

REVISED DATA ITEMS IN THE DATA STANDARDS AND DATA DICTIONARY, VOLUME II, VERSION 11.1

The NAACCR 2007 Implementation Guidelines and Recommendations, Appendix C includes errata and revisions to the data items in Standards for Cancer Registries Volume II, *Data Standards and Data Dictionary*, Eleventh Edition, Record Layout Version 11.1 (Effective January 1, 2007). Excerpts from Volume II, Version 11.1 revealing the errata for each data item are provided below. Track Changes were used to reveal the changes made to each data item. The Volume II, Version 11.1 Access database (Revised September 2006) has been updated with these changes and is posted to the NAACCR Web site standards page.

ADDR AT DX--STATE**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
State (pre-96 COC) State at Diagnosis (COC)	80	2	COC	72-73

Description

USPS abbreviation for the state, territory, commonwealth, U.S. possession, or CanadaPost abbreviation for the Canadian province/territory in which the patient resides at the time the reportable tumor is diagnosed. If the patient has multiple primaries, the state of residence may be different for each tumor.

Codes (in addition to the U.S. and Canadian postal service abbreviations)

CD Resident of Canada, NOS (province/territory unknown)
 US Resident of United States, NOS (state/commonwealth/territory/possession unknown)
 XX Resident of country other than the United States (including its territories, commonwealths, or possessions) or Canada, and country is known
 YY Resident of country other than the United States (including its territories, commonwealths, or possessions) or Canada, and country is unknown
 ZZ Residence unknown

ADDR CURRENT—STATE**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
State--Current (COC)	1820	2	COC	1327- 1328

Description

USPS abbreviation for the state, territory, commonwealth, U.S. possession, or Canada Post abbreviation for the Canadian province/territory of the patient's current usual residence. If the patient has multiple tumors, the current state of residence should be the same for all tumors.

Rationale

"Current address" can be used to measure the regional "cancer burden" (cost, medical care needs), especially in major retirement regions. Sometimes central registries carry out follow-up by contacting the patients via letter or telephone calls to ascertain vital status. The most current reported address and telephone number are needed. This information also is useful for conducting interview studies.

Codes (in addition to the U.S. and Canadian postal service abbreviations)

CD Resident of Canada, NOS (province/territory unknown)
 US Resident of United States, NOS (state/commonwealth/territory/possession unknown)
 XX Resident of country other than the United States (including its territories, commonwealths, or possessions) or Canada, and country is known
 YY Resident of country other than the United States (including its territories, commonwealths, or possessions) or Canada, and country is unknown
 ZZ Residence unknown

Note: Prior to Version 5, Follow-Up Contact fields may have been used for patient current address in the NAACCR record layout.

CODING SYSTEM FOR EOD**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
Coding System for Extent of Disease (SEER)	870	1	SEER	562-562

Description

Indicates the type of SEER EOD code applied to the tumor. Should be used whenever EOD coding is applied.

Rationale

Used in data editing and analysis.

Codes

0 2-Digit Nonspecific Extent of Disease (1973-82)
 1 2-Digit Site-Specific Extent of Disease (1973-82)
 2 13-Digit (expanded) Site-Specific Extent of Disease (1973-1982)
 3 4-Digit Extent of Disease (1983-87)
 4 10-Digit Extent of Disease, 1988 (1988-2003)
 blank Cases diagnosed 2004+; or the item is not collected

DATE OF INITIAL RX--SEER**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
Date Therapy Initiated (SEER) Date Started (SEER)	1260	8	SEER	835-842

Description

Date of initiation of the first course therapy for the tumor being reported, using the SEER definition of first course. See also Date of 1st Crs RX--COC [1270]. See Chapter V, Unresolved Issues, for further discussion of the difference between SEER and COC items. See page 87 for date format.

Codes (in addition to valid dates)

00000000 No therapy
 99999999 Unknown date/Unknown if therapy was administered

Clarification of NPCR Required Status

Central registries funded by NPCR are required to collect either Date of Initial RX--SEER [1260] or Date of 1st Crs RX--COC [1270].

FIN CODING SYSTEM

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
	35	1	NAACCR	11-11

Description

The FIN Coding System is a generated code that identifies the coding system used by individual facilities (hospital, clinics, or other providers). This field identifies the coding system used by facilities in the following seven fields of the NAACCR layout:

- Registry ID [40] (when Registry Type [30] = 3)
- Reporting Facility [540]
- Institution Referred From [2410]
- Institution Referred To [2420]
- Last Follow-Up Hospital [2430] (this data item was retired in Version 11)
- Following Registry [2440]
- Archive FIN [3100]

Within a single NAACCR record, all of these fields listed above must be coded using the same FIN coding system.

NPI, a unique identification number for health care providers, is scheduled for 2007 implementation by the Centers for Medicare & Medicaid Services (CMS) as part of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). When a facility starts to use the NPI codes, they should be transmitted in the NPI-specific data items, not in a FIN data item.

Rationale

FIN and NPI codes should not be stored in the same Coding System field, as they are reported in distinctly different fields within the NAACCR layout.

Codes

- 1 COC 7-digit codes (assigned by COC until the end of 2000)
- 2 COC FIN 10-digit codes (assigned 2001+)
- 9 Unknown

Note: Code 3, NPI 8-digit code, has been deleted. Code 4, 15-digit code, has been deleted.

FOLLOW-UP CONTACT--STATE**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
	1844	2	SEER	1377-1378

Description

USPS abbreviation for the state (including U.S. territories, commonwealths, or possessions), or Canada Post abbreviation for the Canadian province/territory of the follow-up contact's current usual residence. If the patient has multiple tumors, the follow-up contact state should be the same for all tumors.

Rationale

Sometimes registries carry out follow-up by contacting the patient and other contacts by a letter or phone call to ascertain their vital status. When a patient's current address is unknown or the patient is for some reason not to be contacted (e.g., patient is a minor child), the most current name, address, and phone number of another contact such as a relative or neighbor are needed. This information may also be useful for conducting epidemiological or research studies.

Codes (in addition to USPS and Canadian Postal Service abbreviations)

CD	Resident of Canada, NOS (province/territory unknown)
US	Resident of United States, NOS (state/commonwealth/territory/possession unknown)
XX	Resident of country other than the United States (including its territories, commonwealths, or possessions) or Canada, and country is known
YY	Resident of country other than the United States (including its territories, commonwealths, or possessions) or Canada, and country is unknown
ZZ	Residence unknown

ICD REVISION COMORBID**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
ICD Revision Comorbidities	3165	1	COC	737-737

Description

This item indicates the coding system in which the Comorbidities and Complications (secondary diagnoses) codes are provided.

Rationale

The COC currently requires the collection and reporting of up to 10 ICD-9-CM codes describing secondary diagnoses for patients hospitalized for cancer treatment. Currently the use of ICD-10-CM is not mandatory in U.S. hospitals, though it may become so in the future. In the event this occurs, cancer registries that maintain or collect this information will need to differentiate between ICD-9-CM and ICD-10-CM code use. The code values and definitions for this item would be expanded as necessary. Allowable codes reported in the Comorbidity and Complications items in FORDS would be re-assessed at the same time.

Codes

0	No comorbidities or complications recorded in patient's record
1	ICD-10-CM
9	ICD-9-CM
Blank	Comorbidities and Complications not collected

ICD-O-3 CONVERSION FLAG**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
	2116	1	SEER/COC	1243-1243

Description

Code specifying how the conversion of site and morphology codes from ICD-O-2 to ICD-O-3 was accomplished.

Codes

- 0 Morphology (Morph--Type&Behav ICD-O-3 [521]) originally coded in ICD-O-3
- 1 Morphology (Morph--Type&Behav ICD-O-3 [521]) converted from (Morph--Type&Behav ICD-O-2 [419]) without review
- 3 Morphology (Morph--Type&Behav ICD-O-3 [521]) converted from (Morph--Type&Behav ICD-O-2 [419]) with review
- Blank Not converted: Cases originally coded in a previous/subsequent ICD-O version and not converted to ICD-0-3. (Conversion from blank to 0 is recommended but not required for cases diagnosed prior to 2007.)

MILITARY RECORD NO SUFFIX

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Military Medical Record Number Suffix (COC)	2310	2	COC	2097-2098

Description

Patient identifier used by military hospitals to record relationship of the patient to the sponsor.

Codes

- 01-19 Child
- 20 Sponsor
- 30-39 Spouse
- 40-44 Mother
- 45-49 Father
- 50-54 Mother-in-law
- 55-59 Father-in-law
- 60-69 Other eligible dependents
- 98 Civilian emergency (Air Force/Navy)
- 99 Not classified elsewhere/stillborn
- Blank Not a military facility

NAACCR RECORD VERSION

Alternate Name	Item #	Length	Source of Standard	Column #
	50	1	NAACCR	19-19

Description

This item applies only to record types I, C, A, and M. Code the NAACCR record version used to create the record.

Note: The correction record (U) has its own record version data item.

Codes

- 1 1992-1994 Version 2 and Version 3
- 4 1995 Version 4.0
- 5 1996 and 1997 Version 5.0 or Version 5.1
- 6 1998 Version 6
- 7 1999 Version 7
- 8 2000 Version 8
- 9 2001 and 2002 Version 9 and 9.1
- A 2003, 2004, and 2005 Version 10, 10.1, and 10.2
- B 2006 and 2007 Version 11 and 11.1
- Blank September 1989 Version

Note: Code 4 was assigned to the 1995 Version to synchronize the document version and the layout version numbers. Layout document Versions 2 and 3 are coded as 1.

OVER-RIDE HISTOLOGY

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Histology/Behavior Inter-field Review (Field Item Edit Morph) (SEER #2)	2040	1	SEER	1129-1129

Description

Some computer edits identify errors. Others indicate possible errors that require manual review for resolution. To eliminate the need to review the same cases repeatedly, over-ride flags have been developed to indicate that data in a record (or records) have been reviewed and, while unusual, are correct.

This over-ride is used with the following edits in the NAACCR Metafile of the EDITS software:

Diagnostic Confirmation, Behavior ICDO2 (SEER IF31)
Diagnostic Confirmation, Behavior ICDO3 (SEER IF31)
Morph (1973-91) ICD-O-1 (SEER MORPH)
Morphology--Type/Behavior ICDO2 (SEER MORPH)
Morphology--Type/Behavior ICDO3 (SEER MORPH)

Rationale

Some edits check for code combinations that are possible, but quite rare. If the code combination generates an error message and review of the case indicates that the codes are correct for the case, then the over-ride flag is used to skip the edit in the future. See Chapter IV, Recommended Data Edits and Software Coordination of Standards.

Over-ride Flags as Used in the EDITS Software Package

Edits of the type Diagnostic Confirmation, Behavior, differ in the use of ICD-O-2 or ICD-O-3 and check that, for *in situ* cases (Behavior = 2), Diagnostic Confirmation specifies microscopic confirmation (1, 2, or 4).

The distinction between *in situ* and invasive is very important to a registry, as prognosis is so different. Since the determination that a neoplasm has not invaded surrounding tissues, i.e., *in situ*, is made microscopically, cases coded *in situ* in behavior should have a microscopic confirmation code. However, very rarely, a physician will designate a case noninvasive or *in situ* without microscopic evidence.

1. If an edit of the type, Diagnostic Confirmation, Behavior, gives an error message or warning, check that Behavior and Diagnostic Confirmation have been coded correctly. Check carefully for any cytologic or histologic evidence that may have been missed in coding.

Edits of the type, Morphology--Type/Behavior, perform the following check:

1. Codes listed in ICD-O-2 or ICD-O-3 with behavior codes of only 0 or 1 are considered valid, since the behavior matrix of ICD-O-2 and ICD-O-3 allows for the elevation of the behavior of such histologies when the tumor is *in situ* or malignant. This edit forces review of these rare cases to verify that they are indeed *in situ* or malignant.
2. The following histologies are generally not accepted as *in situ*: ICD-O-2 histologies 8000-8004, 8020, 8021, 8331, 8332, 8800-9054, 9062, 9082, 9083, 9110-9491, 9501-9989, ICD-O-3 histologies 8000-8005, 8020, 8021, 8331, 8332, 8800-9055, 9062, 9082, 9083, 9110-9493, 9501-9989. This edit forces review of these cases.

3. If a Morphology-Type/Behavior edit produces an error or warning message and the case is one in which the 4-digit morphology code is one that appears in ICD-O-2 or ICD-O-3 only with behavior codes of 0 or 1, or the case is one in which the 4-digit morphology code is not generally accepted with a behavior code of 2, verify the coding of morphology and that the behavior should be coded malignant or *in situ*. The registrar may need to consult a pathologist or medical advisor in problem cases.

Exceptions:

If year of Date of Diagnosis > 2000, then a behavior code of 1 is valid for the following ICD-O-2 histologies and no over-ride flag is needed: 8931, 9393, 9538, 9950, 9960-9962, 9980-9984, and 9989. Similarly, the following ICD-O-3 histologies are valid with a behavior code of 1: 8442, 8451, 8462, 8472, and 8473.

If year of Date of Diagnosis > 2003, the following ICD-O-3 benign histologies will pass without review: 8146, 8271, 8861, 8897, 9121, 9122, 9131, 9161, 9350, 9351, 9352, 9360, 9361, 9383, 9384, 9394, 9412, 9413, 9444, 9492, 9493, 9506, 9531, 9532, 9533, 9534, 9537, 9541, 9550, 9562, and 9570.

4. Grade 5-8 with histologies not in the range of 9590-9948 is impossible.
5. Some terms in ICD-O-2 and ICD-O-3 carry an implied statement of grade. These histologies must be reported with the correct grade as stated below. An error of this type cannot be overridden.

ICD-O-2

8020/34 Carcinoma, undifferentiated
8021/34 Carcinoma, anaplastic
8331/31 Follicular adenocarcinoma, well differentiated
8851/31 Liposarcoma, well differentiated
9062/34 Seminoma, anaplastic
9082/34 Malignant teratoma, undifferentiated
9083/32 Malignant teratoma, intermediate type
9401/34 Astrocytoma, anaplastic
9451/34 Oligodendroglioma, anaplastic
9511/31 Retinoblastoma, differentiated
9512/34 Retinoblastoma, undifferentiated

ICD-O-3

8020/34 Carcinoma, undifferentiated
8021/34 Carcinoma, anaplastic
8331/31 Follicular adenocarcinoma, well differentiated
9082/34 Malignant teratoma, undifferentiated
9083/32 Malignant teratoma, intermediate type
9401/34 Astrocytoma, anaplastic
9451/34 Oligodendroglioma, anaplastic
9511/31 Retinoblastoma, differentiated
9512/34 Retinoblastoma, undifferentiated

Instructions for Coding

1. Leave blank if the program does not generate an error message for the edits of the types, Diagnostic Confirmation, Behav Code or Morphology--Type/Behavior.
2. Leave blank and correct any errors for the case if an item is discovered to be incorrect.

- Code 1, 2, or 3 as indicated if review of all items in the error or warning message confirms that all are correct.

Codes

- Reviewed: The behavior code of the histology is designated as "benign" or "uncertain" in ICD-O-2 or ICD-O-3, and the pathologist states the primary to be "*in situ*" or "malignant"
Reviewed: The behavior code of the histology is generally not "*in situ*."
- Reviewed: The behavior code is "*in situ*," but the case is not microscopically confirmed (flag for a "Diagnostic Confirmation, Behavior" edit)
- Reviewed: Conditions 1 and 2 above both apply
- Blank Not reviewed or reviewed and corrected

REGIONAL NODES EXAMINED

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Number of Regional Lymph Nodes Examined (SEER) Pathologic Review of Regional Lymph Nodes (SEER) Regional Lymph Nodes Examined	830	2	SEER/COC	541-542

Description

Records the total number of regional lymph nodes that were removed and examined by the pathologist. Beginning with tumors diagnosed on or after January 1, 2004, this item is a component of the Collaborative Stage system. Tumors diagnosed from 1988 through 2003, this item is a part of the 10-digit EOD [779], detailed site-specific codes for anatomic EOD.

Rationale

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

Codes

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

Note: See Chapter V, Unresolved Issues, for a discussion of coding differences between COC and SEER.

REGIONAL NODES POSITIVE

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Number of Positive Regional Lymph Nodes (SEER) Pathologic Review of Regional Lymph Nodes (SEER) Regional Lymph Nodes Positive	820	2	SEER/COC	539-540

Description

Records the exact number of regional nodes examined by the pathologist and found to contain metastases. Beginning with tumors diagnosed on or after January 1, 2004, this item is a component of the Collaborative Stage system. Tumors diagnosed from 1988 through 2003, this item is part of the 10-digit EOD [779], detailed site-specific codes for anatomic EOD.

Rationale

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

Codes

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

Note: See Chapter V, Unresolved Issues, for a discussion of coding differences between COC and SEER.

RURALURBAN CONTINUUM 2003

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Beale Code RuralUrban Continuum 2000	3310	2	NAACCR	229-230

Description

The “RuralUrban Continuum 2003” code, often referred to as the “Beale Code,” is generated programmatically using Addr at DX--State [80] and County at DX [90]. It contains the Rural-Urban Continuum code as provided by OMB.

The code is a 10-point continuum (00-09) measuring urban-rural status. Abstractors do not enter these codes.

The code has been expanded to 2 digits to accommodate areas that are not included in Rural Urban Continuum code table, such as Canadian provinces/territories and U.S. territories. These areas will be coded with a value of 98. Records for nonresidents of the state of reporting institution (County at DX = 998) will also be coded 98. If Addr at DX--State is XX, YY, or ZZ, the Rural Urban Continuum 2003 code will be coded as 99. If County at DX equals 999, the Rural Urban Continuum 2003 code will be coded as 99.

RuralUrban Continuum 2003 codes are provided for each county by OMB and consist of a 1-character rural-urban status, which is very useful for incidence data analysis.

Rationale

RuralUrban Continuum 2003 codes are provided for each county by OMB and consist of a 1-character rural-urban status, which is very useful for incidence data analysis.

Codes

Metropolitan Counties (00-03)

- 00 Central counties of metropolitan areas of 1 million population or more
- 01 Fringe counties of metropolitan areas of 1 million population or more
- 02 Counties in metropolitan areas of 250,000-1,000,000 population
- 03 Counties in metropolitan areas of less than 250,000 population

Nonmetropolitan Counties (04-09)

- 04 Urban population of 20,000 or more, adjacent to a metropolitan area
- 05 Urban population of 20,000 or more, not adjacent to a metropolitan area
- 06 Urban population of 2,500-19,999, adjacent to a metropolitan area
- 07 Urban population of 2,500-19,999, not adjacent to a metropolitan area
- 08 Completely rural (no places with a population of 2,500 or more) adjacent to a metropolitan area
- 09 Completely rural (no places with a population of 2,500 or more) not adjacent to a metropolitan area
- 98 Program run, but: (1) area is not included in Rural-Urban Continuum code table, or (2) record is for resident outside of state of reporting institution

99 Unknown
Blank Program not run; record not coded

RX SUMM--RADIATION

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Radiation (SEER/COC) Radiation Therapy (pre-96 COC)	1360	1	SEER	873-873

Description

Codes for the type of radiation therapy performed as part of the first course of treatment.

Note: Radiation to brain and central nervous system for leukemia and lung cases is coded as radiation in this field.

Codes

- 0 None
- 1 Beam radiation
- 2 Radioactive implants
- 3 Radioisotopes
- 4 Combination of 1 with 2 or 3
- 5 Radiation, NOS—method or source not specified
- 6 Currently allowable for historic cases only; see note below
- 7 Patient or patient's guardian refused*
- 8 Radiation recommended, unknown if administered*
- 9 Unknown if radiation administered

* *Note:* For COC, codes 7 and 8 were used for tumors diagnosed before 1996, but should have been converted to 0 in this field and to the appropriate code in the new field Reason for No Radiation [1430]. The COC standards for hospitals do not allow use of codes 7 and 8 in 1996 and later. SEER continues to use codes 7 and 8 for all years. See Chapter V, Unresolved Issues, for further discussion

Note: In the SEER program, a code 2 for other radiation was used between 1973 and 1987. When the radiation codes were expanded to add codes '2' radioactive implants and '3' radioisotopes, all cases with a code '2' and diagnosed in 1973-1987 were converted to a code '6' radiation other than beam radiation.

SEER CODING SYS--CURRENT**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
	2120	1	NAACCR	1198-1198

Description

This shows the SEER coding system best describing the majority of SEER items as they are in the record (after conversion).

Codes

- 0 No SEER coding
- 1 Pre-1988 SEER Coding Manuals
- 2 May 1988 SEER Coding Manual
- 3 January 1989 SEER Coding Manual
- 4 January 1992 SEER Coding Manual
- 5 January 1998 SEER Coding Manual
- 6 January 2003 SEER Coding Manual
- 7 January 2004 SEER Coding Manual
- 8 January 2007 SEER Coding Manual

SEER CODING SYS--ORIGINAL**Revised**

Alternate Name	Item #	Length	Source of Standard	Column #
	2130	1	NAACCR	1199-1199

Description

This shows the SEER coding system best describing the way the majority of SEER items in the record were originally coded.

Codes

- 0 No SEER coding
- 1 Pre-1988 SEER Coding Manuals
- 2 May 1988 SEER Coding Manual
- 3 January 1989 SEER Coding Manual
- 4 January 1992 SEER Coding Manual
- 5 January 1998 SEER Coding Manual
- 6 January 2003 SEER Coding Manual
- 7 January 2004 SEER Coding Manual
- 8 January 2007 SEER Coding Manual

SEQUENCE NUMBER--CENTRAL

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Sequence Number (pre-96 SEER)	380	2	SEER	281-282

Description

Code indicates the sequence of all reportable neoplasms over the lifetime of the person. This data item differs from Sequence Number--Hospital [560], because the definitions of reportable neoplasms often vary between a hospital and a central registry. Each neoplasm is assigned a different number. Sequence Number 00 indicates that the person has had only one *in situ* or one malignant neoplasm as defined by the Federal reportable list (regardless of central registry reference date). Sequence Number 01 indicates the first of two or more reportable neoplasms, while 02 indicates the second of two or more reportable neoplasms, and so on. Because the time period of Sequence Number is a person's lifetime, reportable neoplasms not included in the central registry (those that occur outside the registry catchment area or before the reference date) also are allotted a sequence number. For example, a registry may contain a single record for a patient with a sequence number of 02 because the first reportable neoplasm preceded the central registry's reference date.

Reporting Requirements: Federally Required and State/Province Defined

The Federal or SEER/NPCR standard defining which neoplasms are reportable is described in Chapter III, Standards for Tumor Inclusion and Reportability. It is assumed that this shared standard is the "minimum" definition of reportability. Individual central cancer registries may define additional neoplasms as reportable.

Numeric codes in the 00-35 range indicate the sequence of neoplasms of *in situ* or malignant behavior (2 or 3) at the time of diagnosis, which SEER/NPCR standards require to be reported. Codes 60 to 87 indicate the sequence of non-malignant tumors (as defined in Chapter III) and any other neoplasms that the central registry has defined as reportable. Neoplasms required by SEER/NPCR with an *in situ* or malignant behavior at the time of diagnosis are sequenced completely independently of this higher numbered category. Sequence Number-Hospital does not affect Sequence Number-Central. The two notational systems are independent, but central registries should take Sequence Number-Hospital [560] into account when coding Sequence Number Central.

Timing Rule

The sequence number may change over the lifetime of the patient. If an individual previously diagnosed with a single reportable malignant neoplasm is subsequently diagnosed with a second reportable malignant neoplasm, the sequence code for the first neoplasm changes from 00 to 01. A central registry might also discover that an individual with one or more known neoplasms had an earlier reportable neoplasm that had been unknown to the registry. Typically, a re-evaluation of all related sequence numbers is required whenever an additional neoplasm is identified.

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

If a registry collects any central registry-defined neoplasms, the codes 60-87 should be used. The codes 60-87 also should be used for non-malignant tumor diagnosed on or after January 1, 2004. Timing rules for sequencing these neoplasms are the same as timing rules for sequencing of required *in situ* or invasive neoplasms.

Rationale

The purpose of sequencing based on the patient’s lifetime is to truly identify the 00s, the people who only had one malignant primary in their lifetimes for survival analysis. If a central registry sequences by just what is reported to them, then it will be unclear whether 00 means the person only had one malignant primary in his lifetime or the person had one malignant primary since the central registry started collecting data. The Federally required reportable list has changed throughout the years, so the registry must use the appropriate reportable list for the year of diagnosis. The central registry reference date will not affect Sequence Number-Central.

Codes

In Situ/Malignant as Federally Required based on Diagnosis Year

- 00 One primary in the patient’s lifetime
- 01 First of two or more primaries
- 02 Second of two or more primaries
- ..
- ..
- 59 Fifty-ninth or higher of fifty-nine or more primaries
- 99 Unspecified or unknown sequence number of federally required *in situ* or malignant tumors. Sequence number 99 can be used if there is a malignant tumor and its sequence number is unknown. If there is known to be more than one malignant tumor, then the tumors must be sequenced.

Non-malignant Tumor as Federally Required based on Diagnosis Year or State/Province Defined

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

The table below shows which sequence number series to use by type of neoplasm

Neoplasm	SeqNum-Central
<i>In Situ</i>/Malignant as Federally Required Based on Diagnosis Year	(Numeric Series)
<i>In Situ</i> (behavior code = 2) (Cervix CIS/CIN III, Diagnosis Year before 1996) (includes VIN III, VAIN III, AIN III)	00 – 59
Malignant (behavior code = 3)	00 – 59
Juvenile Astrocytoma, Diagnosis Year 2001+ (*)	00 – 59
Invasive following <i>In Situ</i> -New primary as defined by COC	00 – 59
Invasive following <i>In Situ</i> -New primary as defined by SEER	00 – 59
Unspecified Federally Required Sequence Number or Unknown	99
<u>Non-malignant Tumor as Federally Required based on Diagnosis Year or State/Province Registry-Defined</u>	
Examples:	
Non-malignant Tumor/Benign Brain	60 – 87
Borderline Ovarian, Diagnosis Year 2001+	60 – 87
Other Borderline/Benign	60 – 87

Skin SCC/BCC	60 – 87
PIN III	60 – 87
Cervix CIS/CIN III, Diagnosis Year 2003+	60 – 87
Unspecified Non-malignant Tumor or Central Registry-Defined Sequence Number	88
Cervix CIS/CIN III, Diagnosis Year 1996-2002	98

*Juvenile astrocytomas should be reported as 9421/3.

Note: See the section on Sequence Number—Central in *The SEER Program Code Manual*.

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

SEQUENCE NUMBER--HOSPITAL

Revised

Alternate Name	Item #	Length	Source of Standard	Column #
Sequence Number (COC)	560	2	COC	411-412

Description

Code indicates the sequence of all malignant and non-malignant neoplasms over the lifetime of the patient. This item differs from the Sequence Number--Central [380] because the definitions of reportable neoplasms often vary between a hospital and a central registry. Each neoplasm is assigned a different number. Sequence Number 00 indicates that the person has only one malignant neoplasm in his lifetime (regardless of hospital registry reference date). Sequence Number 01 indicates the first of two or more malignant neoplasms, while 02 indicates the second of two or more malignant neoplasms, and so on. Because the time period of Sequence Number is a person's lifetime, reportable neoplasms not included in the hospital registry are also allotted a sequence number. For example, a registry may contain a single record for a patient with a sequence number of 02 because the first reportable neoplasm occurred before the hospital registry's reference date. Similarly, Sequence Number 60 indicates the patient has only one non-malignant neoplasm, and Sequence Number 61 represents the first of multiple non-malignant neoplasms.

Reporting Requirements: COC, State/Province, and the Hospital Cancer Committee

The COC standard defining which neoplasms are reportable is described in Chapter III, Standards for Case Inclusion and Reportability; it is assumed that this standard is the "minimum" definition of reportability. In addition to the COC-required reportable neoplasms, hospital cancer registries have to meet the reporting requirements of the central cancer registry and the hospital cancer committee. These neoplasms often are called "reportable by agreement" in COC publications. Any tumor in the patient's past that is reportable or reportable-by-agreement must be taken into account when sequencing subsequently accessioned tumors. Sequence numbers should be reassigned if the facility subsequently learns of an unaccessioned tumor that affects sequencing. Sequence Number-Central [380] does not affect Sequence Number-Hospital. The two notational systems are independent.

Timing Rule

If two or more malignant tumors are diagnosed at the same time, the lowest sequence number will be assigned to the diagnosis with the worst prognosis. Likewise, if two or more non-malignant tumors are diagnosed at the same time, the lowest sequence number is assigned to the diagnosis with the worse prognosis. If no difference in prognosis is evident, the decision is arbitrary.

Codes

In situ and Malignant Tumors:

- 00 One malignant primary only in the patient’s lifetime
- 01 First of two or more malignant primaries
- 02 Second of two or more malignant primaries
- ..
- .. (Actual number of this malignant primary)
- ..
- 59 Fifty-ninth or higher of fifty-nine or more primaries
- 99 Unspecified sequence number of a primary malignant tumor or unknown (When a patient has multiple tumors with unspecified/unknown sequence numbers, code 99 should only be used once.)

Nonmalignant Tumors:

- 60 Only one non-malignant tumor in the patient's lifetime
- 61 First of two or more non-malignant tumors
- 62 Second of two or more non-malignant tumors
- ..
- 88 Unspecified number of non-malignant tumors (When a patient has multiple unspecified neoplasms in this category, code 88 should only be used once.)

The table below shows which sequence number series to use by type of neoplasm

Neoplasm	SeqNum-Hospital (code range)
<i>In situ</i> and Malignant	
One <i>in situ</i> (behavior code = 2) or malignant (behavior code = 3) primary tumor only in the patient’s lifetime	00
First of multiple <i>in situ</i> or malignant primary tumors in the patient’s lifetime	01
Actual sequence of two or more <i>in situ</i> or malignant primary tumors	02 – 59
Unspecified malignant sequence number or unknown	99
Non-Malignant	
One benign (behavior code = 0) or borderline (behavior code = 1) primary tumor only in the patient’s lifetime	60
First of two or more benign or borderline primary tumors in the patient’s lifetime	61
Actual sequence of two or more non-malignant primary tumors	62 – 87
Unspecified non-malignant sequence number or unknown	88

*Juvenile astrocytomas should be reported as 9421/3

Note: See the section on Sequence Number in the COC (FORDS) Manual.