SECTION I - INTRODUCTION

Introductory Note

The Massachusetts Cancer Registry (MCR) was established by legislation Massachusetts General Law Chapter 111, Section 111b in July 1980. This bill authorized the Commissioner of Public Health to establish a statewide cancer incidence registry and mandatory reporting system. After a planning and approval period of approximately two years, the MCR began operations (within what became the Bureau of Health Statistics, Research and Evaluation) on January 1, 1982.

The purpose of the MCR is twofold: first, the Registry is designed to provide public information and statistical analyses of cancer incidence in Massachusetts; second, it is designed to serve as a resource for epidemiologic investigations of cancer in Massachusetts. The design and structure of the registry were developed based upon the experience of several other population-based registries in North America and Europe.

In the fall of 1994, the MCR was awarded a grant from the CDC under the National Cancer Registries Amendment Act to expand both the data set and the existing reporting requirements to include not only hospitals, but all health care facilities and practitioners. As a result, the regulations governing cancer reporting in Massachusetts (105 CMR 301.000) were amended on March 24, 1995 to expand the data set. These regulations were then further revised to expand the definition of those required to report cancer cases to include non-hospital reporting sources on October 6, 1995.

The MCR *Abstracting and Coding Manual for Hospitals* is designed to provide hospitals with abstracting and coding procedures pertaining to those data items contained in the MCR data set. In no way does this manual imply any restriction on the type or scope of information collected at the hospital level. Many hospitals, particularly those with ACoS approved cancer programs, will collect a larger data set.

Confidentiality

As stated above, Chapter 111, Section 111B of the Massachusetts General Laws established the Cancer Registry within the Massachusetts Department of Public Health to record cases of malignant disease which occur in residents of Massachusetts. The Cancer Registry Regulations (at 105 CMR 301.040) stipulate that the identity of individual patients whose cases are reported to the MCR are to be held in the strictest confidence. Information concerning a particular individual, and any other information maintained by the MCR which, because of name, identifying number, mark, or description, can be readily associated with a particular individual shall not be released to or discussed with anyone other than authorized personnel at the reporting facility, unless prior informed consent is received from the patient or his/her guardian or legal representative.

Massachusetts General Law does provide [at 105 CMR 301.040(E)] for the release of MCR data by the Commissioner of Public Health, for research and statistical purposes, to the authorized representative of a study or research project sanctioned by the Commissioner under strict conditions guaranteed to maintain confidentiality.

The MCR also maintains confidentiality policies and procedures to protect information that could be used to identify data concerning a specific facility or physician.

Casefinding

Casefinding is the process used by hospitals to identify patients with reportable neoplasms. Casefinding involves careful, systematic monitoring of records maintained by those departments and services that usually deal with cancer patients.

The primary sources for case identification include these records:

- pathology reports (including histology, cytology, hematology, bone marrow, and autopsy findings)
- daily discharges
- disease indexes
- outpatient records
- radiation therapy records
- oncology clinic records

The following should also be considered as additional sources for casefinding:

- surgery reports
- nuclear medicine logs
- radiology logs (including logs of scans)

Reporting Requirements

Hospitals must report all cases of cancer first seen at their facility, as an inpatient or outpatient, either with evidence of cancer or for cancer-directed treatment, on or after January 1, 1982. Cases diagnosed at autopsy should also be reported. A report is required regardless of whether or not the patient was diagnosed elsewhere previously. A report is not required if the patient was first seen at the reporting hospital prior to January 1, 1982 and is admitted again after that date. Do not report recurrences or metastatic sites of a tumor -- report the primary site only. Massachusetts residents and non-residents (as well as residents of foreign countries) are to be reported.

Reporting Methods

A MCR Cancer Patient Abstract (page 6) is to be completed for each reportable neoplasm. For patients with more than one primary, use a separate form to report each neoplasm. All data submissions to the MCR on paper forms must be printed legibly or typed.

Computerized registries may submit cases on tape or diskette in NAACCR format in lieu of paper forms. It is the hospital's responsibility to work with its vendor to ensure the proper use of this format. The MCR does not have contracts with software vendors and therefore cannot be involved in arrangements with them. This is the hospital's responsibility.

Changes to Previously Submitted Forms

Occasionally, with the passage of time, a patient's medical record becomes more complete with regard to information initially missing or uncertain. It is therefore established practice to accept the thinking and information about the case at the time of the latest submission, or the most complete or detailed information. Thus, there may be changes in the coding of primary site, histology, stage (at diagnosis), etc., as the information becomes more certain. The patient's birthdate, Social Security Number, or the spelling of his/her name might also be changed on your data system. The MCR must be made aware of such changes.

There may also be cases reported which later information indicates never were reportable diagnoses. The MCR must be notified so that these cases can be deleted from the MCR database.

Deletions, changes or other updates to information that has previously been submitted to the MCR should be submitted on paper MCR Change/Delete Forms (see page 7).* These forms are identical to the MCR Cancer Patient Abstract with the exception of two boxes marked "Change" and "Delete". The color of these forms makes them easily recognizable.

* Alternatively, you may call the MCR at (617) 624-5645 and report a change over the telephone. Ask to speak to one of our registrars, and have the patient's identifiers ready. Be sure to speak directly to a registrar, or leave a message that you'd like to be called back -- do not leave patient information on the MCR voice-mail system.

So that the appropriate changes can be made to the correct case at the MCR, it is important that accurate patient and case identification be supplied. These data elements include the patient's last name, first name, middle name, date of birth and Social Security number. Also be sure to fill in your facility name and the date of diagnosis for us. Don't forget to use the Comments/Narrative Remarks field to explain the change or reason for deletion.

Because the MCR no longer uses a patient identification "key" derived from various fields on the initial case report form, the "Delete" box should only be checked for true deletions of entire case reports. If the "Delete" box is checked, please indicate in the "Comments / Narrative Remarks" field the reason that the case is being deleted.

The "Change" box should be checked for changes made to any field on the Cancer Patient Abstract. Enter the correct information only for the fields to be changed (remembering that identifying elements including reporting hospital, patient last/first/middle name, date of birth, Social Security number, and date of diagnosis need to be specified for all cases for proper case identification), and briefly indicate the reason for the change in the "Comments / Narrative Remarks" field.

Computerized registries should not send electronic change records to the MCR. Changes should not be submitted electronically like a standard abstract. If submitted as such, they appear to the system as new cases and must be processed fully before they can be identified as a duplicate. This slows the MCR's case processing efforts and inflates the reporting facility's expected case counts, which may cause future problems.

INTRODUCTION cont.

**** MCR abstract here ****

INTRODUCTION cont.

**** MCR Change/Delete form here ****

References

In addition to this manual, a hospital registry must have the following reference works:

- *International Classification of Diseases for Oncology, Second Ed.* (World Health Organization, 1990) -- Usually referred to as "ICD-O-2", this manual contains internationally recognized codes for different types of cancer and sites in the body where they occur. This edition is used for cases diagnosed in 1992 and later.
- *International Classification of Diseases for Oncology, First Ed.* (World Health Organization, 1976) -- Referred to as ICD-O or ICD-O-1, this manual is used to code cases diagnosed prior to 1992. (Field trial editions of ICD-O-2 published 1986 - 1988 may be used for coding diagnoses between these years and 1992.)
- *Summary Staging Guide for the Cancer Surveillance, Epidemiology and End Results Reporting (SEER) Program* (National Institutes of Health, 1977, last Revision dated 7/86) -- This manual defines the stages for most cancer sites. The same material can also be found in *Self Instructional Manual for Tumor Registrars: Book 6* (SEER program, National Institutes of Health, 1977).
- *Cancer Staging Manual, Fifth Ed.* (American Joint Committee on Cancer, 1997, with Clarifications issued 1/22/99) - Contains the definitions and explanations required for coding stages in the TNM system. This 5th Edition is used to stage cases diagnosed 1/1/98 and later. [The 4th Edition (*Manual for Staging of Cancer*) should be used to stage cases diagnosed between 1/1/93 and 12/31/97; the 3rd Edition is used to stage cases diagnosed 1/1/89 - 12/31/92; the 2nd Edition is used to stage cases diagnosed 1/1/84 - 12/31/88; the 1st Edition should be used to stage cases diagnosed before 1988.]

The following references, although not necessary, can be very helpful when abstracting and coding cancer cases.

- *Self Instructional Manuals for Tumor Registrars* (SEER program, National Institutes of Health)
  - Book 1. *Objectives and Functions of a Tumor Registry*, 2nd Ed. (1980)
  - Book 2. *Cancer Characteristics and Selection of Cases*, 3rd Ed. (1995)
  - Book 3. *Tumor Registrar Vocabulary - The Composition of Medical Terms*, 2nd Ed. (1993)
  - Book 4. *Human Anatomy as Related to Tumor Function*, 2nd ed. (1993)
  - Book 5. *Abstracting a Medical Record: Patient Identification, History and Examinations*, 2nd Ed. (1993)
  - Book 6. *Classification for Extent of Disease (Summary Staging Guide)* (1977)
  - Book 7. *Statistics and Epidemiology for Cancer Registries* (1994)
  - Book 8. *Antineoplastic Drugs*, 3rd Ed. (1993)

- *Standards of the Commission on Cancer Volume II: Registry Operations and Data Standards (ROADS).* (American College of Surgeons, 1996, Supplement issued 1997 with 1/1/98 revisions) -- This manual contains definitions and codes recommended for use in hospitals with ACoS approved cancer programs. This replaces the *Data Acquisition Manual* (DAM).
- *SEER Program: Comparative Staging Guide for Cancer* (National Cancer Institute, National Institutes of Health, 1993) -- This manual provides a comparison of the SEER Summary Staging System, the SEER Extent of Disease Staging System, and the AJCC TNM Staging System. (NIH Pub. No. 93-3640) An updated version compatible with AJCC 5th Ed. staging should also become available.
- *Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, Third Edition* (North American Association of Central Cancer Registries, 1998) -- This book describes the data fields and codes accepted in the NAACCR record layout version 6 (1998 diagnoses and forward), and highlights data collection and coding differences among the SEER program, the Commission on Cancer, and other groups. It is useful for understanding why certain codes fail edits, which data fields are required (or only recommended) by different groups, and how the coding of some fields has changed over time.
- *U.S. Postal Service National 5-Digit ZIP Code and Post Office Directory* and *ZIP+4 State Directory for Massachusetts* (available from the U.S. Postal Service) -- These volumes serve as useful resources in determining and confirming address information.

Abstracting Requirements for Nonanalytic Cases

Although the ACoS does not require hospitals to abstract nonanalytic cases, population-based cancer registries like the MCR must record all cases regardless of place of diagnosis or class of case. The MCR therefore requires that nonanalytic cases (Classes 3, 4, 5 and 9) be abstracted and submitted to the MCR. (See pages 92-93 for definitions of "Class of Case".)

Reporting requirements for cases included in Classes 3, 4, and 9 are less stringent than those for other cases. The reporting hospital's medical record often does not contain the required data, or contains only second-hand data. Report any information included in the medical record. It is not necessary to obtain missing information, although a hospital may choose to do so.

Although a complete abstract is not required, certain data items must be completed in order for the case to be processed:

Reporting Facility Code
Medical Record Number
Patient Name (Last, First, Middle)
Address (preferably at the time of diagnosis; otherwise, for the current admission)
Birth Date
Age at Diagnosis
Social Security Number
Sex
Race
Primary Site Code
Histology/Behavior/Grade Codes
Date of Diagnosis
Sequence Number
Type of Reporting Source
Date of Last Contact

Even though information for many required data fields might not be available, all of the fields must be filled in (i.e., not left blank). When necessary, enter codes for UNKNOWN or NONE.

SECTION II - REPORTABILITY

Determining Reportability

The MCR requires that hospitals report all cases seen at that facility with neoplasms classified as malignant or *in situ* in the "Morphology of Neoplasms" section of ICD-O-2 (ICD-O-1 or ICD-O, First Ed. for cases diagnosed prior to 1/1/92). The only exceptions are the following morphology-site combinations:

morphology	
8000-8004	malignant neoplasms, NOS, of the skin (C44.0-C44.9)
8010-8045	epithelial carcinomas of the skin (C44.0-C44.9)
8050-8082	papillary and squamous cell carcinomas of the skin (C44.0-C44.9)
8090-8110	basal cell carcinomas of any site except genital sites

Note: The above lesions are reportable for skin of the genital sites -- vagina, clitoris, vulva, prepuce, penis, and scrotum (C52.9, C51.0-C51.9, C60.0, C60.9, and C63.2).

In addition, the MCR requires that all cases with behavior codes 0, 1, 2 or 3 of the meninges, brain, and central nervous system (C70.0, C70.1, C70.9, C71.0-C71.9, C72.0-C72.5, C72.8, and C72.9) be reported.

Beginning with cases diagnosed on or after 1/1/1998, the MCR no longer requires reporting facilities to submit cases of carcinoma *in situ* of the uterine cervix (ICD-O-2 primary site C53 with histologic type codes 8000-8110 and behavior code 2). This includes cases of cervical intraepithelial neoplasia, Grade III (CIN III).

Invasive carcinomas of the cervix are still reportable.

Beginning with cases diagnosed on or after 1/1/1998, the MCR also no longer requires reporting facilities to submit cases of prostatic, vaginal, or vulvar intraepithelial neoplasia (PIN, VAIN, or VIN).

Definition of a Cancer Diagnosis

A patient is considered to have a reportable diagnosis if the diagnosis is determined by a recognized medical practitioner, even if it is not pathologically confirmed. In most instances, the patient's medical record clearly presents the diagnosis of cancer by use of specific terms which are synonymous with cancer. The physician, however, may not always be certain, nor the recorded language definitive. The terminology used to describe a tumor may be vague or ambiguous.

REPORTABILITY cont.

The following lists should be used as a guide in determining reportability. A *positive pathology report*, however, takes precedence over any other report or statement in a patient's chart.

Reportable

A case is reportable if any of the following terms are used:

- apparently a malignancy
- compatible with a malignancy
- consistent with a malignancy
- favors a malignancy
- most likely malignant
- presumed malignant
- probable malignancy
- suspect or suspected malignancy
- suspicious of malignancy *
- typical of/for malignancy

* If only a **cytology** is reported as "suspicious", do not interpret this as a diagnosis of cancer. Report the case only if a positive biopsy or a physician's clinical impression of cancer supports the cytology findings.

Non-Reportable

A case is not reportable if any of the following terms are used:

- approaching
- equivocal
- possible
- questionable
- rules out
- suggests
- very close to
- worrisome

Identification of the Primary Neoplasm

To ensure the accurate reporting of cancer incidence in Massachusetts and to stage each cancer properly, it is essential that the primary neoplasm be identified accurately. The primary neoplasm is the original lesion, as opposed to a tumor that has developed as a result of metastasis or extension.

It is particularly important that metastatic lesions be distinguished from the primary lesion. Metastatic lesions are the result of the dissemination of tumor cells from the primary site to a remote part of the body. These new lesions do not represent primary tumors. Information regarding the nature of primary-versus-metastatic lesions is most often found in pathology reports. The term "secondary" is often used to describe metastatic lesions.

Single-Versus-Multiple Primaries

To ensure consistency, the MCR has adopted the SEER rules and definitions for determining whether lesions are single or multiple primaries. As stated by SEER:

> ...the determination of how many primary neoplasms a patient has is, of course, a medical decision; but operational rules are needed to ensure consistent reporting by all participants. Basic factors include the site of origin, date of diagnosis, histologic type, behavior of the neoplasm (i.e., benign versus uncertain versus malignant) and laterality....In some neoplasms...one must be careful since different histologic terms are used to describe progressive stages or phrases of the same disease process.

In general, if there is a difference in the site where the neoplasms originate, then it is fairly easy to determine if they are separate primaries, regardless of dates of detection and histologic differences. Likewise, if there is a clear difference in histology, other data such as site and time of detection are not essential.

A separate MCR Cancer Patient Abstract (page 6) must be submitted for each independent primary neoplasm present at the time of admission, unless it was previously reported. Tumors identified only by history are excluded.

Definitions and rules governing the determination of single-versus-multiple primaries follow.

General Principle: Report the case as a single or multiple primary as documented by a physician. If physician determination is absent or unavailable, use the following guidelines.

Definitions Related to Single-Versus-Multiple Primaries

"Site Difference"

For the following, each topographic subcategory (4 characters) as delineated in ICD-O-2 is considered to be a separate site:

colon (C18._)
anus and anal canal (C21._)
bone (C40._, C41._)
peripheral nerves and autonomic nervous system (C47._)
connective tissue (C49._)
melanoma of skin (C44._, 8720-8790)

Each site grouping shown in Table II.1 (page 16) is to be considered one site when determining single-versus-multiple primaries.

For all other sites, each topographic category (3 characters) as delineated in ICD-O-2 is considered to be a separate site.

Examples:

- Transverse colon (C18.4) and descending colon (C18.6) are to be considered separate sites.*
- Base of tongue (C01.9) and border of tongue (C02.1) are considered subsites of the tongue and are to be treated as one site -- either overlapping lesion of parts of the tongue (C02.8), or tongue, NOS (C02.9).
- Trigone of bladder (C67.0) and lateral wall of bladder (C67.2) are considered subsites of the bladder and are to be treated as one site -- either overlapping lesion of subsites of the bladder (C67.8), or bladder, NOS (C67.9).

***** Exceptions: colon polyps

1. Simultaneous lesions and polyps in the same segment of the colon are a single primary.
2. Polyps may 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. This benign disease usually develops into adenocarcinoma in adenomatous polyposis coli (8220/3) or adenocarcinoma in multiple adenomatous polyps (8221/3).

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 frank adenocarcinoma of the colon or typical colon polyps. If multiple segments of the colon, or of the colon and rectosigmoid, or of 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).

"Histologic Type Difference"

Differences in histologic type refer to differences in the first 3 digits of the morphology code, except for lymphatic and hematopoietic diseases. (See **Multiple Primaries in Lymphatic and Hematopoietic Diseases** on pages 20-39.)

"Simultaneous / Synchronous"

These terms describe diagnoses made within two months of each other.

Single Primaries

The following are to be considered single primaries:

- A single lesion of *one histologic type* is considered a single primary even if the lesion crosses site boundaries.
- A single lesion with *multiple histologic types* is to be considered a single primary. Generally, the histology is coded to the highest code number if there is not a mixed histology code given in ICD-O-2.
- A new cancer with the *same histology* as an earlier one, if diagnosed in the **same site** within two months, is considered to be a single primary.
- Multiple lesions of the *same histologic type*, if diagnosed in the **same site** within two months, are to be considered a single primary; further, if one lesion has an *in situ* behavior and another a malignant behavior, this is still to be considered a single primary whose behavior is malignant.

Table II.1

ICD-O-2 Codes to be Considered ONE Primary Site When Determining Single-Versus-Multiple Primaries

ICD-O-2 Codes	Site Groupings
C01 C02	base of tongue other and unspecified parts of tongue
C05 C06	palate other and unspecified parts of mouth
C07 C08	parotid gland other and unspecified major salivary glands
C09 C10	tonsil oropharynx
C12 C13	pyriform sinus hypopharynx
C23 C24	gallbladder other and unspecified parts of biliary tract
C30 C31	nasal cavity and middle ear accessory sinuses
C33 C34	trachea bronchus and lung
C37 C38.0 C38.1 - C38.3 C38.8	thymus heart mediastinum overlapping lesion of heart, mediastinum and pleura
C38.4	pleura
C51 C52 C57.7 C57.8 - C57.9	vulva vagina other specified parts of female genital organs unspecified female genital organs
C56 C57.0 C57.1 C57.2 C57.3 C57.4	ovary fallopian tube broad ligament round ligament parametrium uterine adnexa
C60 C63	penis other and unspecified male genital organs
C64 C65 C66 C68	kidney renal pelvis ureter other and unspecified urinary organs
C74 C75	adrenal gland other endocrine glands and related structures

Multiple Primaries

The following are to be considered separate primaries.

- Multiple lesions of the *same histologic type* that occur in **different sites** are to be considered separate primaries, unless stated to be metastatic.
- A new cancer of the *same histology* as an earlier one, if diagnosed in the **same site** after two months, should be considered a separate primary unless stated to be metastatic. Exceptions:
    - Bladder cancers (C67._) with histology codes 8120-8130: For these bladder cancers, a single abstract is required for the first lesion only. Reappearance of disease in the bladder with histology codes 8120-8130 is to be considered a recurrence, regardless of the time that has passed since the initial diagnosis.
    - If there is an *in situ* followed by an invasive cancer in the same site more than two months apart, report as two primaries even if stated to be a recurrence. (This is a SEER rule, also adopted by the NAACCR Uniform Data Standards Committee, for diagnoses as of 1/1/95.)
- Multiple lesions of *different histologic types* occurring within a **single site** are to be considered separate primaries whether occurring simultaneously or at different times. Exceptions:
    - For multiple lesions within a single site occurring within two months, if one lesion 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 primary and code to the more specific histologic term. The ONLY EXCEPTIONS to this are:
        - When both an adenocarcinoma (8140/3) and an adenocarcinoma (*in situ*) in a(n) (adenomatous) polyp (8210) or an adenocarcinoma (*in situ*) in a (tubulo) villous adenoma (8261, 8263) arise in the same segment of the colon or rectum, code as adenocarcinoma (8140/3).
        - When both a carcinoma (8010/3) and a carcinoma (*in situ*) in a(n) (adenomatous) polyp (8210) arise in the same segment of the colon or rectum, code as carcinoma (8010/3).
- Multiple lesions of *different histologic types* in **different sites** are considered separate primaries whether occurring simultaneously or at different times.

Paired Organs (Laterality)

Each "side" of a paired organ (Appendix B) is a separate site, but if only *one histologic type* is reported and if **both sides** of a paired site are involved within two months of diagnosis, a determination must be made as to whether the patient has one or two independent primaries. If it is determined that there are two independent primaries, then two MCR Cancer Patient Abstracts (page 6) are to be submitted, each with the appropriate laterality and extent of disease information.

If it is determined that there is only one primary, then laterality should be coded according to the side in which the single primary originated and a single MCR Cancer Patient Abstract should be submitted. If it is impossible to tell in which of the pair a single primary originated, Laterality (see page 76) should be coded as "**4**" and a single MCR Cancer Patient Abstract should be submitted.

There are three exceptions to this rule:

- Simultaneous bilateral involvement of the ovaries in which there is only a single histology is to be considered one primary, and Laterality is to be coded **4**.
- Simultaneous bilateral retinoblastomas are always considered single primaries and Laterality is coded **4**.
- Simultaneous bilateral Wilms's tumors are always considered single primaries and Laterality is coded **4**.

Breast Ductal and Lobular Carcinomas

A single MCR Cancer Patient Abstract (page 6) should be prepared for certain combinations of ductal and lobular carcinomas occurring in the **same breast** within two months of each other. ICD-O-2 has assigned morphology code 8522 to this combination. These cases should be coded as follows:

- Infiltrating ductal carcinoma (8500/3) and lobular carcinoma (8520/3) -- Code as 8522/3.
- Infiltrating ductal carcinoma (8500/3) and lobular carcinoma *in situ* (8520/2) -- Code as 8522/3.
- Intraductal carcinoma (8500/2) and lobular carcinoma (8520/3) -- Code as 8522/3.
- Intraductal carcinoma (8500/2) and lobular carcinoma *in situ* (8520/2) -- Code as 8522/2.

Separate MCR Cancer Patient Abstracts should be prepared for a ductal lesion in one breast and a lobular lesion in the **other breast**, whether or not they occur within two months of each other.

Separate MCR Cancer Patient Abstracts (page 6) should be prepared for two lesions in the **same breast** diagnosed more than two months apart.

Intraductal Carcinoma and Paget's Disease

Morphology code 8543/3 should be used for a combination of intraductal carcinoma (8500/2) and Paget's disease of the breast (8540/3).

Kaposi's Sarcoma

Kaposi's sarcoma (9140/3) is reported only once. Kaposi's sarcoma is coded to the site in which it arises. If Kaposi's sarcoma arises in skin and another site simultaneously, code to skin (C44._). If no primary site is stated, code to skin, NOS (C44.9).

Lymphatic and Hematopoietic Diseases

Table II.2 (pages 21-39) is used to help determine single/multiple primaries of lymphatic and hematopoietic diseases. Because of the rarity of subacute leukemias and aleukemias, they have been excluded from this table. Similarly, malignant myeloproliferative and immunoproliferative diseases, except Waldenstrom's macroglobulinemia, are not included. The following histology codes (added to ICD-O-2 in recent years) are also not included: 9688, 9708, 9710, 9715, 9716, 9717, 9828, 9871, 9872 and 9874.

In Table II.2, the original diagnosis is listed on the left, followed (center column) by those diagnoses to be reported as a second primary, and those diagnoses (on the right) that should not be reported as a second primary.

Examples (see page 23):

- first diagnosis -- small cleaved cell, diffuse lymphoma (9672)
  second diagnosis -- Hodgkin's disease, mixed cellularity (9652)
  These would be considered two primaries.
- first diagnosis -- small cleaved cell, diffuse lymphoma (9672)
  second diagnosis -- acute lymphocytic leukemia (9821)
  These would be considered one primary. Report the first diagnosis.

Rules:

1. Topography (site) is not to be considered in determining multiple primaries of lymphatic and hematopoietic diseases.
2. The interval between diagnoses is not to enter into the decision.

   Example: A lymphocytic lymphoma (9670) diagnosed in March 1992 and an unspecified non-Hodgkin's lymphoma (9590) diagnosed in April 1993 would be considered one primary -- a lymphocytic lymphoma (9670) diagnosed in March 1992 (the earlier diagnosis).

Table II.2

Determination of Subsequent Primaries for Lymphatic and Hematopoietic Diseases

Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Hodgkin's disease (9650-9667)	Non-Hodgkin's lymphoma (9591-9595, 9670-9686, 9690-9698, 9702-9714) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761) Any leukemia (9800-9941)	Malignant lymphoma, NOS (9590) Hodgkin's disease[1] (9650-9667)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Malignant Lymphoma, NOS[2] (9590)	Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) Mast cell tumor (9740, 9741) Acute leukemia, NOS (9801) Non-lymphocytic leukemia (9840-9842, 9860-9910) Myeloid sarcoma (9930) Acute panmyelosis (9931) Acute myelofibrosis (9932) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)	Non-Hodgkin's lymphoma[3] (9590-9595, 9670-9686, 9690-9698, 9702-9714) Hodgkin's disease[3] (9650-9667) True histiocytic lymphoma (9723) Plasmacytoma[3] or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Leukemia, NOS (9800) Chronic leukemia, NOS (9803) Lymphoid or lymphocytic leukemia (9820-9827) Plasma cell leukemia (9830) Lymphosarcoma cell leukemia (9850)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Non-Hodgkin's lymphoma[2] (9591-9595, 9670-9686, 9690-9698, 9711-9714)	Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) Mast cell tumor (9740, 9741) Acute leukemia, NOS (9801) Non-lymphocytic leukemias (9840-9842, 9860-9910) Myeloid sarcoma (9930) Acute panmyelosis (9931) Acute myelofibrosis (9932) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)	Non-Hodgkin's lymphoma[1] (9590-9595, 9670-9686, 9690-9698, 9702-9714) True histiocytic lymphoma (9723) Plasmacytoma[3] or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Leukemia, NOS (9800) Chronic leukemia, NOS (9803) Lymphoid or lymphocytic leukemia (9820-9827) Plasma cell leukemia (9830) Lymphosarcoma cell leukemia (9850)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Burkitt's lymphoma (9687)	Specific non-Hodgkin's lymphoma (9593-9594, 9670-9686, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761) Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Chronic lymphocytic leukemia (9823) Plasma cell leukemia (9830) Non-lymphocytic leukemias (9840-9842, 9860-9910) Lymphosarcoma cell leukemia (9850) Myeloid sarcoma (9930) Acute panmyelosis (9931) Acute myelofibrosis (9932) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)	Malignant lymphoma, NOS (9590-9591, 9595) Lymphosarcoma (9592) Burkitt's lymphoma (9687) Lymphoid or lymphocytic leukemia (9820-9822, 9824-9825, 9827) Burkitt's leukemia (9826)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Cutaneous and peripheral T-cell lymphomas (9700-9709)	Specific non-Hodgkin's lymphoma (9593-9594, 9670-9687, 9690-9698, 9711-9714) Hodgkin's disease (9650-9667) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761) Lymphoid or lymphocytic leukemia specified as B-cell (9820-9827) Plasma cell leukemia (9830) Non-lymphocytic leukemia (9840-9842, 9860-9910) Lymphosarcoma cell leukemia (9850) Myeloid sarcoma (9930) Acute panmyelosis (9931) Acute myelofibrosis (9932) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)	Malignant lymphoma, NOS (9590-9591, 9595) Lymphosarcoma (9592) Cutaneous and peripheral T-cell lymphomas (9700-9709) Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Lymphoid or lymphocytic leukemia unless specifically identified as B-cell (9820-9827)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722, 9723)	Specific non-Hodgkin's lymphoma (9592-9594, 9670-9686, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761) Leukemia except hairy cell and leukemic reticuloendotheliosis (9800-9932)	Non-Hodgkin's lymphoma, NOS (9590-9591, 9595) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722, 9723) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Plasmacytoma or multiple myeloma (9731, 9732)	Non-Hodgkin's lymphoma except immunoblastic or large cell lymphoma (9592-9594, 9670, 9672-9677, 9683, 9685-9686, 9690-9697, 9702-9713) Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Mast cell tumor (9740, 9741) Leukemia except plasma cell (9800-9827, 9840-9941)	Malignant lymphoma, NOS (9590, 9591, 9595) Immunoblastic or large cell lymphoma[4] (9671, 9680-9682, 9684, 9698, 9714) Plasmacytoma or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Plasma cell leukemia (9830)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Mast cell tumor (9740, 9741)	Non-Hodgkin's lymphoma (9590-9595, 9670-9687, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Chronic lymphocytic leukemia (9823) Plasma cell leukemia (9830) Non-lymphocytic leukemias (9840-9842, 9860-9880, 9910) Lymphosarcoma cell leukemia (9850) Myeloid sarcoma (9930) Acute panmyelosis (9931) Acute myelofibrosis (9932) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)	Mast cell tumor (9740, 9741) Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Monocytic leukemia (9890-9894) Mast cell leukemia (9900)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Waldenstrom's macro-globulinemia (9761)	Non-Hodgkin's lymphoma except immunoblastic or large-cell lymphoma (9593-9594, 9673-9677, 9683, 9685-9686, 9690-9697, 9702-9713) Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Mast cell tumor (9740, 9741) Leukemia except plasma cell (9800-9827, 9840-9941)	Malignant lymphoma, NOS (9590, 9591, 9595) Lymphosarcoma (9592) Malignant lymphoma, lymphocytic (9670, 9672) Immunoblastic or large cell lymphoma (9671, 9680-9682, 9684, 9698, 9714) Plasmacytoma or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Plasma cell leukemia (9830)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Leukemia, NOS (9800)	Non-Hodgkin's lymphoma[2] (9590-9595, 9670-9687, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Mycosis fungoides (9700) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761)	Sezary's disease[3] (9701) Any leukemia[5] (9800-9941)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Acute leukemia, NOS (9801)	Non-Hodgkin's lymphoma (9590-9595, 9670-9687, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Mycosis fungoides (9700) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761)	Sezary's disease[3] (9701) Any leukemia[6] (9800-9941)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Chronic leukemia, NOS (9803)	Hodgkin's disease (9650-9667) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) Mast cell tumor (9740, 9741)	Non-Hodgkin's lymphoma[2] (9590-9595, 9670-9686, 9690-9698, 9702-9714) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Any leukemia[7] (9800-9941)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Lymphocytic leukemia (9820-9827)	Hodgkin's disease (9650-9667) Malignant histiocytosis or Letterer-Siwe's disease[8] (9720, 9722) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761) Non-lymphocytic leukemias[8] (9840-9842, 9860-9910) Myeloid sarcoma[8] (9930) Acute panmyelosis[8] (9931) Acute myelofibrosis[8] (9932)	Non-Hodgkin's lymphoma[2] (9592-9595, 9670-9687, 9690-9698, 9702-9714) Malignant lymphoma, NOS[2] (9590-9591) Mycosis fungoides or Sezary's disease[9] (9700, 9701) True histiocytic lymphoma (9723) Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Lymphocytic leukemia[9] (9820-9827) Plasma cell leukemia[8] (9830) Lymphosarcoma cell leukemia[8] (9850) Hairy cell leukemia[8] (9940) Leukemic reticuloendotheliosis[8] (9941)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Plasma cell leukemia (9830)	Non-Hodgkin's lymphoma (9590-9595, 9670-9686, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Mast cell tumor (9740, 9741) Non-lymphocytic leukemia (9840-9842, 9860-9910) Myeloid sarcoma (9930) Acute panmyelosis (9931) Acute myelofibrosis (9932)	Plasmacytoma or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Lymphocytic leukemia (9820-9827) Plasma cell leukemia (9830) Lymphosarcoma cell leukemia (9850) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Lympho-sarcoma cell leukemia (9850)	Hodgkin's disease (9650-9667) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) Mast cell tumor (9740, 9741) Non-lymphocytic leukemia (9840-9842, 9860-9941)	Non-Hodgkin's lymphoma (9590-9595, 9670-9687, 9690-9698, 9702-9714) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Lymphocytic leukemia (9820-9827) Plasma cell leukemia (9830) Lymphosarcoma cell leukemia (9850)

Table II.2 continued Numbered notes appear on page 39.

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Non-lymphocytic leukemias (9840-9842, 9860-9894, 9910-9932)	Non-Hodgkin's lymphoma (9590-9595, 9670-9686, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761) Lymphocytic leukemia (9820-9827) Plasma cell leukemia (9830) Lymphosarcoma cell leukemia (9850) Mast cell leukemia (9900) Hairy cell leukemia (9940) Leukemic reticuloendotheliosis (9941)	Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Non-lymphocytic leukemias[1] (9840-9842, 9860-9894, 9910-9932)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Mast cell leukemia (9900)	Non-Hodgkin's lymphoma (9590-9595, 9670-9686, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Waldenstrom's macroglobulinemia (9761) Any other leukemia (9820-9894, 9910-9941)	Mast cell tumor (9740, 9741) Leukemia, NOS (9800) Acute leukemia, NOS (9801) Chronic leukemia, NOS (9803) Mast cell leukemia (9900)

Table II.2 continued

First Primary	Presumably a Second Primary (Report as a second primary.)	Presumably Not a Subsequent Primary (Do not report as a second primary.)
Hairy cell leukemia or leukemic reticulo-endotheliosis (9940, 9941)	Non-Hodgkin's lymphoma (9590-9595, 9670-9686, 9690-9698, 9702-9714) Hodgkin's disease (9650-9667) Burkitt's lymphoma (9687) Mycosis fungoides or Sezary's disease (9700, 9701) True histiocytic lymphoma (9723) Plasmacytoma or multiple myeloma (9731, 9732) Mast cell tumor (9740, 9741) Waldenstrom's macroglobulinemia (9761) Any non-lymphocytic leukemia (9800-9804, 9830-9932) Lymphocytic leukemia (9821-9827)	Malignant histiocytosis or Letterer-Siwe's disease (9720, 9722) Lymphocytic leukemia, NOS (9820) Hairy cell leukemia or leukemic reticuloendotheliosis (9940, 9941)

Notes for Table II.2:

[1] Code to the term with the higher histology code.

[2] If the diagnosis includes "can't rule out leukemia" or "consistent with chronic lymphocytic leukemia", and a bone marrow or peripheral blood study within two months confirms the chronic lymphocytic leukemia diagnosis, then code only to chronic lymphocytic leukemia (9823/3); if not confirmed as chronic lymphocytic leukemia, then code as the lymphoma.

[3] Presumably this is the correct diagnosis. Code the case to this histology.

[4] Occasionally, multiple myeloma develops an immunoblastic or large cell lymphoma phase. This is to be considered one primary -- multiple myeloma. Consult your medical advisor or pathologist if questions remain.

[5] Leukemia, NOS (9800) should be upgraded to a more specific leukemia diagnosis (higher number) when it is found, but should not be considered a second primary.

[6] Acute leukemia, NOS (9801) should be upgraded to a more specific type of acute leukemia (higher number) when it is found, but should not be considered a second primary.

[7] Chronic leukemia, NOS (9803) should be upgraded to a more specific type of chronic leukemia (higher number) when it is found, but should not be considered a second primary.

[8] If any of these diagnoses are made within four months of lymphocytic leukemia, NOS (9820) or acute lymphocytic leukemia (9821), then one of the two diagnoses probably is wrong. The case should be reviewed.

[9] Lymphocytic leukemia, NOS (9820) should be upgraded to a more specific diagnosis that is not considered a second primary.

Negative Biopsies

Cases in which a positive cytology is followed by a negative biopsy must be carefully evaluated: the case should not be reported if the biopsy rules out the presence of cancer; if a negative biopsy does not rule out cancer, the case is considered cytologically confirmed and it should be reported. (Also see the "suspicious cytology" note on page 12.)

Pathology-Only and Consultation-Only Cases

Cases diagnosed by a pathology department strictly on the basis of slides or specimens submitted from outside the hospital (without the patient being seen or examined), and cases seen for consultation only should not be reported to the MCR. It is important, however, that the MCR be made aware of these cases to ensure that all cases of cancer in Massachusetts have been recorded. Therefore, the MCR requests (not a requirement) that the hospital submit the names of these patients. The MCR will check to see that a case for each of these patients has been reported; if we have no corresponding case on file, the MCR will follow back to the diagnosing physician to obtain the necessary data elements to include the case on the MCR database.

It may be difficult to identify a consultation-only case. As a general guideline, the MCR suggests determination of who is responsible for the treatment decisions and follow-up of the patient: if the reporting hospital is responsible, a MCR Cancer Patient Abstract (page 6) should be submitted; if, on the other hand, the reporting hospital is merely confirming a diagnosis made elsewhere, rendering a second opinion, or recommending treatment to be delivered and managed elsewhere, a Cancer Patient Abstract is not required but, as noted above, the MCR requests that we be notified of the case.

It may be difficult to distinguish pathology-only cases from some Class 6 cases (diagnosis and entire first course of treatment in the office of a physician on your medical staff). The physician office should be able to help you identify which cases to consider truly Class 6 (see pages 92-93 for Class definitions). The basic question to ask about these types of cases is, "If I don't report this case to the MCR, will it never be reported at all?" If no other hospital has diagnosed or helped treat a patient, then your facility may be the only source of information on that case. If in doubt about the case, please report it to us.

Whenever there is doubt regarding whether or not to submit a Cancer Patient Abstract to the MCR, please report the case, or consult us at (617) 624-5645.

SECTION III - PATIENT INFORMATION

Facility Name

Enter the name of the facility from which the case is being reported. Facilities reporting on diskette should include their name on each diskette label.

Facility Code

The MCR has assigned a code number to each reporting facility. Enter the code for the facility from which the case is being reported. Note that the new Facility Code is the old three-digit code preceded by a "2". For example, if the old Facility Code number was "009", it should now be submitted as **2009**. Facilities reporting on diskette should include their Code on each diskette label.

Non-hospital facilities should contact the MCR (617-624-5645) for the assignment of a Facility Code.

Accession Number

The first two digits of "Accession Number" specify the year in which the patient was first seen at the reporting institution for the diagnosis and/or treatment of cancer. The last four numbers are the numeric order in which the facility's registry entered the case into its data base.

Example: A patient is diagnosed at the reporting institution in 1998. The first two digits of the accession number are 98. This is the 23rd patient accessioned in 1998, making the last four digits of the accession number 0023. The full accession number is **980023**.

Enter the unique Accession Number assigned to each patient at your facility. The Accession Number identifies the patient even if multiple primaries exist. Use the same Accession Number for all subsequent primaries.

Example: The registry assigns Accession Number 980033 to a patient with prostate cancer in 1998. This patient re-enters the reporting institution in 1999 to have treatment for a primary lung cancer. The Accession Number for this second primary (lung) is again **980033**.

Sequence Number

"Sequence Number" represents the chronological order of a patient's primary malignant and/or benign tumor among all the reportable tumors occurring during the patient's lifetime, whether they exist at the same or at different times, and whether or not they are entered in the reporting hospital's registry.

Malignant Tumors

Codes for **malignant primaries** (Behavior codes **2** or **3**) are as follows:

Tumor Sequence	**Code**
1 primary malignancy only	**00**
first of 2 or more malignant primaries	**01**
second of 2 or more malignant primaries	**02**
third of 3 or more malignant primaries	**03**
(actual number of subsequent primary)	**...**
*unknown	**99***

* This code is only to be used when there is a substantial reason to believe that the patient had a previous malignancy, but it is not definitely known. If, however, the patient has undergone a procedure that might have been for cancer, but there is no substantial reason for assuming that it was for cancer, do not enter code **99**. For example, in the absence of specific information indicating cancer, a previous hysterectomy or the removal of a rectosigmoid polyp would not be sufficient reason for entering code **99**.

Sequence code **00** indicates that the patient has only one primary malignancy. The sequence code for this case should be changed from **00** to **01** if the patient develops another primary malignancy. Sequence code **01** indicates that the case is the first of multiple primaries.

Example: In January 1992, the hospital registry assigns a **00** Sequence Number to a patient with a primary colon cancer. The patient develops a second primary cancer, of the pancreas, in October 1994. Assign Sequence Number **02** to the second (pancreatic) cancer, and change the Sequence Number of the first (colon) cancer to **01**.

When malignancies occur simultaneously, assign the first Sequence Number (**01**) to the primary with the worse prognosis. When the prognoses are alike, the assignment of a Sequence Number is arbitrary.

Examples: A patient is diagnosed at the reporting facility with simultaneous carcinoma *in situ* of a vocal cord and invasive adenocarcinoma of the colon. Assign sequence number **01** to the colon primary.

A patient has simultaneous adenocarcinoma *in situ* in a colon polyp and squamous cell carcinoma *in situ* in a vocal cord polyp. Assign Sequence Numbers as you choose because both primaries have similar prognoses.

The Sequence Number counts the patient's primary tumors. When multiple institutions treat a patient, the Sequence Number of each case should be the same at each institution.

Example: The reporting facility diagnoses a patient with lung cancer. The patient has a history of colon cancer that was diagnosed and treated elsewhere. The lung cancer is the second of this patient's multiple primary cancers, so assign a Sequence Number of **02** to the lung cancer case.

Record in the "Comments / Narrative Remarks" field the primary sites, histologies and diagnosis dates of other reportable tumors that the patient had before the diagnosis of the tumor being reported. This information assists the MCR in the accurate matching and linking of patient and tumor data.

Nonmalignant Tumors (Benign, Borderline, Uncertain Behavior)

Codes for **nonmalignant tumors** (Behavior codes **0** or **1**) are as follows:

Tumor Sequence	Code
1 benign tumor only; or the first of 2 or more benign tumors	**AA**
second of 2 or more benign tumors	**BB**
third of 3 or more benign tumors	**CC**
(letters representing actual number of subsequent benign tumor)	**...**
unspecified number of benign tumors	**XX**

The benign sequence code does not affect the malignant sequence code -- they are independent.

Example: A patient develops colon cancer in 1995. The Sequence Number is **00**. The patient develops a benign meningioma in 1996. Meningiomas are reportable-by-agreement in the reporting facility, so the registry assigns the Sequence Number **AA** (one benign tumor only). The Sequence Number for the first primary (colon) remains **00**.

Year First Seen for This Primary

(On the MCR Cancer Patient Abstract, this field is labeled "Yr 1st Seen".)

Enter the year during which the patient was first seen at the reporting institution for the diagnosis or treatment of the neoplasm being reported. It is not necessarily the year that the registrar accessioned the case. Note that the "Year First Seen for *This* Primary" relates only to one primary tumor. A patient with multiple primaries may have a different "Year First Seen for This Primary" on each abstract. Include all four digits of the year.

Examples: A patient had surgery for rectal carcinoma at another institution in December 1998, and started radiation therapy at the reporting institution in January 1999. Assign **1999** as the "Year First Seen for This Primary".

A patient with breast cancer had initial therapy at another institution in July 1998. The patient enters the reporting institution in April 2000 for treatment of recurrent breast cancer. Assign **2000** as the "Year First Seen for This Primary".

If a patient has a previous accession (another primary), the "Year First Seen for This Primary" may differ from the first two digits of the "Accession Number".

Example: The patient had a breast primary in 1992 and was assigned "Accession Number" 920150, and the "Year First Seen for This Primary" was recorded as **1992**. The patient developed a second primary (right kidney) in 1998. Designate **1998** as the "Year First Seen" for the kidney primary, but keep the same "Accession Number".

Patients seen at the end of the year may present unusual problems. A patient may have inconclusive scans or tests in December and be diagnosed in January. Use the year of diagnosis as the "Year First Seen for This Primary".

Example: A patient is admitted to the reporting institution in December 1998 and is diagnosed in January 1999. Assign 1999 as the "Year First Seen for This Primary".

Primary Payer at Diagnosis

This data item may be used by the MCR in financial analyses and as an indicator for quality and outcome analyses. The code should reflect the primary payer *at the time of diagnosis*. Do not update the code if the payer changes later. If more than one category applies, code the payer that paid the largest amount.

The codes are as follows:

Primary Payer at Diagnosis	**Code**
not insured, NOS (unknown if patient was self-paid or a charity write-off)	**00**
Not insured, charity write-off	**01**
Not insured, self-payment	**02**
private insurance (not covered by codes 20-47)	**10**
managed care provider, NOS	**20**
Health Maintenance Organization (HMO)	**21**
Preferred Provider Organization (PPO)	**22**
State funded, NOS	**30**
Medicaid	**31**
Transitional Assistance (Welfare)	**32**
Federally funded, NOS	**40**
Medicare	**41**
Medicare with supplement	**42**
Champus/TriCare (military personnel/dependents treated at nonmilitary facility)	**43**
Military (personnel/dependents treated at a military facility)	**44**
Veterans Administration	**45**
Indian Health Service	**46**
Public Health Service	**47**
insured, NOS (unknown insurer)	**88**
unknown if insured or not (not unknown insurer)	**99**

Medical Record Number

Enter the patient's Medical (hospital) Record Number. If the patient has not been assigned a Medical Record Number, other identifying numbers may be used. For example, for patients receiving radiation therapy, the radiation therapy log number, preceded by the letters "RT" can be used. For patients seen only on an outpatient basis, the assigned number can be preceded with the letters "OP".

Abstracted By

Enter the initials of the individual who abstracted the case. Do not code the data entry person unless that person is also the abstractor.

Admission Date

Enter the date the patient was first seen at the reporting hospital in MMDDCCYY format. If the month or day has only one digit, enter a zero before the number. Use the following rules:

inpatient: first date of admission as an inpatient for the neoplasm being reported, or the date when diagnosis of a reportable neoplasm was made during a long-term hospitalization for another condition

outpatient: date the patient was first diagnosed, treated, or seen as an outpatient for the neoplasm being reported

autopsy: date of death for a case diagnosed at autopsy (not necessarily the autopsy date)

Discharge Date

Enter the date the patient was discharged for the admission being reported in MMDDCCYY format. If the month or day has only one digit, enter a zero before the number. Use the "Admission Date" for outpatient and autopsy cases (the date of death).

Managing Physician Name

Determine the physician most responsible for the patient's cancer care. It is this physician who may be contacted regarding enrollment of the patient in a special study or about permission for a researcher to contact the patient or patient's family. Although several physicians may be involved in the care of a patient, one tends to manage the patient's cancer care. If there is question as to which physician to record, enter the name of the discharging physician.

Note that this is a text field which should contain the physician's last name, first name, and middle initial -- not the *coded* field "Managing Physician" which appears in the ROADS Manual. Some uniform guidelines for entering the name consistently follow. On the MCR Cancer Patient Abstract (page 6), this field is no longer divided up into separate boxes.

Last Name

Enter the managing physician's last name without punctuation. Names which contain an apostrophe should be entered with no apostrophe or space (e.g., **ONEILL**). Surnames with prefixes (e.g., St. Pierre or Mac Farlane) are entered without punctuation or spaces (**STPIERRE**, **MACFARLANE**). Note that if a name includes the word "Saint" (e.g., Saint Michaels), abbreviate "Saint" and connect it (no space) to the rest of the name (**STMICHAELS**). Do not enter titles such as M.D., D.O., D.D.S., etc.

First Name

Enter the managing physician's first name. For someone who uses only the first letter of his/her name and is known by the middle name (e.g., C. Douglas Jones), enter both the first initial and the middle name, separated by a space.

Middle Initial

If known, include the managing physician's middle initial.

Patient Name

The name formats described for these fields correspond to computerized files (such as death files) used for matching purposes. Facilities submitting electronic data should edit out any punctuation before submitting cases to the MCR. Correct entry of the patient's last, first and middle name is also very important in identifying duplicate case reports and for the MCR to be able to link and consolidate all of a patient's records.

Last Name

Enter the patient's surname without punctuation or spaces. Names which contain an apostrophe should be entered with no apostrophe or space (e.g., **ONEILL**). Surnames with prefixes (e.g., St. Pierre, Mac Farlane) are entered without punctuation or spaces (**STPIERRE**, **MACFARLANE**). Note that if a name includes the word "Saint" (e.g., Saint Michaels), abbreviate "Saint" and connect it (no spaces) to the rest of the name (**STMICHAELS**). Do not enter titles and designations such as Mr., Mrs., Dr., Rev., Br., Sr., Jr., II, III, etc. in this field. (See next field description.)

For people with more than one surname separated by a space or a hyphen, enter as if it is one name (e.g., "Doe-Buck" or "Doe Buck" is entered as **DOEBUCK**).

Name Suffix

"Name Suffix" is a title following a person's last name -- frequently a generation identifier (such as Senior/Junior/III) which helps distinguish patients with the same name. Do not use punctuation. If multiple suffixes are used, the generation-specific suffix (Junior, Third, etc.) is to be recorded (rather than an occupation-related suffix).

Example: The patient's name is John C. Smith, III, M.D. Enter **III**.

Identifier	Suggested Abbreviation
Doctor	**MD** or **PhD**
Junior	**Jr**
Senior	**Sr**
the Third	**III**
the Fourth	**IV**

Leave the field blank if the patient does not have a "Name Suffix", or if it is unknown.

First Name

Enter the patient's first name. For a patient who usually uses only the first letter of his/her first name and is known by the middle name (e.g., C. Douglas Jones), enter the first initial and the middle name, separated by a space, into the "First Name" field (**C_DOUGLAS**); then leave the "Middle Name" field blank.

For patients with religious or other titles (e.g., Sister Mary White or Doctor Mary White), enter only the patient's first name (**MARY**) in the first name field; do not enter the patient's title here. Also, especially for members of the clergy, be sure to enter the patient's surname (**WHITE**) in the "Last Name" field. If surname is unavailable (e.g., just "Sister Mary"), record first name (**MARY**) in the "First Name" field and leave the "Last Name" field blank. (The MCR obtains information on religious and other occupational titles as part of the occupation fields.)

Middle Name

Enter the patient's entire middle name whenever possible. If only the middle initial is known, enter just this. Leave blank if there is no middle name/initial, or if it is unknown.

Maiden Name

Enter the maiden name of a female patient without punctuation or spaces. Leave the field blank if maiden name is not applicable or not known (i.e., leave the field blank for males and for any female whose maiden name is identical to her surname). Do not enter an alias or “aka” name here (see next field description).

Alias

A patient may sometimes use a different name or nickname. These "also known as" or "aka" names are categorized as aliases. This item is useful for matching multiple records for the same patient.

If the patient uses an alias for a first name only, record the actual last name, followed by a blank space and the first name alias.

Example: Ralph Williams also uses the name Bud Williams. Record **Williams_Bud** in the "Alias" field.

If the patient uses only a last name alias, record the last name alias, followed by a blank space and the actual first name.

Example: Janice Smith also uses the name Janice Brown. Record **Brown_Janice**.

If the patient uses an alias for both first and last names, record the last name alias followed by a blank space and the first name alias.

Example: Joe Jones also uses the name Sam Smith. Record **Smith_Sam** in the "Alias" field.

Leave the field blank if the patient does not have an alias, or if the alias is unknown.

Birth Date

Enter the patient's date of birth in MMDDCCYY format. If the month or day has only one digit, enter a zero before the number. Enter all four digits of the birth year.

Estimate year of birth when exact information is unavailable. (It is preferable to estimate than to code the year as unknown.) ONLY enter **9999** if there is no basis for estimating a birth year.

Example: The patient is 70 years old when diagnosed on June 15, 1993. The medical record has no exact birth date. Record unknown month (**99**) and day (**99**), but estimate the year as 1923. The complete birth date entered would be **99991923**.

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

Day	Code
first	**01**
second	**02**
third	**03**
...	**..**
...	**..**
...	**..**
thirty-first	**31**
unknown	**99**

Year	Code
1890	**1890**
1990	**1990**
unknown*	**9999**

*Try to estimate year rather than use unknown!

Age at Diagnosis

Enter the patient's age at the time of initial diagnosis. Age is measured in completed years of life (age at the last birthday prior to diagnosis).

Note that the patient's age at admission to your hospital may not be the patient's age on the date of diagnosis. To calculate Age at Diagnosis, subtract the year of the patient's birth from the year of diagnosis; if the patient's birthday is after the date of diagnosis, subtract one year from that calculated age.

Example: A patient develops cancer in March 1992. The patient's date of birth is December 1932. Subtract 1932 from 1992 to get a calculated age of 60. Since the patient has not yet had a birthday this year (1992), subtract one year from the calculated age. The patient is therefore 59 years old at diagnosis. Enter **059** in the "Age at Diagnosis" field.

Number of years of age at last birthday	**Code**
less than 1 year old	**000**
1 year old, but less than 2	**001**
2 years old, but less than 3	**002**
...	**...**
98 years old, but less than 99	**098**
...	**...**
one hundred twenty years old	**120**
unknown	**999**

The patient's age helps to validate the Birth Date. If your computer system automatically calculates age, please check that the "Age at Diagnosis" field makes sense for the case. It is easy to mis-enter a digit in the Birth Date (or enter the diagnosis year instead of the birth year) and produce a non-sensical Age at Diagnosis (e.g., an infant who is divorced, a retired teacher, smokes, and has prostate cancer).

Birthplace

Enter the code for the patient's Birthplace (see Appendix A). Foreign countries and U.S. states are covered. Codes for Massachusetts and nearby states are shown here for convenience:

State	Code	State	Code
Massachusetts	**005**	New York	**011**
Connecticut	**007**	Pennsylvania	**014**
Maine	**002**	Rhode Island	**006**
New Hampshire	**003**	Vermont	**004**
New Jersey	**008**		

Enter **000** for Birthplace in the U.S., exact state unknown.

Enter **998** for Birthplace outside the U.S. if the country is unknown.

Enter **999** for a completely unknown Birthplace.

Social Security Number

Enter the patient's Social Security Number in this field. This is an important tool for the proper identification of patients. It is used primarily to identify multiple reports of the same cancer so that they are not counted as separate cases, and to identify patients whose names have changed or been reported differently by different facilities.

Nine characters have been provided to enter the patient's Social Security number (so enter only numerals). Note that the Social Security Number is often used as a Medicare claim number; however, a patient's Medicare claim number may not be the patient's Social Security Number (but rather, that of the spouse). Every effort should be made to ascertain the patient's own Social Security Number.

Do not enter a Social Security Number that begins or ends with "B" or "D". These letters identify a spouse's Social Security Number (the letter indicates that the patient receives benefits under the spouse's number). Enter **999999999** for these patients.

If the patient has no Social Security Number or if it is unknown, enter **999999999**.

Address at Diagnosis

Address at diagnosis is used in determining cancer rates within different geographic areas. Therefore it is important that the patient's residence address at the time of diagnosis be reported. This may not be the patient's current or mailing address. Every effort should be made to determine the patient's correct address. If a patient has multiple primaries occurring over time, the address at diagnosis may be different for subsequent tumors. **Do not update the address** for a given primary if it changes later.

The MCR has adopted rules for determining residency from the U.S. Dept. of Commerce's Bureau of the Census. It is important to follow the rules exactly so that MCR data can be compared with data from other sources. The following rules apply to entering the address.

- Enter the address of the patient's usual residence on the Date of Diagnosis. "Usual residence" is where the patient lives and sleeps most of the time, and is not necessarily the same as the legal or voting residence. Do not record an address where the patient may be staying temporarily, such as a friend's or relative's. If both a street address and a P.O. Box (or other mailing address) are given, enter the street address.
- If the patient has more than one home (for example, lives on the Cape during the summer and in Florida during the winter), enter the residence where the patient lives most of the time. If that cannot be determined, enter whichever address was given to your facility by the patient.
- For military personnel and their families living on a base, enter the most specific street address on the base possible rather than just the base's main address. For personnel living off base, enter the individual’s residence address.
- For institutionalized patients, including those incarcerated or in nursing, convalescent, rest homes, or other long-term care facilities, the address is that of the institution. The institution’s street address (rather than just its name) is preferred.
- Use the current address of a college student (where he/she lives most of the year). For children in boarding schools below college level, enter the parents’ address.
- For Class 3 or 4 cases, the patient’s usual residence may have changed since the time of initial diagnosis. The address at diagnosis is preferred. If that address is unknown, enter the patient’s address on admission to your facility, or a current address.
- If the patient is homeless or transient with no usual residence, use the address where he/she was staying when diagnosed (perhaps a shelter or the diagnosing institution).

Street Address at Diagnosis

Enter the number and street of the patient's usual permanent residence at the time of initial diagnosis. Only use numbers, letters and the number symbol(#), slash(/), hyphen(-) or period(.) in this field. Include foreign (non-U.S./Canada) street addresses.

House numbers should precede street names. Unit designations should be placed directly after the house number (e.g., **123E MAIN ST**) or after the street name (e.g., **123 MAIN ST APT E**). If the house number contains "½" (e.g., 38½ Main Street), enter this using the format **38_1/2_MAIN ST**. Whenever possible, avoid entering just a building's name (e.g., Nice View Apartments or Smith Rest Home) without its street address.

Space for twenty-six characters is allotted to this field. Use abbreviations as needed. If necessary, omit the less important elements of a street address, such as an apartment number. Do not omit those elements needed to locate the address in a census tract, such as building number, full street name, and street type. **Do not update this field** for a given primary if the patient's address changes after diagnosis.

If the street address cannot be determined, enter **UNKNOWN**.

City / Town at Diagnosis

Enter the name of the city/town of residence. For patients using mailing addresses (such as P.O. boxes), try to determine the usual street address and town of residence. This may not be the mailing address' town. Eighteen characters are allotted for this field. Use standard abbreviations as needed, but do not use punctuation. The MCR edit program accepts standard abbreviations in this field (**N**, **S**, **E** and **W** for "North", "South", "East" and "West", respectively; **FT** for "Fort"; **GR** or **GT** for "Great"; and **MT** for "Mount"). Include spaces for city/town names consisting of more than one word (**NEW_BEDFORD**).

If a patient's usual residence at the time of diagnosis is in a foreign country, enter the name of the city/town in the foreign country. Space permitting, you may also enter the country's name here (the MCR does not collect the country's name in a separate field).

If the city/town where the patient lived at the time of diagnosis cannot be determined, enter **UNKNOWN**. **Do not update this field** for a given primary if the patient's address changes after diagnosis.

State at Diagnosis

Enter the standard two-letter U.S. Postal Service abbreviation for the patient's state/province of residence at the time of diagnosis (see **Table III** on the next page). If the patient has multiple primaries, each address may be different for subsequent tumors. **Do not update this field** for a given primary if the patient's address changes after diagnosis.

If the patient lived inside the U.S. (including its territories, commonwealths/possessions listed in **Table III**) or Canada at diagnosis, but the specific *state/province* is *unknown*, enter **XX**.

If the patient lived outside the U.S. (including its territories, commonwealths/possessions in **Table III**) and outside Canada at diagnosis and the *country* of residence is *known*, enter **XX**.

If the patient lived outside the U.S. (including its territories, commonwealths/possessions in **Table III**) and outside Canada at diagnosis and the *country* is *un*known, enter **YY**.

Only if the country is *completely* unknown (i.e., you cannot even determine if the address is in the U.S./Canada or not), enter **ZZ**.

For foreign (non-U.S./Canadian) residents, the MCR does *not* collect country name/Geocode in its own field. You may include the country name in the "City / Town" field if it will fit.

ZIP / Postal Code at Diagnosis

Enter the patient's 5-digit ZIP Code or nine-digit "ZIP+4" Code corresponding to the street address at diagnosis. Do not use a hyphen to separate the first five from the last four digits. For Canadian residents, enter their 6-character alphanumeric Postal Code. **Do not update this field** for a given primary if the patient's address changes after diagnosis.

For non-U.S./Canadian residents, enter their foreign Postal Code, if available.

Enter **888888888** for *non*-U.S./Canadian residents if their foreign Postal Code is unknown.

Enter **999999999** for U.S./Canadian residents if the patient's ZIP/Postal Code is unknown.

Enter **999999999** if the country of residence is completely unknown (i.e., you cannot even determine if the patient lives inside or outside the U.S./Canada).

Table III

Common Codes for the State Field

United States:

State	Code	State	Code	State	Code
Alabama	**AL**	Kentucky	**KY**	North Dakota	**ND**
Alaska	**AK**	Louisiana	**LA**	Ohio	**OH**
Arizona	**AZ**	Maine	**ME**	Oklahoma	**OK**
Arkansas	**AR**	Maryland	**MD**	Oregon	**OR**
California	**CA**	Massachusetts	**MA**	Pennsylvania	**PA**
Colorado	**CO**	Michigan	**MI**	Rhode Island	**RI**
Connecticut	**CT**	Minnesota	**MN**	South Carolina	**SC**
Delaware	**DE**	Mississippi	**MS**	South Dakota	**SD**
District of Columbia	**DC**	Missouri	**MO**	Tennessee	**TN**
Florida	**FL**	Montana	**MT**	Texas	**TX**
Georgia	**GA**	Nebraska	**NE**	Utah	**UT**
Hawaii	**HI**	Nevada	**NV**	Vermont	**VT**
Idaho	**ID**	New Hampshire	**NH**	Virginia	**VA**
Illinois	**IL**	New Jersey	**NJ**	Washington	**WA**
Indiana	**IN**	New Mexico	**NM**	West Virginia	**WV**
Iowa	**IA**	New York	**NY**	Wisconsin	**WI**
Kansas	**KS**	North Carolina	**NC**	Wyoming	**WY**

Canada:

Province	Code
Alberta	**AB**
British Columbia	**BC**
Labrador	**LB**
Manitoba	**MB**
New Brunswick	**NB**
Newfoundland	**NF**
Northwest Territories	**NT**
Nova Scotia	**NS**
Ontario	**ON**
Prince Edward Island	**PE**
Quebec	**PQ**
Saskatchewan	**SK**
Yukon	**YT**

U.S. Territories/Commonwealths/Possessions:

Locality	Code
American Samoa	**AS**
Federated States of Micronesia	**FM**
Guam	**GU**
Marshall Islands	**MH**
Northern Mariana Islands	**MP**
Palau	**PW**
Puerto Rico	**PR**
Trust Territories	**TT**
Virgin Islands	**VI**

Other codes:

U.S., NOS	**XX**
Canada, NOS	**XX**
Not U.S./Canada, country known	**XX**
Not U.S./Canada, country unknown	**YY**
Complete unknown	**ZZ**

PATIENT INFORMATION cont.

Sex

Enter the appropriate code for the patient's sex:

Sex	Code
male	**1**
female	**2**
other (including hermaphrodite and persons with sex chromosome abnormalities)	**3**
transsexual (persons who have undergone sex-change surgery)	**4**
not stated	**9**

Marital Status at Diagnosis

Enter the patient's marital status at the time of first diagnosis for each primary tumor. If the patient is under 15 years of age, assume he/she has never married and enter code **1**. **Do not update this field** for a given primary if the patient's Marital Status changes after diagnosis.

Marital Status	Code
single (never married)	**1**
married (including common law)	**2**
separated	**3**
divorced	**4**
widowed	**5**
unknown	**9**

Race

If information regarding a patient's race is not recorded on the face sheet of the medical record, every attempt should be made to find it in the history and physical examination or other parts of the medical record. When coding race, it is important to remember that race is defined by specific physical heredity -- not by Birthplace or place of residence.

Exception: When a person's race is recorded only as "Oriental", "Mongolian" or "Asian" and the Birthplace is recorded as "China", "Japan", "the Philippines" or another specific Asian nation, code the race based on the Birthplace information.

Example: If a patient's race is recorded as "Oriental" and the Birthplace is recorded as "Japan", consider the Race to be Japanese and enter code **05**.

Pediatric patients of mixed parentage should be classified according to the race of the mother; if the mother is also of mixed parentage, code the first race reported. (This allows correlation with the patient's race as it would have been coded on the birth certificate.)

Use the following codes to enter the patient's race:

Race	Code	Race	Code
White*	**01**	Micronesian, NOS	**20**
Black**	**02**	Chamorran	**21**
American Indian, Aleutian, or Eskimo	**03**	Guamanian, NOS	**22**
		Polynesian, NOS	**25**
Chinese	**04**	Tahitian	**26**
Japanese	**05**	Samoan	**27**
Filipino	**06**	Tongan	**28**
Hawaiian	**07**	Melanesian, NOS	**30**
Korean	**08**	Fiji Islander	**31**
Asian Indian, Pakistani	**09**	New Guinean	**32**
Vietnamese	**10**	other Asian, including Asian, NOS & Oriental, NOS	**96**
Laotian	**11**		
Hmong	**12**	Pacific Islander, NOS	**97**
Kampuchean (Cambodian)	**13**	other	**98**
Thai	**14**	unknown	**99**

* "White" includes Mexican, Puerto Rican, Cuban.

** "Black" includes Negro, Afro-American, African American.

When coding the "Race" field, please note the following:

- The "Race" field is to be used in conjunction with the "Spanish/Hispanic Origin" field.
- A combination of "White" and any other race is coded to the other race.
- A mixture of "Hawaiian" and any other race is coded as Hawaiian (**07**).
- A combination of nonwhite races is coded to the first nonwhite race documented.

Spanish/Hispanic Origin

This field matches a question asked on the Decennial Census of the U.S. Population and is also used by the SEER program to maintain consistency with Census Bureau data. The MCR has adopted this coding scheme for the same reasons.

This field is used to reflect the "best guess" as to whether or not the patient should be classified as Spanish/Hispanic for purposes of calculating cancer statistics. Information on Spanish/Hispanic Origin may be found in the medical record. *All information sources* should be used to determine the best code, including stated ethnicity, Birthplace, personal history and language spoken, and surname/maiden name. Persons with Spanish surname/origin may be of any race; therefore, coding should be independent of race. Spanish/Hispanic origin is not synonymous with birth in a Spanish-language country. Use Birthplace as a guide in determining the correct code, but do not rely on it exclusively.

The following codes should be used for this field:

Origin	**Code**
non-Spanish; non-Hispanic (includes Brazilian,	**0**
Mexican (includes Chicano)	**1**
Puerto Rican	**2**
Cuban	**3**
South or Central American (except Brazil)*	**4**
other Spanish/Hispanic origin (includes European)	**5**
Spanish/Hispanic/Latino, NOS (There is evidence other than surname/maiden name that the person is Hispanic, but he/she cannot be assigned to any of the categories **1**-**5**.)	**6**
Spanish surname only (The only evidence of person's Hispanic origin is surname/ maiden name, and there is no contrary evidence that the patient is not Hispanic.)	**7**
unknown whether Spanish/Hispanic or not	**9**

* Code Portuguese and Brazilians as non-Spanish (**0**).

Spanish/Hispanic Surnames / Maiden Names

Although someone of Spanish origin may have *any* name, and someone *not* of Spanish origin may have a name that tends to be "typically" Spanish/Hispanic, we would prefer a code based on name alone rather than a complete unknown.

If the medical record describes the patient as "Mexican", "Puerto Rican", "Cuban" or another specific origin included in codes **1**-**5**, enter the appropriate code *regardless* of whether or not the patient's surname/maiden name is Spanish.

If the patient has a Spanish surname/maiden name, but the medical record contains information that he or she is not of Spanish origin, enter **0** ("non-Spanish, NOS"). (American Indians and Filipinos may have Spanish surnames but are *not* to be considered Spanish/Hispanic under this coding scheme.)

Lacking further information, the following list may be used as a guide for identifying which names most typically belong to those of Spanish/Hispanic origin. Researchers at the Bureau of the Census found that over 75% of individuals having each of these surnames identified themselves as being of Spanish/Hispanic origin in the 1990 Census. Persons with these 639 surnames combined represent over two-thirds of the U.S. Hispanic-origin population.

> If the medical record contains no useful information on Spanish/Hispanic origin,
> *and* if the patient's surname/maiden name matches one of the names listed,
> *and* nothing in the medical record indicates that the patient is *not* Spanish/Hispanic, enter code **7**.
>
> If, however, the patient's name does *not* appear on this list, DO NOT ASSUME that the patient is non-Hispanic. Use your best judgment to determine the correct code.

source: David L. Word & R. Colby Perkins, Jr., Technical Working Paper No. 13 -- "Building a Spanish Surname List for the 1990's", U.S. Bureau of the Census Population Division, March 1996.

Abeyta	Aranda	Benavidez	Carrillo	Cortez
Abrego	Arce	Benitez	Carrion	Cotto
Abreu	Archuleta	Bermudez	Carvajal	Covarrubias
Acevedo	Arellano	Bernal	Casanova	Crespo
Acosta	Arenas	Berrios	Casares	Cruz
Acuna	Arevalo	Betancourt	Casarez	Cuellar
Adame	Arguello	Blanco	Casas	Curiel
Adorno	Arias	Bonilla	Casillas	Davila
Agosto	Armas	Borrego	Castaneda	Deanda
Aguayo	Armendariz	Botello	Castellanos	Dejesus
Aguilar	Armenta	Bravo	Castillo	Delacruz
Aguilera	Armijo	Briones	Castro	Delafuente
Aguirre	Arredondo	Briseno	Cavazos	Delagarza
Alanis	Arreola	Brito	Cazares	Delao
Alaniz	Arriaga	Bueno	Ceballos	Delapaz
Alarcon	Arroyo	Burgos	Cedillo	Delarosa
Alba	Arteaga	Bustamante	Ceja	Delatorre
Alcala	Atencio	Bustos	Centeno	Deleon
Alcantar	Avalos	Caballero	Cepeda	Delgadillo
Alcaraz	Avila	Caban	Cerda	Delgado
Alejandro	Aviles	Cabrera	Cervantes	Delrio
Aleman	Ayala	Cadena	Cervantez	Delvalle
Alfaro	Baca	Caldera	Chacon	Diaz
Alicea	Badillo	Calderon	Chapa	Dominguez
Almanza	Baez	Calvillo	Chavarria	Dominquez
Almaraz	Baeza	Camacho	Chavez	Duarte
Almonte	Bahena	Camarillo	Cintron	Duenas
Alonso	Balderas	Campos	Cisneros	Duran
Alonzo	Ballesteros	Canales	Collado	Echevarria
Altamirano	Banda	Candelaria	Collazo	Elizondo
Alva	Banuelos	Cano	Colon	Enriquez
Alvarado	Barajas	Cantu	Colunga	Escalante
Alvarez	Barela	Caraballo	Concepcion	Escamilla
Amador	Barragan	Carbajal	Contreras	Escobar
Amaya	Barraza	Cardenas	Cordero	Escobedo
Anaya	Barrera	Cardona	Cordova	Esparza
Anguiano	Barreto	Carmona	Cornejo	Espinal
Angulo	Barrientos	Carranza	Corona	Espino
Aparicio	Barrios	Carrasco	Coronado	Espinosa
Apodaca	Batista	Carrasquillo	Corral	Espinoza
Aponte	Becerra	Carreon	Corrales	Esquibel
Aragon	Beltran	Carrera	Correa	Esquivel
Arana	Benavides	Carrero	Cortes	Estevez

PATIENT INFORMATION cont.

Estrada
Fajardo
Farias
Feliciano
Fernandez
Ferrer
Fierro
Figueroa
Flores
Florez
Fonseca
Franco
Frias
Fuentes
Gaitan
Galarza
Galindo
Gallardo
Gallegos
Galvan
Galvez
Gamboa
Gamez
Gaona
Garay
Garcia
Garibay
Garica
Garrido
Garza
Gastelum
Gaytan
Gil
Giron
Godinez
Godoy
Gomez
Gonzales
Gonzalez
Gracia
Granado
Granados
Griego
Grijalva
Guajardo
Guardado
Guerra
Guerrero
Guevara
Guillen
Gurule
Gutierrez
Guzman
Haro
Henriquez
Heredia
Hernadez
Hernandes
Hernandez
Herrera
Hidalgo
Hinojosa
Holguin
Huerta
Hurtado
Ibarra
Iglesias
Irizarry
Jaime
Jaimes
Jaquez
Jaramillo
Jasso
Jimenez
Jiminez
Juarez
Jurado
Laboy
Lara
Laureano
Leal
Lebron
Ledesma
Leiva
Lemus
Leon
Lerma
Leyva
Limon
Linares
Lira
Llamas
Loera
Lomeli
Longoria
Lopez
Lovato
Loya
Lozada
Lozano
Lucero
Lucio
Luevano
Lugo
Lujan
Luna
Macias
Madera
Madrid
Madrigal
Maestas
Magana
Malave
Maldonado
Manzanares
Mares
Marin
Marquez
Marrero
Marroquin
Martinez
Mascarenas
Mata
Mateo
Matias
Matos
Maya
Mayorga
Medina
Medrano
Mejia
Melendez
Melgar
Mena
Menchaca
Mendez
Mendoza
Menendez
Meraz
Mercado
Merino
Mesa
Meza
Miramontes
Miranda
Mireles
Mojica
Molina
Mondragon
Monroy
Montalvo
Montanez
Montano
Montemayor
Montenegro
Montero
Montes
Montez
Montoya
Mora
Morales
Morena
Mota
Moya
Munguia
Muniz
Munoz
Murillo
Muro
Najera
Naranjo
Narvaez
Nava
Navarrete
Navarro
Nazario
Negrete
Negron
Nevarez
Nieto
Nieves
Nino
Noriega
Nunez
Ocampo
Ocasio
Ochoa
Ojeda
Olivares
Olivarez
Olivas
Olivera
Olivo
Olmos
Olvera
Ontiveros
Oquendo
Ordonez
Orellana
Ornelas
Orosco
Orozco
Orta
Ortega
Ortiz
Osorio
Otero
Ozuna
Pabon
Pacheco
Padilla
Padron
Paez
Pagan
Palacios
Palomino
Palomo
Pantoja
Paredes
Parra
Partida
Patino
Paz
Pedraza
Pedroza
Pelayo
Pena
Perales
Peralta
Perea
Peres
Perez
Pichardo
Pino
Pineda

PATIENT INFORMATION cont.

Pizarro
Polanco
Ponce
Porras
Portillo
Posada
Prado
Preciado
Prieto
Puente
Puga
Pulido
Quesada
Quezada
Quinones
Quinonez
Quintana
Quintanilla
Quintero
Quiroz
Rael
Ramirez
Ramon
Ramos
Rangel
Rascon
Raya
Razo
Regalado
Rendon
Renteria
Resendez
Reyes
Reyna
Reynoso
Rico
Rincon
Riojas
Rios
Rivas
Rivera
Rivero
Robledo
Robles
Rocha
Rodarte
Rodrigez
Rodriguez
Rodriquez
Rojas
Rojo
Roldan
Rolon
Romero
Romo
Roque
Rosado
Rosales
Rosario
Rosas
Roybal
Rubio
Ruelas
Ruiz
Ruvalcaba
Saavedra
Saenz
Saiz
Salas
Salazar
Salcedo
Salcido
Saldana
Saldivar
Salgado
Salinas
Samaniego
Sanabria
Sanches
Sanchez
Sandoval
Santacruz
Santana
Santiago
Santillan
Sarabia
Sauceda
Saucedo
Sedillo
Segovia
Segura
Sepulveda
Serna
Serrano
Serrato
Sevilla
Sierra
Sisneros
Solano
Solis
Soliz
Solorio
Solorzano
Soria
Sosa
Sotelo
Soto
Suarez
Tafoya
Tamayo
Tamez
Tapia
Tejada
Tejeda
Tellez
Tello
Teran
Terrazas
Tijerina
Tirado
Toledo
Toro
Torres
Torrez
Tovar
Trejo
Trevino
Trujillo
Ulibarri
Ulloa
Urbina
Urena
Urias
Uribe
Urrutia
Vaca
Valadez
Valdes
Valdez
Valdivia
Valencia
Valentin
Valenzuela
Valladares
Valle
Vallejo
Valles
Valverde
Vanegas
Varela
Vargas
Vasquez
Vazquez
Vega
Vela
Velasco
Velasquez
Velazquez
Velez
Veliz
Venegas
Vera
Verdugo
Verduzco
Vergara
Viera
Vigil
Villa
Villagomez
Villalobos
Villalpando
Villanueva
Villareal
Villarreal
Villasenor
Villegas
Yanez
Ybarra
Zambrano
Zamora
Zamudio
Zapata
Zaragoza
Zarate
Zavala
Zayas
Zelaya
Zepeda
Zuniga

Tobacco History

It is important to collect information on tobacco use for as many cancer patients as possible, regardless of diagnosis. This information can often be found in the medical record in the history and physical, nurses' notes, social service notes and/or anesthesia notes. If necessary, the medical records of previous or subsequent admissions should also be reviewed.

Use the following codes for cases diagnosed as of 01/01/1996:

History	**Code**
never used tobacco	**0**
cigarette smoker, current	**1**
cigar/pipe smoker, current	**2**
snuff/chew/smokeless tobacco user, current	**3**
combination tobacco use, current	**4**
previous tobacco use	**5**
unknown	**9**

Occupation and Industry

Information on the occupation and industry of cancer patients can be used to identify areas of research on possible links between workplace exposures and cancer. For example, DPH studies have investigated potential cancer risks for construction workers, firefighters and waitresses. In addition, occupation and industry information can be useful in identifying groups of workers in particular need of preventive services (such as mammograms) regardless of whether or not their cancers were caused by their work. Because these studies rely on comparisons between different occupations and industries, it is important to collect accurate information for all cancer patients, regardless of age, sex, occupation or diagnosis.

Information regarding occupation and industry may often be found in the patient's history and physical exam, nurses' notes, social service notes, admitting sheet, etc. To obtain this information it may also be necessary to review pertinent sections of previous and subsequent admission records. The MCR collects information regarding the patient's usual occupation and industry (as defined on page 70). This is not necessarily the patient's current or most recent job. Please make every attempt to determine the patient's usual occupation and industry.

Sometimes the medical record may only include the type of industry or employer's name. Enter all available information because even partial information can be useful.

The following rules and guidelines apply to occupation and industry data:

- No occupation/industry information: When there is no information available for either occupation or industry, enter **UNKNOWN** in both the "Usual Occupation" and "Usual Industry" fields. Do not use the term "none" which could mean that the individual has never worked.
- Incomplete information: Enter **UNKNOWN** in the "Usual Industry" field if information about occupation, but not industry is available, even if the person is currently retired, disabled, or otherwise not working. Similarly, if only information about industry is available, enter **UNKNOWN** for "Usual Occupation".
- More than one occupation/industry listed: Make every effort to determine the occupation and/or industry held during most of the patient's working life.

- Only current occupation/industry listed: If only the current or most recent occupation/industry is available, then record this.
- Housewives/persons at home: If the patient worked outside the home but spent most of their life working in the home, use **HOUSEWIFE/HUSBAND**. Record the patient's Usual Occupation outside the home if s/he spent most of their time working outside the home. If no information is available concerning an occupation outside the home, enter **AT HOME** or **OWN HOME** in the "Usual Industry" field, and **HOUSEWIFE/HUSBAND** in the "Usual Occupation" field. (These terms are preferable to "homemaker" or "housekeeper", which can be confused with some occupations outside the home.)
- Retired persons: Review the patient's record for information on a past occupation, industry or employer. *Only* when there is no information available, enter **RETIRED** in both the "Usual Occupation" and "Usual Industry" fields.
- Unemployed/disabled persons: Attempt to find a former occupation or industry for persons currently unemployed or disabled. If it is known that the patient never worked, enter **NEVER WORKED** in both "Usual Occupation" and "Usual Industry" fields. If no information is available, enter **UNKNOWN** in both fields.
- Children: If the patient is a child, enter **CHILD** in both fields. *Note*: It is no longer necessary to search for a parent's occupation/industry.
- Students: If the patient is an adult and is a student, review the patient's record for information about any job which the student may have held previously or concurrently with attending school. If no information is available, enter **STUDENT** in both fields.
- Armed Forces employees: If known, enter the branch of service (Army, Navy, etc.) in the "Usual Industry" field; if the branch is not known, enter **ARMED FORCES** or **MILITARY**. The Armed Forces include both civilian and military occupations: for civilian occupations, enter the appropriate description (e.g., nurse, payroll clerk, cook) in the "Usual Occupation" field; for military occupations, provide the rank (e.g., private, sergeant, captain), if available, as well as the type of job (e.g., pilot, tank driver).

Usual Occupation

Enter the patient's "usual occupation", using up to 25 characters. "Usual occupation" refers to the type of job the individual was engaged in for most of his/her working life (e.g., accountant, truck driver, teacher, auto mechanic, textile machine operator). If the patient is not employed at the time of diagnosis, make every attempt to determine the longest held occupation. Do not enter general terms such as "student", "housewife", "retired", "unemployed" or "disabled" unless no other information regarding occupation can be found.

Although any information is useful, please provide as detailed a description of occupation as possible, because this will allow for more accurate coding of the information.

Examples:

Common entry	Preferable detailed entry
Analyst	Computer systems analyst, budget analyst, food analyst
Construction worker	Construction laborer, carpenter, plumber, electrician
Engineer	Electrical engineer, chemical engineer, power plant engineer
Factory worker	Assembler, lathe operator, stitcher, spray painter, riveter
Mechanic	Auto mechanic, elevator mechanic, refrigeration mechanic
Technician	Medical lab technician, electronic technician, X-ray technician

Usual Industry / Type of Business

Enter the industry associated with the patient's Usual Occupation, using up to 25 characters.

"Usual Industry" refers to the type of business or activity in which the individual worked in his/her Usual Occupation (e.g., accounting firm, trucking company, elementary school, auto repair, clothing manufacture).

If the medical record contains the employer's name but does not specify an industry, enter the employer's name here. Do not abbreviate the name unless the employer is very commonly known. If known, also enter the city/town where employed (e.g., **GENERAL ELECTRIC, LYNN, MA**) as this can help identify the employer's industry and distinguish different branches of a company having the potential for different occupational exposures.

As with the "Usual Occupation" field, do not enter general terms such as "retired", "student" or "unknown" unless no other information can be obtained. A particular problem with industry information is a failure to supply sufficient detail to determine the actual industry activity. For example, the entry "automotive" could refer to auto manufacturing, auto dealers, or auto repair. Sometimes the Usual Occupation helps to clarify the type of industry.

Examples:

Common entry	Preferable detailed entry
Electrical	Electrical products manufacturing, electric utility, electrical contractor
Health care	Hospital, doctor's office, home health services
Lumber	Logging, sawmill, retail lumberyard
Transportation	Bus service, taxi, trucking, airline, railroad, travel agency
Utility	Electric utility, gas utility, water utility

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Primary Site Code

Enter the topography code for the site of origin from the Topography section of ICD-O-2. [Note that ICD-O-2 code C14.1, laryngopharynx, should not be used for diagnoses made after 1/1/95. Laryngopharynx became a synonym under C13.9 (hypopharynx, NOS).]

Enter the site code that matches the narrative primary site indicated in the medical record. Site codes are found in the Topography - Numerical List Section (pages 1-20) in ICD-O-2, and in the Alphabetic Index (pages 51-136) of ICD-O-2, which includes both Topography and Morphology terms.

Please note that in the Alphabetic Index, the site is indicated by a three-digit number preceded by a "C" as part of the code. The "**C**" should be entered. The first two numeric digits of the topography code stand for the part of the body, and the third digit represents a specific area in that part. The Topography section is arranged in numerical order of the first two digits. The decimal point should be dropped when entering "Primary Site Code".

Example: A patient's record states that the primary site is "cardia of stomach". This site is looked up in the Alphabetic Index of ICD-O-2, either under "cardia" or "stomach", and its code is found to be "C16.0". In coding for the MCR, drop the decimal point and enter the four-character code **C160**.

Most sites include a third digit of “8” to be used for *single* tumors that overlap the boundaries of two or more subsites and whose exact origin is not known.

Most sites also include a third digit of “9” to be used when a subsite is not specified, and for *multiple* tumors originating in different subsites of the organ.

Site-Specific Morphologies

Some types of neoplasms are specific to certain primary sites. For example, hepatoma (8170/3), by definition, always arises in the liver (C22.0); therefore, "hepatoma", with no other statement about topography, should be entered with primary site **C220**. If the patient's medical record contains a morphologic term which has a corresponding "C" code in ICD-O-2, use this "C" code if no definite site is given or if only a metastatic site is given.

If the site specified by the physician differs from the site referred to in ICD-O-2, report the site specified by the physician.

For a more extensive discussion of site-specific morphologies, see the Introduction (pages xxx-xxxi) in ICD-O-2.

Primary-Versus-Secondary (Metastatic) and Ill-Defined Sites

As previously stated, the primary site should always be identified in cases reported to the MCR, rather than a metastatic or secondary site. If the site of origin cannot be identified exactly, the following guidelines may be used:

- NOS: Use the "NOS subcategory" when a subsite of an organ is not specifically stated. Do not use the "NOS term" if a more descriptive term is available.

- Primary Site Codes C76.0-C76.8: These codes may be used for diagnoses referring to ill-defined sites or regions of the body, such as "pelvis", "abdomen" and "head". These sites contain several types of tissue (e.g., bone, skin, soft tissue) which might not be specified in the diagnostic statement. In such cases, site codes C76.0-C76.8 may be used; if, however, the tissue in which the tumor originated can be identified, use a more specific site code.

- Primary Site Code C80.9: If the primary site of tumor origin is unknown, and the only information available is the metastatic or secondary site, enter **C809** to code the primary site.

Special Primary Site Conditions

Special rules apply to the following cases:

- Ductal and Lobular Breast Lesions: See page 19 for a discussion of certain mixed ductal and lobular lesions of the breast. If these lesions occur separately in different quadrants of the same breast, enter site code **C509**.
- Familial Polyposis: When multiple carcinomas arising in familial polyposis involve multiple segments of the colon or of the colon and rectum, code the primary site as colon, NOS (**C189**).
- Kaposi's Sarcoma: Code the primary site in which the tumor arises. If Kaposi's sarcoma arises in the skin and another site simultaneously, or if no primary site is stated, code the primary site as skin, NOS (**C449**).
- Leukemia: Code the primary site as bone marrow (**C421**).
- Lymphoma: Code to an extranodal site (e.g., stomach, lung, skin) when there is no nodal involvement of any kind or if it is stated in the medical record that the origin was an extranodal site. If no primary site is given, enter code **C779** (lymph node, NOS) rather than the code for an unknown primary site (**C809**).
- Lymphoreticular Process: For malignancies of the lymphoreticular process classified as *myeloproliferative* (arising in the bone marrow), code the primary site as bone marrow (**C421**). For lymphoreticular process malignancies classified as *lymphoproliferative* (arising in the lymph tissue), code the site as "lymph node, NOS" (**C779**). Code *unspecified* malignancies of the lymphoreticular process to the primary site "reticuloendothelial system, NOS" (**C423**).
- Melanoma: If the primary site is unknown, assume that the primary site is the skin and enter site code **C449**.
- Neuroblastoma: Code neuroblastomas of ill-defined sites to the most likely site in each case. (Adrenal medulla is a common site.) If the location of the primary tumor is unknown, enter code **C499** (connective, subcutaneous, and other soft tissues, NOS).
- Subareolar / Retroareolar Tumor: Code as the central portion of breast (**C501**) to indicate that the tumor arose in the breast tissue beneath the nipple but not in the nipple itself.

Laterality

(This field is labeled "Lat." on the MCR Cancer Patient Abstract.)

Use the following codes to classify the Laterality *of the primary site* at diagnosis:

Laterality	**Code**
not a paired site	**0**
Right side is origin of primary.	**1**
Left side is origin of primary.	**2**
only one side involved, right or left origin unspecified	**3**
bilateral involvement, but origin unknown -- and stated to be a single primary (including bilateral ovarian primaries of the same histologic type diagnosed within two months of each other; bilateral retinoblastomas; and bilateral Wilms's tumors)	**4**
paired site, but no information concerning laterality; midline tumor	**9**

Laterality should be provided for each primary site abstracted.

For an unknown primary site (C80.9), enter Laterality code **0**.

Code **4** should not be used for bilateral primaries for which separate abstracts are prepared, nor when the side of origin is known and the tumor has spread from there to the other side.

Example: For a left ovarian primary with metastasis to the right ovary, enter code **2** (not **4**).

Laterality codes **1-9** must be used for the sites shown in **Table IV.1** (next page) *except as noted*. Only major headings are listed in this table; however, Laterality should be coded for all ICD-O-2 subheadings unless specifically excluded in the table's text. Such exclusions must be coded **0**.

Examples: Primary Site is carina (unpaired), C34.0 - enter Laterality code **0**

Primary Site is main bronchus (paired), C34.0 - enter a Laterality code **1-9**

Table IV.1 Paired Organ Sites

(also listed by code and alphabetically in Appendix B)

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

Narrative Primary Site

(On the MCR Cancer Patient Abstract, this is the field labeled "Narrative" next to the "Primary Site" and "Lat." code boxes.)

Enter the primary site in narrative form in this field. It is important that the primary site be identified properly so that MCR statistics reflect the actual occurrence of cancer in various sites. Do not report secondary or metastatic sites. (See **SECTION II - REPORTABILITY** for further discussion of primary-versus-secondary sites.)

Do not use the text label for the Primary Site Code to complete this field; instead, this field should contain the most specific primary site information as derived from the medical record. The information in this field will be used to verify Primary Site Codes. Where applicable, adding "right" or "left" into this field also helps us verify the Laterality code for paired sites.

Information regarding primary site can be found in several sections of the medical record, and care should be taken to locate the most specific and accurate identity of the primary site. This is most often found in the pathology report. If the medical record contains conflicting information regarding primary site, information in the pathology report should take precedence over information found in other sections of the medical record. If the primary site is still unclear, the patient's physician should be contacted to verify the primary site.

If the primary site is truly unknown, enter "**UNKNOWN PRIMARY SITE**". (See the "Primary Site Code" section on pages 73-75.)

Histology / Behavior / Grade

Histologic Type Code

Enter the Histologic Type Code from the Morphology section of ICD-O-2*. Histology codes are located in both the Morphology - Numerical List (pages 25-49 in ICD-O-2) and in the Alphabetic Index (pages 51-136 in ICD-O-2). (Both topography and morphology terms are included in the Alphabetic Index. Morphology codes are identified in this section with an "M" preceding the code number, but do not enter "M" when coding this field.) The histology field is a five-digit field consisting of two parts: histologic type (4 characters) and the behavior code (1 character). (Behavior is discussed on pages 83-86.) The MCR has adopted the SEER rules for coding histologies.

* [Note that several histology codes which do *not* appear in ICD-O-2 have become valid in recent years. Code **9715** (MALT lymphoma) may be used for diagnoses made after 1/1/95; codes **9688** (T-cell rich B-cell lymphoma), **9708** (subcutaneous panniculitic T-cell lymphoma), **9710** (marginal zone lymphoma), **9716** (hepatosplenic γδ cell lymphoma), and **9717** (intestinal T-cell lymphoma) may be used for diagnoses made after 1/1/96; codes **9828** (acute lymphoblastic leukemia, L2 type), **9871** (acute myelomonocytic leukemia with eosinophils), **9872** (acute myeloid leukemia, minimal differentiation), **9873** (acute myeloid leukemia, without maturation) and **9874** (acute myeloid leukemia, with maturation) may be used for diagnoses made after 1/1/98.]

When coding histologic type, use the best information from the entire pathology report (microscopic description, final diagnosis, comments). Information from an AJCC staging form can also be used if the form is signed by a physician.

Lymphomas: Lymphomas may be classified by the Rappaport classification or the Working Formulation. If both systems are used to classify the disease, the terms used to describe the lymphoma may differ, and *the Working Formulation term should take precedence*.

Example: In the pathology report, the Working Formulation describes "malignant lymphoma, diffuse, large cell, cleaved" (9681). The Rappaport classification describes "malignant lymphoma, diffuse, histiocytic" (9680). Code **9681** since the Working Formulation takes precedence.

General Rule: Before coding histologic type, a determination should be made as to whether the case involves a single primary or multiple primaries. (See pages 13-39 for a detailed discussion.) If the final diagnosis gives a specific histologic type, enter the code for that type. All pathology reports for the primary under consideration should be used. Although the report from the most representative tissue is usually the best, sometimes all of the cancerous tissue may be removed at biopsy; in such cases, the biopsy report must be used. If a definitive statement of a more specific histologic type (higher code number in ICD-O-2) is found in the microscopic description or in the comments, the more specific histologic diagnosis should be coded.

When coding histology, also use the following rules.

Single Lesion, Multiple Histologies, Same Behavior: If two histologic types or subtypes in the same primary tumor have the same Behavior Code, proceed in the following order to select the appropriate Histologic Type Code:

1. Use a combination code, if one exists.

   Examples:

   - Invasive breast carcinoma, predominately lobular with foci of ductal carcinoma - Use the combination code for lobular and ductal carcinoma (**8522**/3).
   - Predominately lobular with a ductal component - Use the combination code for lobular and ductal carcinoma (**8522**/3).

2. If one histologic term appears in ICD-O-2 as an "NOS term" (e.g., "carcinoma, NOS") and the other term is more specific, use the more specific term.

   Examples:

   - Adenocarcinoma (8140/3) of sigmoid colon with mucin-producing features - Code to mucin-producing adenocarcinoma (**8481**/3).
   - Invasive carcinoma, probably squamous cell type - Code to squamous cell carcinoma (**8070**/3) since this is more specific than invasive "carcinoma, NOS" (8010/3).

3. Code the histology of the majority of the tumor if there is no combination code and if neither term is equivalent to an "NOS term" in ICD-O-2. (The phrases "*predominately...*" and "*...with features of...*" are examples of phrases used to specify the majority of the tumor. Examples of phrases which do not describe the majority of the tumor are "*...with foci of...*", "*...areas of...*", and "*...elements of...*"; such phrases are to be ignored when both terms are specific and no combination code exists.)

   Example: predominately leiomyosarcoma associated with foci of well-developed chondrosarcoma - Code the histology of the majority of the tumor - leiomyosarcoma (**8890**/3).

4. If no combination code is available and the histology of the majority of the tumor is not indicated, use the term that has the higher code number in ICD-O-2.

   Example: ductal carcinoma (8500/3) and medullary carcinoma (8510/3) - Code as medullary carcinoma (**8510**/3).

Single Lesion, Multiple Histologies, Different Behaviors: If the Behavior Codes are different, select the morphology code with the higher Behavior Code number.

Example: squamous cell carcinoma *in situ* (8070/2) and papillary squamous cell carcinoma (8052/3) - Code as papillary squamous cell carcinoma (**8052**/3).

Exception: If the histology of the invasive component is an "NOS term" (e.g., carcinoma, adenocarcinoma, melanoma), use the specific term associated with the *in situ* component, but enter an invasive Behavior Code.

Example: squamous cell carcinoma *in situ* (8070/2) with areas of invasive carcinoma (8010/3) - Code as squamous cell carcinoma (**8070**/3).

Multiple Lesions Considered a Single Primary: When multiple lesions are considered a single primary, use the following rules:

1. If one lesion is described with an "NOS term" (e.g., carcinoma, adenocarcinoma, sarcoma), and the other lesion is described with a more specific term (e.g., *large cell* carcinoma, *mucinous* adenocarcinoma, *spindle cell* sarcoma), code to the more specific term.

2. For colon and rectum primaries:

   When both an adenocarcinoma (8140/3) and an adenocarcinoma (*in situ* or invasive) in a(n) adenomatous polyp (8210) or an adenocarcinoma (*in situ* or invasive) in (tubulo)villous adenoma (8261, 8263) arise in the same segment of the colon or of the rectum, code as adenocarcinoma (**8140**/3).

   When both a carcinoma (8010/3) and a carcinoma (*in situ* or invasive) in a(n) (adenomatous) polyp (8210) arise in the same segment of the colon or of the rectum, code as carcinoma (**8010**/3).

3. If the histologies of multiple lesions can be represented by a combination code, use that code.

Behavior Code

(This field is labeled "Beh." on the MCR Cancer Patient Abstract.)

The fifth digit of the ICD-O-2 histology code (which appears after the slash) is the Behavior Code. Use the best information available from the pathology report to code behavior.

The MCR requires that all tumors ending with a fifth digit Behavior Code of "2" or "3" be reported. As noted on page 11, the following are exceptions:

Morphology	
8000-8004	malignant neoplasms, NOS, of the skin (C44.0-C44.9)
8010-8045	epithelial carcinomas of the skin (C44.0-C44.9)
8050-8082	papillary and squamous cell carcinomas of the skin (C44.0-C44.9)
8090-8110	basal cell carcinomas of any site except genital sites

Note: The above lesions are reportable for skin of the genital sites -- vagina, clitoris, vulva, prepuce, penis, and scrotum (C52.9, C51.0-C51.9, C60.0, C60.9, and C63.2).

In addition, the MCR requires that all cases with Behavior Codes 0, 1 or 3 of the meninges, brain, and central nervous system (C70.0, C70.1, C70.9, C71.0-C71.9, C72.0-C72.5, C72.8, and C72.9) be reported.

Beginning with cases diagnosed on or after 1/1/1998, the MCR no longer requires reporting facilities to submit cases of carcinoma *in situ* of the uterine cervix (C53 with histologic type codes 8000-8110 and behavior code 2). This includes cases of cervical intraepithelial neoplasia, Grade III (CIN III).

Invasive carcinomas of the cervix are still reportable.

Also beginning with cases diagnosed on or after 1/1/1998, the MCR no longer requires reporting facilities to submit cases of prostatic, vaginal, or vulvar intraepithelial neoplasia (PIN, VAIN, or VIN).

The codes for classifying Behavior are shown here:

Behavior	**Code**
benign	**0**
uncertain whether benign or malignant *borderline malignancy *low malignant potential	**1**
carcinoma *in situ* intraepithelial non-infiltrating non-invasive	**2**
malignant, primary site	**3**
malignant, secondary site malignant, metastatic site	**6
malignant, uncertain whether primary or metastatic site	**9

* except ovarian cystadenomas with histologies 8440-8490, which are coded as malignant (**3**)

** This is a reportable behavior, but enter code **3** for the MCR. Behavior Code "6" indicates a metastatic site. If the only specimen is from a metastatic site, code the histologic type of the metastatic site but enter **3** for the Behavior Code.

Example: If the patient had a biopsy of the liver showing metastatic adenocarcinoma (8140), the primary site is unknown (C80.9). Code the histology as adenocarcinoma (8140/**3**).

In Situ

The following terms indicate *in situ* behavior:

- adenocarcinoma in an adenomatous polyp with no invasion of stalk
- Bowen's disease
- Clark's Level 1 for melanoma, limited to epithelium
- comedocarcinoma, noninfiltrating (C50._)
- confined to epithelium
- Hutchinson's melanotic freckle, NOS (C44._)
- intracystic, noninfiltrating
- intraductal
- intraepidermal, NOS
- intraepithelial, NOS
- involvement up to but not including the basement membrane
- lentigo maligna (C44._)
- lobular neoplasia (C50._)
- lobular, noninfiltrating (C50._)
- noninfiltrating
- noninvasive
- no stromal involvement
- papillary, noninfiltrating or intraductal
- precancerous melanosis (C44._)
- PIN III (prostatic intraepithelial neoplasia, Grade III)*
- Queyrat's erythroplasia (C60._)
- Stage 0

Code behavior as malignant (**3**) if <u>any</u> invasion is present, no matter how limited.

* *not* reportable to the MCR for diagnoses as of 1/1/1998

Microinvasion

Code microinvasion (the earliest stage of invasion) as malignant (**3**), not *in situ*.

For the diagnosis of microinvasive squamous cell carcinoma (a common form of cervical cancer), use the morphology code provided by ICD-0-2 (8076/**3**).

Grade / Differentiation / Cell Origin Code

The Grade or Differentiation of a tumor describes the tumor's resemblance to normal tissue. A well differentiated (Grade I) tumor is the most like normal tissue. Grade is also needed for the AJCC staging of some types of cancer.

A Grade stated in a histopathology report takes precedence over one in a cytology report. Code the Grade or Differentiation as stated in the FINAL pathologic diagnosis.

Example: Microscopic Description: moderately differentiated squamous cell carcinoma with poorly differentiated areas

Final Pathologic Diagnosis: moderately differentiated squamous cell carcinoma

Code moderately differentiated (**2**).

Exception: If the Differentiation is NOT stated in the final pathologic diagnosis, use the information from the microscopic description or comments.

Code the Grade or Differentiation from the pathologic examination of the *primary* tumor only not from metastatic sites. If the primary site is unknown, code the Grade/Differentiation as unknown (**9**).

Example: A metastatic liver lesion is specified as "poorly differentiated", and the primary site cannot be identified. Enter code **9** for Grade because the differentiation *at the primary site* cannot be determined.

When the pathology report(s) list(s) more than one Grade of tumor, code to the highest Grade code, even if it does not represent the majority of the lesion. This may result from different degrees of Differentiation between biopsy and resection specimens.

Examples:

- moderately to poorly differentiated carcinoma - Code as poorly differentiated (**3**).
- Code a combination of Grades I and II carcinoma as moderately differentiated (**2**).
- If a final diagnosis states "predominantly Grade I, focally Grade II", code as Grade II (**2**).

Code the Grade for *in situ* lesions if available.

Codes **5**, **6** and **8** define cell origins for leukemias and lymphomas, and code **7** defines a cell origin for leukemias only. For these types of cancer, cell classifications have precedence over grading or differentiation. Do NOT use "high grade," "low grade," or "intermediate grade" descriptions of lymphomas as a basis for coding Differentiation. (Those terms are categories in the Working Formulation of Lymphoma Diagnosis and are **not** related to this field.)

The Grade/Differentiation/Cell Origin codes are as follows:

Description	**Grade/Cell Type Origin**	**Code**
well differentiated differentiated, NOS	Grade I	**1**
moderately differentiated moderately well differentiated intermediate differentiation	Grade II	**2**
poorly differentiated	Grade III	**3**
undifferentiated anaplastic	Grade IV	**4**
for lymphomas and leukemias: T-cell, T-precursor	T-cell origin	**5**
for lymphomas and leukemias: B-cell, Pre-B, B-precursor	B-cell origin	**6**
for leukemias only: null cell, non T-non B	Null cell origin	**7**
for lymphomas and leukemias: NK cell	Natural killer cell origin	**8**
grade/differentiation/cell type not determined, not stated, not applicable; unknown primary site	unknown	**9**

MRI / PET / Brain Tumor Grading

It may be possible to establish tumor Grade through magnetic resonance imaging (MRI) or positron emission tomography (PET) when there is no tissue diagnosis. (Brain tumors may be graded using these methods.) If there is *no* tissue diagnosis, but the Grade or Differentiation is indicated on an MRI or PET report, use that Grade; if there *is* a tissue diagnosis, however, do not use the Grade from any other source.

Other Grade/Differentiation Terminology

When there is variation in the usual terms for Grade or Differentiation, use the following conversions:

Terminology	Grade	Code
low grade partially well differentiated	I-II	**2**
medium grade	II-III	**3**
moderately undifferentiated relatively undifferentiated	III	**3**
high grade	III-IV	**4**

Occasionally, a Grade is written as "2/3" (Grade II in a 3-grade system) or "II/IV" (Grade II of a 4-grade system). For these classifications, use the following codes:

Grade	Code
I / III	**2**
II / III	**3**
III / III	**4**

Grade	Code
I / IV	**1**
II / IV	**2**
III / IV	**3**
IV / IV	**4**

Breast Tumors and Scarff Bloom-Richardson Grading

The Differentiation of a breast tumor may be described using the Scarff Bloom-Richardson (SBR or BR) grading system. (This grading system may also be called Bloom-Richardson, modified Bloom-Richardson, Elston-Ellis modification of Bloom-Richardson, Nottingham grade, or Nottingham modification of Bloom-Richardson.) Use the following codes:

Bloom-Richardson Score	Bloom-Richardson Grade	Differentiation	Code
3, 4, 5	low grade	well differentiated	**1**
6, 7	intermediate grade	moderately differentiated	**2**
8, 9	high grade	poorly differentiated	**3**

Prostate Tumors and Gleason's Score or Pattern

Both the tumor Differentiation and Gleason's Score and/or Pattern may be given. Code the tumor Grade/Differentiation when it is available, but use the following conversions when the reports gives only the Gleason's Score (2-10):

Gleason's Score	Grade and Differentiation	Code
2, 3, 4	I well differentiated	**1**
5, 6, 7	II moderately differentiated	**2**
8, 9, 10	III poorly differentiated	**3**

If only the predominate pattern (1-5) is mentioned, use the following conversions:

Gleason's Pattern	Grade and Differentiation	Code
1, 2	I well differentiated	**1**
3	II moderately differentiated	**2**
4, 5	III poorly differentiated	**3**

Narrative Histology/Behavior/Grade

(On the MCR Cancer Patient Abstract, this is the "Narrative" field next to the box labeled "Grade".)

Enter the histology, behavior and grade/differentiation/cell origin in narrative form in this field.

Do not use the text label to complete this field; instead, this field should contain histology, behavior and grade/differentiation information as derived from the medical record. The information in this field will be used to verify the Histologic Type, Behavior and Grade Codes.

Information regarding histology, behavior and grade is primarily found in the pathology report. Care should be taken to locate the most specific and accurate information. If the medical record contains conflicting information regarding histology, behavior or grade, information in the pathology report should take precedence over information from other sections of the medical record. If histology, behavior or grade is still unclear, the patient's physician should be contacted for verification.

Date of Diagnosis

Enter the date, in MMDDCCYY format, on which a recognized medical practitioner first stated that the patient had the reported cancer, whether or not the diagnosis was ever histologically confirmed, and whether or not the diagnosis was made at the reporting hospital or before admission.

Use **9**'s to code unknown parts of the date (such as 06**99**1998 or **9999**1998).

For a diagnosis made *in utero*, use the date of the child's birth as the Date of Diagnosis.

For cases of Class 5 (first diagnosed at autopsy), enter the date of death as the Date of Diagnosis, even if the autopsy was actually performed on a later date.

If a patient receives cancer-directed therapy before definitive diagnosis, use the date on which therapy started as the Date of Diagnosis.

Do not change the Date of Diagnosis if the diagnosis was confirmed at a later date.

Examples:

- A patient has a mammogram on September 15, 1998, revealing a mass in the left breast's lower inner quadrant compatible with carcinoma. On September 22, 1998, the patient has an excisional breast biopsy that confirms infiltrating ductal carcinoma. The Date of Diagnosis is **09151998**.
- A physician notes a prostate nodule during a physical examination performed on January 17, 1998 which is suspicious for cancer. On January 24, 1998 a needle biopsy of the prostate provides histologic confirmation of adenocarcinoma. The Date of Diagnosis is entered **01171998**.

If, however, a physician reports that, in retrospect, a patient had cancer at an earlier date, use that earlier date as the Date of Diagnosis (i.e., backdate the diagnosis).

Example: In June of 1996, a patient has a total abdominal hysterectomy for endometriosis. The patient is later admitted in October of 1998 with abdominal pain and distension. A laparoscopy with omental biopsy reveals metastatic cystadenocarcinoma. A review of the 1996 hysterectomy shows an area of cystadenocarcinoma in the left ovary. Backdate the diagnosis to 06/96. (Enter **06991996**.)

Vague Dates

Estimate the Date of Diagnosis if you do not know the exact date. Approximation is preferable to entering an unknown date. Use the following procedures if information is limited to descriptive terms:

Descriptive Term	**Date Coded**
spring	April
middle of the year	July
fall / autumn	October
winter	Try to determine if this means the beginning or end of the year, and then code January or December.

Class of Case

Class of Case divides registry data into analytic and nonanalytic categories. Analytic cases (0, 1, 2, 6) are those included on treatment and survival analyses. Nonanalytic cases (3, 4, 5, 8, 9) are those that are not included in treatment and survival analyses. The MCR requires hospitals to report nonanalytic cases, but only in an abbreviated fashion (see page 10).

Code	Class	Description
0	Class 0	First diagnosed at reporting institution since its reference date, and all of the first course of therapy given elsewhere. Cases include: • patients who choose to be treated elsewhere • patients who are referred elsewhere for treatment for any reason (e.g., lack of special equipment, proximity of a patient's residence to the treatment center, or financial, social or rehabilitative considerations)
1	Class 1	First diagnosed at reporting institution since its reference date, and either (a) received all or part of the first course of therapy at the reporting institution, or (b) was never treated. Cases include: • patients who received all or part of their first course of therapy at the reporting institution • patients who refused any treatment • patients who were untreatable because of age, advanced disease or other medical conditions • Specific treatment was recommended but not received at the reporting institution, and it is unknown if treatment was ever administered. • It is unknown if treatment was recommended or administered. • patients diagnosed at the reporting institution prior to the reporting institution's reference date, and all or part of the first course of therapy was received at the reporting institution after the reporting institution's reference date • patients who were first diagnosed and had staging workup at the reporting institution, and all or part of the first course of therapy was received in a staff physician's office. • patients who were first diagnosed in a staff physician's office and then treated at the reporting institution • patients who were diagnosed and whose treatment was planned at the reporting institution, and treatment was delivered elsewhere in accordance with the reporting institution's treatment plan

Code	Class	Description
2	Class 2	First diagnosed elsewhere, and either (a) received all or part of the first course of therapy at the reporting hospital after its reference date, or (b) planning of the first course of therapy was done primarily at the reporting hospital. Cases include: • patients diagnosed at another hospital but not treated until admission to the reporting hospital, regardless of the interval between diagnosis and treatment • patients diagnosed and surgically treated at another hospital, then admitted to the reporting hospital for radiation therapy that completes planned first course of treatment • any cases the reporting hospital considered to be analytic (i.e., the planning/management decisions were made at the hospital, even if the treatment was actually administered elsewhere, and the follow-up care of the patient is the responsibility of the reporting hospital)
3	Class 3	First diagnosed at another institution, and either (a) entire first course of therapy was given elsewhere, (b) patient was never treated, or (c) unknown if treated. Cases include: • patients diagnosed and first course of therapy completed elsewhere, later admitted to the reporting hospital with disease • no information available on patient's first course of therapy, and patient is now treated or managed at the reporting institution • The reporting institution is treating or managing the recurrence, progression, or subsequent treatment of a previously diagnosed malignancy.
4	Class 4	First diagnosed and first course of therapy at reporting institution before its reference date. Cases include: • Cases whereby the reporting facility manages or treats a recurrence or progression of the disease <u>after</u> the facility's reference date. *Note*: Class 4 cases are reportable to the MCR <u>only</u> if the reporting institution's reference date is later than the MCR's reference date of January 1, 1982.
5	Class 5	First diagnosed at autopsy. Cases include: • incidental finding of cancer at autopsy
6	Class 6	Patients who were diagnosed and received all of first course of treatment in a staff physician’s office. *Note:* This extends only to those physicians who are members of your institution’s medical staff. If a physician holds multiple staff appointments, the physician must assign reporting responsibility to one institution.
8	Class 8	By death certificate only. <u>This code is for MCR use only</u>. Cases include: • Diagnoses based on death certificates only.
9	Class 9	Unknown. Cases include: • unknown if previously diagnosed or treated • previously diagnosed, but date unknown

Tumor Size

Use three digits to record the size of the primary tumor *in millimeters*. Tumor Size is the largest dimension or the diameter of the primary tumor before treatment.

(Note: Tumor size is often reported in the medical record in centimeters. For convenience, the MCR Cancer Patient Abstract has been designed so that you may enter tumor size here in centimeters.)

Enter the size given in the pathology report for surgically excised tumors. Do not use this field to record depth of tumor or laboratory values. Do not calculate a tumor size by adding the sizes of pieces or chips of tissue as they might not be from the same location or might represent only a small portion of a large tumor. Do not add measurements recorded in biopsy and resection reports. Use the report that documents the largest size. If an excisional biopsy is performed and residual tumor is found during a wider resection, base Tumor Size on the excisional biopsy report.

Exceptions:

- Code size of tumor prior to radiation therapy for surgical patients who received preoperative radiation therapy.
- There are times when the pathologic Tumor Size is not available. The pathology report may not identify Tumor Size, or the tumor may not have been surgically excised. In these cases, use the Tumor Size documented in the following reports (listed in order of preference):
    1. Operative report
    2. Scans
    3. X-rays
    4. Physical examinations

To convert centimeters to millimeters, move the decimal point one digit to the right (i.e., multiply the number of centimeters by 10).

Example: 2.1 centimeters is equivalent to 21 millimeters, so **021** would be entered for Tumor Size.

The following are millimeter equivalents of centimeters and inches:

1.0 mm	=	0.1 cm
10.0 mm	=	1.0 cm
1.0 cm	≈	0.394 inch
1.0 inch	≈	2.5 cm
1.0 inch	≈	25.0 mm

Round off decimals to the nearest tenth.

Example: Tumor size 2.19 cm is rounded off to 2.2 cm. Enter **022** (millimeters).

Code the largest size when a tumor has multiple measurements.

Examples:

- Record size as **033** mm for a 2 x 3.3 x 2.5 cm tumor.
- Record size as **045** mm for a 4.5 x 2.0 cm tumor.

Do not use the size of the entire specimen for Tumor Size.

Examples:

- A patient has an excisional breast biopsy. The pathology report states that the specimen measures 1 cm x 2 cm, but does not state the actual size of the tumor. Do not use the specimen size of 1 cm x 2 cm; rather, code the size based on information from the operative report, mammography, or physical exam.
- A patient has a colonoscopy with polypectomy. The pathology report reads "a 1.5 x .6 cm polyp with a microscopic focus of adenocarcinoma *in situ*." Do not record 1 cm as Tumor Size. Enter **001** mm for Tumor Size because of the term "microscopic" (see **Table IV.2**, page 97).

When a patient has multiple tumors being reported as one primary, record the size of the largest tumor.

Example: A patient has a 1 cm nodule in the right upper lobe and a 1.5 cm nodule in the right middle lobe. Enter Tumor Size as **015** mm.

When a primary has both *in situ* and invasive components, record the size of the invasive component only.

Example: The pathology report describes a breast mass consisting of a 1.8 x 1.3 cm intraductal carcinoma, and a 1.1 cm nodule of infiltrating ductal carcinoma. Enter Tumor Size as **011** mm.

Descriptive Terms

Physicians sometimes use various terms to describe the size of a tumor. The following table converts such terms into millimeters.

Table IV.2

Millimeter Equivalents of Descriptive Terms

Fruits:

Object	mm	Object	mm
Apple	**070**	Lemon	**080**
Apricot	**040**	Olive	**020**
Cherry	**020**	Orange	**090**
Date	**040**	Peach	**060**
Fig, dried	**040**	Pear	**090**
Grape	**020**	Plum	**030**
Grapefruit	**100**	Tangerine	**060**
Kumquat	**050**		

Nuts:

Object	mm
Almond	**030**
Chestnut	**040**
Chestnut, Horse	**040**
Hazel nut	**020**
Hickory nut	**030**
Peanut	**010**
Pecan	**030**
Walnut	**030**

Vegetables:

Object	mm
Bean	**010**
Lima bean	**020**
Pea	< **010**
Pea, split	< **010**

Table IV.2 continued

Eggs and Miscellaneous Foods:

Object	mm	Object	mm
Doughnut	**090**	Egg, Pigeon	**030**
Egg	**050**	Egg, Robin	**020**
Egg, Bantam	**040**	Lentil	**< 010**
Egg, Goose	**070**	Millet	**< 010**
Egg, Hen	**030**		

Money:

Object	mm
Dime	**010**
Dollar, silver	**040**
Half dollar	**030**
Nickel	**020**
Penny	**010**
Quarter	**020**

Other:

Object	mm
Ball, golf	**040**
Ball, ping-pong	**030**
Ball, tennis	**060**
Baseball	**070**
Fist	**090**
Marble	**010**
Match head	**< 010**
Microscopic	**001**
Pencil eraser	**008**

Record the actual diameter of the lesion for malignant melanomas. Do *not* record tumor thickness or level of penetration as Tumor Size. (The level of penetration is reflected in the AJCC stage.)

Enter code **000** when a primary tumor is not identified (AJCC T0). Note: Use this code only for solid tumors.

Example: A patient has a biopsy of an axillary mass. The pathology report identifies infiltrating ductal carcinoma in an axillary node. Workup reveals no breast lesion. Enter Tumor Size **000**.

Enter code **998** for Tumor Size when the following terms describe the tumor involvement at these sites:

- Esophagus (C15.0-C15.9): "entire circumference"
- Stomach (C16.0-C16.9): "diffuse"; "widespread"; "3/4 or more"; "linitis plastica"
- Colon/rectum (C18.0-C20.9): familial/multiple polyposis (Histologic Type Code 8220 or 8221 with a Behavior Code of 2 or 3)
- Lung (C34.0-C34.9): "diffuse"; "entire lobe of lung"
- Breast (C50.0-C50.9): "diffuse"; "widespread"; "3/4 or more"; "inflammatory carcinoma"

Enter code **999** in the following circumstances:

- when Tumor Size is not recorded or not available
- when transurethral resections of the prostate or bladder have produced chips and fragments of tissue (Do not estimate Tumor Size by adding the sizes of these chips or fragments together. A clinical size may be found from physical exam, ultrasound of the prostate, or cystoscopy of the bladder.)
- for the following sites/diseases --
    - hematopoietic neoplasm
    - Hodgkin's disease
    - ill-defined primary site
    - Kaposi's sarcoma
    - Letterer-Siwe's disease
    - leukemia
    - multiple myeloma
    - mycosis fungoides of skin
    - non-Hodgkin's lymphoma
    - reticuloendotheliosis
    - unknown primary site

Confirmation Method

(This field is labeled "Diag. Conf." on the MCR Cancer Patient Abstract.)

This field corresponds to the ACoS Diagnostic Confirmation field. The diagnostic Confirmation Method indicates whether malignancy was confirmed microscopically at any time during the course of the patient's disease. It is a priority coding scheme, with the lower code number taking priority over other codes. The most conclusive method -- the microscopic examination of tissue -- is therefore coded **1**. Consider the patient's entire disease course when coding this field. Change the code to a lower number if a preferable method later confirms a diagnosis.

The codes for this field follow:

Microscopic Confirmation

1 Positive histology

Microscopic confirmation includes tissue specimens from biopsy (including punch biopsy and needle biopsy), frozen section, surgery, autopsy, curettage and conization. This applies to tumor tissue taken from the primary site or a metastatic site. In addition, it also applies to bone marrow biopsy and bone marrow aspiration. Hematologic confirmation of leukemia (i.e., peripheral blood smear) should also be coded **1**.

2 Positive exfoliative cytology, no positive histology

Diagnosis by cytology is based upon the microscopic examination of cells, rather than tissue. Code **2** should not be used if cancer is ruled out by histologic examination. Included are fine needle aspirations (FNA), sputum smears, bronchial brushings/washings, tracheal washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, and cervical and vaginal smears. Also include paraffin-block specimens from concentrated spinal, pleural or peritoneal fluid.

4 Positive microscopic confirmation, method not specified

These are cases that are reported as microscopically confirmed, but have no information about the method used (histology or cytology).

No Microscopic Confirmation

5 Positive laboratory test or marker study

This includes diagnoses of cancer based on certain laboratory tests or marker studies that are clinically diagnostic for cancer. Examples are an abnormal electrophoretic spike for multiple myeloma or Waldenstrom's macroglobulinemia. Note that a PSA test is *not* clinically diagnostic for prostate cancer.

6 Direct visualization without microscopic confirmation

This includes diagnoses of cancer by direct visualization and/or palpitation during surgical exploration, or by endoscopy or gross autopsy. Use this code only in the absence of positive histology or cytology.

7 Radiography or other imaging technique without microscopic confirmation

This includes all cases diagnosed by radiology including ultrasound, computerized (axial) tomography (CT or CAT scans), and magnetic resonance imaging (MRI). Use this code only in the absence of positive histology or cytology.

8 Clinical diagnosis only (other than **5**, **6** or **7**)

This includes cases diagnosed by clinical methods not mentioned previously. Use this code only in the absence of positive histology or cytology.

9 Unknown whether or not microscopically confirmed

Use this code when the method of confirmation is unknown. (includes death certificate only cases)

Type of Reporting Source

(This field is labeled "Type of Rept Src" on the MCR Cancer Patient Abstract.)

This code designates the source of information for the patient's cancer (i.e., the source of the documents/information used to abstract the case).

The codes are arranged in their order of precedence. If there are several sources, report the one with the lowest code number.

The codes are as follows:

Information Source	**Code**
hospital - inpatient/outpatient or clinic	**1**
laboratory - hospital or private (e.g., pathology specimen only)	**3**
private medical practitioner (physician office)	**4**
nursing home, convalescent hospital, hospice	**5**
autopsy only (neoplasm discovered and diagnosed for the first time as the result of an autopsy)	**6**
death certificate only	**7**

Note that codes **5** and **7** are not used by hospitals.

AJCC TNM Staging System

The clinical and pathologic staging elements are now separate fields for the MCR. The MCR requires that hospitals report either pathologic or clinical stage (or both) for the sites and histologies included in the AJCC *Cancer Staging Manual, Fifth Edition*.

For simultaneous independent bilateral tumors in paired organs, each primary should be staged separately.

Example: A patient is diagnosed in May with a 1-cm ductal carcinoma of the right breast and a 0.5-cm lobular carcinoma of the left breast. Stage each primary separately (T1b for the right, T1a for the left).

If the primary site is not *definitely* known, AJCC staging of the cancer should be based on "reasonable clinical certainty" of a primary site identification. If there is *not* "reasonable clinical certainty" indicating one primary site, then the AJCC staging should be "not applicable" (as for an unknown primary site).

Examples:

- A CT scan is used to diagnose brain metastases. The physician states in the medical record that the primary site is probably lung. Use the AJCC scheme for lung primaries to stage this case.
- A patient has liver metastases, and it is indicated that the primary site may be the colon or lung. Since a primary site is not clearly identified, this case should be AJCC-staged T88N88M88.

Lymph nodes are not often surgically removed for *in situ* tumors. The AJCC classification is therefore usually "pTis cN0_ cM0_, cStage Group 0_" because there is usually only clinical evaluation of the nodal and distant extents of disease.

The MCR collects only 2 characters in each TNM field. The MCR does *not* collect various supplementary prefixes, suffixes and staging extensions used in the AJCC system:

aTNM when the stage is determined from autopsy findings (the MCR collects only previously unsuspected cases found incidentally through autopsy);

LX, L0 and L1 for lymphatic invasion;

T(m) or T(#) to indicate multiple tumors or the specific number of tumors in one site;

rTNM when recurrent tumors are staged after a disease-free interval (the MCR does not collect recurrences);

RX, R0, R1 and R2 for residual tumors following treatment;

SX, S0, S1 and S2 for sceral invasion;

VX, V0, V1 and V2 for venous invasion; and

yTNM when staging is done during/after initial multimodality therapy.

The Clinical AJCC classification (**cTNM**) is based on information and evidence obtained before treatment. It should be used for sites which are accessible for clinical examination, including the cervix, oral cavity, and larynx. Use this classification for organs where only clinical findings are used or available to evaluate the extent of disease. Physical examination, imaging, endoscopy, biopsy, surgical exploration and other relevant findings are the basis of clinical staging. Evaluate the clinical stage of disease using all information available before the first cancer-directed treatment.

The Pathologic AJCC classification (**pTNM**) is based on information obtained before treatment and supplemented by additional evidence from surgery and pathologic examination of the resected specimen. It is a combination of all findings. The pathologic stage provides the most precise data to estimate prognosis and calculate results. Pathologic assessment of the primary tumor requires either a resection of the primary tumor or a biopsy adequate to evaluate the highest pT category. The pathologic assessment of the regional lymph nodes requires the surgical removal of enough nodes to confirm the absence of regional lymph node metastasis and evaluate the highest pN category.

Pathologic staging takes precedence over clinical staging, except as follows:

There are some diseases and sites for which clinical staging takes precedence. Clinical staging takes precedence when a patient has radiation or chemotherapy pre-operatively, and when a patient does not have cancer-directed surgery.

Examples:

- cervical cancer treated pre-operatively with radiation
- breast cancer treated pre-operatively with chemotherapy and radiation
- prostate cancer biopsied and treated with hormones
- small cell carcinoma of the lung biopsied and treated with chemotherapy
- a pancreas primary diagnosed without histologic confirmation

Clinical T

Under the TNM system, the T Element is used to describe the primary tumor's size and/or extension. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for detailed site-specific/histology-specific coding rules.

The clinical T classification (cT) is based on information and evidence obtained before treatment. Use this for sites that are accessible for clinical examination, including cervix, oral cavity, and larynx. Use clinical classifications where only clinical findings are used or available to evaluate the extent of disease. The physical examination, imaging, endoscopy, biopsy, surgical exploration, and other relevant findings are the basis of clinical staging. Evaluate the clinical stage of disease using all information available before the first cancer-directed treatment.

When there are multiple synchronous tumors being reported as one primary, the T Element for the *largest* individual tumor is coded. The MCR does not collect the special AJCC designations for such multiple tumors [e.g., T2(m)], nor the number of such tumors [e.g., T2(3)] in the T Element (and the "Tumor Size" field will also only reflect the size of the largest tumor). You may include tumor multiplicity information in the "Narrative Staging" or "Narrative Primary Site" fields. The number of tumors is important in determining the T Element for some cancer types (for example, see the AJCC coding for liver and intrahepatic bile duct carcinomas).

Examples:

- There are two simultaneous ductal carcinomas in the upper outer quadrant of the right breast -- one with diameter 0.4 cm, the other with diameter 0.8 cm. The case is reported with T**1b** because this corresponds to the size of the larger lesion. The "Narrative Staging" field could include the fact that there were two tumors, along with their sizes.
- There are two primary tumors -- one sized at 1.1 cm, the other at 2.1 cm -- in the same lobe of the liver, without any vascular invasion. The T Element is T**3_**. Since this could also describe a single tumor > 2 cm or several smaller tumors with vascular invasion, use part of the "Narrative Staging" field to specify the situation that was coded.

The following general definitions are used throughout the T Element classification:

TX - primary tumor cannot be assessed or is unknown

T0 - no evidence of a primary tumor

Tis - carcinoma *in situ*

T1, T2, T3, T4 - describe increasing size and/or local extent of the primary tumor

Use **X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a T value.

Example: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating ductal carcinoma. The patient is lost to follow-up. AJCC requires the pathologic examination of tissue and the palpation of axillary lymph nodes for clinical staging. Record cT**X_**NX_MX_.

T**X_** is also coded for certain lung cancers when a primary tumor mass cannot be found or evaluated.

Code T**88** is not included in AJCC staging. The addition of this code enables registries to distinguish unstaged cases in which the site or histologic type has no AJCC staging scheme from cases that could not be staged because the information was incomplete. Use T**88** when the site or histologic type does not have an AJCC staging scheme (or does not have a scheme for classifying the T Element).

Examples:

- Leukemia, trachea, brain primary -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record T**88**N88M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T**88**N88M88.
- Lymphomas have AJCC Stage Grouping schemes, but not TNM Elements. Record T**88**N88M88.

Some T categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

Ta (code **A_**) is defined for penis, renal pelvis and ureter, bladder, and urethra;

Tis pu (code **SU**) is defined for urethra;

Tis pd (code **SD**) is defined for urethra;

T1a1 and T1a2 (codes **A1** and **A2**) are defined for cervix uteri;

T1b1 and T1b2 (codes **B1** and **B2**) are defined for cervix uteri;

T1c is defined for breast, corpus uteri, ovary, fallopian tube, and prostate;

T2c is defined for ovary and fallopian tube;

T3c is defined for ovary, fallopian tube, and kidney;

T4a and T4b are defined for bladder, lacrimal gland, and breast;

T4c and T4d are defined for breast.

Choose the lower (less advanced) T category when there is any uncertainty.

The MCR allows for 2 characters in this field. If the value is only one character, enter it on the left and leave the second space blank. The following table shows how each T category should be coded (both cT and pT categories are included in this table).

T Category	Code	T Category	Code	T Category	Code	T Category	Code
TX*	**X_**	T1mic	**1M**	T2	**2_**	T4	**4_**
T0	**0_**	T1	**1_**	T2a	**2A**	T4a	**4A**
Ta	**A_**	T1a	**1A**	T2b	**2B**	T4b	**4B**
Tis	**IS**	T1a1	**A1**	T2c	**2C**	T4c	**4C**
Tispu	**SU**	T1a2	**A2**	T3	**3_**	T4d	**4D**
Tispd	**SD**	T1b	**1B**	T3a	**3A**	T not applicable**	**88**
		T1b1	**B1**	T3b	**3B**		
		T1b2	**B2**	T3c	**3C**		
		T1c	**1C**				

* This cancer has an AJCC T classification scheme, but there is not enough information to specify the T; occult lung cancers (primary tumor mass not present or not evaluable).

** There is no AJCC T classification for this cancer.

Clinical N

The N Element identifies the absence or presence of regional lymph node metastases. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

The following general definitions are used throughout the TNM classification:

NX - regional lymph nodes cannot be assessed or status unknown

N0 - nodes were assessed and there was no evidence of regional lymph node metastasis

N1, N2, N3 - indicate increasing involvement of regional lymph nodes

Classify a primary tumor that directly extends into lymph nodes in the N Element as lymph node metastasis (rather than in the T Element as continuous extension of the primary tumor).

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

A grossly recognizable tumor nodule in the connective tissue of a lymph drainage area that is *more than 3 millimeters* in greatest extent is classified in the N Element, even if there is no evidence of residual lymph node tissue found.

Use code N**X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign an N Element code.

Example: A testicular mass is biopsied. The biopsy identifies an embryonal carcinoma. The patient is lost to follow-up. The requirements for clinical N staging of testicular cancers have not been met. Code cN**X_**.

Code N**88** is not included in AJCC staging, but this code helps distinguish unstaged cases with no AJCC staging scheme from cases with a staging scheme that could not be staged. Use N**88** when the site/histologic type does not have an AJCC N staging scheme.

Examples:

- Leukemia, pituitary gland, ill-defined digestive primary site -- These do not have staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition*. Record T88N**88**M88.
- The pathology report identifies a sarcoma of the stomach. The stomach staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N**88**M88.
- Gestational trophoblastic tumors do not have N categories. Record N**88**.

Some N categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

N1a and N1b are defined for thyroid;

N3a and N3b are defined for nasopharynx.

Choose the lower (less advanced) N category when there is any uncertainty. The MCR allows for 2 characters in this field. If the value is only one digit, enter it on the left and leave the second space blank.

N Category	Code	N Category	Code
NX*	**X_**	N2	**2_**
N0	**0_**	N2a	**2A**
N1	**1_**	N2b	**2B**
N1a	**1A**	N2c	**2C**
N1b	**1B**	N3	**3_**
		N3a	**3A**
		N3b	**3B**
		N not applicable**	**88**

* This cancer has an AJCC N classification scheme, but there is not enough information to specify the N.

** There is no AJCC N classification for this cancer.

Clinical M

The M Element records the presence or absence of distant metastases (including spread to nonregional lymph nodes). Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

The following general definitions are used throughout the TNM classification:

MX - presence of distant metastasis cannot be assessed or is unknown

M0 - no known distant metastasis

M1 - distant metastases present

Use M**X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to code an M Element.

Example: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating ductal carcinoma. The patient is lost to follow-up. AJCC requires tumor size and palpation of axillary lymph nodes for clinical staging. Record TX_NX_M**X_**.

Code M**88** is not included in AJCC staging, but its use helps registries distinguish unstaged cases in which the site/histology has no AJCC staging scheme from cases that could not be staged because of incomplete information. Use M**88** when the site or histologic type does not have an AJCC staging scheme.

Examples:

- Leukemia, parathyroid, dermatofibrosarcoma, nasal cavity -- There are no staging schemes in the *AJCC Cancer Staging Manual, Fifth Edition* for these cancers. Record T88N88M**88**.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N88M**88**.

Only a few cancers have some special M Element codes. Because there are so few, they are noted here for convenience (but always refer to the AJCC staging manual for details):

for the lower thoracic esophagus:
- M1a indicates metastasis to the celiac nodes
- M1b indicates any other distant metastasis

for the midthoracic esophagus:
- M1b indicates involvement of nonregional nodes and/or any other distant metastasis

for the upper thoracic esophagus:
- M1a indicates metastasis to the cervical nodes
- M1b indicates any other distant metastasis

for melanomas of the skin (including skin of vulva, penis and scrotum):
- M1a indicates metastasis to other skin sites, subcutaneous tissue or nonregional nodes
- M1b indicates metastasis to the viscera

for gestational trophoblastic tumors:
- there is no MX_ or M1_ category
- M0_ indicates no *clinical* metastases present
- M1a indicates lung metastasis
- M1b indicates any other distant metastasis

for prostate cancers:
- M1a indicates metastasis to nonregional nodes
- M1b indicates metastasis to bone(s)
- M1c indicates any other distant metastasis

for testicular cancers:
- M1a indicates metastasis to nonregional nodes or lung(s)
- M1b indicates any other distant metastasis

The MCR allows 2 characters in this field. The MCR does *not* collect the additional AJCC M1 notations "PUL", "OSS", "HEP", etc. (see page 7 in the *Cancer Staging Manual, Fifth Edition*) to denote the site(s) of distant metastasis. Please include any known site(s) of distant metastasis in the "Narrative Staging" field.

Choose the lower (less advanced) M category when there is any uncertainty.

M Category	**Code**
MX*	**X_**
M0	**0_**
M1	**1_**
M1a	**1A**
M1b	**1B**
M1c	**1C**
M not applicable**	**88**

* This cancer has an AJCC M classification scheme, but there is not enough information to specify the M Element.

** There is no AJCC M classification for this cancer.

Clinical Stage Grouping

(This field is labeled "cStage Grp" on the MCR Cancer Patient Abstract.)

The Stage Grouping defines the anatomic extent of disease. Different cases which fall into the same Stage Grouping are expected to have similar prognoses. The Clinical Stage Grouping is important for selecting and evaluating the primary therapy.

The TNM Stage Grouping is usually based on the previously coded TNM Elements. Non-Hodgkin's lymphomas and Hodgkin's Disease cases have only Stage Groupings in the TNM system (no TNM Elements). Many of the opthalmic cancers have TNM Elements but no Stage Groupings. Tumor Size, Histopathologic Grade, Age at Diagnosis, risk factors, or serum tumor marker data are needed to determine the Stage Grouping for some cancer types. (When appropriate, the risk factor and serum marker information can be included in the "Narrative Staging" or "Comments/Narrative Remarks" fields since the MCR does not collect codes for those data items.) Always refer to the AJCC *Cancer Staging Manual*, *Fifth Edition* for appropriate site-specific coding rules.

Code **88** does not appear in AJCC staging. Use code **88** when the site or histologic type does not have an AJCC Stage Grouping scheme.

Examples:

- Leukemia, central nervous system, adrenal gland, unknown primary -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record Stage Grouping **88**.
- The pathology report identifies a carcinoma of the eyelid. The appropriate staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* has TNM Elements, but no Stage Groupings. Record Stage Grouping **88**.

Code **99** also does not appear in AJCC staging. Use code **99** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a Stage Grouping.

Example: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating ductal carcinoma. The patient is lost to follow-up. The AJCC TNM elements are TX_NX_MX_. Record Stage Grouping **99**.

The MCR collects 2 characters in this field. If the code is only one digit, enter it on the left and leave the second space blank. For Hodgkin's Disease and non-Hodgkin's lymphomas, the MCR does *not* collect the Stage Grouping extensions "E", "S" and "E+S" to indicate extralymphatic involvement, involvement of the spleen, and both; neither does the MCR explicitly collect the number of lymph node regions involved (e.g., "II_3"), nor "A" and "B" to indicate systematic symptoms. Such details may be included in the "Narrative Staging" field.

Some Stage Grouping categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

occult (code **OC**) is defined for lung;

0a (code **0A**) and 0is (code **0S**) are defined for renal pelvis and ureter, bladder, and urethra;

IA1 and IA2 (codes **A1** and **A2**) are defined for cervix uteri;

IB1 and IB2 (codes **B1** and **B2**) are defined for cervix uteri;

IC (code **1C**) is defined for corpus uteri, ovary, fallopian tube, and gestational trophoblastic tumors;

IS (code **1S**) is defined for testis;

IIC is defined for ovary, fallopian tube, gestational trophoblastic tumors, and testis.

Choose the lower (less advanced) Stage Grouping when there is any uncertainty.

Stage Grouping	Code	Stage Grouping	Code	Stage Grouping	Code
Stage Occult	**OC**	Stage IB1	**B1**	Stage IIIA	**3A**
Stage 0	**0_**	Stage IB2	**B2**	Stage IIIB	**3B**
Stage 0A	**0A**	Stage IC	**1C**	Stage IIIC	**3C**
Stage 0is	**0S**	Stage IS	**1S**	Stage IV	**4_**
Stage I	**1_**	Stage II	**2_**	Stage IVA	**4A**
Stage IA	**1A**	Stage IIA	**2A**	Stage IVB	**4B**
Stage IA1	**A1**	Stage IIB	**2B**	Stage IVC	**4C**
Stage IA2	**A2**	Stage IIC	**2C**	Stage Grouping not applicable*	**88**
Stage IB	**1B**	Stage III	**3_**	unknown, stage X**	**99**

* There is no AJCC Stage Grouping classification for this cancer.

** This cancer has an AJCC Stage Grouping classification, but there is not enough information to specify the Stage Grouping.

Pathologic T

The Pathologic T Element (pT) is used to describe the primary tumor's size and/or extension. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

Pathologic classification is based on information obtained before treatment and supplemented by additional evidence from surgery and pathologic examination of the resected specimen. It is a combination of all findings. The pathologic stage provides the most precise data to estimate prognosis and calculate end results. Pathologic assessment of the primary tumor generally requires a resection of the primary tumor or biopsy specimen adequate to evaluate the highest pT category.

When there are multiple synchronous tumors being reported as one primary, the T Element for the *largest* individual tumor is coded. The MCR does not collect the special AJCC designations for such multiple tumors [e.g., T2(m)], nor the number of such tumors [e.g., T2(3)] in the T Element (and the "Tumor Size" field will also only reflect the size of the largest tumor). You may include tumor multiplicity information in the "Narrative Staging" or "Narrative Primary Site" fields. The number of tumors is important in determining the T Element for some cancer types (for example, see the AJCC coding for liver and intrahepatic bile duct carcinomas).

Examples:

- There are two simultaneous ductal carcinomas in the upper outer quadrant of the right breast -- one with diameter 0.4 cm, the other with diameter 0.8 cm. The case is reported with T**1b** because this corresponds to the size of the larger lesion. The "Narrative Staging" field could include the fact that there were two tumors, along with their sizes.
- There are two primary tumors -- one sized at 1.1 cm, the other at 2.1 cm -- in the same lobe of the liver, without any vascular invasion. The T Element is T**3_**. Since this could also describe a single tumor > 2 cm or several smaller tumors with vascular invasion, use part of the "Narrative Staging" field to specify the situation that was coded.

A tumor nodule, up to 3 millimeters in greatest extent, in the connective tissue of a lymph drainage area *without histologic evidence of residual lymph node tissue* is classified in the T Element (as discontinuous extension of the primary tumor) rather than in the N Element.

Many sites in the AJCC staging system specifically include a classification for carcinomas *in situ* as "Tis". If there is an accepted histologic classification for carcinoma *in situ* as determined by a pathologist, you may use "pTis" even if the *Cancer Staging Manual, Fifth Edition* does not include this category for the given primary site.

The following general definitions are used throughout the TNM classification:

TX - primary tumor cannot be assessed or is unknown.

T0 - no evidence of a primary tumor

Tis - carcinoma *in situ*

T1, T2, T3, T4 - describe increasing size and/or local extent of the primary tumor

Use code **X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign a T value.

Example: A biopsy of a breast mass identifies infiltrating ductal carcinoma. The patient is lost to follow-up. The AJCC staging scheme requires excision of the primary tumor with macroscopically clean margins for pathologic staging. Record pT**X**.

Code T**88** is not included in AJCC staging. This code enables the MCR to distinguish cases in which the site or histologic type has no AJCC staging scheme from cases that could not be staged because the information was incomplete.

Use T**88** when the site or histologic type does not have an AJCC staging scheme.

Examples:

- Leukemia, dermatofibrosarcoma, brain primary -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record T**88**N88M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T**88**N88M88.
- Lymphomas have AJCC Stage Groupings, but no TNM Elements. Record T**88**N88M88.

Some T categories are only defined for certain types of cancer. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

Ta (code **A_**) is defined for penis, renal pelvis and ureter, bladder, and urethra;

Tis pu (code **SU**) is defined for urethra;

Tis pd (code **SD**) is defined for urethra;

pT1 mic (code **1M**) is defined for breast;

T1a1 and T1a2 (codes **A1** and **A2**) are defined for cervix uteri;

T1b1 and T1b2 (codes **B1** and **B2**) are defined for cervix uteri;

T1c is defined for breast, corpus uteri, ovary, fallopian tube, and prostate;

T2c is defined for ovary and fallopian tube;

T3c is defined for ovary, fallopian tube, and kidney;

T4a and T4b are defined for melanoma of skin, bladder, lacrimal gland, and breast;

T4c and T4d are defined for breast.

Choose the lower (less advanced) T category when there is any uncertainty.

The MCR allows for 2 characters in this field. If the value is only one character, enter it on the left and leave the second space blank. The following table shows how each T category should be coded.

T Category	Code	T Category	Code	T Category	Code	T Category	Code
TX*	**X_**	T1mic	**1M**	T2	**2_**	T4	**4_**
T0	**0_**	T1	**1_**	T2a	**2A**	T4a	**4A**
Ta	**A_**	T1a	**1A**	T2b	**2B**	T4b	**4B**
Tis	**IS**	T1a1	**A1**	T2c	**2C**	T4c	**4C**
Tispu	**SU**	T1a2	**A2**	T3	**3_**	T4d	**4D**
Tispd	**SD**	T1b	**1B**	T3a	**3A**	T not applicable**	**88**
		T1b1	**B1**	T3b	**3B**		
		T1b2	**B2**	T3c	**3C**		
		T1c	**1C**				

* This cancer has an AJCC T classification scheme, but there is not enough information to specify the T; occult lung cancers (primary tumor mass not present or not evaluable).

** There is no AJCC T classification for this cancer.

Pathologic N

Pathologic N (pN) identifies the absence or presence of regional lymph node metastases. Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

The following general definitions are used throughout the TNM classification:

NX - regional lymph nodes cannot be assessed or status unknown

N0 - nodes were assessed and there was no evidence of regional lymph node metastasis

N1, N2, N3 - indicate increasing involvement of regional lymph nodes

If the primary tumor extends directly into a lymph node, classify this in the N Element as a lymph node metastasis (rather than in the T Element).

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* metastasis and classified in the M Element.

A grossly recognizable tumor nodule in the connective tissue of a lymph drainage area that is *more than 3 millimeters* in greatest extent is classified in the N Element, even if there is no evidence of residual lymph node tissue found.

Use code N**X_** when the site or histologic type has an AJCC staging scheme but there is not enough information to assign an N Element code.

Example: A patient has a biopsy of a testicular mass. The biopsy identifies an embryonal carcinoma. The patient is lost to follow-up. This type of case has an AJCC staging scheme, but no assessment of regional lymph node involvement was made. Record N**X_**.

Code **88** does not appear in AJCC staging. Its use enables registries to distinguish cases unstaged because of insufficient information from those unstaged because they have no AJCC staging scheme. Use code **88** when the site/histology does not have an AJCC staging scheme.

Examples:

- Adrenal gland, unknown primary site -- These have no staging schemes in the *AJCC Cancer Staging Manual, Fifth Edition*. Record T88N**88**M88.
- The pathology report identifies a breast mass as sarcoma. The breast staging scheme in the *AJCC Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N**88**M88.
- Gestational trophoblastic tumors do not have N categories. Record N**88**.

Some N categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

pN1a and pN1b are defined for exocrine pancreas, breast, and thyroid;

pN1bi, pN1bii, pN1biii and pN1biv (code **1B**) are defined for breast;

N3a and N3b are defined for nasopharynx.

Choose the lower (less advanced) N category when there is uncertainty. The MCR collects 2 characters. If the value is only one digit, enter it on the left and leave the second space blank.

N Category	Code	N Category	Code
NX*	**X_**	N2	**2_**
N0	**0_**	N2a	**2A**
N1	**1_**	N2b	**2B**
N1a	**1A**	N2c	**2C**
N1b	**1B**	N3	**3_**
		N3a	**3A**
		N3b	**3B**
		N not applicable**	**88**

* This cancer has an AJCC N classification scheme, but there is not enough information to specify the N.

** There is no AJCC N classification for this cancer.

Pathologic M

The M Element records the presence or absence of distant metastases (including spread to nonregional lymph nodes). Always refer to the AJCC *Cancer Staging Manual, Fifth Edition* for appropriate site-specific and histology-specific coding rules.

Metastasis in any lymph node not specified as regional in the appropriate AJCC staging scheme should be considered *distant* and classified in the M Element.

The following general definitions are used throughout the TNM classification:

MX - presence of distant metastasis cannot be assessed or is unknown

M0 - no known distant metastasis

M1 - distant metastasis present

Use M**X** when the site or histologic type has an AJCC staging scheme but there is not enough information to specify an M Element.

Example: A patient has a fine needle biopsy of a breast mass. The cytology identifies infiltrating ductal carcinoma. The patient is lost to follow-up. Breast carcinomas have an AJCC staging scheme, but the status of distant metastasis has not been evaluated for this case. Record TX_NX_M**X_**.

Code **88** does not appear in AJCC staging. This code allows registries distinguish unstaged cases in which the site/histology has no AJCC staging scheme from cases that could not be staged because of incomplete information. Use M**88** when the site or histologic type does not have an AJCC Staging scheme.

Examples:

- Leukemia, central nervous system, an ill-defined pelvic site -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record T88N88M**88**.
- The pathology report identifies a stomach sarcoma. The stomach staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* applies only to carcinomas. Record T88N88M**88**.

Only a few cancers have some special M Element codes. Because there are so few, they are noted here for convenience (but always refer to the AJCC staging manual for details):

for the lower thoracic esophagus:
- M1a indicates metastasis to the celiac nodes
- M1b indicates any other distant metastasis

for the midthoracic esophagus:
- M1b indicates involvement of nonregional nodes and/or any other distant metastasis

for the upper thoracic esophagus:
- M1a indicates metastasis to the cervical nodes
- M1b indicates any other distant metastasis

for melanomas of the skin (including skin of vulva, penis and scrotum):
- M1a indicates metastasis to other skin sites, subcutaneous tissue or nonregional nodes
- M1b indicates metastasis to the viscera

for gestational trophoblastic tumors:
- there is no MX_ or M1_ category
- M0_ indicates no *clinical* metastases present
- M1a indicates lung metastasis
- M1b indicates any other distant metastasis

for prostate cancers:
- M1a indicates metastasis to nonregional nodes
- M1b indicates metastasis to bone(s)
- M1c indicates any other distant metastasis

for testicular cancers:
- M1a indicates metastasis to nonregional nodes or lung(s)
- M1b indicates any other distant metastasis

The MCR allows 2 characters in this field. The MCR does *not* collect the additional AJCC M1 notations "PUL", "OSS", "HEP", etc. (see page 7 in the *Cancer Staging Manual, Fifth Edition*) to denote the site(s) of distant metastasis. Please include any known site(s) of distant metastasis in the "Narrative Staging" field.

Choose the lower (less advanced) M category when there is any uncertainty.

M Category	**Code**
MX*	**X_**
M0	**0_**
M1	**1_**
M1a	**1A**
M1b	**1B**
M1c	**1C**
M not applicable**	**88**

* This cancer has an AJCC M classification scheme, but there is not enough information to specify the M.

** There is no AJCC M classification for this cancer.

Pathologic Stage Grouping

(This field is labeled "pStage Grp" on the MCR Cancer Patient Abstract.)

The Stage Grouping defines the anatomic extent of disease. Different cases which fall into the same Stage Grouping are expected to have similar prognoses. The Pathologic Stage Grouping can be used as a guide for the need of adjuvant therapy, for reporting end results, and estimation of prognosis. In order to assign a Pathologic Stage Grouping, it is not always necessary to have three Pathologic TNM Elements. If sufficient tissue has been removed for pathologic examination to evaluate the highest T and N categories, you may use either the cM or pM to assign the Pathologic Stage Grouping.

The TNM Stage Grouping is usually based on the previously coded TNM Elements. Non-Hodgkin's lymphomas and Hodgkin's Disease cases have only Stage Groupings in the TNM system (no TNM Elements). Many of the opthalmic cancers have TNM Elements but no Stage Groupings. Tumor Size, Histopathologic Grade, Age at Diagnosis, risk factors, or serum tumor marker data are needed to determine the Stage Grouping for some cancer types. (When appropriate, the risk factor and serum marker information can be included in the "Narrative Staging" or "Comments/Narrative Remarks" fields since the MCR does not collect codes for those data items.) Always refer to the AJCC *Cancer Staging Manual, Fifth Ed.*. for appropriate site-specific and histology-specific coding rules.

Code **88** does not appear in AJCC staging. Use code **88** when the site or histologic type does not have an AJCC Stage Grouping scheme.

Examples:

- Leukemia, dermatofibrosarcoma, trachea, unknown primary site -- There are no staging schemes in the AJCC *Cancer Staging Manual, Fifth Edition* for these cancers. Record Stage Grouping **88**.
- The pathology report identifies a carcinoma of the eyelid. The appropriate staging scheme in the AJCC *Cancer Staging Manual, Fifth Edition* has TNM Elements, but no Stage Groupings. Record **88**.

Code **99** also does not appear in AJCC staging. Use **99** when the cancer type has an AJCC staging scheme but there is not enough information to assign a pathologic Stage Grouping.

Example: A patient has a fine needle biopsy of a breast mass, identifying infiltrating ductal carcinoma. The patient is lost to follow-up. The TNM Elements are TX_NX_MX_. Record Stage Grouping **99**.

The MCR allows for 2 characters in this field. If the stage is only one digit, enter it on the left and leave the second space blank. For Hodgkin's Disease and non-Hodgkin's lymphomas, the MCR does *not* collect the Stage Grouping extensions "E", "S" and "E+S" to indicate extralymphatic involvement, involvement of the spleen, and both; neither does the MCR explicitly collect the number of lymph node regions involved (e.g., "II_3"), nor "A" and "B" to indicate systematic symptoms. Such details may be included in the "Narrative Staging" field.

Some Stage Grouping categories are only defined for certain cancers. Some of these are noted here for convenience, but always refer to the AJCC staging manual for details:

occult (code **OC**) is defined for lung;

0a (code **0A**) and 0is (code **0S**) are defined for renal pelvis and ureter, bladder, and urethra;

IA1 and IA2 (codes **A1** and **A2**) are defined for cervix uteri;

IB1 and IB2 (codes **B1** and **B2**) are defined for cervix uteri;

IC (code **1C**) is defined for corpus uteri, ovary, fallopian tube, and gestational trophoblastic tumors;

IS (code **1S**) is defined for testis;

IIC is defined for ovary, fallopian tube, gestational trophoblastic tumors, and testis.

Choose the lower (less advanced) stage grouping when there is any uncertainty.

Stage Grouping	Code	Stage Grouping	Code	Stage Grouping	Code
Stage Occult	**OC**	Stage IB1	**B1**	Stage IIIA	**3A**
Stage 0	**0_**	Stage IB2	**B2**	Stage IIIB	**3B**
Stage 0A	**0A**	Stage IC	**1C**	Stage IIIC	**3C**
Stage 0is	**0S**	Stage IS	**1S**	Stage IV	**4_**
Stage I	**1_**	Stage II	**2_**	Stage IVA	**4A**
Stage IA	**1A**	Stage IIA	**2A**	Stage IVB	**4B**
Stage IA1	**A1**	Stage IIB	**2B**	Stage IVC	**4C**
Stage IA2	**A2**	Stage IIC	**2C**	Stage Grouping not applicable*	**88**
Stage IB	**1B**	Stage III	**3_**	unknown, stage X**	**99**

* There is no AJCC Stage Grouping classification for this cancer.

** This cancer has an AJCC Stage Grouping classification, but there is not enough information to specify the Stage Grouping.

TNM Edition Number

This field identifies the edition of the AJCC *Manual for Staging of Cancer* used to stage the case. Staging criteria may differ between editions. This code allows analysis of cases grouped by edition number.

AJCC Staging Edition	**Code**
not stated (case has an AJCC staging scheme, but staging was not done)	**0**
First Edition	**1**
Second Edition	**2**
Third Edition	**3**
Fourth Edition	**4**
Fifth Edition	**5**
not applicable (case does *not* have an AJCC staging scheme)	**8**
unknown edition (case was AJCC-staged, but the edition is unspecified)	**9**

SEER General Summary Stage

The SEER General Summary Stage groups cases into broad staging categories (such as localized, regional and distant). Note: The Commission on Cancer only requires Summary Staging for cases which are not TNM-staged. The MCR requires *both* Summary Staging and TNM staging for all reportable cases (use "unknown" and "not applicable" codes as necessary).

Summary Stage is limited to all information available within two months of diagnosis.

Exception: Summary Stage for prostate primaries is limited to all information available within the first *four* months of diagnosis for cases diagnosed on or after January 1, 1995.

Exclude metastasis or disease progression that develops after the original diagnosis.

Summary Stage for all sites is based on pathologic, operative and clinical assessments. The priority for using these reports is:

pathologic

operative (particularly important when the surgical procedure does not remove all malignant tissue)

clinical

Code the following as "systemic disease" (**7**):

- Letterer-Siwe's disease
- leukemia
- multiple myeloma
- reticuloendotheliosis

Code the following as "unstaged, unknown, or unspecified" (**9**):

- an unknown primary
- Class 3 or 4 cases (see page 93) when the stage at *initial* diagnosis is unknown

Use the following codes:

Extent of Disease	Code
in situ	**0**
localized	**1**
regional by direct extension	**2**
regional to lymph nodes	**3**
regional (both **2** and **3**)	**4**
regional, NOS	**5**
distant metastasis/systemic disease	**7**
unstaged, unknown, or unspecified	**9**

Refer to the *SEER Self Instructional Manual for Tumor Registrars - Book 6* or the *Summary Staging Guide* (1977) for site-specific coding schemes for SEER General Summary Stage. In this system, "localized", "regional", "direct extension" and "distant" categories are subdivided and coded as follows:

Categories	**Code**
L1, L2, L3, L4, LX	**1** (localized)
R1, R2, R3	**2** (regional by direct extension)
D1, D2	**7** (distant metastasis/systemic disease)

The following terms are commonly used to describe stage:

Direct extension: a continuous infiltration or growth from the primary site into other tissue or organs

Invasion: local spread of a neoplasm by infiltration into or destruction of adjacent tissue

Metastasis: dissemination of tumor cells in a discontinuous fashion from the primary site to other parts of the body (for example, by way of the circulatory or lymphatic system)

Microinvasion: the earliest invasive stage (This is considered invasive.)

Regional: organs or tissues related to a site by physical proximity; also applies to the first chain of lymph nodes draining the area of the site

Ambiguous terms are sometimes used to describe tumor involvement. The following should be used as a guide when assigning stage:

Involved

Consider the following terms to be indicative of involvement:

- apparently
- adherent
- compatible with
- consistent with
- encroaching upon
- extension or invasion to, into, onto or out onto
- favor(s)
- fixation, fixed
- induration (used to describe surrounding fibrous or connective tissue adjacent to the tumor; to be interpreted as extension of the malignant growth)
- most likely
- presumed
- probable
- suspect(ed)
- suspicious
- typical of/for

Not Involved

Consider the following terms to be indicative of non-involvement:

- abuts
- approaching
- equivocal
- possible
- questionable
- rule(s) out
- suggests
- very close to
- worrisome

In Situ (Code 0)

A diagnosis of "*in situ*", which must be based on microscopic examination of tissue or cells, means that a tumor has all the characteristics of malignancy except invasion (i.e., the basement membrane has not been penetrated). A tumor that displays any degree of invasion is not classified as *in situ*. For example, if a report states "carcinoma *in situ* of the cervix showing microinvasion of one area", then the tumor is not *in situ* and code **0** is incorrect. A primary tumor, however, may involve more than one site (e.g., cervix and vagina, labial mucosa and gingiva) and still be *in situ* if it does not show any invasion. If a tumor is staged as *in situ*, its Behavior Code (see pages 83-86) is **2**.

Terms Indicating *In Situ*

Certain terms indicate an *in situ* stage (see also page 85):

Bowen's disease
Clark's Level 1 for melanoma (limited to epithelium)
confined to epithelium
Hutchinson's melanotic freckle, NOS
intracystic, non-infiltrating
intraductal
intraepidermal
intraepithelial
intrasquamous
involvement up to but not including the basement membrane
lentigo maligna
lobular neoplasia
no stromal invasion
non-infiltrating
non-invasive
precancerous melanosis
preinvasive
Queyrat's erythroplasia
Stage 0

Localized (Code 1)

"Localized" denotes a tumor that is invasive, but still confined entirely to the organ of origin. For most sites, a localized tumor may be widely invasive or have spread within the organ, as long as it does not extend beyond the outer limits of the organ and there is no evidence of metastasis to other parts of the body.

Inaccessible Sites - Clinical diagnosis alone is often insufficient for staging a tumor as "localized" when the primary site and regional lymph nodes are inaccessible, such as with the esophagus, lung or pancreas. Without confirmation during surgery or an autopsy, it is usually preferable to code the stage as **9** ("unstageable"); but, if the physician has staged the case as "localized", or if clinical reports (such as CT scans) provide enough information to rule out the spread of disease, Summary Stage **1** may be used. If surgery has been performed, study the operative report for evidence of direct extension or metastasis; if no such evidence can been found, and if radiological examination has also produced none, classify the tumor as "localized".

Vessel / Lymphatic Involvement -- Invasion of blood vessels, lymphatics and/or nerves *within* the primary site is a localized stage, unless there is evidence of invasion outside the site.

Multicentric Tumors -- Tumors with more than one focus (or starting point) are considered to be localized unless extension beyond the primary site has occurred. A tumor that has developed "satellite" nodules, however, (i.e., lesions secondary to the primary one) might not be localized. Refer to the *Summary Staging Guide* for rules about satellite lesions.

Microinvasive -- This term, used by pathologists to describe the earliest invasive stage, has precise meaning for cancer of certain sites. (Microinvasive squamous cell carcinoma is a common form of cervical cancer, for which ICD-O-2 provides a specific morphology code - 8076/3). Microinvasive cancers are staged as "localized".

Regional (Codes 2, 3, 4, 5)

A tumor at the "regional" stage has grown beyond the limits of the organ of origin -- into adjacent organs or tissues by direct extension, and/or to regional lymph nodes by metastasis. Neoplasms appearing to be in the "regional" stage must be evaluated very carefully to make sure they have not spread any further.

Example: A malignant tumor of the stomach or gallbladder often passes through the wall of the primary organ into surrounding tissue. Before coding as regional, make certain that radiological or scan examinations do not reveal metastasis to a lung or bone and that findings during surgery do not include metastasis to the liver or serosal surfaces (which are not regional tissue). Also check progress notes and the discharge summary for any mention of metastasis.

Regional, by Direct Extension Only (Code **2**) -- Sometimes a cancer spreads to surrounding organs or tissue with no involvement of regional lymph nodes. Before assigning code **2** to such a case, make sure that tissue adjacent to the original organ is actually involved. The terms "penetrating" and "extension" are sometimes used to describe spreading within an organ, such as the large intestine or bladder, in which case the stage might still be "localized" (code **1**). The *Summary Staging Guide* lists organs and structures considered to be regional for each site.

Regional, to Lymph Nodes Only (Code **3**) -- If a cancer continues to grow after the onset of local invasion, the regional lymph nodes draining the area usually become involved at some point. Enter code **3** if nodal involvement is indicated but there is no other evidence of extension beyond the organ of origin. Words like "local" and "metastasis" appearing in medical records sometimes cause confusion in coding this stage. Failure to recognize the names of regional lymph nodes might lead to incorrect staging. The *Summary Staging Guide* and the AJCC's *Cancer Staging Manual* contain helpful information about the names of regional and distant nodes.

Examples:

- A diagnosis such as "carcinoma of the stomach with involvement of the local lymph nodes" should, lacking further evidence, be considered "regional" and Summary Staged using code **3**.
- Statements like "carcinoma of the breast with axillary lymph node metastasis" and "carcinoma of the stomach with metastasis to perigastric nodes" indicate metastasis to regional nodes and should be Summary Staged using code **3**.

Bilateral Lymph Node Involvement -- Bilateral lymph node metastases are considered regional for primaries on the midline of the body (for example, on the tongue, esophagus or uterus) and should be coded as **3**, but bilateral regional node involvement of primaries that are not on the midline (like the breast) indicates that the cancer has spread to remote tissue (code **7**).

Regional, Direct Extension and Lymph Nodes (Code **4**) -- Enter code **4** when a tumor has metastasized to regional lymph nodes *and also* has spread to regional tissue via direct extension, but there is no evidence of metastasis to a distant site or distant lymph nodes.

Regional, NOS (Code **5**) -- If available information states only that a cancer has spread regionally, Summary Stage to code **5**. Also enter code **5** for a nodal or lymphoid tissue lymphoma described as "regional" (sometimes reported in the record as "Stage II").

Non-Localized, NOS (Code 6)

In SEER Summary Staging, this category applies to a vague extent of disease somewhere between "regional" and "distant". It is only used for primary sites in the "Non site-specific staging scheme" (see pages 2-5 in the SEER *Summary Staging Guide*). The MCR does NOT collect this code. Use the most appropriate code from **0**-**5**, **7** or **9**.

Distant / Systemic Disease (Code 7)

Enter code **7** for any tumor that extends beyond the primary site by one of these means:

- direct extension beyond adjacent organs or tissues specified as "regional" in the *Summary Staging Guide*;
- metastasis to distant lymph nodes;
- development of discontinuous secondary or metastatic tumors (These often develop in the liver or lungs because all venous blood flows through these organs, and veins are invaded more easily than thicker-walled arteries.)

Code **7** also includes contralateral or bilateral lymph node metastases if the primary site is not located along the midline of the body (e.g., in the breast, lung, bronchus, ovary, testis, kidney). Also included in code **7** are systemic diseases, such as leukemia, multiple myeloma, reticuloendotheliosis, and Letterer-Siwe's disease.

Unstageable (Code 9)

If information in the medical record is insufficient to assign a SEER Summary Stage, enter code **9**. Code **9** is required when the primary site is not known (C80.9). For nonanalytic cases (Class 3, 4), code **9** is appropriate unless the stage at the time of the *initial* diagnosis is known.

Special Rules for Lymph Nodes

Special rules apply to staging lymph node involvement:

- For solid tumors, the terms "fixed", "matted" or "mass in the mediastinum, retroperitoneum and/or mesentery", with no specific information as to the type of tissue involved, are considered to indicate *lymph node* involvement. Any other terms, such as "palpable", "enlarged", "visible swelling", "shotty" or "lymphadenopathy", should be ignored; look for a statement of involvement -- either clinical or pathological.
- For lymphomas, any mention of lymph nodes is indicative of involvement.

Pediatric Stage

(This field is labeled "Ped. Stage" on the MCR Cancer Patient Abstract.)

The MCR requires staging of pediatric patients using AJCC staging (discontinued in the *Fifth Edition*), or the staging criteria of the pediatric intergroup studies and the pediatric cooperative groups. As indicated in the code table (next page), certain stage categories are only defined for certain diagnoses.

Record the Pediatric Stage as specified in the pediatric staging system selected (see next field). This field has 2 digits; if the code is only one digit, record it on the left and leave the second space blank. Truncate the least significant subdivision of the category from the right as needed.

Use code **88** for all non-pediatric cases.

Codes for the "Pediatric Stage" field:

Pediatric Stage	**Applicable Case Types**	**Code**
Stage I		**1_**
Stage IA	rhabdomyosarcoma and related sarcomas only	**1A**
Stage IB	rhabdomyosarcoma and related sarcomas only	**1B**
Stage II		**2_**
Stage IIA	rhabdomyosarcoma and related sarcomas only	**2A**
Stage IIB	rhabdomyosarcoma and related sarcomas only	**2B**
Stage IIC	rhabdomyosarcoma and related sarcomas only	**2C**
Stage III		**3_**
Stage IIIA	liver, rhabdomyosarcoma and related sarcomas, Wilms's tumor only	**3A**
Stage IIIB	liver, rhabdomyosarcoma and related sarcomas, Wilms's tumor only	**3B**
Stage IIIC	Wilms's tumor only	**3C**
Stage IIID	Wilms's tumor only	**3D**
Stage IIIE	Wilms's tumor only	**3E**
Stage IV		**4_**
Stage IVA	bone only	**4A**
Stage IVB	bone only	**4B**
Stage IVS	neuroblastoma only	**4S**
Stage V	Wilms's tumor, retinoblastoma only	**5_**
Stage A	neuroblastoma only	**A_**
Stage B	neuroblastoma only	**B_**
Stage C	neuroblastoma only	**C_**
Stage D	neuroblastoma only	**D_**
Stage DS	neuroblastoma only	**DS**
not applicable (not a pediatric case; adult patient)		**88**
unstaged; unknown		**99**

Pediatric Staging System

(This field is labeled "Ped. Stg Sys" on the MCR Cancer Patient Abstract.)

The MCR requires staging of pediatric patients using AJCC staging (discontinued in the *Fifth Edition*), or the staging criteria of the pediatric intergroup studies and the pediatric cooperative groups. This field records the specific staging system used.

Use code **88** for all non-pediatric cases. Record **00** when a pediatric case was not staged. Use code **97** when the case was staged using a system other than those identified in codes **01-15**. Use code **99** if a pediatric case was staged, but the staging system used is unknown.

Staging System	**Code**
none (a pediatric case, but it was not staged)	**00**
American Joint Committee on Cancer (AJCC)	**01**
Ann Arbor	**02**
Children's Cancer Group (CCG)	**03**
Evans	**04**
General Summary	**05**
Intergroup Ewings	**06**
Intergroup Hepatoblastoma	**07**
Intergroup Rhabdomyosarcoma	**08**
International System	**09**
Murphy	**10**
National Cancer Institute (pediatric oncology)	**11**
National Wilms's Tumor Study	**12**
Pediatric Oncology Group (POG)	**13**
Reese-Ellsworth	**14**
SEER Extent of Disease	**15**
not applicable (not a pediatric case; adult patient)	**88**
other (a pediatric case staged using a staging system not listed here)	**97**
unknown (a staged pediatric case, but the system used is unknown)	**99**

Regional Nodes Examined

(On the MCR Cancer Patient Abstract, this field is labeled "Reg Nodes Exam" in the Staging area.)

This field describes the total number of regional lymph nodes *examined* by a pathologist. Include nodes considered "regional" and used in the pN Element according to the AJCC *Cancer Staging Manual, Fifth Edition*). Code *all* regional lymph nodes that were removed as part of the first course of therapy treatment plan (see pages 141-142 for the definition of first course of therapy). If nodes were removed at different times during first course of treatment, be sure to include all of them in this field. Do not include nodes that were removed to establish recurrence or progression of disease.

Example: The pathology report reads "11/17 nodes examined were found to contain metastatic squamous cell carcinoma". Enter **17** for "Regional Nodes Examined".

Notes: The number coded in this field may not be the same as in "Number of Regional Lymph Nodes Removed -- Summary". "Number of Regional Lymph Nodes Removed -- Summary" refers only to nodes removed during the procedure coded in "Surgery of Primary Site -- Summary"; "Regional Nodes Examined" refers to *all* regional nodes removed during the entire first course of treatment.

Also, a tumor nodule (>3 mm in diameter) removed in adjacent tissue may be counted as a regional node for AJCC staging purposes, even if pathology later found no residual lymph node tissue in that nodule. (See pages 6-7 and appropriate sites in the AJCC *Cancer Staging Manual*, 5th Ed. for these rules.) Such a nodule could be counted as a node in the "Regional Nodes Examined" and "Regional Nodes Positive" fields, but would *not* be counted in the "Number of Regional Lymph Nodes Removed" surgery fields.

Use code **00** when no regional nodes were surgically removed.

Use code **95** when the cytology or histology was positive for malignant cells, and a lymph node aspiration was performed, but no nodes were actually removed.

Use code **99** if information about regional lymph node removal is completely unknown, and for sites and histologies for which regional lymph node removal is not applicable.

Examples:

brain primary

Letterer-Siwe's disease

leukemia

lymphoma

multiple myeloma

reticuloendotheliosis

unknown primary

patient treated pre-operatively with radiation, chemotherapy, hormone therapy or immunotherapy

The codes for "Regional Nodes Examined" follow:

No regional lymph nodes were removed.	**00**
One regional lymph node was removed.	**01**
Two regional lymph nodes were removed.	**02**
...	**...**
Ninety *or more* regional lymph nodes were removed.	**90**
No regional lymph node(s) removed, but aspiration of regional lymph node(s) was performed.	**95**
Regional lymph node removal documented as a *sampling*, and # of regional nodes unknown/not stated.	**96**
Regional lymph node removal documented as *dissection*, and # of regional nodes unknown/not stated.	**97**
Regional lymph nodes surgically removed, but # of nodes unknown/not stated *and* their removal was not documented as "sampling" or "dissection".	**98**
not applicable; not stated; unknown; death certificate only	**99**

Regional Nodes Positive

(On the MCR Cancer Patient Abstract, this field is labeled "Reg Nodes Positive" in the Staging area.)

This field describes the number of regional lymph nodes examined by a pathologist and reported as containing tumor. Include only regional nodes removed as part of the first course of treatment (see pages 141-142 for the definition of first course of treatment). Include nodes considered "regional" and used in the pN Element according to the AJCC *Cancer Staging Manual, Fifth Edition*). Be sure that the number coded in this field (up to **89**) does not exceed the number coded for "Regional Nodes Examined".

Examples:

- The pathology report reads "11/17 nodes examined were found to contain metastatic squamous cell carcinoma". Enter **11** for "Regional Nodes Positive".
- No regional lymph nodes were removed during first course of treatment. "Regional Nodes Examined" is coded **00**, and "Regional Nodes Positive" is coded **98**.
- 100 regional nodes were removed during the entire first course of treatment, and 99 were found positive. "Regional Nodes Examined" is coded **90**, and "Regional Nodes Positive" is coded **96**.

Note: A tumor nodule (>3 mm in diameter) removed in adjacent tissue may be counted as an involved regional node for AJCC staging purposes, even if that nodule was not found to contain residual lymph node tissue in pathology. (See pages 6-7 and appropriate sites in the AJCC *Cancer Staging Manual*, 5th Ed. for these rules.) Such a nodule could be counted as a regional lymph node metastasis in the "Regional Nodes Removed" and "Regional Nodes Positive" fields, but would *not* be counted in the "Number of Regional Lymph Nodes Removed" surgery fields.

Use code **97** when the cytology or histology from a lymph node *aspiration* is positive for malignant cells.

Use code **98** when no regional lymph nodes were found positive because none were ever examined.

Use code **99** if information about the regional lymph node status is unknown, or if regional lymph node removal is not applicable for the case.

Examples:

brain primary
Letterer-Siwe's disease
leukemia
lymphoma
multiple myeloma
reticuloendotheliosis
unknown primary site

The codes for "Regional Nodes Positive" follow:

All regional nodes examined were negative.	**00**
one positive regional node	**01**
two positive regional nodes	**02**
...	**...**
ninety-six *or more* positive regional nodes	**96**
Positive regional nodes were reported, but the number was not specified.	**97**
No regional nodes were examined.	**98**
Regional nodes were examined, but it's unknown if they were positive or negative; not applicable	**99**

Narrative Staging

(This is the "Narrative" field located at the bottom of the Staging area on the MCR Cancer Patient Abstract.)

This field should be used to justify the TNM, SEER Summary and/or Pediatric Staging fields as concisely as possible. Any information that helps to explain the staging codes but does not appear elsewhere on the abstract should be entered here. Such information might include physical examination findings, x-ray findings, operative findings, detailed pathologic findings, the number of tumors in the primary site, serum tumor marker tests, risk factors, site(s) of metastasis, and/or the names of involved regional or distant nodes. If a single staging code can apply to several different situations (for example, T4 for lung or liver primaries, or T3 for colorectal primaries), please use this Narrative to specify which situation is applicable to this particular case.

Examples:

- A patient has been coded with distant disease (M**1_** or Summary Stage **7**). The justifying Narrative might say "positive bone scan", "CT scan reveals liver mets" or "contralateral scalene nodes involved".
- Suppose three different lung cancer patients had these staging codes --
  T**4_**N**0_**M**0_**, Stage Grouping **3B**, SEER Summary Stage **1**;
  T**4_**N**0_**M**0_**, Stage Grouping **3B**, SEER Summary Stage **2**;
  T**4_**N**0_**M**0_**, Stage Grouping **3B**, SEER Summary Stage **7**.
  (The Fifth Edition of the TNM Manual was used for all three AJCC stagings.)
  Since a T**4_** classification can indicate several different situations -- invasion of various sites, multiple tumors in one lobe, or a tumor plus a malignant pleural effusion -- the Narratives for these cases should include enough detail to help us distinguish the cases (for example, "2 tumor masses w/ same hist in upper lobe", "tumor directly invades esophagus" or "heart invaded by tumor").

This field will allow up to 300 characters. Use standard abbreviations as necessary.

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SECTION V - TREATMENT DATA

First Course of Treatment - General Instructions

First course of treatment includes all methods of treatment recorded by the managing physician(s) in the treatment plan and administered to the patient.

Treatment Plan

A treatment plan is a statement made by the managing physician(s). It describes the type(s) of treatment(s) they intend to use to modify or control malignancy. All cancer-directed treatments specified in the treatment plan are part of the first course of therapy. A treatment plan may specify only one method of treatment (e.g., surgery) or any combination of therapies (e.g., surgery, radiation and chemotherapy). A single "regimen" includes a combination of concurrent or adjuvant treatments. All treatments specified in the treatment plan and delivered to the patient are considered to be first course of therapy. A recommendation of "no treatment" is also a treatment plan.

A treatment plan's documentation may be fragmented and is frequently found in several different sources, including the medical record, clinic record, consultation reports and outpatient records.

Time Periods for All Malignancies Except Leukemia

First course of therapy includes all cancer-directed treatment planned by the physician(s) during or after the first diagnosis of cancer. Planned treatment may include multiple modes of therapy and may encompass intervals of a year or more.

When a treatment plan is *not available*, evaluate the therapy and the time it started. If the therapy is a part of an established protocol, or within accepted management guidelines for the disease, consider it to be first course of therapy.

If there is *no treatment plan*, established protocol, or management guidelines and you cannot consult with a physician, use the following principle: "Initial treatment must begin within four months of the date of initial diagnosis." All other cancer-directed therapy that begins within four months of the date of initial treatment is first course of therapy.

Treatment failure or disease progression may prompt the physician to stop therapy before the full course is completed. Consider any treatments administered after the discontinuation of first course to be secondary or subsequent therapy only (don't record it for the MCR).

Time Periods for Leukemia

First course of therapy includes all cancer-directed treatments planned by the physician(s) during or after the first diagnosis of leukemia. Record all remission-inducing or remission-maintaining cancer-directed therapy as first course of therapy (including radiation to the central nervous system). Treatment regimens may include multiple modes of therapy, and their administration may encompass a year or more.

When a treatment plan is *not available*, evaluate the therapy and the time it started; if the therapy is a part of an established protocol or within accepted management guidelines for the disease, it is first course of therapy.

If there is *no treatment plan*, established protocol, or management guidelines and you cannot consult with a physician, use the principle: "Initial treatment must begin within two months of the date of initial diagnosis." All other cancer-directed therapy that begins within two months of the date of initial treatment is first course of therapy.

A patient may relapse after achieving a first remission. All treatment administered after relapse is secondary or subsequent therapy (don't record this for the MCR).

Definitions

"Cancer-Directed Treatment" -- Cancer-directed treatment is tumor-directed. Its purpose is to modify, control, remove or destroy primary or metastatic cancer tissue. Physicians administer the treatment(s) to minimize tumor size or delay the spread of disease.

Record all cancer-directed treatment administered to the patient. Record treatments given in other institutions (except for the treatment "...At This Facility" fields), as well as failed treatments (those to which the patient did not respond).

"Non Cancer-Directed Treatment" -- Non cancer-directed treatments prolong a patient's life, make the patient comfortable, or prepare a patient for cancer-directed therapy. These treatments are not tumor-directed, and they are not meant to reduce tumor size or delay the spread of disease. Non cancer-directed procedures include diagnostic procedures and supportive care (treatments designed to relieve symptoms and/or minimize the cancer's effects). Non cancer-directed therapies are generally not used in statistical analyses of treatment. The MCR collects information on non cancer-directed *surgery*.

TREATMENT DATA ITEMS

Treatment - Summary / Treatment - At This Facility Codes -- Numerical codes are used to describe each treatment modality (surgery, radiation, chemotherapy, etc.). For each modality, there is a field used to code a Summary of the entire first course of treatment, and a field to assign a separate code to that portion of the treatment administered at the reporting hospital (labeled "This Hosp" on the MCR Cancer Patient Abstract).

For the purposes of treatment coding, the office of a physician on the hospital's medical staff should be considered to be an extension of the hospital (i.e., when coding treatment given at the reporting hospital, include treatment administered in the office of a physician on the medical staff).

Treatment - Start Dates -- There is a *start* date field for each treatment modality. Dates should be entered in MMDDCCYY format. If the exact start date of a treatment modality is not available, record an *approximate* date.

If the treatment was administered in courses (as in a radiation series) or included different procedures (e.g., an excisional biopsy and a resection), then enter the date the first procedure was performed.

For any type of treatment that is *not known to have been given*, fill the date field with zeroes. (For example, if the "Chemotherapy -- Summary" and "Chemotherapy -- At This Facility" fields are coded **0** because the first course of treatment included no Chemotherapy, then "Chemotherapy -- Date Started" should be coded **00000000**.) For autopsy-only cases, the date fields should also be zero-filled. Do *not* leave any treatment date field blank.

If, however, a type of treatment *is known to have been given*, but its start date is not known, enter nines; if the *year* can at least be estimated, however, it is important to enter this (such as **99991997**). The MCR automated edits tend to reject unknown years.

Treatment Text -- There is a Narrative field for each treatment modality. These fields should be used to describe first course of treatment as concisely as possible. If more than one procedure was performed, list each in chronological order. A text field may be left blank when that particular treatment modality was not provided; but, if no Cancer-Directed Surgery was performed, please record the reason in the "Surgery of Primary Site -- Narrative" field (for example, "patient refused recommended procedure").

NON CANCER-DIRECTED SURGERY

Surgical procedures done to diagnose/stage disease (exploratory) or for relief of symptoms (palliative) are Non Cancer-Directed Surgery. Non Cancer-Directed procedures include the following:

- Biopsy, incisional

  (An *excisional* biopsy is Cancer-Directed Surgery.)

- Biopsy, NOS

  (Unless otherwise specified, if the specimen size is ≤1 cm, assume the biopsy to have been *in*cisional, and report it as Non Cancer-Directed Surgery.)

- Dilation and curettage for *invasive* cervical cancer

- Dilation and curettage for invasive or *in situ* cancers of the corpus uteri, including choriocarcinoma

- Removal of fluid (paracentesis or thoracentesis), even if cancer cells are present

- Surgery in which tumor tissue is not removed

  Examples:

  - bypass surgery -- colostomy, esophagostomy, gastrostomy, nephrostomy, tracheostomy, urethrostomy
  - exploratory surgery -- celiotomy, cystotomy, gastrotomy, laparotomy, nephrotomy, thoracotomy

- Removal of non-cancerous endocrine gland(s)

  (but the removal of testes, adrenals or pituitary is Endocrine Surgery for prostate primaries, and should be reported under Hormone Therapy)

- Surgery to relieve pain (e.g., chordotomy)

- Transurethral resection (TUR) without removal of tumor tissue

Brushings, washings, aspiration of cells and hematologic findings (peripheral blood smears) are not surgical procedures. Do not code these for the MCR.

The codes for Non Cancer-Directed Surgery are not site-specific:

no Non Cancer-Directed Surgical procedure	**00**
incisional biopsy, needle biopsy, or aspiration biopsy of *other* than the primary site	**01**
incisional biopsy, needle biopsy, or aspiration biopsy of the *primary* site	**02**
exploratory ONLY (no biopsy)	**03**
bypass surgery (no biopsy); ___ostomy ONLY (no biopsy)	**04**
exploratory ONLY + incisional/needle biopsy of the primary site or other sites	**05**
bypass surgery + incisional/needle biopsy of the primary site or other sites ___ostomy ONLY + incisional/needle biopsy of the primary site or other sites	**06**
Non Cancer-Directed Surgery, NOS	**07**
unknown if any Non Cancer-Directed Surgery was done	**09**

The code priorities for the Non Cancer-Directed Surgery fields are:

codes **01** - **07** have priority over **09**;

codes **01** - **06** have priority over **07**;

within **01** - **06**, the higher number has priority.

Non Cancer-Directed Surgery -- Summary

Using the code table above, report the type(s) of Non Cancer-Directed Surgery performed to diagnose the disease and work up the case. Enter the code for *all* Non Cancer-Directed Surgery performed -- include procedures done at the reporting facility, plus all known Non Cancer-Directed Surgery performed elsewhere. If multiple procedures were performed, follow the code priority rules above, and list these procedures, with their dates, in the "Surgery of Primary Site --Narrative" field.

Non Cancer-Directed Surgery -- At This Facility

Using the code table on the previous page, enter the code for just the Non Cancer-Directed Surgery performed at the reporting facility (including any done in the office of a staff physician). If multiple procedures were performed, follow the code priorities listed under the code table, and be sure that all the procedures, with their dates, are included in the "Surgery of Primary Site -- Narrative" field.

Non Cancer-Directed Surgery -- Date Started

See the general instructions for treatment date fields on page 143.

Note: There is not a separate Narrative field for Non Cancer-Directed Surgery. The field "Surgery of Primary Site -- Narrative" records both Cancer-Directed and Non Cancer-Directed Surgery.

CANCER-DIRECTED SURGERY

Cancer-Directed Surgery is tumor-directed. Its purpose is to modify, control, remove or destroy cancer tissue.

Note that an excisional biopsy is Cancer-Directed Surgery. When the surgeon states that the procedure is an excisional biopsy, code it as such even if the pathology report shows involvement of the margins. If there is no statement that the initial biopsy was "excisional", yet no residual tumor was found at a later resection, assume that the biopsy *was* excisional. If an excisional biopsy is followed by a "re-excision" or "wide excision" within four months of the beginning of treatment, include the later information in coding first course of treatment Cancer-Directed Surgery. Record the date of an excisional biopsy as the first date of Cancer-Directed Surgical treatment, whether followed by further definitive surgery or not, and whether or not residual tumor was found in a later resection.

The Cancer-Directed Surgery code fields are site-specific. Codes are listed in Appendix D.

Surgical Approach

This field describes the method used to approach the organ of origin and/or primary tumor. Code the approach for Cancer-Directed Surgery of the *primary* site only. The codes appear in Appendix D.

If no primary site surgical procedure was done ("Surgery of Primary Site -- Summary" is coded **00**), then "Surgical Approach" must also be coded **0**. If the field "Surgery of Primary Site -- Summary" is **99**, code "Surgical Approach" **9**.

"Endoscopy, image guided" is a generic term for guidance provided by any imaging technique including, but not limited to, CT scans, MRI scans, ultrasound, and radiographic imaging.

"Open" is a generic term describing all non-scope approaches. Procedures for which Surgical Approach would be coded "open" include, but are not limited to, mastectomy, excision of a skin melanoma, and glossectomy.

"Open, assisted by endoscopy" means that the scope is being used (present in the body) at the same time the primary tumor is resected. DO NOT CODE a procedure as "assisted by endoscopy" when the scope is used and *removed* prior to the resection, nor when it is inserted and used after the primary tumor's resection.

Example: A patient with lung cancer is taken to the surgical suite. A bronchoscopy and mediastinoscopy are done to evaluate whether the lesion is resectable. The scopes are removed before the surgeon performs a wedge resection. Using the lung cancer codes in Appendix D (page D-55), code "Surgical Approach" as "Open, **not** assisted by endoscopy" (**6**).

If the patient has multiple Cancer-Directed Surgeries of the *same* primary site, code "Surgical Approach" for the most invasive, definitive surgery (the numerically highest code).

Example: A patient has a colonoscopy with removal of a polyp in the sigmoid colon. The "Surgery of Primary Site" code is **26** (see Appendix D, pages D-25 and D-26). The pathology report identifies carcinoma extending into the stalk. A week later, the patient has a hemicolectomy ("Surgery of Primary Site" code **40**). Since the hemicolectomy is the most definitive surgery and has the numerically higher code, "Surgical Approach" is coded "Open, not assisted by endoscopy" (**5**).

Surgery of Primary Site

Only record surgeries of the *primary site* in this section. Surgery to remove regional tissues or organs is coded in this section only if these tissues/organs are removed *along with* the primary site in an "en bloc resection". (An en bloc resection is the removal of multiple organs in one piece at one time.)

> *Example*: When a patient has a modified radical mastectomy, since the breast and axillary contents are removed in one piece (en bloc), "Surgery of Primary Site" is coded as a modified radical mastectomy (**50**), even if pathology finds no nodes in the specimen. (See the codes in Appendix D, page D-72.)

Record a non en bloc resection of a secondary or metastatic site in the data field "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes".

If no primary site surgical procedure was done, use code **00**.

The operative report title may not have adequate information for the surgery code. Use the operative report text and the pathology report to confirm the operative procedure. Use the information from the pathology report when an operative report is unclear or is inconsistent, unless the pathology report states that an accurate accounting of organs removed cannot be given (e.g., tumor encasement, crush artifact, etc.).

The general priority scheme for the "Surgery of Primary Site" codes in Appendix D is as follows:

codes **10 - 90** have priority over **99**;

codes **10 - 80** have priority over **90** and **99**;

codes **10 - 79** have priority over codes **80**, **90** and **99**.

The range of codes **00 - 89** are generally hierarchical -- as the code numbers ascend, the procedures represented become more invasive and/or radical. If more than one code describes the procedure, use the numerically higher code.

If the patient has *multiple* cancer-directed surgeries of the *same* primary site, code the most invasive, definitive surgery (numerically highest code).

Example: A patient has a colonoscopy with removal of a polyp in the sigmoid colon (see the codes in Appendix D, page D-26). The pathology report identifies carcinoma extending into the stalk ("Surgery of Primary Site" code **26**). A week later, the patient has a hemicolectomy ("Surgery of Primary Site" code **40**). Code the hemicolectomy since it is the most invasive, definitive surgery and has the numerically higher code.

Code the appropriate surgery for each site when *multiple primaries* are excised at the same time.

Examples:

- A total abdominal hysterectomy was performed for a patient who had cancer of the cervix and of the endometrium. Code a total abdominal hysterectomy for each of the two primaries.
- A patient has a total colectomy for multiple primary cancers originating in several segments of the colon. Code a total colectomy for each primary.

In the "Surgery of Primary Site -- Narrative" field, though, record *all* primary site surgical procedures done at the reporting institution **and** at other institutions.

Example: "Colonoscopy and polypectomy (date); hemicolectomy".

Surgery of Primary Site -- Summary

Using the codes for the appropriate primary site in Appendix D, enter the code for all surgery of the primary site performed as part of first course of treatment. This includes treatment given at the reporting facility, plus all known treatment given elsewhere. If multiple procedures are performed, enter the code for the procedure having the highest code number, and list *all* procedures, with their dates of performance, in the "Surgery of Primary Site -- Narrative" field.

Surgery of Primary Site -- At This Facility

Using the codes in Appendix D, enter the code for the surgery of the primary site performed only at the reporting facility. If multiple primary site procedures were performed at your facility, enter the code for the procedure having the highest code number, and be sure that the "Surgery of Primary Site -- Narrative" field includes all the procedures, with their dates. Include procedures performed in a staff physician's office.

Surgery of Primary Site -- Date Started

See the general instructions on page 143 for treatment date fields. Record the date of an excisional biopsy here, whether followed by further definitive surgery or not, and whether or not residual tumor was found later in a resection.

Surgery of Primary Site -- Narrative

See the general instructions on page 143 for treatment text fields. Include all Non Cancer-Directed and Cancer-Directed Surgery performed in chronological order, with dates. If no Cancer-Directed Surgery was done, give a reason here (for example, "patient refused the recommended surgery").

Surgical Margins

This field describes the status of the surgical margins after resection of the primary tumor. DO NOT code margin status from regional lymph node surgery or metastatic site surgery. (Note: For *ovarian* primaries only, this field is used to describe residual tumor status following surgery.)

Microscopic involvement cannot be seen by the naked eye. The pathology report usually documents microscopic involvement in its final diagnosis or microscopic portions. Macroscopic involvement is gross tumor visible to the naked eye. It may be documented in the operative report or in the gross portion of the pathology report.

The codes appear in Appendix D and are hierarchical. If two codes describe the margin status, use the numerically higher code.

> *Example*: The pathology report from a colon resection (codes are in Appendix D, page D-27) describes the proximal margin as grossly involved with tumor (code **5**) and the distal margin as microscopically involved (code **2**). Code the macroscopic involvement (code **5**).

If the patient has *multiple* cancer-directed surgeries of the *same* primary site, code the status of the surgical margins after the last surgery.

> *Example*: Patient has an excisional biopsy of a breast lesion (see the codes in Appendix D, page D-74). The pathology report describes an infiltrating ductal carcinoma. The margins are microscopically involved. A few weeks later, the patient has a modified radical mastectomy. The pathology report says all margins are free. Code the margin status after the mastectomy -- "all margins grossly and microscopically negative" (**0**).

If no Cancer-Directed Surgery of the Primary Site was done ("Surgery of Primary Site -- Summary" is **00**), "Surgical Margins" must be coded **8**.

Scope of Regional Lymph Node Surgery

For most primary sites, these fields define the removal of regional lymph nodes. There is no minimum number of nodes that must be removed. If at least one regional lymph node was removed, the code for this field must be in the range **1-5**. If a regional lymph node was aspirated, code "regional lymph node(s) removed, NOS" (**1**).

For head and neck sites, this field describes *neck dissections*. Codes **2-5** indicate only that a neck dissection was done; they do not imply that nodes were found during the pathologic examination of the specimen. Code the neck dissection here even if no nodes were found.

The codes are hierarchical. If more than one procedure was performed, or if more than one code applies, code the procedure that is numerically higher.

Examples: A patient with a head and neck primary has a lymph node biopsy (code **1**), followed by a limited neck dissection (**3**). Code the limited neck dissection.

If a patient has a *modified* radical neck dissection, record code **4** rather than the more generic "neck dissection, NOS" (**2**).

For most primary sites in Appendix D, a list identifies the specific nodes which are regional. (For some primary sites, each subsite has different regional nodes.) Any other nodes are considered *distant* and are coded in "Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes".

If no cancer-directed surgical procedure was performed, enter code **0**.

Scope of Regional Lymph Node Surgery -- Summary

Using the codes for the appropriate primary site in Appendix D, report the Scope of Regional Lymph Node Surgery done at your facility and elsewhere.

Scope of Regional Lymph Node Surgery -- At This Facility

Using the codes in Appendix D, code just the Scope of Regional Lymph Node Surgery performed at your facility. Include procedures done in a staff physician's office.

Number of Regional Lymph Nodes Removed

Record the number of regional lymph nodes identified in the pathology report **DURING THIS SURGICAL PROCEDURE ONLY** (the surgical procedure coded in the "Surgery of Primary Site" fields). **DO NOT ADD** numbers of nodes removed at different surgical events.

If *no* regional lymph nodes are identified in the pathology report, code **00** here, even if the surgical procedure includes a lymph node dissection (e.g., modified radical mastectomy), or if the operative report documents the removal of nodes.

Note: Because these fields are *not* cumulative and not affected by timing issues, they do not duplicate the field "Regional Nodes Examined" (which describes all regional nodes removed during the entire first course of treatment). Do not automatically copy the values from one field to another. (See pages 135-136 for the field "Regional Nodes Examined".)

Number of Regional Lymph Nodes Removed -- Summary

Using the codes for the appropriate primary site in Appendix D, report the Number of Regional Lymph Nodes Removed at your facility and elsewhere for the surgical procedure coded in "Surgery of Primary Site -- Summary".

Number of Regional Lymph Nodes Removed -- At This Facility

Using the codes for the appropriate primary site in Appendix D, code just the Number of Regional Lymph Nodes Removed at your facility for the surgical procedure coded in "Surgery of Primary Site -- At This Facility". Include nodes removed in a staff physician's office.

Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes

(On the MCR Cancer Patient Abstract, these fields are labeled "Surgery-Other Reg/Dist".)

These fields describe the *separate* (not en bloc with the primary) removal of tissue(s) or organ(s) *other than* the primary tumor/organ of origin. If regional/distant tissues/organs were removed in continuity with the primary tumor (en bloc), their removal is reported under Surgery of the Primary Site rather than here. Include the removal of any non-primary tissue that was removed because the surgeon *suspected* malignant involvement, even if the pathology was negative. Do not code the *incidental* removal of tissue (i.e., removed for reasons other than suspected malignancy).

Example: During a colon resection, the surgeon noted cholelithiasis and removed the gallbladder. The gallbladder's removal is incidental and should not be coded in any field.

Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes -- Summary

Using the codes for the appropriate primary site in Appendix D, report the Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes performed at your facility and elsewhere.

Codes **1 - 8** have priority over code **9**.

Surgery of Other Regional Sites, Distant Sites, or Distant Lymph Nodes -- At This Facility

Using the codes in Appendix D, report just the Surgery of Other Regional Sites, Distant Sites or Distant Lymph Nodes performed at your facility. Include procedures performed in a staff physician's office.

Codes **1 - 8** have priority over code **9**.

Reconstruction / Restoration -- First Course

(On the MCR Cancer Patient Abstract, this field is labeled "Reconstr.")

This field codes surgical procedures that improve the shape, appearance or function of body structures that are missing, defective, damaged, or misshapen by cancer-directed therapy *or cancer*.

"Reconstruction / Restoration -- First Course" is limited to procedures started during the first course of cancer-directed therapy. Some reconstructive/restorative procedures involve several events; only code these as "Reconstruction / Restoration -- First Course" if the first event occurred during the first course of treatment. The MCR does not collect data on procedures which *started* after the first course of treatment's completion.

Use the codes for the appropriate primary site in Appendix D. Code *only* those procedures specifically listed for each site. Codes **1 - 8** have priority over code **9**.

Reason For No
Cancer-Directed Surgery

For *all* cancers, this field records if Cancer-Directed Surgery was done; and if it was *not* done, it records a reason *why* it was not done.

Record a reason why Cancer-Directed Surgery was not performed for this case; or, if it was performed, enter **0**.

Enter the applicable number from the following codes:

Cancer-Directed Surgery was performed. (The field "Surgery of Primary Site - Summary" must be coded **10**-**90**.)	**0**
Cancer-Directed Surgery was not recommended. (includes inoperable cancer, widespread cancer, and conditions not treated surgically, such as leukemia)	**1**
Cancer-Directed Surgery was contraindicated because of other conditions; autopsy-only cases (includes advanced age and the presence of other diseases, such as heart disease, that would contraindicate surgery)	**2**
The reason for no Cancer-Directed Surgery is unknown. (Cancer-directed surgery would have been the treatment of choice, but it was not performed, and a reason is not given.)	**6**
patient/guardian refused Cancer-Directed Surgery (Cancer-directed surgery was the treatment of choice and was recommended by the physician, but the patient, a family member, or a guardian refused the surgery.)	**7**
Cancer-Directed Surgery was recommended, but it's not known if it was performed. (Cancer-directed surgery was recommended by a physician, but no follow-up information is available to confirm if the surgery was performed.)	**8**
unknown if cancer-directed surgery recommended or performed; death certificate-only cases (No confirmation if cancer-directed surgery was recommended or performed.)	**9**

RADIATION THERAPY

Code the type of Radiation Therapy that the patient received. This field records radiation administered to the primary site or any metastatic site for *curative* or *prophylactic* intent. Record all procedures that are part of the first course of therapy.

Do not include radiation for hormonal effect, such as irradiation of non-cancerous endocrine glands. Do not include irradiation of the male breast to prevent gynecomastia.

Types of Radiation

The primary types of Radiation Therapy include the external administration of radioactive beams, implantation of radioactive material, and the internal administration of radioisotopes by means other than implantation. Radioactive materials include the following:

Au^{198}	gold
Co^{60}	cobalt
CrO_4P	chromic phosphate
$Cr^{32}PO_4$	phosphocol
Cs	cesium
I^{125} and I^{131}	iodine
Ir^{192}	iridium
P^{32}	phosphorus
Pb^{210}	lead
Ra^{226}	radium
Rn^{222}	radon
Ru^{106}	ruthenium
Sr^{89} and Sr^{90}	strontium
Y^{90}	yttrium

Beam (Teletherapy) -- Radiation is classified as "beam" when the source of radiation is outside the patient, as in a cobalt machine or linear accelerator. Examples of beam radiation include the following:

Betatron

Brachytron

Cobalt

Cyclotron

Grenz ray

Helium ion or other heavy particle beam

Linear accelerator (LINAC)

MeV

Neutron beam

Spray radiation

Stereotactic radiosurgery (gamma knife, proton beam)

X-ray

Radioactive Implants -- This category includes any radioactive material administered by implants, molds, seeds, needles or intracavitary applicators. (Heyman capsules, Fletcher suit, and Fletcher after-loader are methods of isotope application. Interpret these terms as radioactive implants.)

Other Internal Radiation -- Record the name or chemical symbol and method of administration of any radioactive material given orally, intracavitarily, or by intravenous injection. (I^{131}-labeled immunoglobin is coded both as a radioisotope and as Immunotherapy.)

Use the following codes for Radiation Therapy:

no Radiation Therapy	**0**
beam radiation (X-ray, cobalt, linear accelerator, neutron beam, spray radiation, intra-operative radiation and stereotactic radiosurgery, gamma knife and protein beam)	**1**
radioactive implants (brachytherapy, interstitial implants, molds, seeds, needles or intracavitary applicators of radioactive materials -- cesium, radium, radon, and radioactive gold)	**2**
radioisotopes (internal use of radioactive isotopes, iodine-131, phosphorus-32, strontium-89, strontium-90)	**3**
combination(s) of beam radiation with radioactive implants or with radioisotopes (combination of **1** with **2** and/or **3**)	**4**
Radiation Therapy, NOS (method or source not specified)	**5**
unknown if Radiation Therapy administered	**9**

Radiation Therapy -- Summary

Using the code table above, code all the first course of treatment Radiation Therapy received by the patient at your facility *and* elsewhere.

Radiation Therapy -- At This Facility

Using the code table above, code just the Radiation Therapy administered at your facility. Include treatment administered in the office of a physician on your medical staff.

Radiation Therapy -- Date Started

See the Treatment Date instructions on page 143.

Radiation Therapy -- Narrative

See the Treatment Text instructions on page 143.

Radiation / Surgery Sequence

(This field is labeled "Surg/Rad Seq" at the end of the Radiation Therapy line on the MCR Cancer Patient Abstract.)

Radiation/Surgery Sequence defines the order in which Radiation Therapy and Cancer-Directed Surgery were delivered during first course of therapy. Enter codes in the range **2-6** only if the patient had both Radiation Therapy and Cancer-Directed Surgery during first course of treatment. Non Cancer-Directed Surgery (e.g., incisional biopsy, bypass surgery, exploratory surgery) does not qualify.

Code Radiation / Surgery Sequence as follows:

no Radiation Therapy and/or Cancer-Directed Surgery	**0**
Radiation Therapy before Cancer-Directed Surgery	**2**
Radiation Therapy after Cancer-Directed Surgery	**3**
Cancer-Directed Surgery both before and after Radiation Therapy	**4**
intraoperative Radiation Therapy	**5**
intraoperative Radiation Therapy with other Radiation Therapy administered before or after Cancer-Directed Surgery	**6**
sequence unknown, but both Radiation Therapy and Cancer-Directed Surgery were administered	**9**

CHEMOTHERAPY

Chemotherapy consists of a group of anticancer drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis, causing the cells to die. Chemotherapeutic agents may be administered by intravenous infusion or given orally. They may also be topical, intrathecal, intracavitary or intra-arterial. Methods of administration are not coded for the MCR.

Chemotherapy agents may be administered singly or in combination regimens of two or more chemotherapy drugs. The drugs are frequently given in combinations referred to by acronyms or protocols. Do not enter protocol numbers alone. Two or more single agents given at separate times during first course of therapy are considered to be a *combination* regimen.

Chemotherapy is often administered in treatment cycles. The time span of each treatment cycle varies, depending on histology, stage of disease and treatment modalities. Chemotherapy may be administered for several weeks or years. For the MCR, only record Chemotherapy that is part of first course of treatment.

Also record Chemotherapy as cancer-directed therapy when it is delivered *concurrently* or as *adjuvant* treatment. Concurrent chemotherapeutic agents are used in combination with other modes of therapy (surgery, radiation therapy, etc.) to treat cancer. In adjuvant therapy, when other methods have already destroyed cancer cells, Chemotherapy is given to prevent or delay a recurrence by destroying micrometastases (undetected cancer cells).

Chemotherapy may be divided into the following categories:

Alkylating Agents

Busulfan (Myleran)	DTIC (Dacarbazine)
Carmustine (Lomustine)	Mechlorethamine (Mustargen)
Chlorambucil (Leukeran)	Phenylalanine mustard (Melphalan)
Cyclophosphamide (Cytoxan)	Triethylene-thiophosphoramide (Thio-TEPA)

Antimetabolites

Folic acid analogs:	Methotrexate (Amethopterin, MTX)
Pyrimidine analogs:	5-fluorouracil (5-FU)
Purine analogs:	6-mercaptopurine (6-MP)

Natural Products

Antitumor antibiotics:	Bleomycin (Blenoxane)
	Dactinomycin (Actinomycin D)
	Daunorubicin (Daunomycin)
	Doxorubicin (Adriamycin)
	Mitomycin C (Mutamycin)
Vinca alkaloids:	Vinblastine (VBL, Velban)
	Vincristine (VCR, Oncovin)
Enzymes:	L-Asparaginase (Elspar)

Miscellaneous Agents

Cis-diammine dichloroplatinum II (Cisplatin)

Hydroxyurea (Hydrea)

Procarbazine (Matulane)

Note: Leucovorin is an example of an *ancillary* drug which may be administered in conjunction with chemotherapuetic agents. Ancillary drugs are not coded for the MCR, but they may be recorded in the "Chemotherapy -- Narrative" field.

Example: 5-FU and Leucovorin are both given to a cancer patient as part of the planned first course of therapy. If there are no additional Chemotherapy agents given, the correct Chemotherapy code is **2** ("single agent") -- not **3** ("multiple agents"). Chemotherapy -- Narrative could say "5-FU (+ Leucovorin)".

Use the following codes for Chemotherapy:

no Chemotherapy	**0**
Chemotherapy, NOS	**1**
Chemotherapy, single agent	**2**
Chemotherapy, multiple agents (combination regimen)	**3**
unknown if chemotherapy recommended or administered	**9**

Note: In the range **1-3**, the higher code number has priority.

Chemotherapy -- Summary

Using the code table above, report all the Chemotherapy given to the patient as part of first course of treatment. Include Chemotherapy given at your institution *and* at all others.

Chemotherapy -- At This Facility

Using the code table above, report just the Chemotherapy administered at your facility as part of first course of treatment. Include treatment delivered in a staff physician's office.

Chemotherapy -- Date Started

See the Treatment Date instructions on page 143.

Chemotherapy -- Narrative

Record the generic or trade names of the Chemotherapy agents used. Include those that are in the investigative or clinical trial phase. See the *SEER Self Instructional Manual for Tumor Registrars: Book 8*, 3rd ed. (1994) for a comprehensive list of chemotherapeutic agents in use at the time of its publication. Do not enter protocol numbers alone. The names of (uncoded) ancillary drugs given along with Chemotherapy agents may also be included here.

HORMONE / STEROID / ENDOCRINE THERAPY

Hormones promote hormonal withdrawal or hormonal interface to alter cancer growth. Hormonal therapy may effect a long-term control of the cancer, but it is not usually used to "cure" the cancer.

Code the type of Hormone/steroid (endocrine) Therapy the patient received as part of first course of therapy. Record surgery performed for hormonal effect (such as castration) and radiation for hormonal effect.

Hormones and Antihormones

Report cancer-directed treatment with hormones and antihormones for all sites and types of cancer. Report cancer-directed use of adrenocorticotrophic hormones for the treatment of leukemias, lymphomas, multiple myeloma, and breast and prostate cancers.

Code Prednisone as Hormonal Therapy when it is given in combination with Chemotherapy (e.g., MOPP or COPP) for cancer of *any* site. If administered for other reasons, do *not* code such agents as Hormone Therapy.

Examples:

- A patient with advanced cancer is given Prednisone to stimulate appetite. Do not code this.
- A patient with advanced lung cancer has multiple brain metastases. The physician orders Decadron to reduce the edema in the brain and relieve neurological symptoms. This use of Decadron is not coded as Hormone Therapy.

Hormone classifications include the following:

adrenocorticosteroids (Prednisone, Decadron)

androgens (Halotestin)

antiestrogens (Tamoxifen, Nolvadex)

estrogens (DES, diethylstilbestrol)

hormone synthesis inhibitors (Elipten, Cytadren)

progestins (Provera, Megace)

For a more complete list of hormonal agents, see the *SEER Self Instructional Manual for Tumor Registrars: Book 8*, 3rd ed. (1994).

Thyroid-stimulating hormone (TSH) is normally *replacement* therapy and *not* tumor-directed; however, the administration of thyroid hormone following thyroidectomy *is* definitive Hormonal Therapy because the thyroid extract has a dual role in such cases -- as replacement therapy, *and* to inhibit recurrence and metastasis. Exogenous dissected thyroid may be used in treatment following a subtotal or total thyroidectomy.

Endocrine Surgery and/or Endocrine Radiation

For reporting purposes, endocrine surgery/radiation (code **2**) is defined as the total removal/irradiation of an endocrine gland (*both* glands or all of one remaining gland in the case of paired glands). Record endocrine surgery and/or radiation for treatment of cancer of the prostate only. Endocrine surgical procedures are as follows:

adrenalectomy

hypophysectomy

orchiectomy

Report any type of radiation directed toward an endocrine gland to affect hormonal balance in these circumstances:

- treatment is for cancer of the prostate;
- both paired glands (testes, adrenals) or all of a remaining gland have/has been irradiated.

If tumor tissue is present in a gland removed in the course of endocrine therapy, record the procedure as Cancer-Directed Surgery also.

Use the following codes for Hormone Therapy:

no Hormone Therapy	**0**
hormones (including NOS and antihormones)	**1**
endocrine surgery and/or endocrine radiation therapy (if cancer is of another site)	**2**
combination of **1** and **2**	**3**
unknown if Hormone Therapy recommended or administered	**9**

Note: Codes 7 and 8 are no longer used for diagnoses as of 01/01/1996. If patient/guardian refused Hormone Therapy, use code **0**. If Hormone Therapy was recommended but you do not know if it was ever given, also use code **0**.

Hormone Therapy -- Summary

Using the code table above, report *all* Hormone Therapy performed at your facility *and* elsewhere as part of first course of treatment.

Hormone Therapy -- At This Facility

Using the code table above, report just the first course of treatment Hormone Therapy received at your facility. Include treatment given in a staff physician's office.

Hormone Therapy -- Date Started

See the Treatment Date instructions on page 143.

Hormone Therapy -- Narrative

See the Treatment Text instructions on page 143.

IMMUNOTHERAPY

Immunotherapy (biological response modifier therapy, BRM) consists of biological or chemical agents that alter the immune system or change a patient's response to tumor cells. Code only Immunotherapy that the patient received as part of first course of therapy.

Immunotherapy agents include:

allogeneic cells

BCG vaccine

bone marrow transplant

C-Parvum

Herceptin

Interferon

Levamisole

MVE-2

Pyran copolymer

Thymosin

vaccine therapy

virus therapy

Refer to the *SEER Self Instructional Manual for Tumor Registrars: Book 8,* 3rd ed. (1994) for drug categories.

Use the following codes for Immunotherapy:

no Immunotherapy	**0**
biological response modifier (BRM)	**1**
bone marrow transplant - autologous	**2**
bone marrow transplant - allogeneic	**3**
bone marrow transplant, NOS	**4**
stem cell transplant	**5**
combination of **1** and any **2-5**	**6**
patient/guardian refused Immunotherapy	**7**
Immunotherapy recommended, but unknown if administered	**8**
unknown* if Immunotherapy recommended or administered	**9**

* There is reason to believe that Immunotherapy was recommended or given, but there is no information to confirm this.

Immunotherapy -- Summary

Using the code table above, record all first course of therapy Immunotherapy procedures done at your institution, and at all other institutions.

Immunotherapy -- At This Facility

Using the code table above, record just the procedures done at your facility. Include treatment given in a staff physician's office.

Immunotherapy -- Date Started

See the Treatment Date instructions on page 143.

Immunotherapy -- Narrative

See the Treatment Text instructions on page 143.

OTHER CANCER-DIRECTED THERAPY

(These fields are labeled "Other Treatment" on the MCR Cancer Patient Abstract.)

Other Cancer-Directed Therapy includes treatments given as part of first course of therapy designed to modify or control cancer cells that are not defined in the Surgery, Radiation Therapy, Chemotherapy, Hormone Therapy, or Immunotherapy fields.

Examples:

- tumor embolization (arterial block) if the surgeon's intent is to kill tumor cells
- any experimental drug that cannot be classified elsewhere
- hyperbaric oxygen (as an adjunct to definitive treatment)
- hyperthermia (given alone or in combination with Chemotherapy, as in isolated heated limb perfusion for melanoma)
- double-blind clinical trial information where the type of agent administered is unknown and/or there is any use of a placebo. However, after the code is broken, report the treatment under the appropriate category [a Change/Delete Form (page 7) should be submitted when the data become available, or call a tumor registrar at the MCR (617-624-5645)].
- unorthodox and unproven treatment, such as Laetrile or Krebiozen

Do not code ancillary (non cancer-directed) drugs. (There is *no coding scheme* for these.) You may record their use in a treatment Narrative field, but since their effects are not cancer-directed, it is not necessary to report them.

Examples:

- Allopurinol
- Epogen
- G-CSF (growth stimulating factors)
- Leucovorin
- Neupogen

Note: This is only a partial list. Refer to the *SEER Self Instructional Manual for Tumor Registrars: Book 8 - Antineoplastic Drugs*, 3rd ed. for a more complete listing.

Use the following codes for Other Cancer-Directed Therapy:

no Other Cancer-Directed Therapy	**0**
Other Cancer-Directed Therapy	**1**
Other experimental Cancer-Directed Therapy (not included elsewhere)	**2**
double-blind clinical trial, code not yet broken (Code and report the treatment actually administered when the double-blind clinical trial code is broken.)	**3**
unproven therapy (includes Laetrile, Krebiozen, etc.)	**6**
patient/guardian refused therapy which, if given, would have been coded as 1-3 above	**7**
Other Cancer-Directed Therapy recommended, but unknown if administered	**8**
unknown* if Other Cancer-Directed Therapy recommended or administered	**9**

* There is reason to believe that Other Cancer-Directed Therapy was recommended or given, but there is no information to confirm this.

Other Cancer-Directed Therapy -- Summary

Using the code table above, code Other Cancer-Directed Therapy received by the patient as part of first course of therapy. Record all procedures done at your institution and at all others.

Other Cancer-Directed Therapy -- At This Facility

Using the code table above, code only Other Cancer-Directed Therapy given at your facility. Also include treatment given in a staff physician's office.

Other Cancer-Directed Therapy -- Date Started

See the Treatment Date instructions on page 143.

Other Cancer-Directed Therapy -- Narrative

See the Treatment Text instructions on page 143.

SECTION VI - FOLLOW-UP DATA

Date of Last Contact

Enter the date, in MMDDCCYY format, of last contact with the patient.

If the patient is dead, this field records the date of death.

For hospitals without follow-up registries, the date entered in this field is probably the Discharge Date.

Follow-up registries are requested to enter the Date of Last Contact learned from follow-up efforts. If no follow-up information has been received by the time the case is abstracted, enter the Discharge Date from the hospital. Do not use the date that information was received in the mail, nor the date information was requested from a patient, physician or other follow-up source.

If a patient has multiple primaries, all abstracts submitted for the patient should contain the same Date of Last Contact.

Never use the code for unknown year (**9999**), and do not leave this field blank.

Vital Status

Enter the patient's Vital Status as of the date entered in the "Date of Last Contact" field. Use the most accurate information available. If a patient has multiple primaries, all records should have the same Vital Status. Use the following codes:

Status	Code
dead	**0**
alive	**1**

FOLLOW-UP DATA cont.

Place of Death

If the patient has died, enter the code for the state (U.S.) or country (outside U.S.) where the death occurred. Use the codes for Birthplace (Appendix A) to complete this field. (The Massachusetts code is **005**.)

If you know that the patient is dead, but you do not know where the death occurred, enter **999**.

If the patient is alive as of the Date of Last Contact, enter **997** -- do not leave this field blank.

Comments / Narrative Remarks

This is a free text field. It should be used to communicate any details about a case that would help the MCR staff to understand its particulars. This field should be used to list other primaries when a patient has multiple primaries. If there is an uncommon site/histology combination or age/diagnosis combination and it has been reviewed by the physicians at your facility, please note it in this field. Tell us anything about the case that you think is important for us to know, and that is not recorded elsewhere on the MCR Cancer Patient Abstract.

Avoid a call from the MCR by using this field!

SECTION VI - CASE STATUS INFORMATION

Date Case Completed

Record the date that the case was completed and passed all edits that were applied at the hospital level. The date should be recorded in MMDDCCYY format.

For facilities reporting cases to the MCR on paper, please fill in the date on which you completed abstracting the case.

Date Case Report Exported

(This field does not apply to facilities reporting cases to the MCR on paper. It does not appear on the MCR Cancer Patient Abstract.)

Record the date that the electronic abstract was exported to a file for transmission to the central registry. As with all dates, record this in MMDDCCYY format.

Vendor Name / Version Number

(This field does not apply to facilities reporting cases to the MCR on paper. It does not appear on the MCR Cancer Patient Abstract.)

This code will be used by the MCR to track which vendor and which software version submitted the case. It will help define the source and extent of a problem discovered in data submitted by a software provider.

Record the name of the computer services vendor who programmed the system submitting the data. Abbreviate as necessary and maintain a consistent name throughout all submissions. Include software version number where available. Code is self assigned by the vendor. This field allows up to 10 alphanumeric characters.

Example: Version 3 of the CanDo Registry System might be entered "Cando V3"

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