

NAACCR Inc.

2010 Implementation Guidelines and Recommendations

(For NAACCR Standards Volume II, Data Standards and Data Dictionary,
Version 12, effective with cases diagnosed on or after January 1, 2010)

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1 INTRODUCTION

The North American Association of Central Cancer Registries, Inc. (NAACCR) has been working with the American College of Surgeons' (ACoS) Commission on Cancer (CoC), National Cancer Institute's (NCI) Surveillance Epidemiology and End Results (SEER) Program, Centers for Disease Control and Prevention (CDC) National Program of Cancer Registries (NPCR), National Cancer Registrars Association (NCRA), Canadian Council of Cancer Registries (CCCR), central cancer registries, and cancer registry software vendors to develop an implementation plan for NAACCR Standards for Cancer Registries Volume II, Data Standards and Data Dictionary Version 12 (Standards Volume II Version 12). The 2010 data standards have been developed in response to requested revisions from a broad set of constituents. Data transmission standards should be consistently maintained among all hospital and central cancer registries and should be implemented in a planned and timely manner. The introduction of a new record layout and addition of and change to the set of standards have potential consequences, and implementation must be evaluated by each program, central cancer registry, software vendor, and reporting facility during the planning process. Delays in implementation may result in inconsistent data collection.

Revisions to data collection and data system design require close attention in order to transition to Standards, Volume II, Version 12 in an efficient and timely manner. NAACCR Record Layout Standards, Volume II, Version 12 and the data collection and file maintenance issues must be addressed by hospital and central cancer registries in addition to software vendors who support these registries.

This document includes suggestions for implementing the significant changes to the NAACCR record length and layout, specifically, the addition of 126 data items, changes to 103 data items and retirement of 69 data items.

For 2010, SEER will be updating both the SEER Program Coding and Staging Manual and the Multiple Primary and Histology (MP/H) Coding Rules. In addition to updates for the NAACCR-approved new data items for 2010, changes will consist primarily of clarifications and corrections. The new MP/H rules for hematopoietic and lymphoid neoplasms will be included. There are a number of MP/H issues that have been raised since the last update that will likely require substantive changes to the MP/H rules for solid tumors. These solid tumor MP/H rule changes will be deferred until 2011.

The 2010 Implementation Guidelines and Recommendations have been completed to the best of the ability of the work group. At the time the guidelines were released the materials for CSV2 and Hematopoietic MP/H Rules were not finalized; therefore, more detailed information could not be incorporated in to the guidelines. As updated information is received it will be shared with the NAACCR membership through the NAACCR listserv.

2 MAJOR CHANGES

2.1 AJCC Cancer Staging Manual 7th Edition

Perhaps the most important change introduced in the AJCC Cancer Staging Manual 7th Edition from the perspective of registry staff is a completely rewritten Chapter 1. The revised chapter responds to a range of questions raised over the years by registrars, and in doing so should be more useful to them than in the past.

Clinical and pathologic stages are plainly delineated in Chapter 1. Clinical stage refers to information obtained prior to treatment or within four months of diagnosis, whichever is shorter, in the clear absence of disease progression. Pathologic stage refers to clinical information plus all information obtained through completion of first course surgery or within four months of diagnosis, whichever is longer. The correct uses of "mixed stage" are identified and explained, including the use of 'pT pN

cM' for pathologic staging in the absence of pathologically confirmed distant metastasis and 'pTis cN cM' for clinical or pathologic *in situ* staging. MX has been removed entirely; if no distant metastases have been identified either clinically or pathologically, cM0 is assigned.

Another feature that registry staff and programmers may appreciate is clear specification of the stageable histologies for each chapter. These are identified as ranges at the beginning of each chapter, along with the applicable sites. The ranges were developed by SEER and CoC staff in consultation with the AJCC chapter authors.

The AJCC Cancer Staging Manual 7th Edition was developed in partnership with the Collaborative Staging teams. AJCC introduced a number of "non-anatomic" prognostic indicator items that will appear in the Collaborative Stage Data Collection System, Version 2 (CSv2) as new Site Specific Factors. The CS New Items team, CS Mapping team, and CS Education team all benefited from communication with the AJCC chapter authors in order to maximize the representation of the AJCC chapters in Collaborative Staging items and training. Similarly, the AJCC authors used feedback from the CS teams to clarify the chapters.

Seventh Edition staging forms have been revised to encourage recording of both clinical and pathologic T, N, M, and stage group, as well as the prognostic indicators. AJCC and CS have been working with the College of American Pathologists (CAP) to update the CAP checklists for pathologic reports, consistent with the AJCC specifications.

The 7th Edition has specific chapters for more cancers than in the past. There are new chapters for gastrointestinal stromal tumors (GIST) and neuroendocrine tumors. In addition, some of the new chapters apply to previously-stageable tumors: Merkel cell carcinoma (previously coded with non-melanoma skin cancers), a new esophagogastric chapter, and three separate chapters for perihilar, distal, and intrahepatic bile ducts. Some chapters cannot be fully specified on the basis of site and histology alone, and CSv2 will include "discriminator" Site Specific Factors to assist in identifying the applicable CS schema or AJCC chapter for affected cases.

Because some stage groups and T, N, or M components are four characters long in the 7th Edition, the storage for these will expand from two to four characters. A conversion from two to four character codes is provided in Appendix A. The AJCC Cancer Staging Manual 7th Edition is to be used for cases diagnosed beginning January 1, 2010.

2.2 Collaborative Staging Changes, CS Version 2 (CSv2)

There are significant changes to collaborative staging which will be effective January 1, 2010, and which are based on AJCC 7th Edition. The staging system has been renamed the *Collaborative Stage (CS) Data Collection System*. The updated version will be available at (<http://cancerstaging.org/cstage/manuals.html>) and contains rules, site-specific codes and the coding structures to code the new CS variables.

The new CSv2 will be available when the AJCC 7th Edition is finalized and the derivation algorithms have been finalized. A beta version of the .dll is planned for release in September 2009, with the final version available before January 2010.

Once CSv2 is installed, it will be the only CS version used for all cases diagnosis year 2004 and forward, regardless of diagnosis year. Existing CS data will need to be converted using the NAACCR 12 format. Standard setters will not be releasing instructions for conversion until general instructions are released by the CS work group.

2.3 Hematopoietic and Lymphoid Neoplasm Rules

The new Hematopoietic rules will go into effect for cases diagnosed on or after January 1, 2010, based on the *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissue, 2008*. The implementation of these rules will require new histology terms and ICD-O codes (Table 2-1), as well as the inclusion of four newly reportable diseases for which the /1 behavior code was changed to /3 (Table 2-2). The new terms are not newly reportable; they are lymphomas, leukemias, etc. that have, until now, been coded in NOS categories.

Cases diagnosed before 2010 should be coded according to the appropriate rules effective at the time of diagnosis.

Central registries may need to work with legislators to update reportability statutes in order to include the newly reportable conditions.

What is New and/or Different in the 2010 Hematopoietic and Lymphoid Neoplasm Case Reportable and Coding Rules?

- The 2008 *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues* is the authoritative reference.
- Newly reportable.
 - New ICD-O histology terms and codes from WHO 2008 (33).
 - Changes to existing codes from non-reportable (/1) to reportable (/3) (3 codes/histologies).
 - Transformations collected as new primary.
- The *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* and the Hematopoietic and Lymphoid Neoplasms Database (Hematopoietic DB).
 - Replaces the February 2001 “Single Versus Subsequent Primaries of Lymphatic and Hematopoietic Diseases” table for cases diagnosed January 1, 2010, and later.
 - Replaces Casefinding and Reportable Neoplasm lists (ICD-9-CM and ICD-10).
- The Hematopoietic and Lymphoid Neoplasm Rules.
 - Case Reportability Instructions that include guidance on descriptive phrases and newly reportable conditions.
 - Multiple Primary Rules that reinforce the instructions to abstract the acute and chronic phases of the same disease as separate primaries.
 - Primary Site and Histology Coding Rules that guide the registrar in coding the correct primary site and the most appropriate and most specific histology rather than the histology as coded at diagnosis.
 - Grade Coding Rules that guide the registrar to code the cell line origins including coding the specific type when both null cell and a specific type such as T-cell are stated in the diagnosis.

Table 2-1 shows newly reportable terms and codes that are documented in the 2008 *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues*. Use this table to code the histology when any of these more specific terms are the diagnosis. Column 1 is the more specific histology term; Column 2 is the new code WHO has proposed for that specific histology.

Table 2-1	
2008 WHO Classification of Tumors of Hematopoietic and Lymphoid Tissues	ICD-O Code
Newly Reportable Terms and Codes – Numerical Order	
Primary cutaneous follicle centre lymphoma	9597/3
T-cell/histiocyte rich large B-cell lymphoma	9688/3
Intravascular large B-cell lymphoma	9712/3
Systemic EBV positive T-cell lymphoproliferative disease of childhood	9724/3
Hydroa vacciniforme-like lymphoma	9725/3

Table 2-1	
2008 WHO Classification of Tumors of Hematopoietic and Lymphoid Tissues	ICD-O Code
Newly Reportable Terms and Codes – Numerical Order	
Primary cutaneous gamma-delta T-cell lymphoma	9726/3
Plasmablastic lymphoma	9735/3
ALK positive large B-cell lymphoma	9737/3
Large B-cell lymphoma arising in HHV8-associated multicentric Castleman disease	9738/3
Fibroblastic reticular cell tumor	9759/3
Mixed phenotype acute leukemia with t(9;22)(q34;q11.2); BCR-ABL1	9806/3
Mixed phenotype acute leukemia with t(v;11q23); MLL rearranged	9807/3
Mixed phenotype acute leukemia, B/myeloid, NOS	9808/3
Mixed phenotype acute leukemia, T/myeloid, NOS	9809/3
B lymphoblastic leukemia/lymphoma, NOS	9811/3
B lymphoblastic leukemia/lymphoma with t(9;22)(q34;q11.2); BCR-ABL1	9812/3
B lymphoblastic leukemia/lymphoma with t(v;11q23); MLL rearranged	9813/3
B lymphoblastic leukemia/lymphoma with t(12;21)(p13;q22); TEL-AML1 (ETV6-RUNX1)	9814/3
B lymphoblastic leukemia/lymphoma with hyperdiploidy	9815/3
B lymphoblastic leukemia/lymphoma with hypodiploidy (hypodiploid ALL)	9816/3
B lymphoblastic leukemia/lymphoma with t(5;14)(q31;q32); IL3-IGH	9817/3
B lymphoblastic leukemia/lymphoma with t(1;19)(q23;p13.3); E2A PBX1 (TCF3 PBX1)	9818/3
T lymphoblastic leukemia/lymphoma	9837/3
Acute myeloid leukemia with t(6;9)(p23;q34) DEK-NUP214	9865/3
Acute myeloid leukemia with inv(3)(q21q26.2) or t(3;3)(q21;q26.2); RPN1EVI1	9869/3
Myeloid leukemia associated with Down Syndrome	9898/3
Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13;q13); RBM15-MKL1	9911/3
Myeloid and lymphoid neoplasms with PDGFRB rearrangement	9965/3
Myeloid and lymphoid neoplasms with PDGFRB arrangement	9966/3
Myeloid and lymphoid neoplasm with FGFR1 abnormalities	9967/3
Polymorphic PTLN	9971/3
Refractory neutropenia	9991/3
Refractory thrombocytopenia	9992/3

Table 2-2 shows neoplasms reportable for cases diagnosed January 1, 2010, or later. Prior to 2010, the following hematopoietic neoplasms were reported only when the physician stated that they were malignant.

Table 2-2	
Histologic Terms and Codes with Changes in Case Reportability	
(Newly Reportable Conditions)	
Name	Proposed ICD-O-3 Code
Chronic lymphoproliferative disorder of NK-cells	9831/3
T-cell large granular lymphocytic leukemia	9831/3
Langerhans cell histiocytosis, NOS (9751/1)	9751/3
Langerhans cell histiocytosis, unifocal (9752/1)	9751/3
Langerhans cell histiocytosis, multifocal (9753/1)	9751/3
Myelodysplastic/Myeloproliferative neoplasm, unclassifiable	9975/3
Myeloproliferative neoplasm, unclassifiable	9975/3

2.3.1 Conversion Considerations

Because disease transformations were not collected as a new primary in 2001-2009, consideration must be given to the fact that the data for those years will have different incidence counts than cases diagnosed in other years. In order to compare incidence over time, data collected for cases diagnosed prior to 2001 and those diagnosed in 2010 and later must be regrouped using the 2001 “Single Versus

Subsequent Primaries of Lymphatic and Hematopoietic Diseases” table, that was used for cases diagnosed 2001-2009.

2.3.2 Education and Training

The educational process for the hematopoietic and lymphoid neoplasm MP/H rules will consist of a series of webinars that will be recorded and available on the SEER website in the fall of 2009. The webinars will be:

1. Why hematopoietic rules were needed, and how they were developed
2. Introduction to final products (Hemato manual and database) and how they work together
3. Hematopoietic and lymphoid lineages and how to use lineage tables
4. Disease diagnostic process; when is the diagnosis final
5. Reporting rules
6. Multiple primary rules
7. Primary site and histology rules
8. Grade rules
9. How to use the Hemato database

2.4 Multiple Primary and Histology Coding Rules

For 2010, SEER will be updating the Multiple Primary and Histology (MP/H) Coding Rules. The changes will consist primarily of clarifications and corrections. There are a number of MP/H issues that have been raised since the last update that will likely require substantive changes to the MP/H rules for solid tumors. These solid tumor MP/H rule changes will be deferred until 2011.

2.5 Record Length/Layout

The NAACCR data exchange record layout has been expanded from a character length of 6,694 to 22,824. This was required to accommodate the many new data items, changes to existing variable lengths, expansion of text items and consideration for interoperability (i.e., date items). Readers should refer to the appropriate summary section of this document for more information.

3 NEW DATA ITEMS

There are 126 new data items in Standards, Volume II; Version 12 (effective January 1, 2010) listed in Appendix A of this document. Reporting requirements for each of the standard setters, including changes in the Requirement Status to existing data items are included in Appendix B of this document.

3.1 Date Flag Items

Twenty-two new date flag items were added as part of an initiative to standardize date items. Since only actual known dates are entered in interoperable date items, these flags can explain the reason when there is no value in the corresponding date item. (See Section 4.6 for more discussion on date formats). The flags will be coded using values known in the electronic world as “flavors of null.” See Appendix D for the Flavors of Null table in its entirety which includes the NAACCR codes, HL7 codes, and definitions.

Note that thirteen date items do not have a corresponding date flag because the items are expected to contain computer-generated dates:

Item #	Item Name	Item#	Item Name
2085	Date Case Initiated	2113	Date Tumor Record Availbl
2090	Date Case Completed	7320	Path Date Spec Collect 1
2092	Date Case Completed--CoC	7321	Path Date Spec Collect 2
2100	Date Case Last Changed	7322	Path Date Spec Collect 3
2110	Date Case Report Exported	7323	Path Date Spec Collect 4
2111	Date Case Report Received	7324	Path Date Spec Collect 5
2112	Date Case Report Loaded		

3.2 New Items Sponsored by CoC

3.2.1 Date Case Completed--CoC [2092]

This item is similar in function to *Date Case Completed [2090]* and is designed specifically for use by CoC with its accredited programs beginning with cases diagnosed January 1, 2010. It is autocoded by the registry software when specific items have been completed, based on the *Class of Case [610]* of the primary.

3.2.2 RX Hosp--Surg App 2010 [668]

This item describes the surgical approach used for the most definitive surgery performed at the reporting facility among robotic, laparoscopic, and open approaches. It is not to be confused with the former item, *RX Summ--Surgical Approach [1319]*, and cannot be derived from it. The new item applies to diagnoses beginning on January 1, 2010.

3.2.3 RX Summ--Treatment Status [1285]

This item performs two tasks. First, it provides a mechanism for recording active surveillance (watchful waiting) as a form of treatment. Second, it specifies whether or not the patient received any treatment. This item is used to interpret dates recorded in *Date of Initial RX--SEER [1260]* and *Date of 1st Crs RX--CoC [1270]* for cases diagnosed beginning January 1, 2010.

3.3 New Items Sponsored by NAACCR

3.3.1 Date Case Initiated [2085]

This data item records the date the electronic abstract is initiated in the reporting facility's cancer registry database.

3.3.2 Inpatient Status [605]

This data item records whether there was an inpatient admission for the most definitive therapy, or in the absence of therapy, for diagnostic evaluation.

The following is a series of six new data items, repeated up to five times each, added at the request of the NAACCR Pathology Data Work Group. The items are intended for use by the Central Cancer Registry to link electronic pathology reports back to the cancer case. Previously, pathology data items were not included in the Volume II record format.

3.3.3 Path Reporting Fac ID 1-5 [7010 – 7014]

Facility ID number of the facility where the specimen described in the corresponding path report was removed/collected. Use the National Provider Identifier (NPI) if possible.

3.3.4 Path Report Number 1-5 [7090 – 7094]

Unique sequential number assigned by a laboratory to the corresponding path report for this case.

3.3.5 Path Order Phys Lic No 1-5 [7100 – 7104]

License number of physician submitting specimens for the corresponding path report.

3.3.6 Path Ordering Fac No 1-5 [7190 – 7194]

Facility ID number of the facility where the specimen described in the corresponding path report was removed/collected.

3.3.7 Path Date Spec Collect 1-5 [7320 – 7324]

Records the date and time of the specimen collection for the cancer being reported, not the date read or date the report was typed.

3.3.8 Path Report Type 1-5 [7480 – 7484]

This item reflects the type of report transmitted to the cancer registry and may need to be classified at the central cancer registry.

3.4 New Items Sponsored by AJCC

The following items were added effective for diagnoses 2010 and later unless otherwise noted below.

3.4.1 Grade Path Value [441] and Grade Path System [449]

For the past several years, registries have become familiar with converting the grade found in the pathology report to the version of the grade defined in *ICD-O-3*. New data items, *Grade Path Value [441]* and *Grade Path System [449]*, supplement *Grade [440]* by providing the grade recorded on the pathology report and the system (grade 2, grade 3, or grade 4) upon which it is based. These items are applicable only for cases for which the pathology report uses a numeric (rather than alpha) method of describing grade and are not intended to replace *Grade [440]*.

3.4.2 Lymph-vascular Invasion [1182]

This new data item is used to record whether or not lymph-vascular invasion is present at diagnosis. This information can be obtained from the pathology report.

3.4.3 CS PreRX Data Items-Deferred Until 2011

These data items belong to the Collaborative Stage (CS) Data Collection System. The CS is based on the *AJCC Cancer Staging Manual*, 6th and 7th Editions. The CS pre-treatment data items include all information prior to the start of therapy. In rare circumstances where workup could not be completed prior to therapy, these items may be based on testing after limited treatment in the absence of progression or regression of disease, such as delayed planned or usual diagnostic workup. This does not include diagnostic workup for progression of disease or regression.

CS PreRX Tumor Size [2730]

CS PreRX Extension [2735]

CS PreRX Tum Sz/Ext Eval [2740]

CS PreRX Lymph Nodes [2750]

CS PreRX Reg Nodes Eval [2755]

CS PreRX Mets at DX [2760]

CS PreRX Mets Eval [2765]

3.4.4 CSPost RX Data Items-Deferred Until 2011

These data items belong to the CS Data Collection System and are being deferred until 2011. The CS system is based on the *AJCC Cancer Staging Manual*, 6th and 7th Editions. The post-treatment data items measure the amount of tumor remaining after neoadjuvant therapy (systemic therapy or radiation therapy prior to surgery). Effective for cases diagnosed 2011 and later.

CS PostRX Tumor Size [2770]
CS PostRX Extension [2775]
CS PostRX Lymph Nodes [2780]
CS PostRX Mets at DX [2785]

3.4.5 CS Mets at DX Data Items

These items identify the site(s) of metastatic involvement at time of diagnosis.

CS Mets at Dx-Bone [2851]
CS Mets at Dx-Brain [2852]
CS Mets at Dx-Liver [2853]
CS Mets at Dx-Lung [2854]

3.4.6 CS Site-Specific Factor 7 – 25 [2861 – 2879]

These data items belong to the CS system. The CS is based on the *AJCC Cancer Staging Manual*, 6th and 7th Editions. The “CS Site-Specific Factor” items 1-25 are used to code additional site-specific information needed to derive TNM or AJCC to code prognostic factors that have an effect on stage or survival. For example, some site-specific information that was formerly recorded in “EOD–Tumor Size” [780] (Breslow’s Thickness for melanoma; HIV/AIDS status for lymphoma) is now also in “CS Site-Specific Factor” items.

Additional information from standard setting organizations about the Site-Specific Factors will not be released until general instructions are released by the CS work group.

3.4.7 CS Version Input Current [2937]

This item indicates the number of the CS version in use at the time CS version input items have been updated or recoded. This data item is recorded the first time the CS input items are entered and should be updated each time the CS input items are modified.

4 CHANGED DATA ITEMS

There are 103 data items that have changed in Standards, Volume II, Version 12.

4.1 Addr--City [70, 1810, 1842]

The space for each of these items was increased to 50 characters.

Addr at Dx--City [70]
Addr Current--City [1810]
Follow-up Contact--City [1842]

No conversion is required. Existing text should be moved to the wider item, left-justified and blank filled.

4.2 Addr--No, Street & Supplementl [2330, 2350, 2335, 2355]

The space for each of these items was increased to 60 characters.

Addr at Dx--No & Street [2330]
Addr Current No & Street [2350]
Addr at Dx--Supplementl [2335]
Addr Current Supplementl [2355]

No conversion is required. Existing codes should be moved to the wider item, left-justified and blank filled.

4.3 AJCC Items

While most *AJCC Manual for Staging of Cancer*, 7th Edition staging items still requires only one or two characters to record, some will require more characters. The following variables have extended from two to four characters. They are left justified, blank filled.

TNM Clin T [940]
TNM Clin N [950]
TNM Clin M [960]
TNM Clin Stage Group [970]
TNM Path T [880]
TNM Path N [890]
TNM Path M [900]
TNM Path Stage Group [910]

No conversion is required. Existing codes should be moved to the wider item, left-justified and blank filled. The special codes, 88 and 99, are still two characters, left-justified and blank filled.

4.4 Class of Case [610] – Conversion Required

Expanded and converted from one character to two in order to accurately reflect the variety of ways registries need to collect this information. CoC traditionally uses the item to identify the responsibilities of its accredited programs toward cancer patients for diagnosis and treatment. Hospital registrars report that their administrators ask them to use the item to track cases that are treated entirely at the facility or only partially at the facility, or to track physician use of the facility for their patients. Central registries sometimes require facilities to report cases that did not easily fit into any of the former Class of Case categories. Finally, some cancer committees arrange for their registries to collect information on cases that did not fit CoC or central registry requirements.

The expanded item distinguishes between “analytic” and “non-analytic” cases, cases required by CoC to be abstracted and reported, and the types of patient contacts that are not reportable for CoC. This item should be updated throughout the first course of treatment if subsequent information indicates a change of code. Table 4-1 shows the first step in the conversion of existing class of case codes to the 2010 class of case codes.

Table 4-1 CoC Conversion Table for Class of Case Step 1	
≤2009	2010+
0	00
1	10
2	20
3	32

4	37
5	38
6	40
7	43
8	49
9	99

After Step 1, if the case is any of the following, make the further conversion indicated in table 4-2.

1. Site = C440-C449 AND ICD-O-2 or ICD-O-3 histology = 8000-8110;
2. Site = C530-C539 AND ICD-O-2 or ICD-O-3 Behavior Code = 2;
3. Site = C619 AND ICD-O-2 or ICD-O-3 histology = 8148;
4. ICD-O-2 or ICD-O-3 Histology =8077;
5. Any Site other than C700-C729 or C751-C753 AND ICD-O-2 or ICD-O-3 Behavior Code is Not 2 or 3;
6. Diagnosis date is unknown or prior to January 1, 2004, AND Site = C700-C729 AND ICD-O-2 or ICD-O-3 Behavior Code is Not 2 or 3.

Table 4-2 CoC Conversion Table for Class of Case After Step 1	
00	99*
10	34
20	36
*(May be moved manually to any Class 30 or higher if appropriate following review)	

If it is necessary to condense the expanded codes to the former categories for any reason (backward conversion), use table 4-3.

Table 4-3 CoC Conversions for Class of Case Backward Conversion	
2010+	≤2009
00	0
10-14	1
20-22	2
30-32	3
33,35,37	4
38	5
40	6
43	7
49	8
99	9
34,36	9*
41,42	9**
*New in 2010 (Type of cancer not reportable, may have been recorded in an analytic class in the past)	
**New in 2010 (Not facility's case)	

4.5 CS Extension [2810] and CS Lymph Nodes [2830]

Instructions for conversion from two to three digits will be provided by the CS Task Force.

4.6 Date Items – Conversion Required

The NAACCR Interoperability Committee developed the date format and coding rules in order to obtain better conformance with other electronic healthcare standards. One purpose of the group’s work is to incorporate standard date handling into the current NAACCR Standard Record Layout with anticipation of moving toward HL7. This will eliminate the need for further manipulation of these items in the future.

The group’s recommendations included changing the transmission date format from MMDDYYYY to YYYYMMDD and removing all non-date values (00000000, 88888888, or 99999999), or any portion of 99 from the date items. Only valid portions of any date are to be transmitted. Information formerly encoded in the pseudo-dates 00000000, 88888888 and 99999999 will be removed and instead conveyed by new Date Flag Items. See Section 3.1. It is important to note that these recommendations address the NAACCR transmission format and do not address how the data should be stored in an individual registry database.

Appendix D includes an Overview of Conversion Specifications for the Transmission of Date Items.

4.7 Follow up Items

The space for each of these items was increased to 60 characters.

Follow-up Contact--No & St [2392]

Follow-up Contact--Suppl [2393]

Follow-up Contact--Name [2394]

No conversion is required. Existing codes should be moved to the wider item, left-justified and blank filled.

4.8 Laterality [410]

Add code ‘5’ for a paired site with a midline tumor. Code 9 no longer records midline tumor information and is used only when there is no laterality information for a paired site. Code 5 may be used to record a midline tumor of a paired site for any year of diagnosis, but review or recoding of historic cases is not required

For analysis using data with diagnoses before January 1, 2010, code 5 should be grouped with code 9.

4.9 Name Items [2230, 2240, 2250, 2280, 2290, 2390]

The name items have been lengthened to 40 characters, except for item Name--Spouse/Parent [2290] which has been lengthened to 60 characters. The unresolved issue among standard setting organizations in regard to the name items has been resolved. The NAACCR Uniform Data Standards Committee voted to use the CoC guidelines effective January 1, 2010. This change allows for the use of blanks, spaces, hyphens, and apostrophes in the patient’s name item(s). Other punctuation is not to be used. If the patient’s name is unknown, the code ‘UNKNOWN’ should be used in the appropriate name item(s). The item may be updated if the name changes.

No conversion is required. Existing codes should be moved to the wider item, left-justified and blank filled.

4.10 Race [160-164,193] – Conversion Required

There are changes to the race code used for “Asian Indian or Pakistani.” Because of the all-too-common tendency to type “09” instead of “99” to indicate unknown race, the code of

“09” has been retired from the list of valid values for the race data items [160-164, 193] as of January 1, 2010, and replaced with three possible values (15 = Asian Indian or Pakistani, NOS; 16 = Asian Indian; 17 = Pakistani).

The change splits the current grouping of “Asian Indian, Pakistani” into two separate groups, “Asian Indian” and “Pakistani”, to make the race information recorded for cancer patients compatible with the coding rules followed by the Census Bureau and thereby allow the calculation of rates for these two groups. Codes “15,” “16” and “17” have been added.

At a minimum, all values of “09” in the central cancer registry’s race variables will need to be recoded to “15.” Manual review of central cancer registry abstracts may be performed to identify cases where the code of “16” or “17” would be more appropriate.

4.11 Rad--No of Treatment Vol. [1520] – Conversion Required (see Table 4-4)

This variable is expanded from two to three digits because split treatment fractions can result in more treatments than could be recorded in a two-digit item.

The conversion is simple but must be performed before the new codes are used.

Table 4-4 CoC Conversion Table Rad--No of Treatment Vol.	
≤2009	2010+
00-98	000-098*
099-998	New codes**
99	999***
* (right justified, 0 filled);	
** (Warning: convert all pre-existing unknown, 99 to 999 <i>before</i> using 099 as a count of treatments);	
*** (Unknown)	
<i>Note:</i> If it is necessary to collapse the expanded codes to two characters for any reason (backward conversion), convert codes 000-097 to 00-97, codes 098-998 to 98, and code 999 to 99.	

4.12 State Requestor Items [2220]

The space available for use for state specific information was increased to 1000 characters.

4.13 Subsq RX Course Codes [1670, 1690, 1710]

The space for each of these items was increased to 11 characters.

4.14 Text Items

The text items were increased to address concerns about information being cut off during transmission between facilities. Text items 2580 and 2590 were increased to 100 characters. Other text items listed below were increased to 1000 characters each. Left justify these text items.

Expanded to 100 characters:

Text--Histology Title [2590]

Text--Primary Site Title [2580]

Expanded to 1000 characters:

Text--Dx Proc--Lab Test [2550]

Text--Dx Proc--OP [2560]

Text--Dx Proc--Path [2570]
 Text--Dx Proc--PE [2520]
 Text--Dx Proc--Scope(s) [2540]
 Text--Dx Proc--X-ray/Scan [2530]
 Text--Remarks [2680]
 Text--Staging [2600]
 Rx Text--Surgery [2610]
 Rx Text--Radiation (Beam) [2620]
 Rx Text--Radiation (Other) [2630]
 Rx Text--Chemo [2640]
 Rx Text--Hormone [2650]
 Rx Text--BRM [2660]
 Rx Text--Other [2670]

4.15 Text--Occupation and Industry [310, 320]

The space for each of these items was increased to 100 characters. Left justify this text.

Text--Usual Occupation [310]

Text--Usual Industry [320]

4.16 Text--Place of Diagnosis [2690]

The space for this item was increased to 60 characters.

4.17 SEER Coding Sys--Current [2120] and SEER Coding Sys--Original [2130]

SEER has added code '9' to SEER Coding Sys Current and Original for the January 2010 SEER Coding Manual

4.18 Item Names Changes

Table 4.5 Item Name Changes, effective January 1, 2010		
Item Number	Old Name	New Name
240	Birth Date	Date of Birth
2840	CS Reg Node Eval	CS Lymph Node Eval
2935	CS Version 1 st	CS Version Input Original
2936	CS Version Latest	CS Version Derived
2980	Derived AJCC M	Derived AJCC-6 M
2990	Derived AJCC M Descript	Derived AJCC-6 M Descript
2960	Derived AJCC N	Derived AJCC-6 N
2970	Derived AJCC N Descript	Derived AJCC-6 N Descript
3000	Derived AJCC Stage Grp	Derived AJCC-6 Stage Grp
2940	Derived AJCC T	Derived AJCC-6 T
2950	Derived AJCC T Descriptor	Derived AJCC-6 T Descript
193	Race--NAPIIA	Race--NAPIIA (derived API)

5 RETIRED DATA ITEMS

The following data items have been deleted from transmission layout effective with Standards, Volume II, Version 12. After January 1, 2010, these items can no longer be transmitted unless adopted by central registries in which case the item should be relocated to the state requestors section of the data exchange record layout (columns 2340 – 3339).

Religion [260]
Tobacco History [340]
Alcohol History [350]
Family History of Cancer [360]
Screening Date [510]
Screening Result [520]
Date of 1st Positive BX [1080]
Site of Distant Met 1 [1090]
Site of Distant Met 2 [1100]
Site of Distant Met 3 [1110]
Recurrence Distant Site 1 [1871]
Recurrence Distant Site 2 [1872]
Recurrence Distant Site 3 [1873]
Over-ride SS/DisMet1 [1984]

6 NEW DERIVED DATA ITEMS

There are seven derived items for 2010 and twelve for 2011 that are computer generated by the CS .dll and must not be modified manually.

These derived data items belong to the Collaborative Stage (CS) Data Collection System. The Collaborative Stage Data Collection System is based on the *AJCC Cancer Staging Manual*, 6th and 7th Editions.

These derived items should not be blank if the associated CS input items contain values. These items should be blank if the associated CS input items are empty or the CS algorithm has not been applied.

For 2010 Implementation:

Derived AJCC-7T [3400]
Derived AJCC-7T Descript [3402]
Derived AJCC-7N [3410]
Derived AJCC-7N Descript [3412]
Derived AJCC-7M [3420]
Derived AJCC-7M Descript [3422]
Derived AJCC-7 Stage Grp [3430]

For 2011 Implementation:

Derived PreRx-7T [3440]
Derived PreRx-7T Descrip [3442]
Derived PreRx-7N [3450]
Derived PreRx-7N Descrip [3452]
Derived PreRx-7M [3460]
Derived PreRx-7M Descrip [3462]
Derived PreRx-7Stage Grp [3470]
Derived PostRx-7T [3480]
Derived PostRx-7N [3482]
Derived PostRx-7M [3490]
Derived PostRx-7Stage Grp [3492]
Derived Neoadjuv Rx Flag [3600]

7 EDITS

The Standards, Volume II, Version 12 metafile includes new edits for the new and modified data items as specified in Standards, Volume II, Version 12. The edits and edit sets are consistent with the reporting requirements as specified in this document by CoC, NPCR, SEER, and CCCR.

To download the new metafile from the NAACCR Web site (www.naaccr.org), click on Cancer Data Standards, NAACCR Data Standards for Cancer Registries, and Standard Data Edits. Then select Standards, Volume II, Version 12 Metafile under Current Metafiles.

As additional changes are made to the metafile, NAACCR Listserv messages will be sent out to the cancer registry community.

It should also be noted that updated versions of the CDC EDITS software tools will be available in the fall of 2009. The EDITS software provides the tools that are used to develop and maintain the various metafiles of edits and edit sets (NAACCR, NCDB, NPCR, SEER, CCCR, and state-specific). The updated tools include a new Edit Engine (Version 4.0), new EditWriter application (EditWriter 4.0), and new GenEDITS Plus application. Additional information on the new CDC EDITS software is available in the Tools section at <http://www.cdc.gov/cancer/npcr>.

NAACCR will begin using EditWriter 4.0 with the Standards, Volume II, Version 12 metafile. A metafile created by (or converted to) EditWriter 4.0 is not backward-compatible (i.e., will not work with EditWriter 3.0 or GenEDITS 1.1.2) and any subsequent changes to the metafile will need to be made using EditWriter 4.0.

8 STANDARD SETTERS REPORTING REQUIREMENTS FOR 2010

Refer to Appendix B for the Required Status Table for specific information regarding standard-setter data reporting requirements. Where necessary, refer to individual program or central cancer registry requirements for additional information.

8.1 CoC Reporting Requirements for 2010

The Commission on Cancer will be requiring its accredited programs to use FORDS Revised for 2010, Version 2 of the Collaborative Stage Data Collection System, the updated multiple primary and histology rules with the new Hematopoietic rules, and the 7th Edition of the AJCC Cancer Staging Manual for all cases diagnosed on or after January 1, 2010. CoC will require some CS Site-Specific Factors to be abstracted as well as all other CS input items with 2010 implementation dates. A list of the specific SSFs required will be distributed to accredited programs by CoC in the fall of 2009. CoC will not require any of the new Pathology Report items. FORDS Revised for 2010 will identify all required items.

8.1.1 Timing of Conversions

NAACCR Record Layout Standards, Volume II, Version 12 will be implemented for data transmission beginning January 1, 2010, which falls within the NCDB Call for Data submission period for cases diagnosed in 2008, 2003, 1998, 1993, and 1988. NCDB will provide a five-month phase-in period for data submitted. Through December 31, 2009, only layout 11.3 will be accepted. From January 1, 2010, through June 1, 2010, both layouts Version 11.3 and 12 will be accepted. After June 1, 2010, layouts prior to Standards, Volume II, Version 12 will not be accepted.

Cases diagnosed in 2010 must be coded using the items as revised or implemented in the revised version. Accredited programs should plan to install software updates just before they begin to

abstract 2010 diagnoses. The software update will execute any necessary conversions, add new items to data-entry screens, and implement the ability to write output in the correct form for the NAACCR Record Layout Standards, Volume II, Version 12.

If abstracting of 2010 cases begins prior to installation of the software update, it will be necessary to review those cases after the update to code the new items and make certain that converted items have the most specific codes assigned. Electronic conversion of *Class of Case* and the *Race* items may result in broader categories than the items require for 2010 cases.

Straggler cases, diagnosed prior to 2010, may be coded using the new layout. For pre-2010 diagnosed cases, it is not necessary to code the items with a 2010 implementation date.

FORDS Revised for 2010 will be revised in the fall of 2009. The CoC does not require any items not identified in FORDS Revised for 2010 to be abstracted for cases diagnosed on or after January 1, 2010. Programs are advised that some data items used in the past and still in their registry databases for historic reasons do not need to be completed for cases diagnosed on or after January 1, 2010, unless the program's Cancer Committee or central registry requires them.

8.1.2 Education

CoC will provide a webinar in November on changes to FORDS. The CoC Flash will announce training available through CoC, AJCC, SEER, NCRA, and NAACCR on new and revised items and coding instructions for CS, multiple primaries, hematopoietic diseases, and AJCC staging. Programs should watch for announcements about these and other training programs that will become available in 2009 and 2010.

8.2 NPCR Reporting Requirements for 2010

Beginning with cases diagnosed on or after January 1, 2010, NPCR will implement the data collection and submission requirements as published in the Standards Volume II, Version 12, Chapter VII, Required Status Table (See Appendix B of this document). This includes the new format for date items, the expanded text items, and any coding changes to NPCR-required data items. The Standards, Volume II, Version 12 Record Layout will be required for the 2011 NPCR Cancer Surveillance System (NPCR-CSS) submission in November 2010/January 2011.

NPCR will require the use of Version 2 of the Collaborative Stage Data Collection System (CSv2); including SSFs for the sites where the factors are needed to derive SEER Summary Stage. NPCR will also require some of the SSFs for Breast [SSF 1 (ER), SSF 2 (PR), and the HER2 SSFs] and SSF 25 for applicable sites (schema discriminators).

At the writing of this document, mapping of the Site Specific Factors (SSFs) for CSv2 had not been completed. To facilitate submission of NPCR recommendations to the Standards, Volume II, Version 12 Required Status Table, NPCR entered TBD for SSFs 4 – 24. Once the mapping activities are complete, NPCR will update the Required Status Table and provide more specific implementation guidelines for CSv2.

NPCR will also require implementation of both the revised Multiple Primary and Histology Coding Rules and the new Hematopoietic and Lymphoid Neoplasm Rules, effective with cases diagnosed on or after January 1, 2010.

8.2.1 NPCR Recommendations for Education and Training

NPCR requires that central cancer registries have a designated education/training coordinator (ETC) who is a CTR. The ETC is responsible for providing training to the central registry staff and reporting sources to ensure high-quality data.

NPCR hosted its annual Education and Training Conference on August 4-5, 2009. During the conference NPCR provided official CSv2 training materials. NPCR recommends that central cancer registries also participate in SEER webinars for the new Hematopoietic and Lymphoid Neoplasm Rules.

Central registry ETCs are expected to deliver appropriate and timely central registry and reporting facility training for CSv2, as well as the new Hematopoietic and Lymphoid Neoplasm Rules.

8.3 SEER Reporting Requirements for 2010

Beginning with cases diagnosed on or after January 1, 2010, SEER will implement the data collection and submission requirements as published in the Standards Volume II, Version 12. This includes the new transmission format for date items, the expanded text items, the new Hematopoietic and Lymphoid Neoplasm rules, and Version 2 of the Collaborative Stage Data Collection System. Only a subset of the Site Specific Factors (SSFs) for CSv2 will be required.

8.4 CCCR Reporting Requirements for 2010

Beginning with cases diagnosed on or after January 1, 2010, the Canadian Council of Central Cancer Registries (CCCR) will implement the data collection, and submission requirements as published in the Standards Volume II, Version 12, Chapter VIII, Required Status Table - CCCR column as updated in this document (see Appendix B). Cases will be submitted to the Canadian Cancer Registry during Statistics Canada's Canadian Cancer Registry Annual Call for Data referencing the Canadian Cancer Registry Input Record lay-out of the Canadian Cancer Registry System Guide for a more comprehensive listing.

9 SUMMARY FOR CENTRAL CANCER REGISTRIES

Registry cases diagnosed on or after January 1, 2010, must be transmitted in accordance with the standards and definitions of the Standards Volume II, Version 12 record layout. Central cancer registries that have not implemented the Standards, Volume II, Version 12 layout by the time reporting facilities are ready to submit data in Standards, Volume II, Version 12 should develop a plan to store incoming Standards, Volume II, Version 12 files. Central cancer registries should specify a date by which they will be able to accept records in the Standards, Volume II, Version 12 layout, and a date after which they will no longer accept earlier record versions. Large backlogs of records should be avoided, both at the level of the reporting facility (records abstracted, but not submitted at the request of the central cancer registry) as well as at the level of the central cancer registry (records received and put into a suspense file to be processed later).

Central registries should also distribute information on how to access the updated CS Manual, the 7th Edition of the TNM Staging Manual, and the new Hematopoietic and Lymphoid Neoplasm Rules and the Hematopoietic DB to all reporting facilities. This information should clearly state that all changes to the manuals are effective as of January 1, 2010, and should be implemented as soon as possible thereafter.

9.1 New Record Length and Record Layout

The Record Type A data exchange record, used for reporting to central registries, has been increased from a character length of 6,694 to 22,824. Increased variable lengths account for much of this increase, particularly in the text items. In addition, many existing data items have been relocated within the record layout. Text items continue to be located at the end of the exchange record.

Initially, difficulties may arise in the transfer of the files to the central cancer registry. In order to speed file transfers, submitting facilities, and central cancer registries will need to compress their files before transmission. The time required for the data transfer will increase because of the increased size of the file. This may or may not be noticeable, depending on how much text is included, how

fast the connection is, and server characteristics. It may be advisable to implement a verification process, to identify files that are damaged or truncated during transmission.

Once the files are received at the central cancer registry, the files should be stored in their compressed format in order to save disk space until the registry is ready to process the files. Programs and procedures for processing incoming files should include steps to uncompress a file before and recompress the file after processing.

If the central cancer registry visually reviews incoming files to ensure proper submission or to verify other state needs or concerns, the time required may be increased. For instance, using the NAACCR Version 11 exchange file, abstracts can be viewed easily using a text editor program. With the Standards, Volume II, Version 12 exchange file, a text editor that can view files with very long lines will be needed. Possibilities include UltraEdit, EditPad, and TextPad, for Windows; or vim for UNIX operating systems.

Depending on the IT architecture within which the central cancer registry functions, loading the data into the database could become problematic. The time required to load the cases onto the central registry database could increase the possibility that other network traffic will ‘crash’ the loading process. Stand-alone systems may not encounter the same difficulties. Server capacity and disk space will likely need to be increased. The central registry should complete its testing well before its planned deployment date.

If the central cancer registry manages its own data processing systems, the system that loads electronic registry reports will need extensive changes to manage the new record length and layout. Furthermore, the central registry will need to assess how the new data structure (increased size of text items, etc.) interacts with the limitations of their database and plan accordingly. All programs that load, manipulate, and extract data will be affected by the coming changes. Central registry software planning and development staff should also read Section 10 of this document. Central registries whose registry software is supported by a vendor should work closely with their vendor and perform beta testing before beginning actual case processing.

Central cancer registries should be aware that back-converting Standards, Volume II, Version 12 records to Version 11 will truncate any text items that exceeded the length defined in Version 11.

9.2 Hematopoietic and Lymphoid Neoplasm Rules

Beginning with cases diagnosed in 2010, the 2008 *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues* will be the definitive standard for coding hematopoietic and lymphoid neoplasms. The result is the addition of new reportable terms and codes for currently reportable conditions, and a change in behavior code from /1 to /3 (uncertain to malignant behavior) for 3 ICD-O codes (see section 2.3.7), making them newly reportable as of January 1, 2010, (see section 2.3.7). Also, myeloproliferative diseases that transform to leukemias will no longer be considered the same primary; the leukemia will be a new primary.

Reportable lists will need to be updated; the WHO manual will need to be made available to reporting entities; and central cancer registry software will need to be made cognizant of the new codes for any central cancer registry-specific edits, case consolidation, and reportable term-recognition software. The new codes expand the range of valid codes (i.e., they are not all in the same range as the previous codes for lymphomas, leukemias, and/or hematopoietic diseases).

All cases are to be handled per the multiple primary rules that were/are in effect as of the date of diagnosis. Thus, hematopoietic and lymphoid neoplasms diagnosed prior to 2001 will be grouped according to the pre-2001 set of multiple primary rules; those diagnosed in 2001 through 2009 will be

grouped according to the February 2001 “Single Versus Subsequent Primaries of Lymphatic and Hematopoietic Diseases” table, and those that are diagnosed in 2010 and later will be grouped according to the new rules embedded in the Hematopoietic DB. It is anticipated that the Hematopoietic DB will make decisions easier regarding same vs. different primary, and the best code to use. Central cancer registries with computerized case consolidation systems will need to obtain a copy of the Hematopoietic DB and directions for its use as soon as possible after its release, so that they can consider how to incorporate it into their current consolidation system.

Epidemiologists who use the data will need to be aware that case counts and survival data will be affected, primarily because of the change in whether or not the transformation of a myelodysplastic disease to a more aggressive one is classified as a new primary. Retrospective comparisons can be made by applying the 2001-2009 leukemia-lymphoma multiple primary rules to the 2010 diagnoses.

9.3 New Data Items

Central cancer registries should carefully review the new data items in Standards, Volume II, Version 12 (see Appendix A) and identify those data items that will be collected and/or stored in their registry, paying particular attention to those data items required by the various standard-setting organizations (see Appendix B), and whether or not the central registry wishes to derive just Summary Stage or also AJCC stage.

Central cancer registries with in-house data management systems will need to review, specify, and modify every piece of software that handles data records to ensure that the new data items are processed and consolidated properly.

Of note are several (sets of) new data items:

9.3.1 Pathology Related Data Items [7010-7484]

These data items were added so that the central cancer registry can more easily link up to five pathology reports received via electronic pathology reporting with the complete case summaries received from facility-based cancer registries.

9.3.2 Treatment Dates [1220, 1230, 1240]

Dates for the individual types of systemic therapy (chemo, hormone, and BRM) are once again required by the CoC; each will have an associated date flag (See Appendix B). If the central registry decides to collect these dates they will need to revise software to begin collecting these date items again.

9.3.3 RX Summ-Treatment Status [1285]

This variable provides a yes/no summary of whether treatment has been given, including an option that indicates active surveillance (watchful waiting). The central registry should consider requiring the reporting of this item since there is no other place where the decision to use active surveillance (watchful waiting) can be recorded.

9.3.4 Pre and Post-Treatment CS Items [2730-2785] and [3440-3492]

These variables are included in the Standards, Volume II, Version 12 layout but **are being deferred until 2011**. This list includes 11 directly coded [2730 – 2785] and 11 derived [3440 – 3492] data items.

9.3.5 CS Version Input Current [2937]

This variable will indicate the version of the CS algorithm under which the CS items in the record were most recently coded. Central cancer registries that have their own abstracting/editing software

will need to create a trigger of some kind that will update item 2937 whenever one of the input CS-associated data items is changed.

9.4 Changed Data Items

Multiple data items have revisions to their length, the data dictionary description, the data dictionary rationale, or the data descriptor note. Central cancer registries should review all revisions (see Standards, Volume II, Version 12 and section 4 of this document) to update individual reporting manuals and documentation. Appendix F in Volume II summarizes the changes effective with Standards, Volume II, Version 12.

In addition, central cancer registries with in-house data management systems will need to carry out the prescribed data conversions for items with changed codes and/or changed lengths as described in Section 4 of this document. This includes the need to review, specify, and modify every piece of software that handles data records to ensure that the revised data items are processed and consolidated properly.

9.4.1 AJCC 7th Edition

The item sizes for directly coded TNM pathologic and clinical stage have, in most instances, increased in AJCC 7th Edition. Historical codes can be directly copied to the longer items (i.e., no conversion of codes is required); assuming that the default database operation is to left justify character values. Most central registries no longer collect directly coded TNM stage, but software may need to be aware of new data item lengths in order to continue processing historical cases correctly. The AJCC 7th Edition is expected to be available in November 2009.

9.4.2 Class of Case

Class of Case has gone from a 1-digit to a 2-digit variable in Standards, Volume II, Version 12. Review section 4.4 for complete information on the changes to the Class of Case variable and instructions on converting old class of case information to the current definitions.

Central registries with in-house data processing systems will need to determine whether any software uses this variable within its case consolidation algorithms (e.g., to distinguish between analytic and non-analytic cases). If so, the software will need to be modified.

9.4.3 Collaborative Staging

CSv2 is being introduced concurrent with NAACCR Record Layout Standards, Volume II, Version 12. It is necessary in order to derive AJCC stage according to the 7th Edition of that manual. The new CS algorithm will assume the addition of new CS items and conversion of some existing items in the software. Some aspects of CSv2 originally planned for release with Standards, Volume II, Version 12 are being deferred until 2011 (for example, pre-RX and post-RX).

The central cancer registry's decision about which CS items it will collect is dependent on the requirements of the applicable standard setter (see Appendix B), and whether the central cancer registry's goal is to derive just summary stage, or also AJCC stage. When the new CS .dll (the program that reads the abstracted CS data items and produces the derived variables) is available from <http://www.cancerstaging.org/cstage/software.html>, and the central cancer registry's database has been modified to meet Standards, Volume II, Version 12 standards, the new .dll should be installed, and all cases in the registry with a diagnosis date in or after 2004 should be re-processed.

Once the new .dll is deployed in the central cancer registry's data processing, all records (2004+) will be processed under CSv2, regardless of diagnosis date. This is acceptable because CSv2 derives both AJCC 6th and AJCC 7th Edition stage variables. Cases diagnosed in 2010 and later will receive two sets of derived values, while cases diagnosed in 2004-2009 will only have AJCC 6th Edition derived

codes. The new Collaborative Staging Data Coding Standards will be available when the AJCC 7th Edition is finalized and the derivation algorithms have been finalized. The current schedule for Beta release of the CSv2 algorithm and associated documentation is the end of September. The algorithm will then be updated as needed over the ensuing months in response to comments from vendors and other users. The final release of the algorithm will be the end of December 2009.

9.4.4 The Multiple Primary and Histology Coding Rules

These will be updated for 2010 diagnoses. The rules will be available by January 1, 2010. An addendum to this document will be posted as soon as more information becomes available.

9.4.5 Date Items

The format for transmitting dates has changed from MMDDYYYY to YYYYMMDD. The codes 00000000, 88888888, 99999999 and any date portion as 99 are no longer used. Only valid portions of any date are to be transmitted. It is important to note that these recommendations address the NAACCR transmission format and do not necessarily address how the data should be stored in an individual registry database. All date items in transmitted records and records being presented to the EDITS engine will be required to be in YYYYMMDD Standards, Volume II, Version 12 format, with appropriately coded date flags. While central registries may continue to store date items in the old format (MMDDCCYY, including using 00000000, 88888888, 99999999, or any date portion as 99 to indicate various reasons the date is not available), it is recommended that, *at a minimum*, central cancer registries abandon the use of 0-, 8-, and 9-filled dates and adopt the use of the new date flags (option 2, below).

Depending on how date items are currently stored, there are various software methods for handling changes in the date format. If date items are sometimes stored as true “date” data types within the database, then the new date flags can either be added to the database or generated every time a transmission record is created, using the instructions found in Appendix D of this document. If the date variables are currently stored per the Version 11 NAACCR standard, there are three options:

- 1) Continue storing the dates as MMDDYYYY, with 0-, 8-, and 9-fills. With this choice the registry’s software will need to translate all incoming records (including updates and new reports) to the Standards, Volume II, Version 12 date format, and also to translate all outgoing records and records submitted to the EDITS engine to the Standards, Volume II, Version 12 date format with the required flags. If the new date flags are not implemented in the software, certain information will not be available when writing a transmission record (see Appendix H in Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, Fourteenth Edition Standards, Volume II, Version 12).
- 2) Continue to store dates as MMDDYYYY but adopt the new date flag items. With this choice the software would only have to reformat the date items (but not convert/back-convert the date flags) every time an update or new submission record is received, or a Standards, Volume II, Version 12 record is written for transmission or presentation to the EDITS engine.
- 3) Convert all date items to the new, Standards, Volume II, Version 12 format and derive the flag values per the instructions found in Appendix D of this document. Continued conversions between Version 11 and Standards, Volume II, Version 12 formats would not be required unless a file is received in a pre-Standards, Volume II, Version 12 NAACCR record format.

9.4.5.1 Recoding Date Items

Although Appendix D contains algorithms for back-converting dates collected under Standards, Volume II, Version 12 to the Version 11 standards, only forward conversion of

dates is recommended. Central cancer registries that maintain their own database systems should also review the guidelines for vendors (see Section 10 of this document).

9.4.6 Laterality

The code 5 was added to the codes for this variable. Code 5 is to be used for a midline tumor in a paired site. Code 9 is to be used only when the laterality is truly unknown.

Central registries that have their own abstracting and data processing systems will need to add code 5 to lists of valid codes and modify any consolidation algorithms to be aware of the code.

Historic cases do not need to be reviewed or recoded. A laterality code of "5" will not flag as an error in cases diagnosed prior to 2010.

9.4.7 Rad–No of Treatment Vol

This variable is expanded from two to three digits to capture more treatments than can be recorded in a two-digit item. See section 4.11.

9.4.8 Race Codes and Coding System

Also of note are the changes to the race code used for “Asian Indian or Pakistani.” The change applies to the data items Race1 – Race5 [160 – 164] and to Race--NAPIIA (derived API [193]). Because of the all-too-common tendency to type “09” instead of “99” to indicate unknown race, the code of “09” has been removed from the list of valid values for the race data items [160-164, 193] and replaced with three possible values (15 = Asian Indian or Pakistani, NOS; 16 = Asian Indian; 17 = Pakistani).

The value of Race Coding System--Current will need to be updated to “7” to indicate the application of the coding change. If a data entry or abstracting program currently inserts a default value of “6” for Race Coding System--Original, the program will need to be updated to insert a “7” instead.

Values of “09” in any of the central cancer registry’s race variables will need to be recoded as “15” unless manual review of the record indicates that the specific code of “16” or “17” is correct.

9.4.8.1 Recoding Race Codes

All historical records will need to undergo a code conversion. Race codes of “09” will flag as errors when processed using an EDITS Standards, Volume II, Version 12 metafile. It is recommended that central cancer registries recode code 09 to code 15 for all years prior to 2010.

9.4.9 Coding System Data Items [470, 480, 1460, 2120, 2130, 2140, and 2150]

New codes to indicate the new coding systems effective with 2010 diagnoses will be necessary for each of the coding system data items (Morph Coding System Current [470], Morph Coding System Original [480], RX Coding System Original [1460], SEER Coding System Current [2120], SEER Coding System Original [2130], CoC Coding System Current [2140], and CoC Coding System Original [2150]). Central registries with their own data entry and editing software, or with case consolidation systems that reference any of these

data items, will need to add logic to handle the new codes. See sections 4 and 10 for more information.

9.5 Central Registry-Specific Items and Retired Items

Section 5 lists the data items that have been retired and are no longer found in Standards, Volume II, Version 12. If the central cancer registry chooses to collect information on any of the retired data items, the information must be collected as State/Requestor Items [2220], which has been increased to hold up to 1,000 characters. Central cancer registries should clearly identify any non-standard or central registry-specific data items that they will be collecting, and should generate detailed abstracting instructions for each item. This information must be circulated to software vendors/developers and reporting facilities.

Central cancer registries must not reuse column spaces of retired items for state-specific items nor should they continue to collect retired items in their previous column spaces. Specifically, if the central cancer registry chooses to continue collecting information on religion, tobacco or alcohol history, family history of cancer, screening date or result, date of first positive biopsy, the site(s) of distant metastases or recurrences, or the override [1984] involved with the deleted items, it will need to specify which columns to use in the range of 2340 - 3339.

9.6 Central Registry Edits

The central cancer registry should review the EDITS metafile for Standards, Volume II, Version 12 (a draft version of which is scheduled to be available the end of September from www.naacr.org), to determine the edits that it will implement. The EDITS metafile will expect the date flags to be populated and dates to be formatted per the Standards, Volume II, Version 12 data standard.

Updated Edits tools will be available from CDC. The new tools will handle the lengthened Standards, Volume II, Version 12 record layout as well as new date item formats and functions, and will be required for use with records in Standards, Volume II, Version 12 format. Metafiles produced by the new tools will not be backward compatible; they will require use of the new EditWriter for development and maintenance of edits and edit sets, as well as application of the new Edit Engine when using the metafiles to edit data.

Central cancer registries should note that edits in the metafile may need to be revised to accommodate central registry-specific reporting requirements, and that special edits may need to be developed for central registry-specific data items (e.g., edits for retired data items that are moved to the state-requestor section). Implementation, testing, and distribution of central registry-specific EDITS metafiles to reporting facilities and vendors should be considered as central cancer registries develop their Standards, Volume II, Version 12 implementation plans. Central cancer registries that generate and distribute their own metafiles should have a plan to keep them updated.

The central cancer registry should evaluate the time required to correct errors in previous years' data that appear after retrospectively applying new edits when there are no guidelines that limit the diagnosis years to which the new edit(s) should be applied, taking into account the relative importance of the affected data items and the amount of time required to edit the records.

9.7 Software Implementation Plan

Central cancer registries that receive submissions from facilities that use commercial software to generate their files should pay close attention to the release dates of these products and coordinate their own Standards, Volume II, Version 12 implementation plan accordingly. To ensure transmission in the appropriate record layout version, every data submission should be reviewed before being merged into the central cancer registry's database. Various methods can be used to test a data submission for compliance with standards, including the application of an EDITS metafile; line review in NoteTab (<http://www.notetab.com>), UltraEdit (<http://www.idmcomp.com>), or Text Pad

(<http://www.textpad.com>); and creating a test environment into which submissions can be loaded and viewed as they would appear in the active database, or combinations of the above.

A reporting facility's first transmission in Standards, Volume II, Version 12 should be tested as thoroughly as possible for layout and code problems before further Standards, Volume II, Version 12 records are accepted from that facility. Some registries may find it useful to require a "test batch" from each software vendor or facility.

9.8 Communication with Reporting Facilities and Software Vendors

Central cancer registries will need to distribute their implementation plan and timeline to reporting facilities and software vendors as soon as possible. The plan should include a new reportability list and an updated list of required data items. Changes to the implementation plan or the timeline should be forwarded immediately to all affected parties. Reporting facilities that are not CoC-accredited cancer programs may be less aware of upcoming changes and may need more transition time. Facilities that do not use a vendor for their reporting software will need extra attention.

Central registry clients should be aware that delays in communication of this information from the state registry clients to the software vendors may result in a delay in reporting of 2010 cases.

Until each state registry client is fully converted to Standards, Volume II, Version 12, vendors will need to provide continued support for reporting and processing of records diagnosed 2009 and earlier in NAACCR Version 11.3 record format.

9.9 Education and Training

Central cancer registry staff should attend education and training workshops provided by the standard setting organizations, and the central registry's trainer(s) should schedule workshops and/or training throughout the state or region to distribute the training information to reporting facilities' staff. In addition, any available on-line training should be publicized to all the reporting entities in the state.

10 SUMMARY FOR SOFTWARE DEVELOPERS AND VENDORS

The magnitude of changes being implemented with Standards, Volume II, Version 12 constitutes a significant challenge for software vendors. All software vendors will be responsible for identifying required software changes, accommodating the new exchange record format and lengths, new hematopoietic and lymphoma morphology codes and availability of Hematopoietic DB from SEER, new and changed data items (in particular new data items and flags), several new CS data items and a new CS algorithm, and performing data conversion where necessary. In addition, new EDITS tools will need to be implemented. Vendors will also need to address testing and implementation issues, as well as technical support and training.

Instruction to development staff should address the following:

10.1 Identify Software Changes

The addition of 126 new data items and changes to codes/descriptions applicable to Standards, Volume II, Version 12 will modify the software's data dictionary. Software specifications generated to adapt programs will be vendor-specific, and will vary for hospital registry applications and central registry applications.

10.2 Hematopoietic and Lymphoid Neoplasm Rules

Implementation of the new Hematopoietic and Lymphoid Neoplasm Rules (see section 2.3) requires the addition of terms and codes to any pick lists for coding histology and behavior. See Tables 2-1 and 2-2 for the new terms and codes. The extension of this list may also require revision of the list of

reportable codes. Vendor software should also provide access to the *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* and the Hematopoietic DB program from SEER. Revised site/histology/behavior validation tables will be made available by SEER and will be included in the NAACCRv12 metafile.

Note that for cases diagnosed 2001 through 2009, continue to use the, "Single Versus Subsequent Primarys of Lymphatic and Hematopoietic Diseases" (February 2001). This table is not to be used for cases diagnosed prior to 2001.

The new histology codes will also extend the boundaries for defining lymphomas in other contexts. The following histology code ranges should be used to group lymphomas for cases diagnosed in 2010 and later: 9588 to 9699, 9702-9738.

10.3 The Multiple Primary and Histology Coding Rules

These will be updated for 2010 diagnoses. The rules will be available by January 1st, 2010. An addendum to this document will be posted as soon as more information becomes available.

10.4 Record Formats and Lengths

The new record layout in Standards, Volume II, Version 12 is 22,824 characters, and many existing data items have been relocated within the record layout. Refer to Standards, Volume II, Version 12, Volume II. Developers and vendors must be able to produce records in this new format for the purposes of data export, import, and transmission, as well as presentation of the data to the EDITS engine for editing. Refer to section 10.7 New Edits Tools, below.

10.5 Date Formats

The Standards, Volume II, Version 12 format includes major changes in the way dates are formatted for both transmissions of data from one system to another, as well as for the purposes of data editing within the software (refer to section 4.6 for details).

It will be up to each individual software vendor to decide how and where date format changes will be reflected in the software. Technically, the Standards, Volume II, Version 12 record layout is for transmission and editing purposes, and its implementation does not necessitate conversion of stored dates, or dates viewed via software interfaces. However, all vendors will need to address new data standards when generating software specifications for Standards, Volume II, Version 12-compliant data extracts, imports, standard reports, and application of data quality edits. All date items in transmitted records and records being presented to the EDITS engine will be required to be in YYYYMMDD Standards, Volume II, Version 12 format, with appropriately coded date flags.

It is recommended that the date flags be stored in the case record, even if dates are stored in the classical format. It is also recommended that vendor-specific date items also store new date flag items in order to address standards for date format exchange.

NOTE: In the Standards, Volume II, Version 12 layout, software-generated items do not have associated date item flags. Software-generated date items for historical cases that pre-date introduction of those items (*e.g.*, Date Case Initiated) will be transmitted as empty dates. This waiver also applies for generated date items that were not implemented in legacy systems.

10.6 New Data Items

Software changes will need to be made to accommodate all new data items. This includes but is not limited to revisions for data collection, import and export, revisions to the software interface, addition of look-ups for new data items where applicable, data entry verifications internal to the software (if

available within the software), data item consolidation where applicable, and reports. Please refer to Appendix A for listing of new data items added in Standards, Volume II, Version 12.

10.7 Changed Data Items

Software changes will also need to be made to accommodate all existing, changed data items in the Standards, Volume II, Version 12 layout. This includes but is not limited to revisions to look-ups for changed data items where applicable, data entry verifications internal to the software (if available within the software), data item consolidation where applicable, and reports. Refer to section 4 for listing of existing data items that have changed in Standards, Volume II, Version 12. Refer to section 10.8 Conversion Considerations below.

Numerous items have had changes in item length. These include name, address, and follow up variables as well as some radiation variables. Refer to section 4 for details.

In addition to the change in field lengths for the name fields, rules on punctuation have been relaxed (see section 4.9). This may impact matching algorithms used in linkage routines or name searches, and modification of such algorithms may be required.

10.8 Generated Items

The Standards, Volume II, Version 12, Chapter VIII Required Status Table includes a number of items that are considered to be generated by the hospital registry software, in addition to those derived by the Collaborative Stage algorithm. In some cases, these items do not exist in the database record but values are written to them in the data exchange record. Other items contain values stored in the database record as well as included in the data exchange record. See Table 10-1 for a list of these items, and refer to the Data Dictionary (Chapter X) for a description of what is expected for each item.

Note that Date Case Completed--CoC [2092] will require appropriate software triggers – recognizing when the CoC edits have been cleared – for entering a date stamp. See section 3.2.1.

Table 10-1 Generated Items	
NAACCR Item #	Item Name
Data items that exist only in the data exchange record	
10	Record Type
50	NAACCR Record Version
Data items that are stored in the database and written to the data exchange record	
21	Patient System ID--Hosp
170	Race Coding Sys--Current
180	Race Coding Sys--Original
450	Site Coding Sys--Current
460	Site Coding Sys--Original
470	Morph Coding Sys--Current
480	Morph Coding Sys--Original
1460	RX Coding System--Current
2085	Date Case Initiated
2090	Date Case Completed
2092	Date Case Completed--CoC
2100	Date Case Last Changed
2110	Date Case Report Exported
2120	SEER Coding Sys--Current

2130	SEER Coding Sys--Original
2140	CoC Coding Sys--Current
2150	CoC Coding Sys--Original
2170	Vendor Name
2935	CS Version Input Original
2936	CS Version Derived
2937	CS Version Input Current

10.9 New CS Algorithm

Collaborative Stage algorithm Version 2.0 (CSv2) is being introduced concurrently with Standards, Volume II, Version 12. This algorithm will assume the addition of new CS items and conversion of some existing items in the software. Refer to section 10.10.1 Conversion Considerations.

CSv2 will be required for all cases diagnosed 1/1/2010 and later as well as for all newly reported cases diagnosed 2004 and later. Upon implementation and after conversion and recoding of CSv1 codes as specified, the CSv2 algorithm should be applied to re-derive AJCC 6th Edition staging information for all cases captured under CSv1 in order to correct some errors in the earlier stage derivation.

In CSv2, more information than just site and histology may be required to assign some schemas. A new parameter, Schema Discriminator (SSF25 [2879]) will be required to complete the schema selection. This may require a two-step query by the abstractor to determine the correct schema. If the implementation of CSv2 displays only those Site-specific Factors required within a schema, SSF25 should be displayed for schemas that require the Schema Discriminator.

Additional recommendations from the CSv2 Task Force:

- Display pick lists, notes, and footnotes for all items. This information is available within the .dll.
- Display the Version number on all pick lists.
- Do not show the Obsolete Codes in pick lists.
- Some registrars may not want to see the AJCC 6th Edition derived stage codes displayed on screen, but the items must be available for analysis.

There are now three CS Version stamp items: CS Version Input Original [2935], CS Version Derived [2936], and CS Version Input Current [2937]. The CS algorithm API will provide the Version stamp to the application, but the application must apply the stamp to the individual Version items at the appropriate time. Refer to the CSv2 documentation for more information.

Some aspects of CSv2 2.0 originally planned for release with Standards, Volume II, Version 12 are being deferred until 2011 (for example, pre-RX and post-RX). Information regarding deferred aspects will be made available to software vendors at a time appropriate for 2011 implementation.

10.10 New Edits Tools

Updated Edits tools will be available from CDC (see section 10.10.2, below). The new tools will handle the lengthened Standards, Volume II, Version 12 record layout as well as new date item formats and functions, and will be required for use with records in Standards, Volume II, Version 12 format. Metafiles produced by the new tools will not be backward compatible; they will require use of the new EditWriter for development and maintenance of edits and edit sets, as well as application of the new Edit Engine when using the metafiles to edit data.

A Standards, Volume II, Version 12 metafile will be made available for central registries, vendors, and software developers and will be required for use with records in the Standards, Volume II,

Version 12 layout. Vendors must accommodate utilization of this new metafile, as well as any new or modified state-specific edits for each state.

10.10.1 Conversion Considerations

Software vendors will need to accommodate and support forward conversion of data where applicable. If stored data (dates in particular) are not converted, vendors will need to accommodate backward conversion to Version 11.3 of incoming data in Standards, Volume II, Version 12 format.

10.10.2 Collaborative Staging Version 2.0

CS Extension [2810] and CS Lymph Nodes [2830] will be converted to three digits. Some additional code changes will also be required; most of the changes can be made globally, but a few changes will require manual review and recoding. Vendor software should provide for identification of the cases that require review. Refer to the CSv2 documentation for specific instructions.

10.10.3 Date Formats and Flag Items

Date items in transmitted records and records being presented to the EDITS engine will be required to be in Standards, Volume II, Version 12 format, as described in full detail in Section 4.6 and Appendix D of this guide.

It will be up to each individual vendor to decide where date format changes will be reflected in the software. Technically, the Standards, Volume II, Version 12 record layout is for transmission and editing purposes, and its implementation does not necessitate conversion of stored date values, or date values viewed via software interfaces. It is recommended that the date flags be stored in the case record, even if dates are stored in the classical format.

10.10.4 Other Changed Data Items

Additional data items that will require conversion include Class of Case [610] (refer to section 4.7), Race1-5 [160-164], Race- NAPIIA [193], and Rad--No of Treatment Vol [1520] (refer to section 4). Race Coding Sys--Current [170], Race Coding Sys--Original [180], Morph Coding Sys--Current [470], Morph Coding Sys--Original [480], SEER Coding Sys--Current [2120], SEER Coding Sys--Original [2130], CoC Coding Sys--Current [2140], and CoC Coding Sys--Original [2150] have changes/additions to code values, and appropriate values will need to be recorded in each record upon new case entry or update to fields covered under each Coding System.

10.10.5 Conversion Documentation

The vendor should provide documentation (i.e., user-friendly pre- and post-conversion logs) of any changes to the database, and mapping of any converted codes, to end users.

10.11 Programming, Testing, and Implementation

Software vendors should provide programming instructions to support the necessary changes for Standards, Volume II, Version 12, as well as testing (if time allows, beta site testing) and implementation of the items listed elsewhere in this document.

Software vendors need to revise/develop, test, distribute, and install software prior to implementation dates set by standard-setting organizations and central cancer registries. Central cancer registries may require test files to be submitted prior to approval in reporting in the Standards, Volume II, Version 12 format. Testing should determine that appropriate values are converted and stored, as well as validated, within the software. Testing should also accommodate verification of revisions for data import and export, revisions to the software interface, addition of look-ups for new and changed data items where applicable, data entry verifications internal to the software (if available within the software), data item consolidation where applicable, and standard as well as ad-hoc report writing.

Any changes to the implementation timeline should be immediately reported to all involved parties. If there are delays to the standards or errata that have not yet been identified, the software vendor programs will be at risk of delay.

Until each central registry client is fully converted to Standards, Volume II, Version 12, vendors will need to provide continued support for reporting and processing of records **diagnosed 2009 and earlier** in NAACCR Version 11.3 record format. Unless otherwise specified by central registries, vendors **should not allow cases diagnosed in 2010** to be completed and submitted in Version 11.3 format. Exceptions for early submission of cases before completion may be required by some central registries.

Individual changes to the state-specific state requestor section must also be communicated early in the coding and implementation period in order to be accommodated for software release.

10.11.1 New CS Algorithm

Instructions for implementation of the CSv2 are described in the API documentation for the algorithm.

10.12 New Edit Tools

A new Edit Engine, new EditWriter application, and new GenEDITS Plus application will be available from CDC for editing Standards, Volume II, Version 12 records and values as well as support existing Version 11.3 formats and backwards conversion. Refer to the Edit Engine API documentation if needed for your software implementation.

10.13 New Online Help Files

Changes to the software's online help system (if available) will need to be made in conjunction with Standards, Volume II, Version 12-related changes made to the software. New Registry Plus Online Help for Standards, Volume II, Version 12 will be made available from CDC. For vendors that do not use CDC's Registry Plus Online Help within their software, or those that supplement it with extra information, updates will need to be made to online help.

10.14 Testing Tools

Data files for testing implementation of the CS algorithm will be made available from AJCC. These data files will support the testing of CS-related changes only. As a result, other data files including values for all data items in the Standards, Volume II, Version 12 record layout will need to be generated for software testing purposes. Each vendor will be responsible for testing full Standards, Volume II, Version 12 records in their software.

If backward conversion of dates from Standards, Volume II, Version 12 to Version 11 is required for importing Standards, Volume II, Version 12 records into a database with an alternative storage format, the test plan should include verification that the backward converted dates can be forward converted to Standards, Volume II, Version 12 in such a way as to replicate the imported date and date flag values.

The Standards, Volume II, Version 12 metafile will contain edit sets for validating case records in the Standards, Volume II, Version 12 record layout.

10.15 Technical Support and Training

Software vendors are expected to support the data changes in Standards, Volume II, Version 12 in the software and provide their clients with training and documentation appropriate to use the updated software. For hospital-level applications, this will include instruction regarding export of records for

transmission to their respective central registry in the correct format with correctly-coded and error-free data, as well as import from their previously supported casefinding interface. Documentation to support the updated software may include information presented via the software's on-line Help system and/or training or tutorial guides. Training and support on new coding rules should be referred to the appropriate standard-setting organization.

10.16 Communication with Central Cancer Registries and Hospital Registries

Software vendors should provide a timeline to the central registries indicating when they will be able to produce software that is able to process and produce Standards, Volume II, Version 12 case records. Vendors should have an avenue for timely communication from all central registry clients, so that proper support of state-specific changes in required data reporting are made, including mapping of state-specific data items in the state/requestor section of the record, as well as determination of handling of those data items retired and now dropped from the standard Standards, Volume II, Version 12 record format that are to continue to be actively transmitted to the central registry via the state requestor section (*e.g.*, Tobacco, Alcohol, and Family History items). In addition, vendors should implement state edit sets as provided by the registries.

Central registry clients should be aware that delays in communication of this information from state registry clients to the software vendor may result in a delay in reporting of 2010 cases.

Until each state registry client is fully converted to Standards, Volume II, Version 12, vendors will need to provide continued support for reporting and processing of records diagnosed 2009 and earlier in NAACCR Version 11.3 record format.

11 SUMMARY FOR HOSPITAL CANCER REGISTRARS & REPORTING FACILITIES

The Commission on Cancer of the College of Surgeons, the National Program of Cancer Registries of the Centers for Disease Control and Prevention, the Surveillance, Epidemiology and End Results of the National Cancer Institute all, and the Canadian Council of Cancer Registries all express their deep gratitude to hospital registrars. It is the hospital registrars who are at the heart of all cancer registry activities, and their diligence is behind everything these organizations are able to do.

Because hospital registrars are so crucial to the collection and use of cancer data, it is important that they become familiar with the changes taking place in 2010 by reading Sections 2 (Major Changes), 3 (New Data Items) and portions of Section 8 (Standard Setters Reporting Requirements for 2010) that apply to their situation.

What follows is an overview of steps that hospital registrars can take to smooth the transition to the new and changed data items and the updated software.

Cases diagnosed on or after January 1, 2010, must be collected, and reported in accordance with the standards and definitions of the Standards, Volume II, Version 12.

11.1 Prioritize Case Abstracting

Registrars should prioritize their abstracting. Ideally, abstracting of cases diagnosed prior to January 1, 2010, should be completed before software vendors convert registry data and/or begin to use Standards, Volume II, Version 12 reporting upgrades.

11.2 Communicate with Central Cancer Registries and Software Vendors

Hospital registries should be in contact with their software vendor to determine when the necessary software upgrade may be delivered, and then make a tentative schedule within the facility to have someone available for the upgrade installation.

Registries that have an interest in being involved in implementation of changes early should consider being a beta test site. This will allow them to receive software and software vendor support early in the process.

Registries should also contact their central registry to find out when they will accept data transmissions in the new version.

11.3 Conversion Consideration

Registrars must review and clean up all date items prior to conversion, as this will ensure that it will be converted with greater ease. Focus initially on items to be converted, especially Dates, Race, and Class of Case.

11.4 Education and Training

Registrars and abstractors should attend education training provided by regional, state, or national programs. This may be any combination of webinars, face-to-face training at meetings, self-instructional material and time to work slowly through coding while getting used to the changes – seek out training on all new and changed material. The websites below may be of assistance:

- <http://training.seer.cancer.gov/>
- <http://www.facs.org/cancer/coc/coceduc.html>
- <http://www.cdc.gov/cancer/npcr/index.htm>
- <http://www.naacr.org/>
- <http://www.ncra-usa.org/>

Once registrars have all the new manuals available, plan to educate your cancer program on what new information you will be collecting – first, to let them know they should make this information available in their dictation; second, so they can develop an interest in using the new data as you accumulate cases. Your liaison physician can help promote this new information.

11.5 The Multiple Primary and Histology Coding Rules

Multiple Primary and Histology Coding rules will be updated for 2010 diagnoses. The rules will be available by January 1, 2010. An addendum to this document will be posted as soon as more information becomes available.

APPENDIX A: AJCC CONVERSION OF CLINICAL AND PATHOLOGIC TNM T, N, M AND STAGE GROUP

These conversion tables are designed to expand the 2-character codes formerly assigned to values that the AJCC Staging Manuals have, for several editions, defined as 3- or 4-character codes so that the recorded value will match the values assigned. They do not convert from one staging version to another, and they do not clean invalid entries. Blank fields should remain blank after conversion. All alpha characters are capitalized. All codes are left justified and blank filled on the right for values shorter than 4 characters. Three- and 4-character codes newly defined for the AJCC 7th edition cannot be entered in the NAACCR 11.3 layout.

Conversion of Clinical and Pathologic TNM T, N, M and Stage Group from 2 Characters (layout 11.3 and earlier) to 4 Characters (layout 12.0)			
TNM Clin T [940] and TNM Path T [880]			
2 Characters	4 Characters		New in AJCC 7 th Edition
X	X		
0	0		
A	A		1D
IS	IS		2A1
SU	ISPU		2A2
SD	ISPD		2D
1M	1MI		3D
1	1		4E
1A	1A		
A1	1A1		
A2	1A2		
1B	1B		
B1	1B1		
B2	1B2		
1C	1C		
2	2		
2A	2A		
2B	2B		
2C	2C		
3	3		
3A	3A		
3B	3B		
3C	3C		
4	4		
4A	4A		
4B	4B		
4C	4C		
4D	4D		
88	88		

Conversion of Clinical and Pathologic TNM T, N, M and Stage Group from 2 Characters (layout 11.3 and earlier) to 4 Characters (layout 12.0)			
TNM Clin N [950] and TNM Path N [890]			
2 Characters	4 Characters		New in AJCC 7th Edition
X	X		
0	0		
I-	0I-		0A
I+	0I+		0B
M-	0M-		4
M+	0M+		
1M	1MI		
1	1		
1A	1A		
1B	1B		
1C	1C		
2	2		
2A	2A		
2B	2B		
2C	2C		
3	3		
3A	3A		
3B	3B		
3C	3C		
88	88		

Conversion of Clinical and Pathologic TNM T, N, M and Stage Group from 2 Characters (layout 11.3 and earlier) to 4 Characters (layout 12.0)			
TNM Clin M [960] and TNM Path M [900]			
2 Characters	4 Characters		New in AJCC 7th Edition
X	X		
0	0		
1M	1MI		1D
1	1		1E
1A	1A		
1B	1B		
1C	1C		
88	88		

**Conversion of Clinical and Pathologic TNM
T, N, M and Stage Group from
2 Characters (layout 11.3 and earlier) to
4 Characters (layout 12.0)**

**TNM Clin Stage Group [970] and TNM Path Stage
Group [910]**

2 Characters	4 Characters		New in AJCC 7th Edition
0	0		
0A	0A		
0S	0S		0IS
1	1		2A1
1A	1A		2A2
A1	1A1		3C1
A2	1A2		3C2
1B	1B		
B1	1B1		
B2	1B2		
1C	1C		
1E	1E		
1S	1S		
2	2		
2A	2A		
2B	2B		
2C	2C		
2E	2E		
2S	2S		
3	3		
3A	3A		
3B	3B		
3C	3C		
3E	3E		
3S	3S		
4	4		
4A	4A		
4B	4B		
4C	4C		
4E	4E		
4S	4S		
88	88		
99	99		
OC	OC		

APPENDIX B: NEW DATA

Standards, Volume II, Version 12 NEW DATA ITEMS N = 126		
CS Mets at Dx-Bone [2851]	Derived AJCC-7 M Descript [3422]	Path Date Spec Collect 4 [7323]
CS Mets at Dx-Brain [2852]	Derived AJCC-7 N [3410]	Path Date Spec Collect 5 [7324]
CS Mets at Dx-Liver [2853]	Derived AJCC-7 N Descript [3412]	Path Report Type 1 [7480]
CS Mets at Dx-Lung [2854]	Derived AJCC-7 Stage Grp [3430]	Path Report Type 2 [7481]
CS PostRx Extension [2775]	Derived AJCC-7 T [3400]	Path Report Type 3 [7482]
CS PostRx Lymph Nodes [2780]	Derived AJCC-7 T Descript [3402]	Path Report Type 4 [7483]
CS PostRx Mets at DX [2785]	Derived Neoadjuv Rx Flag [3600]	Path Report Type 5 [7484]
CS PostRx Tumor Size [2770]	Derived PostRx-7 M [3490]	Path Reporting Fac ID 1 [7010]
CS PreRx Extension [2735]	Derived PostRx-7 N [3482]	Path Reporting Fac ID 2 [7011]
Cs PreRx Lymph Nodes [2750]	Derived PostRx-7 Stge Grp [3492]	Path Reporting Fac ID 3 [7012]
CS PreRx Mets at DX [2760]	Derived PostRx-7 T [3480]	Path Reporting Fac ID 4 [7013]
CS PreRx Mets Eval [2765]	Derived PreRx-7 M [3460]	Path Reporting Fac ID 5 [7014]
CS PreRx Reg Nodes Eval [2755]	Derived PreRx-7 M Descrip [3462]	Recurrence Date -- 1 st Flag [1861]
CS PreRx Tumor Size [2730]	Derived PreRx-7 N [3450]	RX Date--Other Flag [1251]
CS PreRx TumSz/Ext Eval [2740]	Derived PreRx-7 N descript [3452]	RX Date Mst Defn Srg Flag [3171]
CS Site-Specific Factor 7 [2861]	Derived PreRx-7 Stage Grp [3470]	RX Date Rad Ended Flag [3221]
CS Site-Specific Factor 8 [2862]	Derived PreRx-7 T [3440]	RX Date Surg Disch Flag [3181]
CS Site-Specific Factor 9 [2863]	Derived PreRx-7 T Descrip [3442]	RX Date Systemic Flag [3231]
CS Site-Specific Factor10 [2864]	Grade - Path Value [441]	RX Date--BRM Flag [1241]
CS Site-Specific Factor11 [2865]	Grade-Path System [449]	RX Date--Chemo Flag [1221]
CS Site-Specific Factor12 [2866]	Inpatient Status [605]	RX Date--Dx/Stg Proc Flag [1281]
CS Site-Specific Factor13 [2867]	Lymph-vascular Invasion [1182]	RX Date--Hormone Flag [1231]
CS Site-Specific Factor14 [2868]	Path Order Phys Lic No 1 [7100]	RX Date--Radiation Flag [1211]
CS Site-Specific Factor15 [2869]	Path Order Phys Lic No 2 [7101]	RX Date--Surgery Flag [1201]
CS Site-Specific Factor16-25 [2870 – 2879]	Path Order Phys Lic No 3 [7102]	RX Hosp -- ASA Class [665]
CS Version Input Current [2937]	Path Order Phys Lic No 4 [7103]	RX Hosp -- Surg App 2010 [668]
Date Case Completed/CoC [2092]	Path Order Phys Lic No 5 [7104]	Rx Hosp -- Surg Timing [678]
Date Case Initiated [2085]	Path Ordering Fac No 1 [7190]	RX Summ --Treatment Status [1285]
Date Conclusive DX Flag [448]	Path Ordering Fac No 2 [7191]	SEER Site-Specific Fact 1 [3700]
Date of 1st Contact Flag [581]	Path Ordering Fac No 3 [7192]	SEER Site-Specific Fact 2 [3702]
Date of 1st Crs Rx Flag [1271]	Path Ordering Fac No 4 [7193]	SEER Site-Specific Fact 3 [3704]
Date of Birth Flag [241]	Path Ordering Fac No 5 [7194]	SEER Site-Specific Fact 4 [3706]
Date of Death--Canada Flag [1756]	Path Report Number 1 [7090]	SEER Site-Specific Fact 5 [3708]
Date of Diagnosis Flag [391]	Path Report Number 2 [7091]	SEER Site-Specific Fact 6 [3710]
Date of Initial RX Flag [1261]	Path Report Number 3 [7092]	Subsq RX 2ndCrs Date Flag [1661]
Date of Inpt Adm Flag [591]	Path Report Number 4 [7093]	Subsq RX 3rdCrs Date Flag [1681]
Date of Inpt Disch Flag [601]	Path Report Number 5 [7094]	Subsq RX 4thCrs Date Flag [1701]
Date of Last Contact Flag [1751]	Path Date Spec Collect 1 [7320]	
Date of Mult Tumors Flag [439]	Path Date Spec Collect 2 [7321]	
Derived AJCC-7 M [3420]	Path Date Spec Collect 3 [7322]	

APPENDIX C: REQUIRED STATUS TABLE

The following table presents Standards, Volume II, Version 12 of the NAACCR required status summarizing the requirements and recommendations for collection of each item by standard-setting groups. Differences from Version 11.3 are marked “Revised,” “New,” or “Retired” in the “Note” column of the table.

- NPCR** Refers to requirements and recommendations of the NPCR regarding data items that should be collected or computed by NPCR state registries. The NPCR transmit column in the Required Status Table has been removed with Version 11.2. Transmit instructions will be provided by NPCR. *Note: Patient identifying data items collected are not transmitted to CDC.*
- CoC** Refers to requirements of CoC. CoC-accredited cancer program registries are required to collect the indicated items in the “Collect” column and are required to report items indicated in the “Transmit” column to the NCDB. Facilities should refer to the CoC *FORDS* manual for further clarification of required items. *Note: Patient identifying data items collected are not transmitted to the NCDB.*
- SEER** Refers to requirements of NCI’s SEER Program. Central registries are required to collect the indicated items in the “Collect” column and are required to report the items indicated in the “Transmit” column to NCI-SEER. Facilities and central registries should refer to the *SEER Program Code Manual* for further clarification of required items.
- CCCR** Refers to requirements of Canadian Council of Cancer Registries. Provincial/Territorial Cancer Registries should refer to the *Canadian Cancer Registry System Guide* for further clarification of items. Items indicated in the “Collect” column are required to be collected at the registry level and items indicated in the “Transmit” column are required to be reported to the Canadian Cancer Registry. CCCR requirements have been added to the Required Status Table with Version 11.2.

Exchange Items for Hospital to Central and Central to Central

The target audience for this set of requirements is comprised of the various designers of registry software, at the hospital, central registry, and national levels. In the Exchange s columns, data items marked are either required by key organizations for cancer reporting or are of special importance in the unambiguous communication of reports and the proper linking of records. A clear distinction is made between items required for facilities reporting to central registries (labeled Hosp → Central), and those items that central registries should use when sending cases to other central registries (labeled Central → Central). “T” is used when the data are vital to a complete exchange record. If a data item is unknown, it should have the proper code for unknown assigned. It is not specified how registries should handle records that have empty T items. “T*” means the vendor should convey the data if they are available for any of the cases; otherwise, they can leave the item empty. The receiving end (central registry) may, of course, ignore these items if they so choose. “TH” means only certain cases diagnosed before 2004 may require these items. Some central registries have additional required data items. For these, vendors should contact the central registry directly.

Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
10	Record Type	R	.	R	.	R	.	.	T	T	NAACCR	
20	Patient ID Number	R	.	.	R	R	R*	R*	.	T	Reporting Registry	Revised
21	Patient System ID-Hosp	.	.	.	.	.	.	.	T	.	NAACCR	
30	Registry Type	.	.	.	.	.	.	.	.	T	NAACCR	
35	FIN Coding System	.	.	.	.	.	R*	R*	.	.	NAACCR	Revised
37	Reserved 00	.	.	.	.	.	.	.	.	.
40	Registry ID	R	.	.	R	R	.	.	T	T	NAACCR	
45	NPI--Registry ID	.	.	.	R*	.	.	.	.	.	CMS	
50	NAACCR Record Version	R	.	R	.	.	.	.	T	T	NAACCR	
60	Tumor Record Number	.	.	.	S	S	R*	R*	T	T	NAACCR	Revised
70	Addr at DX--City	R	R	R	R	.	R*	R*	T	T	CoC	Revised
80	Addr at DX--State	R	R	R	R	.	.	.	T	T	CoC	
90	County at DX	R	R	R	R	R	.	.	T	T	FIPS/SEER	
100	Addr at DX--Postal Code	R	R	R	R	.	R*	R*	T	T	CoC	Revised
110	Census Tract 1970/80/90	RH*	.	.	RH	RH	.	.	.	T*	SEER	
120	Census Cod Sys 1970/80/90	RH*	.	.	RH	RH	.	.	.	T*	SEER	
130	Census Tract 2000	R	.	.	R	R	.	.	.	T*	NAACCR	
140	Census Tract Cod Sys--Alt	.	.	.	.	.	.	.	.	.		Retired
150	Marital Status at DX	.	.	.	R	R	.	.	.	.	SEER	
160	Race 1	R	R	R	R	R	.	.	T	T	SEER/CoC	
161	Race 2	R	R	R	R	R	.	.	T	T	SEER/CoC	
162	Race 3	R	R	R	R	R	.	.	T	T	SEER/CoC	
163	Race 4	R	R	R	R	R	.	.	T	T	SEER/CoC	
164	Race 5	R	R	R	R	R	.	.	T	T	SEER/CoC	
170	Race Coding Sys--Current	.	R	R	.	.	.	.	T	T	NAACCR	
180	Race Coding Sys--Original	.	R	R	.	.	.	.	T	T	NAACCR	
190	Spanish/Hispanic Origin	R	R	R	R	R	.	.	T	T	SEER/CoC	
191	NHIA Derived Hisp Origin	D	.	.	D	R	.	.	.	.	NAACCR	
192	IHS Link	R*	.	.	.	R	.	.	.	.	NPCR	

Codes for Recommendations: R = Required. RH = Historically collected and currently transmitted. RC = Collected by SEER from CoC-approved hospitals. RS = Required, site specific. S = Supplementary/recommended. D = Derived. . = No recommendations. * = When available. # = Central registries may code available data using either the SEER or CoC data item and associated rules. ^ = These text requirements may be met with one or several text block fields. T = data is vital to complete exchange record. TH = only certain historical cases may require these fields. T* = transmit data if available for any case in exchange record.

Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
193	Race--NAPIIA (derived API)	R	.	.	D	R	.	.	.	.	NAACCR	Revised
200	Computed Ethnicity	R	.	.	D	R	.	.	.	.	SEER	
210	Computed Ethnicity Source	R	.	.	R	R	.	.	.	.	SEER	
220	Sex	R	R	R	R	R	R*	R*	T	T	SEER/CoC	Revised
230	Age at Diagnosis	R	R	R	R	R	D	D	.	.	SEER/CoC	Revised
240	Date of Birth	R	R	R	R	R	R*	R*	T	T	SEER/CoC	Revised
241	Date of Birth Flag	R	R	R	R	R	.	.	T	T	NAACCR	New
250	Birthplace	R*	R	R	R	R	R*	R*	T*	T	SEER/CoC	Revised
260	Religion	.	.	.	.	.	.	.	.	.		Retired
270	Occupation Code--Census	R*	.	.	.	.	.	.	.	.	Census/NPCR	
280	Industry Code--Census	R*	.	.	.	.	.	.	.	.	Census/NPCR	
290	Occupation Source	R*	.	.	.	.	.	.	.	.	NPCR	
300	Industry Source	R*	.	.	.	.	.	.	.	.	NPCR	
310	Text--Usual Occupation	R*	.	.	.	.	.	.	T*	T*	NPCR	
320	Text--Usual Industry	R*	.	.	.	.	.	.	T*	T*	NPCR	
330	Occup/Ind Coding System	R*	.	.	.	.	.	.	.	.	NPCR	
340	Tobacco History	.	.	.	.	.	.	.	.	.		Retired
350	Alcohol History	.	.	.	.	.	.	.	.	.		Retired
360	Family History of Cancer	.	.	.	.	.	.	.	.	.		Retired
362	Census Block Group 2000	.	.	.	S	.	.	.	.	.	Census	
364	Census Tr Cert 1970/80/90	RH*	.	.	RH	RH	.	.	.	.	SEER	
365	Census Tr Certainty 2000	R	.	.	R	R	.	.	.	.	NAACCR	
366	GIS Coordinate Quality	R*	.	.	S	.	.	.	.	.	NAACCR	
368	CensusBlockGroup 70/80/90	.	.	.	S	.	.	.	.	.	Census	
370	Reserved 01	.	.	.	.	.	.	.	.	.
380	Sequence Number--Central	R	.	.	R	R	D	D	.	T	SEER	Revised
390	Date of Diagnosis	R	R	R	R	R	R*	R*	T	T	SEER/CoC	Revised
391	Date of Diagnosis Flag	R	R	R	R	R	.	.	T	T	NAACCR	New
400	Primary Site	R	R	R	R	R	.	.	T	T	SEER/CoC	
410	Laterality	R	R	R	R	R	R*	R*	T	T	SEER/CoC	Revised

Codes for Recommendations: R = Required. RH = Historically collected and currently transmitted. RC = Collected by SEER from CoC-approved hospitals. RS = Required, site specific. S = Supplementary/recommended. D = Derived. . = No recommendations. * = When available. # = Central registries may code available data using either the SEER or CoC data item and associated rules. ^ = These text requirements may be met with one or several text block fields. T = data is vital to complete exchange record. TH = only certain historical cases may require these fields. T* = transmit data if available for any case in exchange record.

Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
419	Morph--Type&Behav ICD-O-2	.	.	.	.	.	.	.	.	.
420	Histology (92-00) ICD-O-2	RH	RH	RH	RH	RH	RH	RH	TH	TH	SEER/CoC	
430	Behavior (92-00) ICD-O-2	RH	RH	RH	RH	RH	RH	RH	TH	TH	SEER/CoC	
439	Date of Mult Tumors Flag	.	.	.	R	R	.	.	.	.	NAACCR	New
440	Grade	R	R	R	R	R	R*	R*	T	T	SEER/CoC	Revised
441	Grade Path Value	.	R	R	R	R	.	.	T*	T*	AJCC	New
442	Ambiguous Terminology DX	.	R	R	R	R	S	S	.	.	SEER	
443	Date of Conclusive DX	.	R	R	R	R	S	S	.	.	SEER	
444	Mult Tum Rpt as One Prim	.	R	R	R	R	S	S	.	.	SEER	
445	Date of Multiple Tumors	.	R	R	R	R	S	S	.	.	SEER	
446	Multiplicity Counter	.	R	R	R	R	S	S	.	.	SEER	
447	Number of Tumors/Hist	.	.	.	.	.	.	.	.	.	Retired	Retired
448	Date Conclusive DX Flag	.	R	R	R	R	.	.	.	.	NAACCR	New
449	Grade Path System	.	R	R	R	R	.	.	T*	T*	AJCC	New
450	Site Coding Sys--Current	R	R	R	.	.	.	.	T	T	NAACCR	
460	Site Coding Sys--Original	.	R	R	.	.	R*	R*	T	T	NAACCR	Revised
470	Morph Coding Sys--Current	R	R	R	.	.	.	.	T	T	NAACCR	
480	Morph Coding Sys--Originl	.	R	R	.	.	R*	R*	T	T	NAACCR	
490	Diagnostic Confirmation	R	R	R	R	R	.	.	T	T	SEER/CoC	
500	Type of Reporting Source	R	.	.	R	R	.	.	T	T	SEER	
501	Casefinding Source	.	.	.	.	.	.	.	T*	T*	NAACCR	
510	Screening Date	.	.	.	.	.	.	.	.	.		Retired
520	Screening Result	.	.	.	.	.	.	.	.	.		Retired
521	Morph--Type&Behav ICD-O-3	.	.	.	.	.	.	.	.	.
522	Histologic Type ICD-O-3	R	R	R	R	R	R*	R*	T	T	SEER/CoC	Revised
523	Behavior Code ICD-O-3	R	R	R	R	R	R*	R*	T	T	SEER/CoC	Revised
530	Reserved 02	.	.	.	.	.	.	.	.	.
538	Reporting Hospital FAN	.	.	.	.	.	.	.	.	.		Retired
540	Reporting Facility	R	R	R	R	.	.	.	T	.	CoC	
545	NPI--Reporting Facility	R*	R	R	R*	.	.	.	.	.	CMS	

Codes for Recommendations: R = Required. RH = Historically collected and currently transmitted. RC = Collected by SEER from CoC-approved hospitals. RS = Required, site specific. S = Supplementary/recommended. D = Derived. . = No recommendations. * = When available. # = Central registries may code available data using either the SEER or CoC data item and associated rules. ^ = These text requirements may be met with one or several text block fields. T = data is vital to complete exchange record. TH = only certain historical cases may require these fields. T* = transmit data if available for any case in exchange record.

Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
550	Accession Number--Hosp	.	R	R	R	.	.	.	T*	.	CoC	
560	Sequence Number--Hospital	.	R	R	R	.	.	.	T	.	CoC	
570	Abstracted By	.	R	R	R	.	.	.	.	.	CoC	
580	Date of 1st Contact	R	R	R	.	.	.	.	T	.	CoC	
581	Date of 1st Contact Flag	R	R	R	.	.	.	.	T	.	NAACCR	New
590	Date of Inpatient Adm	.	.	.	.	.	.	.	.	.	NAACCR	
591	Date of Inpt Adm Flag	.	.	.	.	.	.	.	.	.	NAACCR	New
600	Date of Inpatient Disch	.	.	.	.	.	.	.	.	.	NAACCR	
601	Date of Inpt Disch Flag	.	.	.	.	.	.	.	.	.	NAACCR	New
605	Inpatient Status	.	.	.	.	.	.	.	.	.	NAACCR	New
610	Class of Case	R	R	R	RC	.	.	.	T	.	CoC	
620	Year First Seen This CA	.	.	.	.	.	.	.	.	.		Retired
630	Primary Payer at DX	R*	R	R	R	R	.	.	.	.	CoC	
640	Inpatient/Outpt Status	.	.	.	.	.	.	.	.	.		Retired
650	Presentation at CA Conf	.	.	.	.	.	.	.	.	.		Retired
660	Date of CA Conference	.	.	.	.	.	.	.	.	.		Retired
665	RX Hosp--ASA Class	.	.	.	.	.	.	.	.	.
668	RX Hosp--Surg App 2010	.	R	R	.	.	.	.	T*	.	CoC	New
670	RX Hosp--Surg Prim Site	.	R	R	R	.	.	.	T*	.	CoC	
672	RX Hosp--Scope Reg LN Sur	.	R	R	R	.	.	.	T*	.	CoC	
674	RX Hosp--Surg Oth Reg/Dis	.	R	R	R	.	.	.	T*	.	CoC	
676	RX Hosp--Reg LN Removed	.	RH	RH	.	.	.	.	T*	.	CoC	Revised
678	RX Hosp--Surg Timing	.	.	.	.	.	.	.	.	.
680	Reserved 03	.	.	.	.	.	.	.	.	.
690	RX Hosp--Radiation	.	.	.	RH	.	.	.	TH*	.	SEER/CoC	
700	RX Hosp--Chemo	.	R	R	R	.	.	.	T*	.	CoC	
710	RX Hosp--Hormone	.	R	R	R	.	.	.	T*	.	CoC	
720	RX Hosp--BRM	.	R	R	R	.	.	.	T*	.	CoC	
730	RX Hosp--Other	.	R	R	R	.	.	.	T*	.	CoC	
740	RX Hosp--DX/Stg Proc	.	R	R	.	.	.	.	.	.	CoC	

Codes for Recommendations: R = Required. RH = Historically collected and currently transmitted. RC = Collected by SEER from CoC-approved hospitals. RS = Required, site specific. S = Supplementary/recommended. D = Derived. . = No recommendations. * = When available. # = Central registries may code available data using either the SEER or CoC data item and associated rules. ^ = These text requirements may be met with one or several text block fields. T = data is vital to complete exchange record. TH = only certain historical cases may require these fields. T* = transmit data if available for any case in exchange record.

Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
742	RX Hosp--Screen/BX Proc1	.	.	.	.	.	.	.	.	.		Retired
743	RX Hosp--Screen/BX Proc2	.	.	.	.	.	.	.	.	.		Retired
744	RX Hosp--Screen/BX Proc3	.	.	.	.	.	.	.	.	.		Retired
745	RX Hosp--Screen/BX Proc4	.	.	.	.	.	.	.	.	.		Retired
746	RX Hosp--Surg Site 98-02	.	RH	RH	RH	.	.	.	TH*	.	CoC	Revised
747	RX Hosp--Scope Reg 98-02	.	RH	RH	RH	.	.	.	TH*	.	CoC	Revised
748	RX Hosp--Surg Oth 98-02	.	RH	RH	RH	.	.	.	TH*	.	CoC	Revised
750	Reserved 04	.	.	.	.	.	.	.	.	.
759	SEER Summary Stage 2000	RH	RH	RH	.	S	.	.	TH*	TH*	SEER	
760	SEER Summary Stage 1977	RH	RH	RH	.	S	.	.	TH*	TH*	SEER	
770	Loc/Reg/Distant Stage	.	.	.	.	.	.	.	.	.		Retired
779	Extent of Disease 10-Dig	.	.	.	.	.	.	.	.	.
780	EOD--Tumor Size	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER/CoC	
790	EOD--Extension	.	.	.	RH	RH	.	.	TH*	TH*	SEER	
800	EOD--Extension Prost Path	.	.	.	RH	RH	.	.	TH*	TH*	SEER	
810	EOD--Lymph Node Involv	.	.	.	RH	RH	.	.	TH*	TH*	SEER	
820	Regional Nodes Positive	.	R	R	R	R	R*	R*	T*	T*	SEER/CoC	
830	Regional Nodes Examined	.	R	R	R	R	R*	R*	T*	T*	SEER/CoC	
840	EOD--Old 13 Digit	.	.	.	RH	RH	.	.	.	.	SEER	
850	EOD--Old 2 Digit	.	.	.	RH	RH	.	.	.	.	SEER	
860	EOD--Old 4 Digit	.	.	.	RH	RH	.	.	.	.	SEER	
870	Coding System for EOD	.	.	.	RH	RH	.	.	.	TH*	SEER	
880	TNM Path T	.	R*	R*	.	.	.	.	T*	T*	AJCC	
890	TNM Path N	.	R*	R*	.	.	.	.	T*	T*	AJCC	
900	TNM Path M	.	R*	R*	.	.	.	.	T*	T*	AJCC	
910	TNM Path Stage Group	.	R*	R*	.	.	.	.	T*	T*	AJCC	
920	TNM Path Descriptor	.	R*	R*	.	.	.	.	T*	T*	CoC	
930	TNM Path Staged By	.	R*	R*	T*	T*	CoC	
940	TNM Clin T	.	R	R	T*	T*	AJCC	
950	TNM Clin N	.	R	R	T*	T*	AJCC	

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
960	TNM Clin M	.	R	R	.	.	.	.	T*	T*	AJCC	
970	TNM Clin Stage Group	.	R	R	.	.	.	.	T*	T*	AJCC	
980	TNM Clin Descriptor	.	R	R	.	.	.	.	T*	T*	CoC	
990	TNM Clin Staged By	.	R	R	.	.	.	.	T*	T*	CoC	
1000	TNM Other T	.	.	.	.	.	.	.	.	.		Retired
1010	TNM Other N	.	.	.	.	.	.	.	.	.		Retired
1020	TNM Other M	.	.	.	.	.	.	.	.	.		Retired
1030	TNM Other Stage Group	.	.	.	.	.	.	.	.	.		Retired
1040	TNM Other Staged By	.	.	.	.	.	.	.	.	.		Retired
1050	TNM Other Descriptor	.	.	.	.	.	.	.	.	.		Retired
1060	TNM Edition Number	.	R	R	.	.	.	.	T*	T*	CoC	
1070	Other Staging System	.	.	.	.	.	.	.	.	.		Retired
1080	Date of 1st Positive BX	.	.	.	.	.	.	.	.	.		Retired
1090	Site of Distant Met 1	.	.	.	.	.	.	.	.	.		Retired
1100	Site of Distant Met 2	.	.	.	.	.	.	.	.	.		Retired
1110	Site of Distant Met 3	.	.	.	.	.	.	.	.	.		Retired
1120	Pediatric Stage	.	.	.	.	.	.	.	.	.	CoC	
1130	Pediatric Staging System	.	.	.	.	.	.	.	.	.	CoC	
1140	Pediatric Staged By	.	.	.	.	.	.	.	.	.	CoC	
1150	Tumor Marker 1	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER	Revised
1160	Tumor Marker 2	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER	Revised
1170	Tumor Marker 3	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER	Revised
1180	Reserved 05	.	.	.	.	.	.	.	.	.
1182	Lymph-vascular Invasion	.	R	R	RS	RS	.	.	.	.	AJCC	New
1190	Reserved 06	.	.	.	.	.	.	.	.	.
1200	RX Date--Surgery	R*	R	R	S	.	.	.	T*	T*	CoC	Revised
1201	RX Date--Surgery Flag	R*	R	R	S	.	.	.	T*	T*	NAACCR	New
1210	RX Date--Radiation	R*	R	R	S	.	.	.	T*	T*	CoC	Revised
1211	RX Date--Radiation Flag	R*	R	R	S	.	.	.	T*	T*	NAACCR	New
1220	RX Date--Chemo	R*	R	R	TH*	TH*	CoC	Revised

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
1221	RX Date--Chemo Flag	R*	R	R	.	.	.	.	TH*	TH*	NAACCR	New
1230	RX Date--Hormone	R*	R	R	.	.	.	.	TH*	TH*	CoC	Revised
1231	RX Date--Hormone Flag	R*	R	R	.	.	.	.	TH*	TH*	NAACCR	New
1240	RX Date--BRM	R*	R	R	S	.	.	.	TH*	TH*	CoC	Revised
1241	RX Date--BRM Flag	R*	R	R	S	.	.	.	TH*	TH*	NAACCR	New
1250	RX Date--Other	R*	R	R	S	.	.	.	T*	T*	CoC	Revised
1251	RX Date--Other Flag	R*	R	R	S	.	.	.	T*	T*	NAACCR	New
1260	Date of Initial RX--SEER	R#	.	.	R	R	.	.	T*	T*	SEER	
1261	Date of Initial RX Flag	R#	.	.	R	R	.	.	T*	T*	NAACCR	New
1270	Date of 1st Crs RX--CoC	R#	R	R	.	.	.	.	T*	T*	CoC	
1271	Date of 1st Crs Rx Flag	R#	R	R	.	.	.	.	T*	T*	NAACCR	New
1280	RX Date--DX/Stg Proc	.	R	R	.	.	.	.	.	.	CoC	
1281	RX Date--Dx/Stg Proc Flag	.	R	R	.	.	.	.	.	.	NAACCR	New
1285	RX Summ--Treatment Status	R#	R	R	R	R	.	.	.	.	SEER/CoC	New
1290	RX Summ--Surg Prim Site	R	R	R	R	R	.	.	T	T*	SEER/CoC	
1292	RX Summ--Scope Reg LN Sur	R	R	R	R	R	.	.	T	T*	SEER/CoC	
1294	RX Summ--Surg Oth Reg/Dis	R	R	R	R	R	.	.	T	T*	SEER/CoC	
1296	RX Summ--Reg LN Examined	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER/CoC	Revised
1300	Reserved 07	.	.	.	.	.	.	.	.	.
1310	RX Summ--Surgical Approach	.	RH	RH	.	.	.	.	.	.	CoC	
1320	RX Summ--Surgical Margins	.	R	R	.	.	.	.	.	.	CoC	
1330	RX Summ--Reconstruct 1st	.	RH	RH	RH	RH	.	.	.	.	SEER	
1340	Reason for No Surgery	R	R	R	R	R	.	.	T	T*	SEER/CoC	
1350	RX Summ--DX/Stg Proc	.	R	R	.	.	.	.	.	.	CoC	
1360	RX Summ--Radiation	D	.	.	R	R	.	.	TH*	TH*	SEER	
1370	RX Summ--Rad to CNS	.	.	.	R	R	.	.	.	.	SEER/CoC	
1380	RX Summ--Surg/Rad Seq	R	R	R	R	R	.	.	T	T*	SEER/CoC	
1390	RX Summ--Chemo	R	R	R	R	R	.	.	T*	T*	SEER/CoC	
1400	RX Summ--Hormone	R	R	R	R	R	.	.	T*	T*	SEER/CoC	
1410	RX Summ--BRM	R	R	R	R	R	.	.	T*	T*	SEER/CoC	

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
1420	RX Summ--Other	R	R	R	R	R	.	.	T*	T*	SEER/CoC	
1430	Reason for No Radiation	.	R	R	.	.	.	.	.	.	CoC	
1440	Reason for No Chemo	.	.	.	.	.	.	.	.	.		Retired
1450	Reason for No Hormone	.	.	.	.	.	.	.	.	.		Retired
1460	RX Coding System--Current	R	R	R	.	RH	.	.	T*	T*	NAACCR	
1470	Protocol Eligibility Stat	.	.	.	.	.	.	.	.	.		Retired
1480	Protocol Participation	.	.	.	.	.	.	.	.	.		Retired
1490	Referral to Support Serv	.	.	.	.	.	.	.	.	.		Retired
1500	First Course Calc Method	R	.	.	.	.	.	.	.	.	NAACCR	
1510	Rad--Regional Dose: CGY	.	R	R	.	.	.	.	T	.	CoC	
1520	Rad--No of Treatment Vol	.	R	R	.	.	.	.	T	.	CoC	
1530	Rad--Elapsed RX Days	.	.	.	.	.	.	.	.	.		Retired
1540	Rad--Treatment Volume	.	R	R	.	.	.	.	T	.	CoC	
1550	Rad--Location of RX	.	R	R	.	.	.	.	T	.	CoC	
1560	Rad--Intent of Treatment	.	.	.	.	.	.	.	.	.		Retired
1570	Rad--Regional RX Modality	R	R	R	RC	.	.	.	T	T*	CoC	
1580	Rad--RX Completion Status	.	.	.	.	.	.	.	.	.		Retired
1590	Rad--Local Control Status	.	.	.	.	.	.	.	.	.		Retired
1600	Chemotherapy Field 1	.	.	.	.	.	.	.	.	.		Retired
1610	Chemotherapy Field 2	.	.	.	.	.	.	.	.	.		Retired
1620	Chemotherapy Field 3	.	.	.	.	.	.	.	.	.		Retired
1630	Chemotherapy Field 4	.	.	.	.	.	.	.	.	.		Retired
1639	RX Summ--Systemic/Sur Seq	R	R	R	R	R	.	.	T	T	CoC	
1640	RX Summ--Surgery Type	.	.	.	RH	RH	.	.	TH*	TH*	SEER	
1642	RX Summ--Screen/BX Proc1	.	.	.	.	.	.	.	.	.		Retired
1643	RX Summ--Screen/BX Proc2	.	.	.	.	.	.	.	.	.		Retired
1644	RX Summ--Screen/BX Proc3	.	.	.	.	.	.	.	.	.		Retired
1645	RX Summ--Screen/BX Proc4	.	.	.	.	.	.	.	.	.		Retired
1646	RX Summ--Surg Site 98-02	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER/CoC	
1647	RX Summ--Scope Reg 98-02	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER/CoC	

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		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
1648	RX Summ--Surg Oth 98-02	.	RH	RH	RH	RH	.	.	TH*	TH*	SEER/CoC	
1650	Reserved 08	.	.	.	.	.	.	.	.	.
1660	Subsq RX 2nd Course Date	.	.	.	.	.	.	.	.	.	CoC	
1661	Subsq RX 2ndCrS Date Flag	.	.	.	.	.	.	.	.	.	NAACCR	New
1670	Subsq RX 2nd Course Codes	.	.	.	.	.	.	.	.	.
1671	Subsq RX 2nd Course Surg	.	.	.	.	.	.	.	.	.	CoC	
1672	Subsq RX 2nd Course Rad	.	.	.	.	.	.	.	.	.	CoC	
1673	Subsq RX 2nd Course Chemo	.	.	.	.	.	.	.	.	.	CoC	
1674	Subsq RX 2nd Course Horm	.	.	.	.	.	.	.	.	.	CoC	
1675	Subsq RX 2nd Course BRM	.	.	.	.	.	.	.	.	.	CoC	
1676	Subsq RX 2nd Course Oth	.	.	.	.	.	.	.	.	.	CoC	
1677	Subsq RX 2nd--Scope LN SU	.	.	.	.	.	.	.	.	.	CoC	
1678	Subsq RX 2nd--Surg Oth	.	.	.	.	.	.	.	.	.	CoC	
1679	Subsq RX 2nd--Reg LN Rem	.	.	.	.	.	.	.	.	.	CoC	
1680	Subsq RX 3rd Course Date	.	.	.	.	.	.	.	.	.	CoC	
1681	Subsq RX 3rdCrS Date Flag	.	.	.	.	.	.	.	.	.	NAACCR	New
1690	Subsq RX 3rd Course Codes	.	.	.	.	.	.	.	.	.
1691	Subsq RX 3rd Course Surg	.	.	.	.	.	.	.	.	.	CoC	
1692	Subsq RX 3rd Course Rad	.	.	.	.	.	.	.	.	.	CoC	
1693	Subsq RX 3rd Course Chemo	.	.	.	.	.	.	.	.	.	CoC	
1694	Subsq RX 3rd Course Horm	.	.	.	.	.	.	.	.	.	CoC	
1695	Subsq RX 3rd Course BRM	.	.	.	.	.	.	.	.	.	CoC	
1696	Subsq RX 3rd Course Oth	.	.	.	.	.	.	.	.	.	CoC	
1697	Subsq RX 3rd--Scope LN Su	.	.	.	.	.	.	.	.	.	CoC	
1698	Subsq RX 3rd--Surg Oth	.	.	.	.	.	.	.	.	.	CoC	
1699	Subsq RX 3rd--Reg LN Rem	.	.	.	.	.	.	.	.	.	CoC	
1700	Subsq RX 4th Course Date	.	.	.	.	.	.	.	.	.	CoC	
1701	Subsq RX 4thCrS Date Flag	NAACCR	New
1710	Subsq RX 4th Course Codes		
1711	Subsq RX 4th Course Surg	CoC	

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
1712	Subsq RX 4th Course Rad	.	.	.	.	.	.	.	.	.	CoC	
1713	Subsq RX 4th Course Chemo	.	.	.	.	.	.	.	.	.	CoC	
1714	Subsq RX 4th Course Horm	.	.	.	.	.	.	.	.	.	CoC	
1715	Subsq RX 4th Course BRM	.	.	.	.	.	.	.	.	.	CoC	
1716	Subsq RX 4th Course Oth	.	.	.	.	.	.	.	.	.	CoC	
1717	Subsq RX 4th--Scope LN Su	.	.	.	.	.	.	.	.	.	CoC	
1718	Subsq RX 4th--Surg Oth	.	.	.	.	.	.	.	.	.	CoC	
1719	Subsq RX 4th--Reg LN Rem	.	.	.	.	.	.	.	.	.	CoC	
1720	Subsq RX 5th Course Date	.	.	.	.	.	.	.	.	.		Retired
1730	Subsq RX 5th Course Codes	.	.	.	.	.	.	.	.	.		Retired
1731	Subsq RX 5th Course Surg	.	.	.	.	.	.	.	.	.		Retired
1732	Subsq RX 5th Course Rad	.	.	.	.	.	.	.	.	.		Retired
1733	Subsq RX 5th Course Chemo	.	.	.	.	.	.	.	.	.		Retired
1734	Subsq RX 5th Course Horm	.	.	.	.	.	.	.	.	.		Retired
1735	Subsq RX 5th Course BRM	.	.	.	.	.	.	.	.	.		Retired
1736	Subsq RX 5th Course Oth	.	.	.	.	.	.	.	.	.		Retired
1737	Subsq RX 5th--Scope LN Su	.	.	.	.	.	.	.	.	.		Retired
1738	Subsq RX 5th--Surg Oth	.	.	.	.	.	.	.	.	.		Retired
1739	Subsq RX 5th--Reg LN Rem	.	.	.	.	.	.	.	.	.		Retired
1740	Reserved 09	.	.	.	.	.	.	.	.	.
1741	Subsq RX--Reconstruct Del	.	.	.	.	.	.	.	.	.	CoC	
1750	Date of Last Contact	R	R	R	R	R	.	.	T	T	SEER/CoC	
1751	Date of Last Contact Flag	R	R	R	R	R	.	.	T	T	NAACCR	New
1755	Date of Death--Canada	.	.	.	.	.	R*	R*	.	.	CCCR	Revised
1756	Date of Death--CanadaFlag	.	.	.	.	.	.	.	.	.	NAACCR	New
1760	Vital Status	R	R	R	R	R	D	D	T	T	SEER/CoC	Revised
1770	Cancer Status	.	R	R	.	.	.	.	.	.	CoC	
1780	Quality of Survival	CoC	
1790	Follow-Up Source	R*	R	T*	.	CoC	
1791	Follow-up Source Central	R	T*	NAACCR	

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
1800	Next Follow-Up Source	.	R	.	.	.	.	.	.	.	CoC	
1810	Addr Current--City	.	R	.	R	.	.	.	T*	.	CoC	
1820	Addr Current--State	.	R	.	R	.	.	.	T*	.	CoC	
1830	Addr Current--Postal Code	.	R	.	R	.	.	.	T*	.	CoC	
1835	Reserved 10	.	.	.	.	.	.	.	.	.
1840	County--Current	.	.	.	.	.	.	.	.	.	NAACCR	
1842	Follow-Up Contact--City	.	.	.	R	.	.	.	T*	.	SEER	
1844	Follow-Up Contact--State	.	.	.	R	.	.	.	T*	.	SEER	
1846	Follow-Up Contact--Postal	.	.	.	R	.	.	.	T*	.	SEER	
1850	Unusual Follow-Up Method	.	.	.	.	.	.	.	.	.	CoC	
1860	Recurrence Date--1st	.	R	R	RC	.	.	.	T*	.	CoC	
1861	Recurrence Date--1st Flag	.	R	R	RC	.	.	.	T*	.	NAACCR	New
1870	Recurrence Distant Sites	.	.	.	.	.	.	.	.	.		Retired
1871	Recurrence Distant Site 1	.	.	.	.	.	.	.	.	.		Retired
1872	Recurrence Distant Site 2	.	.	.	.	.	.	.	.	.		Retired
1873	Recurrence Distant Site 3	.	.	.	.	.	.	.	.	.		Retired
1880	Recurrence Type--1st	.	R	R	RC	.	.	.	T*	.	CoC	
1890	Recurrence Type--1st--Oth	.	.	.	.	.	.	.	.	.		Retired
1900	Reserved 11	.	.	.	.	.	.	.	.	.
1910	Cause of Death	R	.	.	R	R	R*	R*	.	T	SEER	Revised
1920	ICD Revision Number	R	.	.	R	R	.	.	.	T	SEER	
1930	Autopsy	.	.	.	.	.	R*	R*	.	.	NAACCR	Revised
1940	Place of Death	R	.	.	.	.	R*	R*	T*	T*	NPCR	Revised
1960	Site (73-91) ICD-O-1	.	.	.	RH	RH	.	.	.	.	SEER	
1970	Morph (73-91) ICD-O-1	.	.	.	.	.	.	.	.	.
1971	Histology (73-91) ICD-O-1	.	.	.	RH	RH	.	.	.	.	SEER	
1972	Behavior (73-91) ICD-O-1	.	.	.	RH	RH	.	.	.	.	SEER	
1973	Grade (73-91) ICD-O-1	.	.	.	RH	RH	.	.	.	.	SEER	
1980	ICD-O-2 Conversion Flag	.	RH	RH	R	R	.	.	T*	T*	SEER	Revised
1981	Over-ride SS/NodesPos	T*	T*	NAACCR	

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		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp->Central	Central->Central		
1982	Over-ride SS/TNM-N	.	.	.	.	.	.	.	T*	T*	NAACCR	
1983	Over-ride SS/TNM-M	.	.	.	.	.	.	.	T*	T*	NAACCR	
1984	Over-ride SS/DisMet1	.	.	.	.	.	.	.	.	.		Retired
1985	Over-ride Acscn/Class/Seq	.	R	R	.	.	.	.	T*	T*	CoC	
1986	Over-ride HospSeq/DxConf	.	R	R	.	.	.	.	T*	T*	CoC	
1987	Over-ride CoC-Site/Type	.	R	R	.	.	.	.	T*	T*	CoC	
1988	Over-ride HospSeq/Site	.	R	R	.	.	.	.	T*	T*	CoC	
1989	Over-ride Site/TNM-StgGrp	.	R	R	.	.	.	.	T*	T*	CoC	
1990	Over-ride Age/Site/Morph	R	R	R	R	R	.	.	T*	T*	SEER	
2000	Over-ride SeqNo/DxConf	R	.	.	R	R	.	.	T*	T*	SEER	
2010	Over-ride Site/Lat/SeqNo	R	.	.	R	R	.	.	T*	T*	SEER	
2020	Over-ride Surg/DxConf	R	R	R	R	R	.	.	T*	T*	SEER	
2030	Over-ride Site/Type	R	R	R	R	R	.	.	T*	T*	SEER	
2040	Over-ride Histology	R	R	R	R	R	.	.	T*	T*	SEER	
2050	Over-ride Report Source	R	.	.	R	R	.	.	T*	T*	SEER	
2060	Over-ride Ill-define Site	R	.	.	R	R	.	.	T*	T*	SEER	
2070	Over-ride Leuk, Lymphoma	R	R	R	R	R	.	.	T*	T*	SEER	
2071	Over-ride Site/Behavior	R	R	R	R	R	.	.	T*	T*	SEER	
2072	Over-ride Site/EOD/DX Dt	.	.	.	R	R	.	.	T*	T*	SEER	
2073	Over-ride Site/Lat/EOD	.	.	.	R	R	.	.	T*	T*	SEER	
2074	Over-ride Site/Lat/Morph	R	R	R	R	R	.	.	T*	T*	SEER	
2080	Reserved 13	.	.	.	.	.	.	.	.	.
2081	CRC CHECKSUM	.	.	.	S	S	.	.	.	.	NAACCR	
2085	Date Case Initiated	.	.	.	.	.	.	.	.	.	NAACCR	New
2090	Date Case Completed	.	.	.	.	.	.	.	.	.	NAACCR	Revised
2092	Date Case Completed--CoC	.	R	R	.	.	.	.	.	.	CoC	New
2100	Date Case Last Changed	.	.	.	.	.	.	.	.	.	NAACCR	
2110	Date Case Report Exported	R	.	.	.	.	.	.	T	.	NPCR	
2111	Date Case Report Received	R	NPCR	
2112	Date Case Report Loaded	R	NPCR	

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		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
2113	Date Tumor Record Availbl	R	.	.	.	.	.	.	.	.	NPCR	
2114	Future Use Timeliness 1	.	.	.	.	.	.	.	.	.		Retired
2115	Future Use Timeliness 2	.	.	.	.	.	.	.	.	.		Retired
2116	ICD-O-3 Conversion Flag	R	.	.	R	R	.	.	T	T	SEER/CoC	Revised
2120	SEER Coding Sys--Current	.	.	.	.	R	.	.	T*	T*	NAACCR	
2130	SEER Coding Sys--Original	.	.	.	.	R	.	.	T*	T*	NAACCR	
2140	CoC Coding Sys--Current	.	R	R	.	.	.	.	T*	T*	CoC	
2150	CoC Coding Sys--Original	.	R	R	.	.	.	.	T*	T*	CoC	
2160	Subsq Report for Primary	.	.	.	.	.	.	.	.	.		Retired
2170	Vendor Name	.	R	R	.	.	.	.	T	T	NAACCR	
2180	SEER Type of Follow-Up	.	.	.	R	R	.	.	.	.	SEER	
2190	SEER Record Number	.	.	.	.	R	.	.	.	.	SEER	
2200	Diagnostic Proc 73-87	.	.	.	RH	RH	.	.	.	.	SEER	
2210	Reserved 14	.	.	.	.	.	.	.	.	.
2220	State/Requestor Items	.	.	.	.	.	.	.	.	.	Varies	
2230	Name--Last	R	R	.	R	.	R*	R*	T	T	CoC	Revised
2240	Name--First	R	R	.	R	.	R*	R*	T	T	CoC	Revised
2250	Name--Middle	R	R	.	R	.	R*	R*	T*	T*	CoC	Revised
2260	Name--Prefix	.	.	.	.	.	.	.	.	.	CoC	
2270	Name--Suffix	.	.	.	R	.	.	.	T*	T*	CoC	
2280	Name--Alias	R	.	.	R	.	.	.	T*	T*	CoC	
2290	Name--Spouse/Parent	.	.	.	.	.	.	.	.	.	NAACCR	
2300	Medical Record Number	R	R	.	R	.	.	.	T	.	CoC	
2310	Military Record No Suffix	.	R	.	.	.	.	.	.	.	CoC	
2320	Social Security Number	R	R	.	R	.	.	.	T	T	CoC	
2330	Addr at DX--No & Street	R	R	.	R	.	.	.	T	T	CoC	
2335	Addr at DX--Supplementl	R	R*	.	R	.	.	.	T*	T*	CoC	Revised
2350	Addr Current--No & Street	.	R	.	R	.	.	.	T*	T*	CoC	
2352	Latitude	R*	.	.	S	NAACCR	
2354	Longitude	R*	.	.	S	NAACCR	

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		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
2355	Addr Current--Supplementl	.	R*	.	R	.	.	.	T*	.	CoC	Revised
2360	Telephone	.	R	.	R	.	.	.	T*	T*	CoC	
2370	DC State	.	.	.	.	.	.	.	.	.		Retired
2380	DC State File Number	R	.	.	R*	.	.	.	.	T*	State	
2390	Name--Maiden	R	.	.	R	.	.	.	T*	T*	CoC	
2392	Follow-Up Contact--No&St	.	.	.	R	.	.	.	.	.	SEER	
2393	Follow-Up Contact--Suppl	.	.	.	R	.	.	.	.	.	SEER	
2394	Follow-Up Contact--Name	.	.	.	R	.	.	.	.	.	SEER	
2410	Institution Referred From	.	R	.	.	.	.	.	T*	.	CoC	
2415	NPI--Inst Referred From	.	R	.	.	.	.	.	.	.	CMS	
2420	Institution Referred To	.	R	.	.	.	.	.	T*	.	CoC	
2425	NPI--Inst Referred To	.	R	.	.	.	.	.	.	.	CMS	
2430	Last Follow-Up Hospital	.	.	.	.	.	.	.	.	.		Retired
2440	Following Registry	.	.	.	R	.	.	.	.	.	CoC	Revised
2445	NPI--Following Registry	.	.	.	R*	.	.	.	.	.	CMS	
2460	Physician--Managing	.	.	.	.	.	.	.	.	.	NAACCR	
2465	NPI--Physician--Managing	.	R	.	.	.	.	.	.	.	CMS	Revised
2470	Physician--Follow-Up	.	R	.	R	.	.	.	T*	T*	CoC	
2475	NPI--Physician--Follow-Up	.	R	.	R*	.	.	.	.	.	CMS	Revised
2480	Physician--Primary Surg	.	R	.	.	.	.	.	.	.	CoC	
2485	NPI--Physician--Primary Surg	.	R	R	.	.	.	.	.	.	CMS	
2490	Physician 3	.	R	.	.	.	.	.	.	.	CoC	
2495	NPI--Physician 3	.	R	R	.	.	.	.	.	.	CMS	
2500	Physician 4	.	R	.	.	.	.	.	.	.	CoC	
2505	NPI--Physician 4	.	R	R	.	.	.	.	.	.	CMS	
2510	Reserved 12	.	.	.	.	.	.	.	.	.
2520	Text--DX Proc--PE	R^	.	.	R	.	.	.	T*	T*	NPCR	
2530	Text--DX Proc--X-ray/Scan	R^	.	.	R	.	.	.	T*	T*	NPCR	
2540	Text--DX Proc--Scopes	R^	.	.	R	.	.	.	T*	T*	NPCR	
2550	Text--DX Proc--Lab Tests	R^	.	.	R	.	.	.	T*	T*	NPCR	

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
2560	Text--DX Proc--Op	R^	.	.	R	.	.	.	T*	T*	NPCR	
2570	Text--DX Proc--Path	R^	.	.	R	.	.	.	T*	T*	NPCR	
2580	Text--Primary Site Title	R^	.	.	R	.	.	.	T*	T*	NPCR	
2590	Text--Histology Title	R^	.	.	R	.	.	.	T*	T*	NPCR	
2600	Text--Staging	R^	.	.	R	.	.	.	T*	T*	NPCR	
2610	RX Text--Surgery	R^	.	.	R	.	.	.	T*	T*	NPCR	
2620	RX Text--Radiation (Beam)	R^	.	.	R	.	.	.	T*	T*	NPCR	
2630	RX Text--Radiation Other	R^	.	.	R	.	.	.	T*	T*	NPCR	
2640	RX Text--Chemo	R^	.	.	R	.	.	.	T*	T*	NPCR	
2650	RX Text--Hormone	R^	.	.	R	.	.	.	T*	T*	NPCR	
2660	RX Text--BRM	R^	.	.	R	.	.	.	T*	T*	NPCR	
2670	RX Text--Other	R^	.	.	R	.	.	.	T*	T*	NPCR	
2680	Text--Remarks	.	.	.	R	.	.	.	T*	T*	NPCR	
2690	Text--Place of Diagnosis	.	.	.	.	.	.	.	.	.	NPCR	
2730	CS PreRx Tumor Size	.	.	.	.	.	.	.	T*	T*	AJCC	New
2735	CS PreRx Extension	.	.	.	.	.	.	.	T*	T*	AJCC	New
2740	CS PreRx Tum Sz/Ext Eval	.	.	.	.	.	.	.	T*	T*	AJCC	New
2750	CS PreRx Lymph Nodes	.	.	.	.	.	.	.	T*	T*	AJCC	New
2755	CS PreRx Reg Nodes Eval	.	.	.	.	.	.	.	T*	T*	AJCC	New
2760	CS PreRx Mets at DX	.	.	.	.	.	.	.	T*	T*	AJCC	New
2765	CS PreRx Mets Eval	.	.	.	.	.	.	.	T*	T*	AJCC	New
2770	CS PostRx Tumor Size	.	.	.	.	.	.	.	T*	T*	AJCC	New
2775	CS PostRx Extension	.	.	.	.	.	.	.	T*	T*	AJCC	New
2780	CS PostRx Lymph Nodes	.	.	.	.	.	.	.	T*	T*	AJCC	New
2785	CS PostRx Mets at DX	.	.	.	.	.	.	.	T*	T*	AJCC	New
2800	CS Tumor Size	R	R	R	R	R	R*	R*	T	T	AJCC	
2810	CS Extension	R	R	R	R	R	R*	R*	T	T	AJCC	
2820	CS Tumor Size/Ext Eval	R	R	R	R	R	R*	R*	T*	T*	AJCC	
2830	CS Lymph Nodes	R	R	R	R	R	R*	R*	T	T	AJCC	
2840	CS Lymph Nodes Eval	.	R	R	R	R	R*	R*	T*	T*	AJCC	

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
2850	CS Mets at DX	R	R	R	R	R	R*	R*	T	T	AJCC	
2851	CS Mets at Dx-Bone	.	R	R	R	R	.	.	T*	T*	AJCC	New
2852	CS Mets at Dx-Brain	.	R	R	R	R	.	.	T*	T*	AJCC	New
2853	CS Mets at Dx-Liver	.	R	R	R	R	.	.	T*	T*	AJCC	New
2854	CS Mets at Dx-Lung	.	R	R	R	R	.	.	T*	T*	AJCC	New
2860	CS Mets Eval	.	R	R	R	R	R*	R*	T*	T*	AJCC	
2861	CS Site-Specific Factor 7	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2862	CS Site-Specific Factor 8	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2863	CS Site-Specific Factor 9	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2864	CS Site-Specific Factor10	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2865	CS Site-Specific Factor11	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2866	CS Site-Specific Factor12	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2867	CS Site-Specific Factor13	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2868	CS Site-Specific Factor14	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2869	CS Site-Specific Factor15	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2870	CS Site-Specific Factor16	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2871	CS Site-Specific Factor17	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2872	CS Site-Specific Factor18	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2873	CS Site-Specific Factor19	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2874	CS Site-Specific Factor20	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2875	CS Site-Specific Factor21	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2876	CS Site-Specific Factor22	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2877	CS Site-Specific Factor23	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2878	CS Site-Specific Factor24	TBD	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2879	CS Site-Specific Factor25	RS	RS	RS	RS	RS	.	.	T*	T*	AJCC	New
2880	CS Site-Specific Factor 1	RS	RS	RS	RS	RS	R*	R*	T*	T*	AJCC	Revised
2890	CS Site-Specific Factor 2	RS	RS	RS	RS	RS	R*	R*	T*	T*	AJCC	Revised
2900	CS Site-Specific Factor 3	RS	RS	RS	RS	RS	R*	R*	T*	T*	AJCC	Revised
2910	CS Site-Specific Factor 4	TBD	RS	RS	RS	RS	R*	R*	T*	T*	AJCC	Revised
2920	CS Site-Specific Factor 5	TBD	RS	RS	RS	RS	R*	R*	T*	T*	AJCC	Revised

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
2930	CS Site-Specific Factor 6	TBD	RS	RS	RS	RS	R*	R*	T*	T*	AJCC	Revised
2935	CS Version Input Original	R	R	R	D	R	R*	R*	.	.	AJCC	Revised
2936	CS Version Derived	R	R	R	D	R	D	D	.	.	AJCC	Revised
2937	CS Version Input Current	R	R	R	D	R	.	.	T*	T*	AJCC	New
2940	Derived AJCC-6 T	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
2950	Derived AJCC-6 T Descript	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
2960	Derived AJCC-6 N	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
2970	Derived AJCC-6 N Descript	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
2980	Derived AJCC-6 M	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
2990	Derived AJCC-6 M Descript	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
3000	Derived AJCC-6 Stage Grp	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
3010	Derived SS1977	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
3020	Derived SS2000	D	D	R	D	R	D	D	T*	T*	AJCC	Revised
3030	Derived AJCC--Flag	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
3040	Derived SS1977--Flag	.	D	R	D	R	D	D	T*	T*	AJCC	Revised
3050	Derived SS2000--Flag	D	D	R	D	R	D	D	T*	T*	AJCC	Revised
3100	Archive FIN	.	R	R	.	.	.	.	.	.	CoC	
3105	NPI--Archive FIN	.	R	R	.	.	.	.	.	.	CMS	
3110	Comorbid/Complication 1	.	R	R	.	.	.	.	T*	.	CoC	
3120	Comorbid/Complication 2	.	R	R	.	.	.	.	T*	.	CoC	
3130	Comorbid/Complication 3	.	R	R	.	.	.	.	T*	.	CoC	
3140	Comorbid/Complication 4	.	R	R	.	.	.	.	T*	.	CoC	
3150	Comorbid/Complication 5	.	R	R	.	.	.	.	T*	.	CoC	
3160	Comorbid/Complication 6	.	R	R	.	.	.	.	T*	.	CoC	
3161	Comorbid/Complication 7	.	R	R	.	.	.	.	T*	.	CoC	
3162	Comorbid/Complication 8	.	R	R	.	.	.	.	T*	.	CoC	
3163	Comorbid/Complication 9	.	R	R	.	.	.	.	T*	.	CoC	
3164	Comorbid/Complication 10	.	R	R	T*	.	CoC	
3165	ICD Revision Comorbid	.	R	R	T*	.	CoC	
3170	RX Date--Most Defin Surg	.	R	R	T*	.	CoC	

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
3171	RX Date Mst Defn Srg Flag	.	R	R	.	.	.	.	T*	.	NAACCR	New
3180	RX Date--Surgical Disch	.	R	R	.	.	.	.	.	.	CoC	
3181	RX Date Surg Disch Flag	.	R	R	.	.	.	.	.	.	NAACCR	New
3190	Readm Same Hosp 30 Days	.	R	R	.	.	.	.	.	.	CoC	
3200	Rad--Boost RX Modality	.	R	R	RC	.	.	.	T*	T*	CoC	
3210	Rad--Boost Dose cGy	.	R	R	.	.	.	.	.	.	CoC	
3220	RX Date--Radiation Ended	.	R	R	.	.	.	.	.	.	CoC	
3221	RX Date Rad Ended Flag	.	R	R	.	.	.	.	.	.	NAACCR	New
3230	RX Date--Systemic	.	R	R	S	.	.	.	T*	T*	CoC	
3231	RX Date Systemic Flag	.	R	R	S	.	.	.	T*	T*	NAACCR	New
3250	RX Summ--Transplnt/Endocr	R	R	R	R	R	.	.	T*	T*	CoC	
3260	Pain Assessment	.	.	.	.	.	.	.	.	.		Retired
3270	RX Summ--Palliative Proc	.	R	R	.	.	.	.	T*	.	CoC	
3280	RX Hosp--Palliative Proc	.	R	R	.	.	.	.	T*	.	CoC	
3300	RuralUrban Continuum 1993	D	.	.	.	.	.	.	.	.	NAACCR	
3310	RuralUrban Continuum 2003	D	.	.	.	.	.	.	.	.	NAACCR	
3400	Derived AJCC-7 T	.	D	R	D	R	D	D	T*	T*	AJCC	New
3402	Derived AJCC-7 T Descript	.	D	R	D	R	D	D	T*	T*	AJCC	New
3410	Derived AJCC-7 N	.	D	R	D	R	D	D	T*	T*	AJCC	New
3412	Derived AJCC-7 N Descript	.	D	R	D	R	D	D	T*	T*	AJCC	New
3420	Derived AJCC-7 M	.	D	R	D	R	D	D	T*	T*	AJCC	New
3422	Derived AJCC-7 M Descript	.	D	R	D	R	D	D	T*	T*	AJCC	New
3430	Derived AJCC-7 Stage Grp	.	D	R	D	R	D	D	T*	T*	AJCC	New
3440	Derived PreRx-7 T	.	.	.	.	.	D	D	T*	T*	AJCC	New
3442	Derived PreRx-7 T Descrip	.	.	.	.	.	D	D	T*	T*	AJCC	New
3450	Derived PreRx-7 N	.	.	.	.	.	D	D	T*	T*	AJCC	New
3452	Derived PreRx-7 N Descrip	.	.	.	.	.	D	D	T*	T*	AJCC	New
3460	Derived PreRx-7 M	.	.	.	.	.	D	D	T*	T*	AJCC	New
3462	Derived PreRx-7 M Descrip	D	D	T*	T*	AJCC	New
3470	Derived PreRx-7 Stage Grp	D	D	T*	T*	AJCC	New

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
3480	Derived PostRx-7 T	.	.	.	.	.	D	D	T*	T*	AJCC	New
3482	Derived PostRx-7 N	.	.	.	.	.	D	D	T*	T*	AJCC	New
3490	Derived PostRx-7 M	.	.	.	.	.	D	D	T*	T*	AJCC	New
3492	Derived PostRx-7 Stge Grp	.	.	.	.	.	D	D	T*	T*	AJCC	New
3600	Derived Neoadjuv Rx Flag	.	.	.	.	.	D	D	T*	T*	AJCC	New
3700	SEER Site-Specific Fact 1	.	.	.	.	.	.	.	.	.	SEER	New
3702	SEER Site-Specific Fact 2	.	.	.	.	.	.	.	.	.	SEER/CoC	New
3704	SEER Site-Specific Fact 3	.	.	.	.	.	.	.	.	.	SEER/CoC	New
3706	SEER Site-Specific Fact 4	.	.	.	.	.	.	.	.	.	SEER/CoC	New
3708	SEER Site-Specific Fact 5	.	.	.	.	.	.	.	.	.	SEER/CoC	New
3710	SEER Site-Specific Fact 6	.	.	.	.	.	.	.	.	.	SEER/CoC	New
7010	Path Reporting Fac ID 1	.	.	.	.	.	.	.	.	.	HL7	New
7011	Path Reporting Fac ID 2	.	.	.	.	.	.	.	.	.	HL7	New
7012	Path Reporting Fac ID 3	.	.	.	.	.	.	.	.	.	HL7	New
7013	Path Reporting Fac ID 4	.	.	.	.	.	.	.	.	.	HL7	New
7014	Path Reporting Fac ID 5	.	.	.	.	.	.	.	.	.	HL7	New
7090	Path Report Number 1	.	.	.	.	.	.	.	.	.	HL7	New
7091	Path Report Number 2	.	.	.	.	.	.	.	.	.	HL7	New
7092	Path Report Number 3	.	.	.	.	.	.	.	.	.	HL7	New
7093	Path Report Number 4	.	.	.	.	.	.	.	.	.	HL7	New
7094	Path Report Number 5	.	.	.	.	.	.	.	.	.	HL7	New
7100	Path Order Phys Lic No 1	.	.	.	.	.	.	.	.	.	HL7	New
7101	Path Order Phys Lic No 2	.	.	.	.	.	.	.	.	.	HL7	New
7102	Path Order Phys Lic No 3	.	.	.	.	.	.	.	.	.	HL7	New
7103	Path Order Phys Lic No 4	.	.	.	.	.	.	.	.	.	HL7	New
7104	Path Order Phys Lic No 5	.	.	.	.	.	.	.	.	.	HL7	New
7190	Path Ordering Fac No 1	.	.	.	.	.	.	.	.	.	HL7	New
7191	Path Ordering Fac No 2	HL7	New
7192	Path Ordering Fac No 3	HL7	New
7193	Path Ordering Fac No 4	HL7	New

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Item	Item Name	NPCR	CoC		SEER		CCCR		Exchange Elements		Source of Standard	Note
		Collect	Collect	Transmit	Collect	Transmit	Collect	Transmit	Hosp-> Central	Central-> Central		
7194	Path Ordering Fac No 5	.	.	.	.	.	.	.	.	.	HL7	New
7320	Path Date Spec Collect 1	.	.	.	.	.	.	.	.	.	HL7	New
7321	Path Date Spec Collect 2	.	.	.	.	.	.	.	.	.	HL7	New
7322	Path Date Spec Collect 3	.	.	.	.	.	.	.	.	.	HL7	New
7323	Path Date Spec Collect 4	.	.	.	.	.	.	.	.	.	HL7	New
7324	Path Date Spec Collect 5	.	.	.	.	.	.	.	.	.	HL7	New
7480	Path Report Type 1	.	.	.	.	.	.	.	.	.	HL7	New
7481	Path Report Type 2	.	.	.	.	.	.	.	.	.	HL7	New
7482	Path Report Type 3	HL7	New
7483	Path Report Type 4	HL7	New
7484	Path Report Type 5	HL7	New

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APPENDIX D: HL7 FLAVORS OF NULL TABLE

Definition: If a value is an exceptional value (NULL-value), this specifies in what way and why proper information is missing.

NAACCR Code	HL7 Code	Name	Definition
10	NI	no information	No information whatsoever can be inferred from this exceptional value. This is the most general exceptional value. It is also the default exceptional value. It is unknown whether this event occurred (e.g., radiation treatment).
11	NA	not applicable	No proper value is applicable in this context (e.g., last menstrual period for a male).
12	UNK	unknown	A proper value is applicable but not known. This event occurred, but the date is unknown (e.g., birth date).
13	NASK	not asked	This information has not been sought (i.e., patient was not asked).
14	ASKU	asked but unknown	Information was sought but not found (i.e., patient was asked but did not know).
15	NAV	temporarily unavailable	Information is not available at this time, but it is expected that it will be available later.
16	OTH*	other*	The actual value is not an item in the value domain of a variable (e.g., concept not provided by required code system).
17	PINF	positive infinity	Positive infinity of numbers.
18	NINF	negative infinity	Negative infinity of numbers.
19	MSK	masked	Information on this item is available, but it has not been provided by the sender due to security, privacy, or other reasons. An alternate mechanism for gaining access to this information may be available. Note: Using this null flavor does provide information that may be a breach of confidentiality. Its primary purpose is for those circumstances where it is necessary to inform the receiver that the information does exist.
20	NP	not present	Value is not present in a message. This is only defined in messages, never in application data! All values not present in the message must be replaced by the applicable default or No-Information (NI) as the default of all defaults.

The null flavors are a general domain extension of all normal data types. Note the distinction between value domain of any data type and the vocabulary domain of coded data types. A vocabulary domain is a value domain for coded values, but not all value domains are vocabulary domains.

* The null flavor. Other is used whenever the actual value is not in the required value domain. This may be, for example, when the value exceeds some constraints that are defined too restrictively (e.g., age < 100 years).

Note: Null flavors are applicable to any property of a data value or a higher-level object attribute. Where the difference of null flavors is not significant, ITs are not required to represent them. If nothing else is noted in this specification, ITs need not represent general NULL flavors for data-value property.

APPENDIX E: CONVERSION SPECIFICATIONS FOR DATE ITEMS

Overview of Conversion Specifications for the Transmission of Date Items

The date transmission conversion rules can be applied whether or not edits have been run prior to conversion. Inter-item date errors that have not been reconciled prior to conversion will be conserved. However, when converting from V11 to V12, invalid V11 dates will be converted to blanks for both the V12 date and the corresponding flag. Similarly, when converting backwards (V12 to V11), invalid V12 dates will be converted to blank V11 dates.

Results of All v11 to v12 date item conversions:

1. If a date item is not transmitted because it is not collected or not intended to be transmitted, both date and corresponding flag items will be blank.
2. Format will be changed from MMDDCCYY to CCYYMMDD.
3. Only actual known portions of the date item will be converted/transmitted (e.g. CCYYMM or CCYY).
4. V11 date values that were 00000000, 88888888, or 99999999 will be converted to blank items, with further information in date flags.
5. The date item will be fixed length and left justified. Any unknown (i.e., '99', '9999') component will be replaced by spaces in the Volume II V12 record layout. The date components in the V12 transmission file are hierarchical. If the year is unknown, the variable will be completely blank. In order to transmit a month, there must be a known year, and in order to transmit a day there must be a known month and a known year.
6. Most V12 dates have a corresponding flag. This flag explains why there is no appropriate value in the corresponding date item.

Rules of thumb for transmitting date items associated with treatment:

When there is no actual known date corresponding to the associated treatment (e.g., V11 value='00000000'), the V12 date will be blank. The value in the associated date flag item can frequently be determined from information in the corresponding treatment item(s).

1. If it is not known whether or not the corresponding event occurred, the value of the date flag should be '10', which means "No information whatsoever can be inferred...It is also the default exceptional value."
2. If it is known that the corresponding event did not occur, the value of the date flag should be '11', which means "No proper value is applicable in this context."
3. If it is known that the corresponding event occurred, but the date was unknown, the most precise value of the date flag would be '12', which means "A proper value is applicable but not known. This event occurred, but the date is unknown (e.g., birth date = 99999999)." Since, prior to Standards, Volume II, Version 12, it was not possible to distinguish between an unknown date and unknown whether or not the event occurred (both were coded as 99999999), the conversion rules in this document replace 99999999 with a flag value of '10'.
4. If it is known that the corresponding treatment was or will be given and the date will be known in the future, the value of the date flag should be '15', which means "Information is not available at this time, but it is expected that it will be available later." The flag '15' does not mean that the date is unknown.

The conversion tables below are ordered based on NAACCR item number.

Date of Birth [240]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Birth Date [240]	Date of Birth [240]	Date of Birth Flag [241]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	12	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Birth [240]	Date of Birth Flag [241]	Birth Date [240]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Any, except blank	99999999	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of Diagnosis [390]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Diagnosis [390]	Date of Diagnosis [390]	Date of Diagnosis Flag [391]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	12	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Diagnosis [390]	Date of Diagnosis Flag [391]	Date of Diagnosis [390]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Any, except blank	99999999	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of Conclusive DX [443]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Conclusive DX [443]	Date of Conclusive DX [443]	Date Conclusive DX Flag [448]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
88888888*	Blank	11	
00000000*	Blank	15	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Conclusive DX [443]	Date Conclusive DX Flag [448]	Date of Conclusive DX [443]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	11*	88888888	
Blank	15*	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

* The v11 definitions of 00000000 and 88888888 for this data item differ from the definitions that these codes are usually associated with for the treatment data items. Consequently, the flag values corresponding to these values are also different.

Code	Meaning	Corresponding Flag
00000000	Accessioned based on ambiguous terminology only (therefore conclusive dx has not yet been made but is expected)	15
88888888	Not applicable, initial diagnosis made by unambiguous terminology	11

Date of Multiple Tumors [445]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Multiple Tumors [445]	Date of Multiple Tumors [445]	Date of Mult Tumors Flag [439]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	12	
88888888*	Blank	11	
00000000*	Blank	15	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Multiple Tumors [445]	Date of Mult Tumors Flag [439]	Date of Multiple Tumors [445]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	11*	88888888	
Blank	15*	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

* The v11 definitions of 00000000 and 88888888 for this data item differ from the definitions that these codes are usually associated with for the treatment data items. Consequently, the flag values corresponding to these values are also different.

Code	Meaning	Corresponding Flag
00000000	Single tumor (i.e., there might be more lesions in the future, but there was one reported)	15
88888888	Information on multiple tumors not collected/not applicable for this site.	11

Date of 1st Contact [580]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of 1st Contact [580]	Date of 1st Contact [580]	Date of 1st Contact Flag [581]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	12	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of 1st Contact [580]	Date of 1st Contact Flag [581]	Date of 1st Contact [580]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Any, except blank	99999999	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of Inpatient Adm [590]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Inpatient Adm [590]	Date of Inpatient Adm [590]	Date of Inpt Adm Flag [591]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Inpatient Adm [590]	Date of Inpt Adm Flag [591]	Date of Inpatient Adm [590]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of Inpatient Disch [600]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Inpatient Disch [600]	Date of Inpatient Disch [600]	Date of Inpt Disch Flag [601]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Inpatient Disch [600]	Date of Inpt Disch Flag [601]	Date of Inpatient Disch [600]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Surgery [1200]

Forward conversion: V11 to V12

V11	V12	V12	Comments
RX Date--Surgery [1200]	RX Date--Surgery [1200]	RX Date--Surgery Flag [1201]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Surgery [1200]	RX Date--Surgery Flag [1201]	RX Date--Surgery [1200]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Radiation [1210]

Forward conversion: V11 to V12

V11	V12	V12	Comments
RX Date--Radiation [1210]	RX Date--Radiation [1210]	RX Date--Radiation Flag [1211]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
88888888	Blank	15	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Radiation [1210]	RX Date--Radiation Flag [1211]	RX Date--Radiation [1210]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	15	88888888	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Chemo [1220]

Forward conversion: V11 to V12

Note: RX Date--Chemo was not supported for diagnosis years 2003-2009. This conversion allows for the possibility of 88888888 as a possible code.

V11	V12	V12	Comments
RX Date--Chemo [1220]	RX Date--Chemo [1220]	RX Date--Chemo Flag [1221]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
88888888	Blank	15	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Chemo [1220]	RX Date--Chemo Flag [1221]	RX Date--Chemo [1220]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	15	88888888	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Hormone [1230]

Forward conversion: V11 to V12

Note: RX Date--Hormone was not supported for diagnosis years 2003-2009. This conversion allows for the possibility of 88888888 as a possible code.

V11	V12	V12	Comments
RX Date--Hormone [1230]	RX Date--Hormone [1230]	RX Date--Hormone Flag [1231]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
88888888	Blank	15	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Hormone [1230]	RX Date--Hormone Flag [1231]	RX Date--Hormone [1230]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	15	88888888	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--BRM [1240]**Forward conversion: V11 to V12**

Note: RX Date--BRM was not supported for diagnosis years 2003-2009. This conversion allows for the possibility of 88888888 as a possible code.

V11	V12	V12	Comments
RX Date--BRM [1240]	RX Date--BRM [1240]	RX Date--BRM Flag [1241]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
88888888	Blank	15	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--BRM [1240]	RX Date--BRM Flag [1241]	RX Date--BRM [1240]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	15	88888888	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Other [1250]

Forward conversion: V11 to V12

V11	V12	V12	Comments
RX Date--Other [1250]	RX Date--Other [1250]	RX Date--Other Flag [1251]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Other [1250]	RX Date--Other Flag [1251]	RX Date--Other [1250]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of Initial Rx--SEER [1260]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Initial Rx--SEER [1260]	Date of Initial Rx--SEER [1260]	Date of Initial Rx Flag [1261]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Initial Rx--SEER [1260]	Date of Initial Rx Flag [1261]	Date of Initial Rx--SEER [1260]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of 1st Crs RX--CoC [1270]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of 1st Crs RX--CoC [1270]	Date of 1st Crs RX--CoC [1270]	Date of 1st Crs Rx Flag [1271]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of 1st Crs RX--CoC [1270]	Date of 1st Crs Rx Flag [1271]	Date of 1st Crs RX--CoC [1270]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Rx Date--Dx/Stg Proc [1280]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Rx Date--Dx/Stg Proc [1280]	Rx Date--Dx/Stg Proc [1280]	Rx Date--Dx/Stg Proc Flag [1281]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Rx Date--Dx/Stg Proc [1280]	Rx Date--Dx/Stg Proc Flag [1281]	Rx Date--Dx/Stg Proc [1280]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Subsq RX 2nd Course Date [1660]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Subsq RX 2nd Course Date [1660]	Subsq RX 2nd Course Date [1660]	Subsq RX 2ndCrS Date Flag [1661]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Subsq RX 2nd Course Date [1660]	Subsq RX 2ndCrS Date Flag [1661]	Subsq RX 2nd Course Date [1660]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Subsq RX 3rd Course Date [1680]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Subsq RX 3rd Course Date [1680]	Subsq RX 3rd Course Date [1680]	Subsq RX 3rdCrS Date Flag [1681]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Subsq RX 3rd Course Date [1680]	Subsq RX 3rdCrS Date Flag [1681]	Subsq RX 3rd Course Date [1680]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Subsq RX 4th Course Date [1700]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Subsq RX 4th Course Date [1700]	Subsq RX 4th Course Date [1700]	Subsq RX 4th Crs Date Flag [1701]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Subsq RX 4th Course Date [1700]	Subsq RX 4th Crs Date Flag [1701]	Subsq RX 4th Course Date [1700]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of Last Contact [1750]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Last Contact [1750]	Date of Last Contact [1750]	Date of Last Contact Flag [1751]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	12	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Last Contact [1750]	Date of Last Contact Flag [1751]	Date of Last Contact [1750]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Any, except blank	99999999	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date of Death--Canada [1755]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Date of Death--Canada [1755]	Date of Death--Canada [1755]	Date of Death--Canada Flag [1756]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	12	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Date of Death--Canada [1755]	Date of Death--Canada Flag [1756]	Date of Death--Canada [1755]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 10 or 11	99999999	
Blank	11	00000000	
Blank	10 or Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Recurrence Date--1st [1860]

Forward conversion: V11 to V12

V11	V12	V12	Comments
Recurrence Date--1st [1860]	Recurrence Date--1st [1860]	Recurrence Date--1st Flag [1861]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
Recurrence Date--1st [1860]	Recurrence Date--1st Flag [1861]	Recurrence Date--1st [1860]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

Date Case Completed [2090]**Forward conversion: V11 to V12**

V11	V12	Comments
Date Case Completed [2090]	Date Case Completed [2090]	
(full valid dates)	Reformat to	
MMDDCCYY	CCYYMMDD	
MM99CCYY	CCYYMM	
9999CCYY	CCYY	
Blank	Blank	
All other values	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V11	Comments
Date Case Completed [2090]	Date Case Completed [2090]	
CCYYMMDD	Reformat to	
	MMDDCCYY	
CCYYMM	MM99CCYY	
CCYY	9999CCYY	
Blank	Blank	
All other values	Blank	Invalid v12 date

Date Case Last Changed [2100]

Forward conversion: V11 to V12

V11	V12	Comments
Date Case Last Changed [2100]	Date Case Last Changed [2100]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	
MM99CCYY	CCYYMM	
9999CCYY	CCYY	
Blank	Blank	
All other values	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V11	Comments
Date Case Last Changed [2100]	Date Case Last Changed [2100]	
CCYYMMDD	Reformat to MMDDCCYY	
CCYYMM	MM99CCYY	
CCYY	9999CCYY	
Blank	Blank	
All other values	Blank	Invalid v12 date

Date Case Report Exported [2110]

Forward conversion: V11 to V12

V11	V12	Comments
Date Case Report Exported [2110]	Date Case Report Exported [2110]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	
MM99CCYY	CCYYMM	
9999CCYY	CCYY	
Blank	Blank	
All other values	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V11	Comments
Date Case Report Exported [2110]	Date Case Report Exported [2110]	
CCYYMMDD	Reformat to MMDDCCYY	
CCYYMM	MM99CCYY	
CCYY	9999CCYY	
Blank	Blank	
All other values	Blank	Invalid v12 date

Date Case Report Received [2111]

Forward conversion: V11 to V12

V11	V12	Comments
Date Case Report Received [2111]	Date Case Report Received [2111]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	
MM99CCYY	CCYYMM	
9999CCYY	CCYY	
Blank	Blank	
All other values	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V11	Comments
Date Case Report Received [2111]	Date Case Report Received [2111]	
CCYYMMDD	Reformat to MMDDCCYY	
CCYYMM	MM99CCYY	
CCYY	9999CCYY	
Blank	Blank	
All other values	Blank	Invalid v12 date

Date Case Report Loaded [2112]

Forward conversion: V11 to V12

V11	V12	Comments
Date Case Report Loaded [2112]	Date Case Report Loaded [2112]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	
MM99CCYY	CCYYMM	
9999CCYY	CCYY	
Blank	Blank	
All other values	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V11	Comments
Date Case Report Loaded [2112]	Date Case Report Loaded [2112]	
CCYYMMDD	Reformat to MMDDCCYY	
CCYYMM	MM99CCYY	
CCYY	9999CCYY	
Blank	Blank	
All other values	Blank	Invalid v12 date

Date Tumor Record Availbl [2113]

Forward conversion: V11 to V12

V11	V12	Comments
Date Tumor Record Availbl [2113]	Date Tumor Record Availbl [2113]	
(full valid dates) MMDDCCYY	Reformat to CCYYMMDD	
MM99CCYY	CCYYMM	
9999CCYY	CCYY	
Blank	Blank	
All other values	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V11	Comments
Date Tumor Record Availbl [2113]	Date Tumor Record Availbl [2113]	
CCYYMMDD	Reformat to MMDDCCYY	
CCYYMM	MM99CCYY	
CCYY	9999CCYY	
Blank	Blank	
All other values	Blank	Invalid v12 date

RX Date--Most Defn Surg [3170]

Forward conversion: V11 to V12

V11	V12	V12	Comments
RX Date--Most Defn Surg [3170]	RX Date--Most Defn Surg [3170]	RX Date Mst Defn Srg Flag [3171]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Most Defn Surg [3170]	RX Date Mst Defn Srg Flag [3171]	RX Date--Most Defn Surg [3170]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Surgical Disch [3180]

Forward conversion: V11 to V12

V11	V12	V12	Comments
RX Date--Surgical Disch [3180]	RX Date--Surgical Disch [3180]	RX Date Surg Disch Flag [3181]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Surgical Disch [3180]	RX Date Surg Disch Flag [3181]	RX Date--Surgical Disch [3180]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11	99999999	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Radiation Ended [3220]

Forward conversion: V11 to V12

V11	V12	V12	Comments
RX Date--Radiation Ended [3220]	RX Date--Radiation Ended [3220]	RX Date Rad Ended Flag [3221]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
88888888	Blank	15	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Radiation Ended [3220]	RX Date Rad Ended Flag [3221]	RX Date--Radiation Ended [3220]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	15	88888888	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date

RX Date--Systemic [3230]

Forward conversion: V11 to V12

V11	V12	V12	Comments
RX Date--Systemic [3230]	RX Date--Systemic [3230]	RX Date Systemic Flag [3231]	
(full real dates) MMDDCCYY	Reformat to CCYYMMDD	Blank	
MM99CCYY	CCYYMM	Blank	
9999CCYY	CCYY	Blank	
99999999	Blank	10	
88888888	Blank	15	
00000000	Blank	11	
Blank	Blank	Blank	
All other values	Blank	Blank	Invalid v11 date

Backward conversion: V12 to V11

V12	V12	V11	Comments
RX Date--Systemic [3230]	RX Date Systemic Flag [3231]	RX Date--Systemic [3230]	
CCYYMMDD	Any	Reformat to MMDDCCYY	
CCYYMM	Any	MM99CCYY	
CCYY	Any	9999CCYY	
Blank	Not blank, not 11 or 15	99999999	
Blank	15	88888888	
Blank	11	00000000	
Blank	Blank	Blank	
All other values	Any	Blank	Invalid v12 date