



Collaborative Stage Data Collection System Version 02.05

Implementation Guide for Registries and Vendors

Elaine N. Collins, RHIA, CTR

Collaborative Stage Informatics Team

Revised January 14, 2014

Revised March 20, 2014

Summary of Changes, March 20, 2014

This document and the associated Northcon conversion program have been revised. The review criteria for category 3c, AJCC Blank GI Nodes, were corrected. The changes do not affect which cases are listed for review, but they do change the message indicating why some cases were listed. Cases that would have been listed under category 3e, Other, will now be correctly indicated as reviewable for category 3c1 and 3c2 based on the coding of SSF 1 or 2. Only cases that staged successfully in v0204 but now result in ERROR are listed for review. Specific changes include:

- The SSF included in the review criteria was corrected from SSF2 to SSF1 for some schemas.
- Category 3c for AJCC 6 and AJCC 7 was split into 3c1 and 3c2, depending on which SSF is referenced.
- Code 988 was removed from the review criteria.
- NETStomach and SmallIntestine were added to the schemas for review under category 3c and Esophagus was deleted from one of the 3c categories.

Informatics Team

SUSAN CAPRON
Chair, NAACCR Edits Work Group
Chicago, IL

GREGORY CHRIST
Statistics Canada
Ottawa, ON

ELAINE COLLINS, MA, RHIA, CTR
Minnesota Cancer Surveillance System
St. Paul, MN

DON GREEN
Information Management Services, Inc
Silver Spring, MD

DONNA GRESS
American Joint Committee on Cancer
Chicago, IL

ALAN HOUSER
CNet Solutions
California

GEORGIA JEFFS-KAPLAN
Bethesda, MD

PETER KIM, MS
Centers for Disease Control and Prevention
Atlanta, GA

CAROL KOSARY, PhD
National Cancer Institute
Bethesda, MD

GEMMA LEE
Cancer Care Ontario
Toronto, ON

GARY LEVIN
Florida Cancer Data Services
Miami, Florida

MARTIN MADERA
American Joint Committee on Cancer
Chicago, IL

CHUCK MAY
Information Management Services, Inc
Silver Spring, MD

KAREN POLLITT
American Joint Committee on Cancer
Chicago, IL

LYNN RIES, MS
National Cancer Institute
Bethesda, MD

JOSEPH ROGERS
Centers for Disease Control and Prevention
Atlanta, GA

DAVID RONEY
Information Management Services, Inc.
Silver Spring, MD

JENNIFER RUHL, RHIT, CCS, CTR
National Cancer Institute
Bethesda, MD

JENNIFER SEIFFERT, MLIS, CTR
Northrop Grumman
Warsaw, IN

REDA WILSON, CTR
Centers for Disease Control and Prevention
Atlanta, GA

Table of Contents

Introduction	4
General Requirements for Implementation	4
V0205 Detailed Implementation Documents and Files	4
“Release Notes” Document	4
“Support for Known Issues” Document	4
Discontinued Site-Specific Factors	4
CS Versioning	4
CS Coding Instructions	5
CS Required Status Database	5
Conversion and Case Review	5
Changes in CS Tables and Descriptors	5
NAACCR v14 Edits Metafile	5
Software Components, Documents, and Resources	6
Checklists for CS Users	6
Hospital Registry Checklist for Upgrading to v0205	7
Central Registry Checklist for Upgrading to v0205	9
Registry Software Vendor Checklist for Upgrading to v0205	12
Appendix 1: CS Version Numbers	13
Appendix 2: Specifications for Conversion and Identifying Cases for Review	16
Appendix 3: Review Instructions for Cases Identified for Review and Recoding by the Conversion Program	37
Appendix 4: Changes in CS Tables and Descriptors	43
Appendix 5: Edits	44

Introduction

The Implementation Guide describes Collaborative Stage Data Collection System Version 2 (CSv2), production version 020550, referred to as v0205. The changes in v0205 primarily clarify coding instructions and correct the algorithm's mapping to AJCC or SEER Summary Stage values. There are no major changes in the design, structure, or function of the Collaborative Stage (CS) algorithm in v0205. There are no new obsolete tables or codes. Some site-specific factors (SSFs) have been discontinued.

General Requirements for Implementation

- CSv0205 is required for use with cancers diagnosed 1/1/2014 and later. CSv0205 may be used for cases diagnosed before 1/1/2014 that are identified after installation.
- Data should be transmitted in the North American Association of Central Cancer Registries, Inc. ([NAACCR](#)) [layout 14.0](#).
- An edits metafile based on the NAACCR version 14 Edits Metafile ([NAACCR v14 edits](#)) should be used after upgrade to the NAACCR version 14.0 layout (NAACCR v14 layout) and CS data conversion.

V0205 Detailed Implementation Documents and Files

Release Notes Document

CS Release Notes detail the changes to Part I and Part II of the coding instructions, including descriptions of those cases needing review and possible recoding. The complete [Release Notes](#) are available for download [here](#).

Support for Known Issues Document

Key issues identified after the completion of the version are documented with guidelines on the best approach to coding and documentation. This [document](#) is posted on the [Registrars page](#).

Discontinued Site-Specific Factors

The CS Governance Committee has published a rationale for discontinuing data collection for some site-specific factors, frequently asked questions related to this change, and a list of the discontinued site-specific factors. Any data for the discontinued site-specific factors already collected can remain in registry databases, and registries may continue to collect these data items. However, codes and coding instructions will not be updated, and registries must refer to previous versions of instructions for coding guidance. Questions for these site-specific factors will no longer be accepted on the CAnswerForum. The detailed list of Discontinued Site-Specific Factors and more information is available on the [Discontinued SSFs for v02.05 web page](#).

CS Versioning

CS versioning is designed to track the history of CS coding for a particular record, and is used by data analysts in evaluating the quality and meaning of reported codes. Three numbers track CS version information for each record in the NAACCR format. CS Version Input Original will be 020550 for new

cases in v02.05, CS Version Input Current will be assigned to existing cases on conversion based on the version under which they were last updated, and CS Version Derived will be 020550 for all CS derived fields derived using the v0205 algorithm. See [Appendix 1](#) for further information.

CS Coding Instructions

The v0205 Coding Instructions are available, in Adobe RoboHelp format, for download from the [Coding Instructions page](#). A PDF version is not being supplied for this release. The Coding Instructions combines Part I, Section 1 (General Rules), Part I, Section 2 (Lab Tests, Tumor Markers, and Site-Specific Factor Notes), Part II (Schemas), and a combined index for Parts I and II. The Coding Instructions include full text searching capability, and have multiple navigation methods, including multiple hyperlinks within and between Parts I and II. Coding Instruction topics and schemas can be printed directly from within the program. For Windows users, the Coding Instructions appear in the standard Microsoft® Help interface, with added features enabled by third-party tools. Non-Windows users can obtain an alternate format to be released at a later date.

CS Required Status Database

The CS Required Status Database is an MS Access database, separate from the CS DLL, that allows standard setters to record which CS data items, including SSFs, are required to be collected by reporting entities. Users can query the database, as well as obtain prepared reports showing required site-specific factors by standard setter, the discontinued site-specific factors, and default values for site-specific factors that are not coded. See the [Required Status Database page](#) for further information.

Conversion and Case Review

The value in the CS Version Input Current field is converted from v0204 to v0205; no other data values are changed. CDC is providing a release of its [Northcon conversion program](#) (for central registry and registry software vendor use) with two functions required for implementation of v0205:

- Updating the CS Version numbers.
- Preparing a list of cases for which review is required or recommended.

See [Appendix 2](#) for the conversion and review case specifications for v0205. Access the Northcon conversion program from within the v0205 Software release or the [CDC web page](#).

See [Appendix 3](#) for a discussion of case review in the conversion to v0205.

Changes in CS Tables and Descriptors

The CS Mapping Team has made certain changes to mapping and CS table subtitles. These changes may cause some problems in understanding extra tables, or they may result in unexpected output compared to past experience with using the CS system. These changes are detailed in [Appendix 4](#).

NAACCR v14 Edits Metafile

The NAACCR version 14 Edits Metafile is scheduled to release concurrently with the release of v0205. All current CS edits have been updated to accommodate changes with new codes. All edits that reflect

new coding instructions in v0205 include a check on the field CS Version Input Original; these edits are not applied to cases coded in an earlier version of CS. See [Appendix 5](#) for further discussion of related edits issues. Access the NAACCR v14 Edits Metafile on the [NAACCR Standard Edits page](#).

Software Components, Documents, and Resources

The version [02.05 software release](#) contains the following components in a zip file:

- Collaborative Stage library (DLL)
- API documentation
- Source code
- API sample programs
- XML and HTML tables used in the build
- Test-O-Matic
- Systems documentation

The following information and testing files are available separately from the website:

- [Valid, Invalid, and Obsolete Codes tables](#)
- [Test cases with valid NAACCR records](#)
- [Test cases with invalid NAACCR records](#)

Checklists for CS Users

To help all users implement v0205, detailed checklists are provided here listing the steps and resources needed to complete the upgrade. There are three checklists:

- [Hospital Registry Checklist](#)
- [Central Registry Checklist](#)
- [Vendor Checklist](#)

Hospital Registry Checklist for Upgrading to v0205

1. Determine any changes in facility policy for data collection requirements.
 - a. If you are an ACOS-accredited registry, review documentation from the Commission on Cancer (COC) regarding any changes in reporting requirements and applicable edit metafiles.
 - b. Review documentation from your central registry regarding any changes in reporting requirements and applicable state-specific edit metafiles.
 - c. Check the [Discontinued Site-Specific Factors](#) documents for more information about this change in v0205. Check to see if any site-specific factors or data elements are no longer being required by your standard setter(s). Hospital registries that have collected this information in previous versions of CS should consult with their cancer committees to establish policies for ongoing data collection, or to formally cease data collection. Document any changes in the registry's policy and procedure manual and share these changes with your software vendor.
 - d. Review [Appendix 3. Review Instructions for Cases Identified for Review and Recoding by the Conversion Program](#) to determine which review types apply to your registry database. For example, if you do not collect AJCC stage, you may not want to review and potentially recode cases where AJCC 6 or AJCC 7 derived stage values will be affected.
2. Consult with your software vendor about the schedule for the upgrade and conversion.
 - a. Consult with your software vendor if your registry will continue to collect any of the discontinued site-specific factors or any site-specific factor or data element that your standard setter is no longer requiring, to ensure that data entry is available and that coded items are not overwritten with "not applicable" default values.
 - b. Consult with your vendor about whether the list of reviewable cases can be customized to show only those required for maintaining your database.
 - c. All 2014 cases must be coded in v0205, so any 2014 cases coded in v0204 must be reviewed and recoded.
3. Share information among registry staff/develop new coding policies if required based on changes in CS instructions and code definitions.
4. Follow registry software vendor instructions for updating database to v0205 and installing new version of vendor software and edits.
5. After your data have been converted, consult the Manual Review section of Release Notes and [Review Instructions](#) for information about what to do when your vendor provides the requested list of cases for review.
 - a. Review cases with diagnosis date in 2014.
 - b. Review cases with changes in code definitions.
 - c. Review cases that fail to derive stage values ("ERROR" returned by CS algorithm, derived stage components and/or stage group returned as blank)).

6. Rerun your cases with coding changes through edits based on NAACCR v14 edits. (The order of steps 7 and 8 depends on your registry software data flow.)
7. Re-derive stage on all cases with coding changes.
8. Review documentation from your central registry about their schedule for the upgrade and instructions for submitting cases in v0205.
9. Resubmit any converted cases with manual coding updates to the central registry.
10. Submit new v0205 cases to the central registry.

Central Registry Checklist for Upgrading to v0205

1. Determine and communicate any changes in reporting requirements to reporting facilities.
 - a. Review the appropriate reports from the [CS Required Status Database](#) to identify reporting requirements for the standard setter to which the registry reports.
 - b. Review the [Discontinued Site-Specific Factors](#) documents for further information about this change.
 - c. Determine central registry data collection policies for required, non-required, and discontinued site-specific factor data items.
 - d. Communicate information about requirements to reporting entities.
 - e. Communicate information about requirements to central registry software vendor(s) if appropriate.
2. Determine and communicate any changes in editing requirements to reporting facilities and their software vendors.
 - a. Review updates to the [NAACCR v14 edits](#). Note that the SEER and COC edits for required data items have been split into two separate edits compared to previous versions of the NAACCR metafile, one for the SEER required data items and one for the COC required data items.
 - b. Make any required changes to edit metafile(s) used to process records in the central registry database and incoming records sent by reporting entities.
 - c. Make any required changes to central registry edit metafile distributed to reporting entities and/or their software vendors.
 - d. Distribute central registry metafile based on NAACCR v14 edits to reporting entities and/or their software vendors as appropriate.
3. Determine the schedule for the upgrade to v0205, and communicate with reporting entities when the registry will be ready to accept cases in v0205 and when the registry will no longer accept cases in v0204.
4. Obtain the [CS v0205 Software Package](#) for integration into the registry database system.
 - a. In-house system
 - b. Vendor-provided system
5. Reference [Appendix 1, Version Numbers](#) for information about CS Version numbers and their application in the conversion process.
6. Review [Appendix 2, Specifications for Conversion and Identifying Cases for Review](#), and [Appendix 3. Review Instructions for Cases Identified for Review and Recoding by the Conversion Program](#), to determine which review types apply to the registry database.

Important Note

Item 3 in the review instructions identifies cases for which stage components and/or stage group was derived in v0204, but for which the CS v0205 algorithm will no longer derive stage components and/or stage group. If the registry is only required to report Summary Stage, the registry may decide to skip reviews involving blank AJCC 6 or AJCC 7 stage after derivation. Refer to the list of review types in Appendix 2 and review instructions in Appendix 3 for information about affected stage groups.

7. Develop the conversion methodology appropriate for the registry database structure and updating procedures.
 - a. If the Northcon program is used, consult program documentation to determine how to tailor review output to registry needs.
 - b. If the Northcon program is not used, consult with registry software vendor or registry IT staff to determine how to tailor review output to registry needs.
8. Test the accuracy of the conversion process using test components provided within the [CSv0205 software package](#); test the performance of the v0205 DLL to ensure that it is implemented correctly.
9. Convert existing cases within the central registry database using the [Northcon Conversion Program](#) or in-house program based on [Conversion Specifications](#) in Appendix 2.
10. Convert the registry database, run the CS algorithm, and produce the list of cases for review.
11. Consult the [Release Notes – Manual Review Section](#) and [Appendix 3, Review Instructions](#) for information about processing any cases returned for review by the conversion program.
 - a. Review cases with diagnosis date in 2014
 - b. Review cases with changes in code definitions
 - c. Review cases that fail to derive stage values (“ERROR” returned by CS algorithm, derived stage components and/or stage group returned as blank)
12. Recode and re-derive all derived CS fields on reviewed cases
13. Rerun all cases through the latest [NAACCR v14 edits](#).
14. Review new submissions from hospital registries to confirm that data are sent in the correct format.
 - a. Check [Appendix 1, Version Numbers](#) for information about the correct CS Version numbers for converted and new data.
 - b. Convert any cases not submitted in v0205 if accepted after the registry has upgraded to v0205.
15. Obtain the [CS Coding Instructions](#) updated for v0205, available in a standalone format with hyperlinks within the text, between the text and tables, and within the tables.
16. Update coding software to v0205 and edits to the latest used by central registry staff or other reporters using central registry software
17. Update coding instructions for central registry staff or other reporters to incorporate references to or information from [CS Coding Instructions](#).

18. Develop an educational program as appropriate for central registry staff and reporting registries based on changes in v0205.
 - a. Review the [CS Coding Instructions](#) for new or modified information.
 - b. Review the [Changes in CS Tables and Descriptors](#) for helpful information in understanding some changes in derived values returned by the CS algorithm.
 - c. Review the [Release Notes](#), with descriptions of all the changes to the coding instructions and schemas in v0205.
 - d. Check the [Support for Known Issues](#) postings for information about CS data issues which may not have been addressed in the v0205 release and any coding recommendations based on those issues.
19. Review the CS documentation to determine if changes in this release have implications for any long-term data analyses which the registry might undertake.
 - a. The [Release Notes](#) identify changes in coding instructions in effect with v0205. The registry might consider annotating these changes for published trend data, or consider recoding data for cases involved in special studies
 - b. New edits in the [NAACCR v14 Edits Metafile](#) contain a version check for v0205. Some of the edits may apply to earlier cases, or they may identify cases which could be recoded using v0205 instructions. See [Appendix 5](#) for further discussion of edit issues.

Registry Software Vendor Checklist for Upgrading to CSv0205

1. Obtain the [CS v0205 software package](#) for integration into the registry database system. The v0205 files completely replace all earlier CS files. Only data converted into v0205 and collected in v0205 should be maintained after implementation and testing.
2. Identify potential changes in reporting requirements for client facilities.
 - a. Review the appropriate reports from the [CS Required Status Database](#) and documentation from central registries to identify reporting requirements for the standard setters to which clients report.
 - b. Check the [Discontinued Site-Specific Factors](#) documents for more information about this change in v0205.
 - c. Obtain clarification from central registries about reporting requirements for clients.
 - d. Provide release notes for clients about potential changes in reporting requirements and database structure.
 - e. Consider allowing the list of review cases to be customized based on review types designated by the client.
3. Determine the schedule for the upgrade to v0205, and communicate with registry clients.
4. Reference [Appendix 1, Version Numbers](#) documentation for information about CS Version numbers and their application in the conversion process.
5. Develop the process for database conversion of registry cases using the [Northcon Conversion Program](#) or an in-house program based on [Appendix 2, Conversion Specifications](#).
6. Test the CS v0205 software upgrade using test components provided within the [CS v0205 software package](#) and edits metafile changes based on the [NAACCR v14 edits](#).
7. Deliver CS v0205 upgrade and conversion program for each client's database. Upgrade should:
 - a. Include client instructions as required to support the upgrade
 - b. Include conversion of data and conversion of CS version Input Current value
 - c. Make available a list of cases for review based on criteria provided in [Appendix 2](#), customized to client needs if feasible.
 - d. Include edits based on [NAACCR v14 edits](#), including state-specific metafiles
8. Consult [Appendix 3, Review Instructions](#) for information about processing any cases returned for review by the conversion program, for client assistance as needed.

Appendix 1. CS Version Numbers

Table 1. DEFINITION AND USE OF CS VERSION NUMBERS		
CS Version	Definition	Usage
Input Original	Production version in use when record first abstracted	Value for the current installed version of CSv2 <ul style="list-style-type: none"> Entered on all new cases Value does not change
Input Current	Version in use when most recent updates made to the record	<p>New cases:</p> <ul style="list-style-type: none"> Value for the current installed version of CSv2 Same value in CS Version Input Original and CS Version Input Current at initial data entry The two values remain the same until record converted to later version of CS or record is updated. <p>Converted cases:</p> <ul style="list-style-type: none"> A specific CS Version Input Current value assigned to every converted record at data conversion Based on CS Version Input Current value in record at time of conversion CS Version Input Current value assigned at conversion and never used in the CS Version Input Original or CS Version Derived fields <p>Converted and Updated cases:</p> <ul style="list-style-type: none"> CS Version Input Current value for the current installed version of CS if change made to record after conversion
Derived	Version in use when most recent stage calculation applied	Value in use for the current installed version of CS <ul style="list-style-type: none"> Entered in every record when stage derived Updated in converted records upon re-derivation after conversion to new version of CS

The CS Version number for the production release of v0205 is **020550**. Table 2 shows the CS version numbers that could appear in a record after a registry database is converted to v0205 and stage re-derived on converted cases. CS Version Input Current numbers 020510, 020520, 020530, and 020540 are entered into cases converted from v0204 and only assigned at conversion.

Table 2. CS Version Numbers for v0205			
	CS Version Input Original	CS Version Input Current	CS Version Derived
Case last touched by coder in CSv1	0009XX, 01XXXX	020510 (after conversion)	020550
Case last touched by coder in CSv2, 0202	0009XX, 01XXXX, 020100, 020200	020520 (after conversion)	020550
Case last touched by coder in CSv2, 0203	0009XX, 01XXXX, 020100, 020200, 020300	020530 (after conversion)	020550
Case last touched by coder in CSv2, 0204	0009XX, 01XXXX, 020100, 020200, 020300, 020440	020540 (after conversion)	020550
Converted case updated in 0205	0009XX, 01XXXX, 020100, 020200, 020300, 020440	020550	020550
New case in 020550	020550	020550	020550

Table 3 shows the CS Version Input Current values that have applied across the CS data conversions, and the mapping of these numbers to the values assigned to CS Version Input Current in the v0205 data conversion. See Appendix 2, Table for conversion specifications for CS Version Input Current.

Table 3. CS Version Input Current								
CS Version Original	Convert to CS 0202 without update	Convert to CS 0202 with update	Convert to CS 0203 without update	Convert to CS 0203 with update	Convert to CS 0204 without update	Convert to CS 0204 with update	Convert to CS 0205 without update	Convert to CS 0205 with update
0009XX 01XXXX	020000		020300		020410		020510	020550
0009XX 01XXXX	020000		020300			020440	020540	020550
0009XX 01XXXX	020000			020302	020413		020530	020550
0009XX 01XXXX	020000			020302		020440	020540	020550
0009XX 01XXXX		020200	020301		020412		020520	020550
0009XX 01XXXX		020200	020301			020440	020540	020550
0009XX 01XXXX		020200		020302	020413		020530	020550
0009XX 01XXXX		020200		020302		020440	020540	020550
020001 020100 020200			020301		020420		020520	020550

020001 020100 020200			020301			020440	020540	020550
020001 020100 020200				020302	020423		020530	020550
020001 020100 020202				020302		020440	020540	020550
020302					020430		020530	020550
020302						020440	020540	020550
020440							020540	020550

Appendix 2. Specifications for Conversion and Identifying Cases for Review

The conversion to v0205 does not actually convert any of the existing input data values, other than CS Version Input Current. The conversion program is designed to perform these steps:

- The coded fields are copied from existing records, and the CS Version Input Current is changed to show the conversion to v0205.
- The existing derived fields are blanked out.
- The CS v0205 algorithm is run to re-derive and store stage values.
- Cases are listed for review:
 - Cases with diagnosis date in 2014 coded in v0204 (review type 1, specified below)
 - Cases with changes in codes in v0205 (review type 2, specified below)
 - Cases that do not successfully derive a stage (review type 3, specified below) with exception made for cases with Over-ride CS 20 [NAACCR item number 3769] set to 1.

Important Note

Identification of cases for review must be applied after the conversion is applied and the CS algorithm is run. Review type 3 identifies cases for which stage components and/or stage group was derived in v0204, but for which the CS v0205 algorithm will no longer derive stage components and/or stage group. Cases to be reviewed will be those that remain blank after re-deriving the stage values.

EXCEPTION: Cases that have the item Over-ride CS 20 set to 1 will not be listed for review when derived stage values are blank. This over-ride is used to indicate a case with directly-coded SEER Summary Stage 2000 entered instead of CS. This exception applies to NPCR registries only.

Conversion Specifications

For all cases with diagnosis date 2004 and greater:

1. **Blank Fields.** Any fields that are blank in CSv2: v0204 should remain blank after conversion. The fields should be filled with blank characters equal in number to the field length in CSv2.
2. **Grade Path Value [NAACCR item 441].** Copy existing value.
3. **Grade Path System [NAACCR item 449].** Copy existing value.
4. **Lymph-vascular Invasion [NAACCR item 1182]:** Copy existing value.

5. **PreRx and PostRx items [NAACCR items 2730, 2735, 2740, 2750, 2755, 2760, 2765, 2770, 2775, 2780, and 2785].** Copy existing values (these should all be blank.)
6. **CS Tumor Size [NAACCR item 2800].** Copy existing value.
7. **CS Extension [NAACCR item 2810].** Copy existing value.
8. **CS Tumor Size/Ext Eval [NAACCR item 2820].** Copy existing value.
9. **Regional Nodes Positive [NAACCR item 820].** Copy existing value.
10. **Regional Nodes Examined [NAACCR item 830].** Copy existing value.
11. **CS Lymph Nodes [NAACCR item 2830].** Copy existing value.
12. **CS Lymph Nodes Eval [NAACCR item 2840].** Copy existing value.
13. **CS Mets at DX [NAACCR item 2850].** Copy existing value.
14. **CS Mets at Dx-Bone [NAACCR item 2851].** Copy existing value.
15. **CS Mets at Dx-Brain [NAACCR item 2852].** Copy existing value.
16. **CS Mets at Dx-Liver [NAACCR item 2853].** Copy existing value.
17. **CS Mets at Dx-Lung [NAACCR item 2854].** Copy existing value.
18. **CS Mets Eval [NAACCR item 2860].** Copy existing value.
19. **CS Site-Specific Factors 1-6 [NAACCR items 2880, 2890, 2900, 2910, 2920, 2930].** Copy existing value.
20. **CS Site-Specific Factors 7-25 [NAACCR items 2861-2879]:** Copy existing value.
21. **CS Version Input Original [NAACCR item 2935].** Copy existing value.
22. **CS Version Derived [NAACCR item 2936].** Fill with blanks.
23. **CS Version Input Current [NAACCR item 2937].** If the site and histology plus SSF 25 do not yield a schema, copy the CS Version Input Current from the incoming record into the new record. If any CS input data element [any of NAACCR item numbers 2800-2936 ONLY] in the record being converted is not blank, fill as noted below, ELSE leave blank.

Table 1. Conversion for CS Version Input Current			
Values in NAACCR Version 13 record being converted		Value to fill in new NAACCR record, Version 14	
CS Version Input Current	Description: Last review performed under	Without review (Value filled in at conversion)	With review under 0205
020410	CSv1	020510	020550
020412 020420	CSv2 0202	020520	020550
020413 020423 020430	CSv2 0203	020530	020550
020440	CSv2 0204	020540	020550

Important Note:

In rules 24-26 below, a code of '2' in the referenced flag indicates that the registry has derived the referenced stage information from EOD and not from the CS input fields.

24. **Derived AJCC-6 fields [NAACCR items 2940, 2950, 2960, 2970, 2980, 2990, 3000].** If Derived AJCC—Flag [NAACCR item 3030] = 2, copy existing values, ELSE fill with blanks.
25. **Derived SS1977 [NAACCR item 3010].** If Derived SS1977—Flag [NAACCR item 3040] = 2, copy existing value, ELSE fill with blanks.

26. **Derived SS2000 [NAACCR item 3020]**. If Derived SS2000—Flag [NAACCR item 3050] = 2, copy existing value, ELSE fill with blanks.
27. **Derived AJCC--Flag [NAACCR item 3030]**. Copy existing value.
28. **Derived SS1977--Flag [NAACCR item 3040]**. Copy existing value.
29. **Derived SS2000--Flag [NAACCR item 3050]**. Copy existing value.
30. **Derived AJCC-7 fields [NAACCR items 3400, 3402, 3410, 3412, 3420, 3422, 3430]**. Leave blank.
31. **Derived PreRx and PostRx fields [NAACCR items 3440, 3442, 3450, 3452, 3460, 3462, 3470, 3480, 3482, 3490, 3492]**. Fill with blanks.
32. **Derived Neoadjuv Rx Flag [NAACCR item 3600]**. Fill with blanks.
33. **SEER Site-Specific Factors 1-6 [NAACCR items 3700, 3702, 3704, 3706, 3708, 3710]**. Copy existing value.
34. **Over-ride CS 20 [NAACCR item 3769]**: Copy existing value

Review Specifications

The specifications include a review type for each scenario, cross-referenced to the review instructions in [Appendix 3](#); a case selection table showing the schemas, data fields, and codes identifying records for review; and a case display table, showing the review type, schemas, data fields, and codes to be displayed in the output for review.

Item 3 relates to blank derived stage component and stage group values for AJCC 6, AJCC 7, Summary Stage 1977, and Summary Stage 2000. Each of the review categories a, b, c, d, and e under 3 may apply to only some of these derived stage values, for example derived AJCC 6 stage group and not derived AJCC 7 stage group.

The review types are:

1. 2014 diagnoses coded in v0204, 2014 DX
2. Code changes for schemas:
 - a. Nasopharynx Nodes
 - b. BileDuctsIntrahepat SSF10
 - c. Bladder Nodes
3. Blank derived stage components and/or stage group for
 - a. AJCC 6 Blank H&N
 - b. AJCC 6 Blank Tis
 - c. AJCC 6 Blank GI Nodes
 - d. AJCC 6 Blank Invalid CS Version
 - e. AJCC 6 Blank Other (executed only if a, b, c, d do not apply)
 - a. AJCC 7 Blank H&N
 - c. AJCC 7 Blank GI Nodes
 - e. AJCC 7 Blank Other (executed only if a and c do not apply)
 - d. SS1977 Blank Invalid CS Version

e. SS1977 Blank Other (executed only if d does not apply)

d. SS2000 Blank Invalid CS Version

e. SS2000 Blank Other (executed only if d does not apply)

1. 2014 Diagnoses coded in v0204.

“1 2014 DX”

Casefinding:

Schema	AND	
	Date of Diagnosis [NAACCR 390]	CS Version input Original [NAACCR 2935]
All schemas	2014XXXX	<020500

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	1 2014 DX

2. Code Changes

“2a Nasopharynx Nodes”

Casefinding:

Schema	AND	
	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]
Nasopharynx	2004 and greater	130, 430, 530

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	Review Type
{Patient ID}	Nasopharynx	{Date of Diagnosis}	CS Lymph Nodes {CS Lymph Nodes code}	2a Nasopharynx Nodes

“2b BileDuctsIntraHepat SSF10”

Casefinding:

Schema	AND	
	Date of Diagnosis [NAACCR 390]	CS Site-Specific Factor 10 [NAACCR 2864]
BileDuctsIntraHepat	2004 and greater	000, 999

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Site-Specific Factor 10 [NAACCR 2864]	Review Type
{Patient ID}	BileDuctsIntraHepat	{Date of Diagnosis}	CS Site-Specific Factor 10 {CS Site-Specific Factor 10 code}	2b BileDuctsIntraHepat SSF 10

“2c Bladder Nodes”

Casefinding:

Schema	AND	
	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]
Bladder	2004 and greater	400, 450

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	Review Type
{Patient ID}	Bladder	{Date of Diagnosis}	CS Lymph Nodes {CS Lymph Nodes code}	2c Bladder Nodes

3. Blank Derived Stage Values

For all review types 3 below:

Over-ride CS 20 not equal to 1 AND the criteria below.

“3a AJCC 6 Blank H&N”

Casefinding:

Schema	AND			
	Date of Diagnosis [NAACCR 390]	CS Site-Specific Factor 1 [NAACCR 2880]	Derived AJCC-6 N [NAACCR 2960]	Derived AJCC-6 Stage Group [NAACCR 3000]
BuccalMucosa EpiglottisAnterior GumLower GumOther GumUpper Hypopharynx LarynxGlottic LarynxOther LarynxSubglottic LarynxSupraglottic LipLower LipOther LipUpper Nasopharynx Oropharynx PalateHard PalateSoft ParotidGland PharyngealTonsil SubmandibularGland TongueBase	2004 and greater	988	Blank	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Site-Specific Factor 1 [NAACCR 2880]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Site-Specific Factor 1 988	3a AJCC 6 H&N

“3b AJCC 6 Blank Tis”

Casefinding:

Schema	AND				
	Date of Diagnosis [NAACCR 390]	CS Extension [NAACCR 2810]	OR		Derived AJCC-6 Stage Grp [NAACCR 3000]
			CS Lymph Nodes [NAACCR 2830]	CS Mets at DX [NAACCR 2850]	
Appendix CarcinoidAppendix NETColon NETRectum	2004 and greater	000, 050	NOT = (000, 999)	NOT = (00, 99)	Blank
Colon Rectum		000, 050, 100, 110, 120			
Breast		000, 050, 070			
Bladder		010, 030, 060, 100			

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Extension [NAACCR 2810]	CS Lymph Nodes [NAACCR 2830]	CS Mets at DX [NAACCR 2850]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Extension {CS Extension code}	CS Lymph Nodes {CS Lymph Nodes code}	CS Mets at DX {CS Mets at DX code}	3b AJCC 6 Blank Tis

“ 3c AJCC 6 Blank GI Nodes”

3c1 AJCC 6 Blank GI Nodes/SSF1

Casefinding:

Schema	AND					
	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site-Specific Factor 1 [NAACCR 2880]	Derived AJCC-6 N [NAACCR 2960]	Derived AJCC-6 Stage Grp [NAACCR 3000]
EsophagusGEJunction NETStomach Stomach	2004 and greater	100-500	0,1,5,9	000	Blank	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site-Specific Factor 1 [NAACCR 2880]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Lymph Nodes {CS Lymph Nodes code}	CS Lymph Nodes Eval {CS Lymph Nodes Eval code}	CS Site-Specific Factor 1 {CS Site-Specific Factor 1 code}	3c1 AJCC 6 Blank GI Nodes/SSF1

3c2 AJCC 6 Blank GI Nodes/SSF2

Casefinding:

Schema	AND					
	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site-Specific Factor 2 [NAACCR 2890]	Derived AJCC-6 N [NAACCR 2960]	Derived AJCC-6 Stage Grp [NAACCR 3000]

Appendix Colon Rectum	2004 and greater	100-300	0,1,5,9	000	Blank	Blank
-----------------------------	---------------------	---------	---------	-----	-------	-------

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site- Specific Factor 2 [NAACCR 2890]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Lymph Nodes {CS Lymph Nodes code}	CS Lymph Nodes Eval {CS Lymph Nodes Eval code}	CS Site- Specific Factor 2 {CS Site-Specific Factor 2 code}	3c2 AJCC 6 Blank GI Nodes/SSF2

“3d AJCC 6 Blank Invalid CS Version”

Casefinding:

Schema	AND					
	CS Version Input Original [NAACCR 2935]	Date of Diagnosis [NAACCR 390]	OR			
			Derived AJCC-6 T [NAACCR 2940]	Derived AJCC-6 N [NAACCR 2960]	Derived AJCC-6 M [NAACCR 2980]	Derived AJCC-6 Stage Grp [NAACCR 3000]
All schemas	NOT = (000937 010000 010002 010003 010004 010005 010100 010200 010300 010400 010401 020001 020100 020200 020302 020440)	2004 and greater	Blank	Blank	Blank	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Version Input Original [NAACCR 2935]	Derived AJCC-6 T [NAACCR 2940]	Derived AJCC-6 N [NAACCR 2960]	Derived AJCC-6 M [NAACCR 2980]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Version Input Original {CS Version Input Original code}	Derived AJCC-6 T {Derived AJCC-6 T display string}	Derived AJCC-6 N {Derived AJCC-6 N display string}	Derived AJCC-6 M {Derived AJCC-6 M display string}	3d AJCC 6 Blank Invalid CS Version

“3e AJCC 6 Blank Other” (All records with blank Derived AJCC-6 values not included in previous cases)

Casefinding:

Schema	AND				
	Date of Diagnosis [NAACCR 390]	OR			
		Derived AJCC-6 T [NAACCR 2940]	Derived AJCC-6 N [NAACCR 2960]	Derived AJCC-6 M [NAACCR 2980]	Derived AJCC-6 Stage Grp [NAACCR 3000]
All schemas	2004 and greater	Blank	Blank	Blank	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	Derived AJCC-6 T [NAACCR 2940]	Derived AJCC-6 N [NAACCR 2960]	Derived AJCC-6 M [NAACCR 2980]	Review Type
{Patient ID}	{Schema Name}	{Date of Diagnosis}	Derived AJCC-6 T {Derived AJCC-6 T display string}	Derived AJCC-6 N {Derived AJCC-6 N display string}	Derived AJCC-6 M {Derived AJCC-6 M display string}	3c AJCC 6 Blank Other

“3a AJCC 7 Blank H&N”

Casefinding:

Schema	AND			
	Date of Diagnosis [NAACCR 390]	CS Site-Specific Factor 1 [NAACCR 2880]	Derived AJCC-7 N [NAACCR 3410]	Derived AJCC-7 Stage Group [NAACCR 3430]
BuccalMucosa EpiglottisAnterior GumLower GumOther GumUpper Hypopharynx LarynxGlottic LarynxOther LarynxSubglottic LarynxSupraglottic LipLower LipOther LipUpper Nasopharynx Oropharynx PalateHard PalateSoft ParotidGland PharyngealTonsil SubmandibularGland TongueBase	2010 and greater	988	Blank	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Site-Specific Factor 1 [NAACCR 2880]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Site-Specific Factor 1 988	3a AJCC 7 Blank H&N

"3C AJCC7 Blank GI Nodes"

3c1 AJCC 7 Blank GI Nodes/SSF1

Casefinding:

Schema	AND					
	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2810]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site-Specific Factor 1 [NAACCR 2880]	Derived AJCC-7 N [NAACCR 3410]	Derived AJCC-7 Stage Grp [NAACCR 3430]
Esophagus EsophagusGEJunction Stomach	2010 and greater	100-500	0,1,5,9	000	Blank	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site-Specific Factor 1 [NAACCR 2880]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Lymph Nodes {CS Lymph Nodes code}	CS Lymph Nodes Eval {CS Lymph Nodes Eval code}	CS Site-Specific Factor 1 {CS Site-Specific Factor 1 code}	3c1 AJCC 7 Blank GI Nodes/SSF1

3c2 AJCC 7 Blank GI Nodes/SSF2

Casefinding:

Schema	AND					
	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2810]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site-Specific Factor 2 [NAACCR 2890]	Derived AJCC-7 N [NAACCR 3410]	Derived AJCC-7 Stage Grp [NAACCR 3430]

Appendix Colon Rectum SmallIntestine	2010 and greater	100-300	0,1,5,9	000	Blank	Blank
---	---------------------	---------	---------	-----	-------	-------

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Lymph Nodes [NAACCR 2830]	CS Lymph Nodes Eval [NAACCR 2840]	CS Site- Specific Factor 2 [NAACCR 2890]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Lymph Nodes {CS Lymph Nodes code}	CS Lymph Nodes Eval {CS Lymph Nodes Eval code}	CS Site- Specific Factor 2 {CS Site-Specific Factor 2 code}	3c2 AJCC 7 Blank GI Nodes/SSF2

“3e AJCC 7 Blank Other” (All records with blank Derived AJCC-7 values not included in previous cases)

Casefinding:

Schema	AND				
	Date of Diagnosis [NAACCR 390]	OR			
		Derived AJCC-7 T [NAACCR 3400]	Derived AJCC-7 N [NAACCR 3410]	Derived AJCC-7 M [NAACCR 3420]	Derived AJCC-7 Stage Grp [NAACCR 3430]
All schemas	2010 and greater	Blank	Blank	Blank	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	Derived AJCC-7 T [NAACCR 3400]	Derived AJCC-7 N [NAACCR 3410]	Derived AJCC-7 M [NAACCR 3420]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	Derived AJCC-7 T {Derived AJCC-7 T display string}	Derived AJCC-7 N {Derived AJCC-7 N display string}	Derived AJCC-7 M {Derived AJCC-7 M display string}	3c AJCC 7 Blank Other

“3d SS1977 Blank Invalid CS Version”

Casefinding:

Schema	AND		
	Date of Diagnosis [NAACCR 390]	CS Version Input Original [NAACCR 2935]	Derived SS1977 [NAACCR 3010]
All schemas	2004 and greater	NOT = (000937 010000 010002 010003 010004 010005 010100 010200 010300 010400	Blank

		010401 020001 020100 020200 020302 020440)	
--	--	---	--

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Version Input Original [NAACCR 2935]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Version Input Original {CS Version Input Original code}	3d SS1977 Blank Invalid CS Version

“3e SS1977 Blank Other” (All records with blank Derived SS1977 values not included in previous cases)

Casefinding:

	AND	
Schema	Date of Diagnosis [NAACCR 390]	Derived SS1977 [NAACCR 3010]
All schemas	2004 and greater	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Version Input Original [NAACCR 2935]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Version Input Original {CS Version Input Original code}	3e SS1977 Blank Other

“3d SS2000 Blank Invalid CS Version”

Casefinding:

	AND		
Schema	Date of Diagnosis [NAACCR 390]	CS Version Input Original [NAACCR 2935]	Derived SS2000 [NAACCR 3020]
All schemas	2004 and greater	NOT = (000937 010000 010002 010003 010004 010005 010100 010200 010300 010400 010401 020001 020100 020200 020302 020440)	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	CS Version Input Original [NAACCR 2935]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	CS Version Input Original {CS Version Input Original code}	3d SS2000 Blank Invalid CS Version

“3e SS2000 Blank Other” (All records with blank DerivedSS2000 values not included in previous cases)

Casefinding:

Schema	AND	
	Date of Diagnosis [NAACCR 390]	Derived SS2000 [NAACCR 3020]
All schemas	2004 and greater	Blank

Case Display:

Patient ID [NAACCR 20]	Schema	Date of Diagnosis [NAACCR 390]	Review Type
{Patient ID}	{Schema name}	{Date of Diagnosis}	3e SS2000 Blank Other

Following is a sample of case display output from the [Northcon conversion program](#). Note that the output has been imported into a spreadsheet file for readability and the headers have been shortened slightly.

Sample Output from Northcon Conversion Program Listing Reviewable Cases

Record Counter	Patient ID	Seq. Num. Central	Over-ride CS 20	Rep. Facility	Acc. Num. Hosp.	Seq. Num. Hosp.	Date DX	Schema	Code	ReviewType
10	34	00		0000012345	201200348	00	20130302	BileDuctsIntraHepat	CS Site-Specific Factor 10 999	2b BileDuctsIntraHep SSF10
11	35	01		0000012345	201201065	01	20121021	BileDuctsIntraHepat	CS Site-Specific Factor 10 000	2b BileDuctsIntraHep SSF10
12	36	00		0000012345	201201138	00	20121030	Bladder	CS Lymph Nodes 450	2c Bladder Nodes
13	37	00		0000012345	201200582	00	20120613	Esophagus	Derived AJCC7-T T2 Derived AJCC7-N BLANK Derived AJCC7-M M0	3c AJCC 7 Blank GI Nodes
15	39	00		0000012345	201200141	00	20120120	Nasopharynx	CS Lymph Nodes 130	2a Nasopharynx Nodes
16	40	00		0000012345	201200015	00	20120106	Rectum	Derived AJCC7-T T3 Derived AJCC7-N BLANK Derived AJCC7-M M0	3c2 AJCC 7 Blank GI Nodes

Appendix 3. Review Instructions for Cases Identified for Review and Recoding by the Conversion Program

Important Note

There are three categories of cases for which review is recommended or required depending upon standard setter requirements for stage values. The cases for review will be identified by review type as shown in [Appendix 2](#). The stage affected by each review is also shown in the instruction tables below. Each registry must determine which reviews should be performed depending on data needs and requirements.

1. Cases diagnosed in 2014 for which CS was collected in versions prior to v0205 will be listed for review so that any pertinent changes in coding instructions can be applied to code selection.
2. For some codes in the Nasopharynx, BileDuctsIntraHepat, and Bladder schemas, review is needed to implement corrections to the codes or coding instructions.
3. Changes were made in mapping or the behavior of the algorithm, with the result that cases which previously derived a stage value will no longer derive a value. The affected cases should be reviewed and recoded to a combination of codes that will derive valid stage components and/or stage groups.
 - a. For many head and neck schemas, the mapping for CS Site-Specific Factor 1, Size of Lymph Nodes, was updated to ERROR. Any registry collecting AJCC stage must recode “988” to another valid code to get a derived N value and derived stage group. “988” is a valid code for registries that do not require reporting CS Site-Specific Factor 1.
 - b. For gastrointestinal, Breast, and Bladder schemas, the mapping for combinations of codes indicating Tis tumors with positive nodal and/or distant metastases has been changed to ERROR for AJCC stage groups.
 - c. For gastrointestinal schemas where clinical information about nodal involvement is collected in a site-specific factor, the mapping was changed to exclude information from Regional Nodes Positive in the assignment of cN values. These mapping changes may result in an ERROR depending on how CS Lymph Nodes and CS Lymph Nodes Eval were coded.
 - d. CS Version Input Original is required for the derivation of stage values in some schemas. Where an invalid value is used, stage will not be derived. The invalid value must be replaced with a valid value.
 - e. Stage component values or stage group values may not be derived for other reasons. All cases which do not fit within the definitions for 3a, b, c, and d are included in an “other” category.

Instructions

The labels for each review situation, such as “1 2014 Diagnosis”, match the labels on the review case listing produced by the conversion program.

1. 2014 Diagnoses: “1 2014 DX”
Review all cases with 2014 diagnosis originally coded in V0204 and update coding as appropriate, using V0205 instructions and code definitions.

2. Changes in Codes: “2a Nasopharynx Nodes”, “2b BileDuctsIntraHepat SSF10”, “2c Bladder Nodes”
Review for changes in code definitions, following the instructions in the Release Notes (reproduced here for ease of reference) for review cases. Note the derived stage which is affected for each review in this group, and determine if review and recode is necessary for the intended uses of registry data.

Schema	NAACCR Item Name, Number	Code	Recode	Review Note
Nasopharynx	CS Lymph Nodes 2830	130, 430, 530	CS Lymph Nodes 130, 430, 530, 650	Level IV nodes were included in codes 130 and 650 in CSv0203 and CSv0204. Level IV nodes have been removed from the description for code 130 and are listed for code 650 only. Review codes 130, 430, and 530 to identify if any Level IV nodes were coded using these codes. All level IV nodes should be recoded to code 650. For all SEER registries combined, this affects approximately 50-60 cases per year. Stage affected: AJCC 6 AJCC 7
BileDuctsIntraHepat	CS SSF 10, Tumor Growth Pattern 2864	000, 999	CS SSF 10 000, 010, 999	Prior instructions for coding SSF10 for BileDuctsIntraHepat indicated that the information should be coded based upon findings noted in the pathology report. Instructions have been modified to indicate that information can be obtained from radiology and surgery reports as well as from pathology reports. Review all cases coded in the BileDuctsIntraHepat schema with an SSF 10 code of 000 or 999 to determine if a code of 010 should be assigned, which could change the derived T and stage values. Cases coded in the BileDuctsPerihilar schema may also be reviewed and recoded, though SSF 10 is not considered in deriving stage for the BileDuctsPerihilar schema. For all SEER registries combined, this affects approximately 700-900 cases per year.

				Stage affected: AJCC 7
Bladder	CS Lymph Nodes 2830	400, 450	CS SSF 2 [NAACCR 2890] 000-980, 990-997, 999	Prior instructions for coding SSF2 for Bladder included coding the largest size of any regional node listed under CS Lymph Nodes. SSF 2 instructions have been modified to indicate common iliac nodes are excluded when determining size of metastasis in lymph nodes. Review all cases coded in the Bladder schema with CS Lymph Nodes coded as 400 or 450 and recode SSF 2 based on the size of lymph node metastasis in iliac (internal, external, NOS), obturator, pelvic, perivesical, sacral or regional nodes, NOS only. For all SEER registries combined, this affects approximately 45 cases per year. Stage affected: AJCC 6

3. Blank Stage Values:

Review all cases that did not derive AJCC 6 T, N, or M components or stage value, AJCC 7 T, N, or M components or stage value, Summary Stage 1977, or Summary Stage 2000. Identify the problem causing failure to derive, recode, and re-derive stage values. If a case does not fit into one of the situations described in a, b, c, or d, editing with the Edits v14 metafile may help to identify the coding problem.

a. Head and Neck SSF 1: “3a AJCC 6 Blank H&N”, “3a AJCC 7 Blank H&N”

The following table contains review instructions for Site-Specific Factor 1 for head and neck cases which fail to derive a stage after conversion. Note the derived stage which is affected for each review in this group, and determine if review and recode is necessary for the intended uses of registry data. (The Review Notes are available in the Release Notes; they are listed here for ease of reference.)

Schema	NAACCR Item Name, Number	Code	Recode	Review Note
BuccalMucosa EpiglottisAnterior GumLower GumOther GumUpper Hypopharynx LarynxGlottic LarynxOther LarynxSubglottic LarynxSupraglottic LipLower LipOther LipUpper Nasopharynx Oropharynx	CS SSF 1, 2830	988	000-980, 990-997, 999	Multiple Head and Neck Schemas, SSF 1, Size of Lymph Nodes, Code 988 mapping has been updated to ERROR. Code 988 is defined as NA, but SSF 1 is required for staging. Any cases currently coded with 988 in SSF 1 may no longer derive an N value after conversion to v0205. For all SEER registries combined, 5 cases were affected for a single year. For registries that do not collect this data item, AJCC stage may not be derived and will have to be reviewed if you want AJCC stage on your file.

PalateHard PalateSoft ParotidGland PharyngealTonsil SubmandibularGland TongueBase				Stage affected: AJCC 6 AJCC 7
--	--	--	--	---

b. GI, Breast, Bladder In situ: “3b AJCC 6 Blank Tis”

The following table contains review instructions for tumors of gastrointestinal, breast, and bladder primary sites where CS Extension derives a Tis value, which will fail to derive a stage after conversion. Note the derived stage which is affected for each review in this group, and determine if review and recode is necessary for the intended uses of registry data. (The Review Notes are available in the Release Notes; they are listed here for ease of reference.)

Schema	CS Extension 2810	CS Lymph Nodes 2830	CS Mets at DX 2850	Review Note
Appendix CarcinoidAppendix NETColon NETRectum	000, 050	Not 000, 999	Not 000, 999	The combination of a CS Extension code mapping to Tis with a CS Lymph Nodes code indicating nodal involvement or a CS Mets at DX code indicating distant metastasis was previously assigned an AJCC 6 TNM stage. The stage derivation has been corrected to yield “ERROR”. Any case with this combination of codes should be reviewed and recoded to indicate either an invasive T component or negative N and M components. For all SEER registries combined, this affects about 470 cases, primarily colorectal. Stage affected: AJCC 6 Summary Stage 1977 Summary Stage 2000
Colon Rectum	000, 050, 100, 110, 120			
Breast	000, 050, 070			
Bladder	010, 030, 060, 100			

c. GI Nodes: “3c 1 and 2 AJCC 6 Blank GI Nodes”, “3c 1 and 2 AJCC 7 Blank GI Nodes”.

The following table contains review instructions for nodal codes of gastrointestinal sites that fail to derive an N value and thus a stage value after conversion. Note the derived stage which is affected for each review in this group, and determine if review and recode is necessary for the intended uses of registry data.

Schema	CS Lymph Nodes 2810	CS Lymph Nodes Eval 2840	CS SSF 2 2890	Review Note
Esophagus AJCC 7 only) EsophagusGEJunction NETStomach (AJCC 6 only) Stomach	100-500	0,1,5,9	SSF 1 000	The combination of a CS Lymph Node code mapping to positive involvement, not specified as pathologic, a CS Lymph Nodes Eval code indicating clinical evaluation of nodes, and a CS Site-Specific Factor 1 or 2 code indicating no involvement of lymph nodes is now mapped to ERROR. Previously a value in Regional Nodes Positive was used to assign a clinical N value with this combination of codes, but this mapping has been changed. Any case with this combination of codes should be reviewed and recoded. Any one of the three fields could be recoded: to show that nodes were not involved in CS Lymph Nodes; that involvement was determined pathologically rather than clinically in CS Lymph Nodes Eval; to show that nodes were involved clinically in CS Site-Specific Factor 1 or 2. Stage affected: AJCC 6 AJCC 7
Appendix Colon Rectum SmallIntestine (AJCC 7 only)	100-300	0, 1 5 9	SSF2 000	

- d. Invalid CS Version “3d AJCC 6 Blank Invalid CS Version”, “3d SS1977 Blank Invalid CS Version”, “3d SS2000 Blank Invalid CS Version”

Extra tables in some schemas use a value for **CS Version Input Original** indicating a case originally coded in CSv1 or a case originally coded in CSv2 to determine the correct T, N, or M value. If the CS Version Input Original value for any case coded in these schemas is invalid, the extra table will not be checked and the case will not derive a T, N, or M value or a final stage value. An invalid value in this field may thus be a source of CS error and a field to be checked in resolving stage derivation problems. Extra tables have been added to the CorpusCarcinoma and CorpusSarcoma schemas which use this field. Schemas using CS Version Input Original include:

- CorpusCarcinoma – AJCC 6 stage derivation
- CorpusSarcoma – AJCC 6 stage derivation
- Lung – Summary Stage 1977 and Summary Stage 2000 derivation
- SkinEyelid – AJCC 6 T derivation

- Testis – AJCC 6 T derivation

Note: An invalid CS Version Input Original and a blank derived stage value may be coincidental. If the schema and derived value are not included in this list, review the record for other possible coding issues.

Review the invalid version number, determine the number it should be, and enter that value in the CS Version Input Original field. Valid CS Version Input Original values include: “000937”, “010000”, “010002”, “010003”, “010004”, “010005”, “010100”, “010200”, “010300”, “010400”, “010401”, “020001”, “020100”, “020200”, “020302”, “020440”. You may need to speak with your vendor if your software does not allow you to manually update this field.

- e. A stage component or stage group may map to “ERROR”, failing to derive a value for other reasons which are not specifically listed here. The case must be carefully reviewed to determine the source of the problem and the coding resolution. Running the case through the edit metafile may help to identify the incorrect code or combination of codes resulting in the failure to derive a stage component or stage group value.

Appendix 4. Changes in CS Tables and Descriptors

Gastrointestinal Schemas, CS Lymph Nodes Mapping

Prior to v0205, the extra tables that mapped clinical N values for gastrointestinal schemas included information coded in Regional Nodes Positive. In the Colon schema for example, the extra table **Lymph Nodes Clinical Eval Prior to V02.05 AJCC 7 Table** continues this mapping for cases entered prior to v0205 with a CS Lymph Nodes Eval code of 1 or 5. A new table, **Lymph Nodes Clinical Eval V02.05 AJCC 7 Table**, excluding information from Regional Nodes Positive, is used to map clinical N values for v0205 cases, and also for pre-v0205 cases where the CS Lymph Nodes Clinical Eval code is 0 or 5. The table titles thus do not provide exact information about which one is being used to determine the clinical N value.

The following table may be useful in following the mapping for clinical N values for these schemas, which include:

- Esophagus
- EsophagusGEJunction
- Stomach
- SmallIntestine
- Appendix
- Colon
- Rectum

CS Version Input Original	CS Lymph Nodes Eval 0, 5	CS Lymph Nodes Eval 1, 9
Pre-020550	Lymph Nodes Clinical Eval V02.05 AJCC 7 Table	Lymph Nodes Clinical Eval prior to V02.05 AJCC 7 Table
020550	Lymph Nodes Clinical Eval V02.05 AJCC 7 Table	Lymph Nodes Clinical Eval V02.05 AJCC 7 Table

Descriptor Fields

Previously when a T, N, or M value was suppressed (not returned by the algorithm) because it mapped to "ERROR", the stage descriptor ("c", "p", "yp", "a") may have displayed. These values will no longer display when T, N, or M is blank because it mapped to "ERROR".

Appendix 5. Edits

The CS Edits Workgroup continues to review CS codes and instructions to identify coding situations where edits can be used to assist registrar abstracting. As noted in previous implementations, given the increase in the amount of data collected in CSv2, the expanded table notes instructing coding, the complexity of data relationships across the tables, and time required for coders to use and identify problems, it is anticipated that the identification and construction of CSv2 edits will extend well beyond the initial implementation of the system.

Recognizing problems that arise from the application of new edits to previously coded and collected cases, particularly for central registries, the registry community has established an Edits Impact Group (a workgroup of the NAACCR Edits Workgroup) to assess the resulting workload and to make recommendations for managing the response to edit failures with large volumes. The Edits Impact Group will focus on review of edits in conjunction with the CS Edits Workgroup, development of strategies that central registries can adopt to deal with multiple edit failures, and education and communication about edits to hospital and central registries.

The NAACCR v14 Edits Metafile contains new edits that could apply to cases collected under previous versions of CSv2 as well as edits written specifically for v0205. In constructing the new edits, the CS Edits Workgroup has added a check for CS Version Input Original of 0205, so that the edits specifically will not be applied to earlier cases. Any registry wishing to use these edits on earlier cases must customize them by removing the CS Version Input Original check. A registry may decide to customize these edits and apply them to earlier cases for two reasons:

1. The edits not tied to new instructions with v0205 could be used to clean prior data.
2. The edits tied to new instructions with v0205 could enhance the consistency of data over time, as many of the v0205 changes represent improvements or clarifications in existing coding instructions.

New edits and changes in existing edit content are posted with each new version of the NAACCR Edits Metafile.