

Breast Cancer Surveillance Consortium

Data Dictionary Version 3.3

The Statistical Coordinating Center

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FILE DESCRIPTION

I. Patient Information

Typically the information in this file is taken directly from the questionnaire that is completed by the woman each time she obtains a mammogram. Thus, a record should be generated each time a patient completes a questionnaire, and the information should reflect what was known at the time of that particular visit. If a visit is completed and a patient questionnaire is not filled out, it is not necessary to send a record for that visit. The SCC recognizes that sites handle missing patient records and missing patient demographic data differently. If sites backfill information or create patient records for radiology data the SCC is able to use this data, but it is not required to do this since the SCC can handle many instances of missing demographic data analytically on its own end. As a general rule, the SCC would like the most accurate data that reflects what is know at the time of that visit.

Not all information will necessarily come directly from self-report. Some sites or facilities may have to derive the answers from automated data or other secondary sources. In some cases information is directly obtained so it may be considered as reliable as the self-report questionnaire data. In other cases, information may have to be calculated indirectly from other sources. The latter case constitutes "imputing" variables and the SCC considers it desirable to know which values have been imputed. Consequently, for a few important variables the SCC records whether or not certain information has been "imputed" from other sources. Information is considered "imputed" if it is obtained indirectly and may therefore be more likely to be erroneous or differ from self-report. For example, previous breast cancer history could be obtained from the cancer registry rather than directly from the woman. Another example could be classifying a woman as having had a previous mammogram on the basis of a known previous mammography visit to that facility. This would be imputed. However, there will be some gray areas. If a program populates some fields with previously self-reported information and the woman is given a chance to change the value, but does not, this will not be called imputed. The imputed variables will help the SCC keep track of which sites do and do not impute information. The SCC will also record how the imputation is done in its tracking database.

Ordering of the variables in this file reflects the ordering in both the long and short versions of the standardized questionnaires. Furthermore, every item in the questionnaire should map directly to the coding in the Data Dictionary.

In general please use the following rule in coding. If inconsistent information comes from a woman's self-report, code exactly as the woman reported (e.g., if a woman reports that she has never had a mammogram and then reports a date please code both these pieces of data). However, if an inconsistency arises from how the data is collected at the site, please attempt to resolve the inconsistency with whatever data is available and code accordingly.

II. Radiologic Information

Any radiologic event that results in a BI-RADS assessment should be recorded here. This will consist mainly of mammograms and ultrasounds, but if other procedures are performed during the same visit that information will also be captured in this file. Radiologic events that do not result in a BI-RADS assessment should be recorded in the *Additional Imaging Follow-up* file.

Ordering of the variables in this file reflects the ordering in the long and short versions of the standardized radiologist questionnaires. Every item in the questionnaire should map directly to the coding in the Data Dictionary. This file also contains variables that indicate whether or not certain information has been "imputed." For example, type of views might be imputed from indication for visit. Because this may lead to some inaccuracy we would like to flag that this item was imputed.

If there is a comparison film, the record should only be sent once an assessment is made. Do not send the record if you are waiting for comparison film and record is pending. If a mammogram is double-read, the SCC prefers only one record be sent which reflects the final assessment (if known). If there are two records, and it is not clear which is the final read, send both records and the SCC will determine which to use (depending on the specific analysis it's being used for)." There are further examples of how to code radiologic events in Appendix 12.

III. Additional Imaging Follow-up Information

This section is intended to capture radiology when it is done as follow-up to earlier screening or diagnostic mammography and the outcome is not reported in the BI-RADS format. If the follow-up radiology is reported in the BI-RADS format, it should be reported in the *Radiologic Information* file. Information that occurs within a two-year follow-up period to either a positive or negative mammographic exam should be reported. It is expected that much less detail about outcomes and recommendations will be available than in the *Radiologic Information* file. If a site gets more than one imaging record per day, all imaging records should be sent. But if a site only gets one record then just the single one should be sent.

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IV. Biopsy/Surgery Follow-up Information

This file captures biopsy procedures done as follow-up to an earlier mammography. Information that occurs within a two-year follow-up period to either a positive or negative exam should be reported. This file should be submitted even if pathology and/or registry information is also submitted. Some sites do not submit pathology so it may be necessary to send this file to evaluate outcomes. Pathology reports add more detail than reported here.

V. Clinical Follow-up Information

This file is no longer sent.

VI. Carcinoma/Registry Information

The information in this file should only be sent for subjects appearing in the *Patient* and *Radiologic Information* files. It is not necessary to send registry information for subjects on which we have no other information. Sites should send registry data for all years that are available since it will help the SCC determine if there are previous breast cancers. If the SCC cannot receive this information, the sites should try and fill in age at diagnosis and diagnosis date in the Patient Information file. This is one of the few instances where self-report information may be overwritten. If this is done, the imputed personal history of breast cancer variable should be coded appropriately.

This file reflects the information and coding in the SEER manual. It has been updated to the SEER 4th Edition and is compatible with the NAACCR 11.1 file format. In general "structural missing" codes are not applicable here because SEER codes these as unknown (and codes typically used for structurally missing might conflict with existing SEER codes). A blank space is used by NAACCR to indicate structural missing. For our purposes, sites can use either a blank space or the appropriate unknown code (9, 99, etc.), because we want to make it possible for site programmers to produce a file with as little modification as possible. Sites that do not have a SEER-based registry will not be able to provide some of the information. A quick over-view of the fields and changes for this file is provided in Appendix 16. The end of Appendix 16 also lists all reference manuals used to obtain codes and descriptions of registry fields.

For all NAACCR fields there is a Required Status Table located in the Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, Twelfth Edition. It is located at http://www.naaccr.org/filesystem/pdf/Standards Vol II Chapter VIII Required Status Table_Revised December 2007.pdf

In it you will find, for all NAACCR fields, coding which tells us whether a field is required to be collected and/or transmitted at NPCR, CoC, SEER, and CCCR sites.

Some registries may backfill some newer fields with values from older fields. For example: Site-specific surgery VI.72 surgf is intended for 2003+ but may have values from 1998-2002 variables. Data managers should send the values in the variables that their registry supplies.

VII. Vital Status Follow-up Information

This file needs to be submitted annually on all women who have vital status information to allow computation of survival and mortality. The source for this file is death tapes or other vital status sources. Cancer registry information should not be used in this file. Any vital status information coming from cancer registries should go into the Carcinoma/Registry Information file. You may include information on women without breast cancer who are known to be alive.

VIII. Pathology Information

It is expected that many sites will not have this information and cannot send this file. Those sites that do collect this information should still have a record in the biopsy/surgery file for events within two years of a mammogram. Sites should send <u>all</u> pathology data if possible. The SCC will supply a map of all SNOMED codes into the categories: Invasive, insitu, etc. There are three artificial SNOMED codes created to capture pathology findings for which a SNOMED code does not exist. See VIII.13 (Snomedm1) for more information on these codes.

Only data generated by a pathology report should be included. Cancer registry data should not be included.

IX. Computed Variables

NOTE – DATA MANAGERS DO NOT SUBMIT THIS FILE

This file documents how the SCC computes variables for analytic purposes using the information in the above data files. This includes some of our standard definitions that apply to the entire Consortium. There may be more than one computed variable for a single outcome such as family history of breast cancer. The differences are usually due to how missing data are handled – either taken as missing or assumed to be "No". This is important in analysis since missing values are typically excluded. This section provides documentation on which variables from the raw data files are used to compute the analytic variables. The actual code (written in SAS) can be found on the Breast Cancer Surveillance Consortium website. *This file is in draft form (working version) and the SAS code on the website is under development.*

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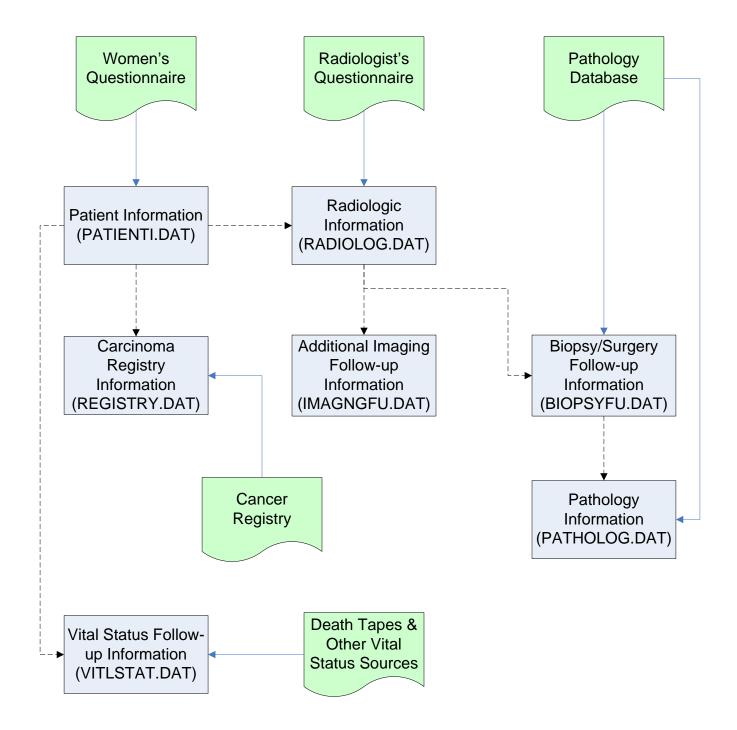
<u>Appendices</u>
The source for each appendix is listed in the table below:

Appendix	Appendix	Appendix	NAACCR#
Number	Source	Contents	(if applicable)
1	FIPS (Federal Information Processing Standard) County Codes	FIPS codes, by county	90
2	FIPS (Federal Information Processing Standard) State Codes	FIPS codes, by state	80
3	SEER Program Code Manual, 4 th edition, Appendix B, pp. B1-B15.	SEER Geocodes	10
4	SEER Program Code Manual, 4 th edition; pp. 45-50	SEER Race	160-164
5	SEER Program Code Manual, 3 rd edition; Section IV, Field 06, p. 95- 104 (inapplicable pages removed)	Morphology ICD-0-2, Histology, Behavior, Grade (to 2000)	419, 440
6A	SEER Program Code Manual, 2 nd edition, revised June 1992, Appendix C, pp. 190-191	Surgery codes (1988-1997)	1640
6B	SEER Program Code Manual, 3 rd edition, Appendix C, pp. C63-C64.	Surgery codes (1998-2002); table comparing all Surgery codes 1988-2003+	1646
6C	SEER Program Code Manual, 4th edition, Appendix C, pp. C-469-C-486 REMOVED OUTDATED CS SECTION, CREATED 6D WITH NEW CS	Surgery codes (2003+), Primary Site, information about other Registry fields	1290, 400
6D	CS Manual and Coding Instructions, Part II, Version 01.03.00, p. 371-375 NEW	CS Staging fields (2004+)	2800, 2810, 2830, 2850, 820, 830, 2880, 2890, 2900, 2910, 2920, 2930
7 & 8	AJCC Cancer Staging Manual. American Joint Committee on Cancer, 6th edition, 2002, Chpt 25;	TNM Pathological/Clinical codes, Derived AJCC fields	880, 890, 900, 910, 940, 950,
	Facility Oncology Registry Data Standards (FORDS) Manual, Commission on Cancer (COC), Revised for 2004; Standards for Cancer Registries, North American Association of Central Cancer Registries (NAACCR), Volume II, 11th edition, Version 11.1 (April 2006); SEER Program: Comparative Staging Guide for Cancer, Version 1.1, June 1993.	& CS Guide Recode codes (historical codes)	960, 970, 2940, 2960, 2980, 3000
9	Additional information on procedure codes compiled by Don Weaver.	Pathology - Surgery procedure type (SCC Data Dictionary item #VIII.9)	
10	SEER memo documenting revision of EOD Extension fields for breast cancer, 3/14/2002 Tum Size CODE 003 IS WRONG. Should be <=3mm - will fix if I can	EOD Tumor Size, Extension	780, 790
11	SNOMED Conversion - DRAFT OUTDATED?	Pathology - Carcinoma type (SCC Data Dictionary item #VIII.19-29, 40, 42)	
12	Examples of how to code radiologic events	Radiology - Assessment (SCC Data Dictionary item #II.29-31)	
13	SCC coding instructions for self-reported breast symptoms	Patient Information - Symptoms (SCC Data Dictionary item #I.11-14)	
14	SEER Program Code Manual, 4th edition, pp. 95- 104 (inapplicable pages removed)	Morphology ICD-0-3, Histology, Behavior, Grade (2001+)	521,440

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15	SEER Program Code Manual, 3rd edition, Revision 1, pp. 17-24	Treatment: Chemotherapy, Hormone therapy, Immunotherapy, Hematologic transplant and endocrine procedures	1390, 1400, 1410, 3250
16	Cancer Registry File Reference Guide		
17	BCSC Glossary of Terms		
18	Patient Questionnaire Coding Guide		

Diagram of the File Structure



FILE TRANSFER

To submit the files to the SCC, the following steps should be followed:

- 1) Run the error program provided by the SCC and correct any errors that occur.
- 2) Run the encryption program provided by the SCC to encrypt patient, radiologist, and facility identifiers.
- 3) Run a Zip utility to compress, encrypt, and password-protect each file (see file naming convention below).
- 4) Browse to the secure file transfer webpage, login and place data in your site's directory.
- 5) Send e-mail to the SCC data manager once the files have been transferred and indicate each file as being either a complete replacement (replaces all previous data), addition (new data only), update (correction to a record previously sent), or delete (records that should be deleted) file.
- 6) If you send a file correction and have added new data since the file was first sent, then resend all files.
- 7) The SCC data manager will send a confirmation message and remove the files from the SCC FTP site within 24 hours.

The following file names should be used during transfer:

Section	File Name
Patient Information	PATIENTI.DAT
Radiologic Information	RADIOLOG.DAT
Additional Imaging Follow-up Information	IMAGNGFU.DAT
Biopsy/Surgery Follow-up Information	BIOPSYFU.DAT
Carcinoma/Registry Information	REGISTRY.DAT
Vital Status Follow-up Information	VITLSTAT.DAT
Pathology Information	PATHOLOG.DAT

Refer to the SCC for more documentation on how to transfer files.

FILE STRUCTURE

Each section of the data dictionary describes a data file that is submitted in fixed column ASCII format. The following information provides instruction on how to construct each of the files.

<u>Section</u> – Each section contains information on the fields that go into that particular file. The section name appears at the top of every page and describes the file contents.

<u>Field Number</u> – The fields are listed in the order they should appear in the data file. The field number contains both the section number and the numerical order within the section (i.e., I.4 is the fourth field in the Patient Information file).

<u>Field name and description</u> —A name has been given to each field and will be used when referring to that field. A brief field description is also included. The item in parentheses is the SAS variable name used by the SCC.

Code - Valid codes followed by a brief code description are listed under each variable.

Structural means the field does not appear on the data collection form. It is usually coded as 8, 88, 888,

missing or 8888 depending on the width of the field.

Unknown.... means the field is collected but the response was left blank or filled in as unknown. It is

usually coded as 9, 99, 999, or 9999 depending on the width of the field.

Note: Some variables allow 8, 9, 88, and 99 as valid codes and are not to be used for structural missing or unknown.

<u>Core Status</u> - The core status of a field indicates whether or not the information is required (minimal structural missing or unknown).

Key Field is a required field. The combination of key fields is used to uniquely identify a record.

Bookkeeping . . is a required field. The only bookkeeping field is "SCC date" and is used by the SCC to keep

track of data submission dates.

Core is a required field. Typically, any information that appears on the short version of the

Consortium standardized questionnaires is considered a core field.

Core (SEER)... is a required field only for those sites that have a SEER-based registry. Sites that do not have a

SEER-based registry may have some missing information in these fields.

Optional may contain a structural missing or unknown code. Typically, any information that does not

appear on the short version of the Consortium standardized questionnaires is considered an

optional field.

Character Position, Width – This is the number of spaces to be filled for a field. All spaces must be filled in so the file does not contain any blanks. If a code is less than the field width, put in leading zeroes (i.e., 9 should be coded as 09 if the field width is 2).

Character Position, Start – This is the column number in which the field starts.

Character Position, Stop – This is the column number in which the field ends.

Last Edit – This is the most recent date any information for a field was changed by the SCC.

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SCC Data Dictionary

Section I, Variables 1 to 4

			Charac	Character Position		Last	
Fiel	d Number			Width	Start	Stop	Edit
Ι	PATIENT INFO	RMATION					
I.1	Record type		Key field	8	1	8	
	Patient information (rectype)	ion record. Only one code allowed.					
	Code:						
	PATIENTI	Patient Information record. Only one code allowed	l.				
I.2	Study site		Key field	1	9	9	
	Unique identifie (site)	r for study site.					
	Code:						
	X	Unique assigned letter for your site (Capitalized)					
I.3	Study ID		Key field	10	10	19	
	Unique person id (studyid)	dentifier for study site.					
	Code:						
	XXXXXXXXX	Encrypted, unique person identifier for site					
I.4	Information da	ate	Key field	8	20	27	
		n was collected on woman. (Typically date of s	urvey.)				
	Code:						
	XXXXXXX	Three variables: Mo(xx); Day(xx); Year(xxxx)					

Sect	Section		Charac	Character Position		
Fiel	d Number		Width	Start	Stop	Edit
I	PATIENT INFO	RMATION				
[.5	SCC date		8	28	35	
	Date prepared f	or SCC				
	(sccdate)					
	Code:					
	XXXXXXX	Three variables: Mo(xx); Day(xx); Year(xxxx)				
I.6	Birth date		8	36	43	
	Self-reported/m (bdate)	edical record date of birth.				
	Code:					
	xxxxxxx	Three variables: Month(xx); Day(xx); Year(xxxx); Stru 8888 for year; Unknown = 99 for mo&day 9999 for ye	_	88 for m	o&day	

I.7 Current age

Exact age of women in years (truncated) at time of survey (time patient information is collected), not at time of exam. If calculated from I.4 Information date and I.6 Birth date, take the integer value and drop the decimal place (i.e., 35.9 should be coded as 035). No data should be sent for anyone under age 18. Also check ages > 100 since there may be a coding problem. This should be the age of the woman at time of survey (time patient information is collected) not at exam.

3

44

46 02/12/2005

(age)
SAS Code to calculate exact age from infodate and bdate:
age=floor((intck('month',bdate,infodate)-(day(infodate)<day(bdate)))/12);</pre>

Code:

XXX	Actual age	
888	Structural missing	
999	Unknown	

I.8 Zip code

Zip code 5 47 51 01/22/2008

Residence zip code. If military personnel provide a non-local permanent zip code, then code as 00000. (zipcode)

xxxxx Five digit zip for residence, 99999=unknown
Use as the zip code for people in the milita

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

I.9 Symptoms

1 52 52 05/11/2004

Self-report of recent (last 6 months) symptoms not including breast pain. Use code 0 for no symptoms or breast pain only; code 1 if there are any symptoms (lump, nipple discharge, or other) in right breast only; code 2 if symptom(s) in left breast only; code 3 if symptom(s) in one breast only, laterality not specified; code 4 if at least one symptom in each breast; code 5 if symptom(s) noted at woman-level only and no other information is available; code 8 if symptoms are not collected by the site; code 9 if symptoms are collected by the site, but are unknown here. For sites using standardized questionnaire, this is computed from I.11-Lump, I.12-Nipple discharge, and I.14-Other symptoms. For sites imputing symptoms, code 0 - No Symptoms if pain is the only symptom.

(symptcur)

Other symptoms may include breast pain if it is not listed separately as a specific symptom.

Code:

Oodo.	
0	No symptoms
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.10 Imputed symptoms

1 53 53 05/11/2003

Indicator variable for "I.9 - Symptoms" field. This indicates whether or not symptoms variable was imputed. If unable to tell if information was imputed, use code 9. Note: Do not include pain as a symptom if imputing this information.

(sympimp)

oodo.		
0	No	
1	Yes	
8	Structural missing	
9	Unknown	

Section Character Pos	sition Last
Field Number Width Start	Stop Edit

I.11 Lump

Self-report of recent (last 6 months) breast change involving a lump. If the patient survey doesn't contain a specific question about lump, use code 8. For information on coding written in symptom descriptions see Appendix 13.

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54 05/11/2004

55 05/11/2004

(lump)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.12 Nipple discharge

Self-report of recent (last 6 months) breast change involving nipple discharge. If the patient survey doesn't contain a specific question about nipple discharge, use code 8. For information on coding written in symptom descriptions see Appendix 13.

(discharg)

_	_1	_	
n	a	e	•

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

I.13 **Breast pain**

Self-report of recent (last 6 months) breast change involving pain. If the patient survey doesn't contain a specific question about breast pain, use code 8. For information on coding written in symptom descriptions see Appendix 13.

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57

58

1

56

56 05/11/2004

57 05/11/2004

58 05/11/2004

(pain)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.14 Other symptoms

Self-report of recent (last 6 months) breast changes involving other symptoms not specifically asked on the patient survey. If lump, nipple discharge, or breast pain do not appear as separate questions on the patient survey, these symptoms may be included in this variable. For information on coding written in symptom descriptions see Appendix 13.

(othsymp)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.15 Reason for visit

Patient reason for visit. If more than one reason is given then code the most severe (highest value = 3). (reason)

Code:	
1	Routine screening
2	Follow-up to routine screening exam
3	Concerns about breast problems
8	Structural missing
9	Unknown

Secti	on		Chara	cter Po	sition	Last
Field	l Number		Width	Start	Stop	Edit
I	PATIENT INF	ORMATION				
I.16		ient reason for visit able for field "I.15 - Reason for Visit" field. This indicates	1 whether o	59 or not th	59 ne natie	ent reason
	for visit varial	ble was imputed. If unable to tell if information was imput			io puii	in rougon
	(reasimp)					
	Code:					
	0	No				
	1	Yes				
	8	Structural missing				
	9	Unknown				
I.17	First concer	ned about breast problems	1	60	60	10/06/200
	First person to	be concerned about breast problems.				
	(concern)	-				
	Code:					
	0	No concerns				
	1	Patient				
	2	Physician or other healthcare provider				
	3	Other person (friend, spouse)				
	4	Concern (cannot determine between patient and provider)				
	8	Structural missing				
	9	Unknown				
I.18	Ever mamm	ogram	1	61	61	
	Ever had a ma					
	(evermamm)					
	Code:					
	0	No				
	1	Yes				
	8	Structural missing				
	9	Unknown				

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

I.19 Time since last mammogram

Woman's self-report of time since last mammogram. If calculated from I.20 Date of last mammogram, compute months, round up all fractional months, and use classification below. Do not try to impute the value from other information you have about the woman's last mammogram. Previous mammogram date is also recorded in the Radiology file. **Field is Core only if I.20 - Date of Last Mammogram is not given. If date of last mammogram is recorded, please compute this variable using months. If both current and last exam dates have known dates, then compute months and round up. If only month/year is known for last exam, then use current month/year to compute the number of months. If only year is known for last exam, then use only year of current exam to compute the number of months (i.e. answer would be 12, 24, etc. months).

(timesinc)

(0	d	е

0	No previous mammogram
1	Within a year (0-11 months)
2	1-2 years (12-35 months)
3	3-4 years (36-59 months)
4	Five years or more (60+ months)
8	Structural missing
9	Unknown

I.20 **Date of last mammogram**

8 63 70 10/06/2000

1

62

62 06/06/2001

Woman's self-report of the date of last mammogram. 9's should be used (99999999) if this variable is not applicable.

(lastdate)

Code:

xxxxxxx

Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; Structural mi

Section	Character Position	Last
Field Number	Width Start Stop	Edit

I.21 Time since last CBE

Report of time since last clinical breast exam. If calculated from I.22 Date of last CBE, compute months, round up all fractional months, and use classification below. Only codes 0 & 1 are core - knowledge of a CBE done within the last 3 months. If information is available on CBE greater than 3 months ago use codes 2 & 3. If it is known that a CBE was never done, use code 4, not code 0. Use code 5 if you cannot determine if the CBE was done within the last 3 months.

(lastcbe)

Code:

0	No CBE within the last 3 months/no other information
1	CBE within the last 3 months (0-3 months)
2	CBE 4 months to 1 year ago (4-12 months)
3	CBE more than 1 year ago (13+ months)
4	Never had CBE
5	Within the last year
6	No CBE within the last 12 months / no other information
8	Structural missing
9	Unknown

I.22 Date of last CBE

8 72 79 10/06/2000

Report of date of last clinical breast exam. 9's should be used (99999999) if this variable is not applicable. (cbedate)

Code:

xxxxxxxx Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

I.23 Personal history of breast cancer

1 80 80

1

71

71 05/11/2004

Personal history of breast cancer.

(bchist)

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

I.24 Imputed personal history of breast cancer

1 81 81

Indicator variable for "I.23 - Personal History of breast cancer". This indicates whether or not personal history of breast cancer variable was imputed. If unable to tell if this information was imputed, use code 9. (cancimp)

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	•
0	No
1	Yes
8	Structural missing
9	Unknown

I.25 Age at diagnosis

2 82 83

Age at first diagnosis. Structural missing is 08, not 88 for this variable and Unknown is 09 not 99. Do not override any self-report information that is filled in for personal history of breast cancer. However, if personal history is "yes" and age and date are "unknown", AND if a site does not send its cancer registry data from all available years (in which case the SCC would not be able to determine if there are previous breast cancers), you may fill in age at diagnosis or date of diagnosis.

(ageatdx)

Additional detail available from some sites; may be computed from year of diagnosis.

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oouo.	
00	no BC
01	Age < 30
02	Age 30-39
03	Age 40-49
04	Age 50-59
05	Age 60-69
06	Age 70+
XX	Actual age (valid range 10-99)
08	Structural missing
09	Unknown

I.26 **Date of diagnosis**

8 84 91 10/06/2000

Date of first diagnosis. 9's should be used (99999999) if this variable is not applicable. Do not override any self-report information that is filled in for personal history of breast cancer. However, if personal history is "yes" and age and date are "unknown", AND if a site does not send its cancer registry data from all available years (in which case the SCC would not be able to determine if there are previous breast cancers), you may fill in age at diagnosis or date of diagnosis.

(dxdate)

Code:

xxxxxxxx Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

Section	Character Position	Last
Field Number	Width Start Stop	Edit

I.27 **Aspiration**

1 92 92 10/06/2000

Fine needle aspiration (FNA) or cyst aspiration only. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9. (aspirate)

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U	и	e	

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.28 **Personal history of biopsy**

1 93 93 10/06/2000

Code if any biopsies except FNA or cyst aspiration. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9. If FNA is combined with biopsy, code as biopsy.

(hxbiopsy)

Code:

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.29 **Date of biopsy**

8 94 101 10/06/2000

If more than one, record the most recent. 9's should be used (99999999) if this variable is not applicable. (biopdate)

Code:

XXXXXXX

Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

I.30 Lumpectomy

1 102 102 10/06/2000

Personal history of lumpectomy for breast cancer. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9. (lumpect)

		_	_1	-	
I	ارا	റ	П	e	1

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.31 **Mastectomy**

1 103 103 10/06/2000

Personal history of mastectomy. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9.

(mastect)

	$\overline{}$	\sim	6	
\sim	U	u	$\boldsymbol{\sigma}$	

ooao.	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.32 **Radiation therapy**

1 104 104 10/06/2000

Personal history of radiation therapy. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9.

(radtherp)

		_
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\mathbf{v}	u	u.

ooao.	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

I.33 Breast reconstruction

Personal history of breast reconstruction. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9.

1

105

106

105 10/06/2000

106 10/06/2000

(reconst)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.34 **Breast reduction**

Personal history of breast reduction. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9.

(brstredx)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

I.35 **Breast implants**

If it is determined that the women has implants this variable should be coded, regardless of how the information is ascertained (e.g. radiology system). If implants are removed, code as 0. If woman does not check YES to any procedure and also does not check the box indicating that she has "not had any of the above procedures," please code 9.

(brstaugm)

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

I.36 **Mother with BC**

Birth mother has had breast cancer. **Core only requires knowing if the mother has ever had a diagnosis of breast cancer, code 0 or 3. If information on age at diagnosis is available, use code 1 or 2.

(motherbc)

Assumes site can distinguish type of first degree relative (code 8 if site does not distinguish)

Code:

0	Mother did not have BC
1	Mother had BC age <50
2	Mother had BC age >=50
3	Mother had BC (age unspecified)
8	Structural missing
9	Unknown

I.37 Sister(s) with BC

1 109 109

1

1

108

108

107

107 05/11/2004

Any sisters with breast cancer?

(sisterbc)

Assumes site can distinguish type of first degree relative (code 8 if site does not distinguish)

0	No sisters with BC
1	Exactly one sister with BC
2	Two or more sisters with BC
3	One or more sisters with BC (number unspecified)
8	Structural missing
9	Unknown

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

I.38 **Daughter(s) with BC**

Any daughters with breast cancer?

(daughtbc)

Assumes site can distinguish type of first degree relative (code 8 if site does not distinguish)

1

1

111

112

113

110

110

111 06/06/2001

Code:

0	No daughters with BC
1	Exactly one daughter with BC
2	Two or more daughters with BC
3	One or more daughters with BC (number unspecified)
8	Structural missing
9	Unknown

I.39 First degree relative with BC

Code YES if there is at least one first degree relative (mother, sister, daughter) who had a breast cancer diagnosis. Code UNKNOWN if all answers are unknown; Code NO for any other combination.

(firstdeg)

Code:

0000.	
0	No
1	Yes
8	Structural missing
9	Unknown

I.40 Mother's age at diagnosis

Mother's age at diagnosis. If the only available information on age is < 50, >= 50 this should be recorded in I.36 - Mother with breast cancer. If not used, code as 08. Note: Structural missing is 08, not 88 for this variable and unknown is 09, not 99.

(momagedx)

This is specific information from the standardized long questionnaire.

Code:	
00	no BC
01	Age < 30
02	Age 30-39
03	Age 40-49
04	Age 50-59
05	Age 60-69
06	Age 70+
XX	Actual age (valid range 10-99)
08	Structural missing
09	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

I.41 Sisters with BC age <50

1 114 114

Number of sisters who were diagnosed with breast cancer under age 50. Use code 0 if patient has no sisters.

(sister50)

Code:

0	No sisters with BC age <50
1	Exactly one sister with BC age <50
2	Two or more sisters with BC age <50
3	One or more sisters with BC age <50 (number unspecified)
8	Structural missing
9	Unknown

I.42 Sister's age at diagnosis

2 115 116

If more than one sister, code the age of youngest diagnosed sister. Structural missing is 08, not 88 for this variable and unknown is 09, not 99.

(sisage)

Code:

Oodo.	
00	no BC
01	Age < 30
02	Age 30-39
03	Age 40-49
04	Age 50-59
05	Age 60-69
06	Age 70+
XX	Actual age (valid range 10-99)
08	Structural missing
09	Unknown

I.43 Daughter(s) with BC age <50

1 117 117

Number of daughters who were diagnosed with breast cancer under age 50. Use code 0 if patient has no daughters.

(daught50)

0	No daughters with BC age <50
1	Exactly one daughter with BC age <50
2	Two or more daughters with BC age <50
3	One or more daughters with BC age <50 (number unspecified)
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Wide	h Start Stop	Edit

I.44 Daughter's age at diagnosis

2 118 119

If more than one daughter, code the age of youngest diagnosed daughter. Structural missing is 08, not 88 for this variable and unknown is 09, not 99.

(daughage)

Code:	
00	no BC
01	Age < 30
02	Age 30-39
03	Age 40-49
04	Age 50-59
05	Age 60-69
06	Age 70+
XX	Actual age (valid range 10-99)
08	Structural missing
09	Unknown

I.45 First degree relative with BC age <50

1 120 120

If computed from separate questions about mother, sister, and daughter, use codes 1 - 3 if there is at least one first degree relative who had a breast cancer diagnosis before the age of 50; code 9 if all answers are unknown; code 0 for any other combination.

(first50)

Code:	
0	No first degree relative with BC age <50
1	Exactly one first degree relative with BC age <50
2	Two or more first degree relatives with BC age <50
3	One or more first degree relatives with BC age <50 (number unspecified)
8	Structural missing
9	Unknown

I.46 Ovarian cancer history

1 121 121

Personal history of ovarian cancer.

(ovhist)

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

I.47 First degree relative with ovarian cancer

1 122 122 06/06/2001

First degree relative (mother, sister, or daughter) with ovarian cancer. If the patient does not check any of these codes, use code 9. Use code 1 if the woman checked YES to any of the first-degree relative boxes (mother, sister, or daughter).

(firstov)

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

I.48 Other relative with ovarian cancer

123 123

Other relative with ovarian cancer. Code 8 for all patients if your site's form does not ask about other relatives with ovarian cancer.

(otherov)

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

I.49 Menarche age

2 124 125 12/11/2006

Age at menarche. If an exact age at menarche between 4 and 87 is reported, code the exact age. If an exact age less than 4 or greater than 87 is reported, code as Unknown. If only an age range is collected, code the age range as either <=10 (exact ages 11 and 12 collected), <=12 or 15+.

(menrcage)

Code:	
00	No menarche
01	$Age \ll 10$
02	Age <= 12
03	Age 15+
XX	Exact age (valid range 04-87)
88	Structural missing
99	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

I.50 Hormone medications

Any hormone-related medications, e.g., Tamoxifen, Raloxifene - refers to current use only. Do not include thyroid medications, hormone-based birth control, or non-prescription estrogens. Tamoxifen or Raloxifene should be included as YES if the woman used them. Should be coded as YES if HRT is being used.

1

126

128

128

126 06/06/2001

(hormany)

Code:	
0	No
1	Yes
2	HRT or oral contraceptives, cannot be distinguished
8	Structural Missing
9	Unknown

I.51 HRT 1 27 06/06/2001

Hormone replacement therapy - refers to current use only. A common brand name is Premarin. (hrt)

Code:

Oodo.	
0	No
1	Yes
2	HRT or oral contraceptives, cannot be distinguished
8	Structural Missing
9	Unknown

I.52 **Type of HRT**

Type of hormone replacement therapy - refers to current use only.

(hrttype)

0	No HRT
1	Estrogen
2	Progesterone
3	Both estrogen and progesterone
4	HRT NOS
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

I.53 **Tamoxifen or Raloxifene**

Refers to current use only. The common brand names are Nolvadex for Tamoxifen and Evista for Raloxifene. Only codes 0 and 3 are core.

(tamxralx)

	$\overline{}$			
- (വ	n	Δ

0	No
1	Tamoxifen
2	Raloxifene
3	Yes NOS
8	Structural missing
9	Unknown

I.54 Birth control hormones

1 130 130 06/06/2001

129

129 10/06/2000

1

This includes oral contraceptives, Depo-provera and Lunelle. Refers to current use only. (bchorm)

Code:	
0	No
1	Yes
2	HRT or Oral contraceptives, can't be distinguished
8	Structural Missing
9	Unknown

I.55 Other hormone medications

1 131 131

Refers to current use only, specific type not known. Do not include thyroid medication, hormone - based birth control, or non - prescription estrogens if possible.

(othhorm)

Information for variable comes directly from "Other" category on standardized questionnaire.

_	٦.		٦,	
		"	μ	

0	No
1	Yes
8	Structural missing
9	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

I.56 **Menopausal**

Have woman's menstrual periods stopped permanently? Use code 3 if menopause is due to some known other reason - other than natural or surgical reasons. For example known other reasons could be: HRT, chemotherapy, never began menstruating. Use code 4 if menopause is due to some unknown reason (i.e., the reason cannot be distinguished between codes 1-3). If a woman provides multiple responses then code using the following hierarchy: 1 (Yes, natural menopause), 2 (Yes, surgical procedure), 3 (Yes, other known reason), 4 (Yes, NOS), 7 (Yes, other unknown reason), 6 (Yes, but periods induced by hormones), 0 (No), 5 (Not sure).

(menopaus)

Code:	
0	No
1	Yes, natural menopause
2	Yes, surgical procedure
3	Yes, other known reason
4	Yes, NOS
5	Not sure
6	Yes, but periods induced by hormones
7	Yes, other unknown reason
8	Structural missing
9	Unknown

I.57 Removal of uterus

1 133 133

1

132

132 12/11/2006

(remuters)

0	No
1	Yes
8	Structural missing
9	Unknown

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

I.58 Removal of ovaries

1 134 134 01/22/2008

Number of ovaries removed.

(removary)

If the questionnaire does not specifically ask for the number of ovaries removed and instead captures this information using any of the following questions: 'Have both of your ovaries been removed?'; 'Have (both) ovaries been removed?'; or 'Have your ovaries been removed?'; then code 2 for a 'Yes' response and 3 for a 'No' response. If the questionnaire captures this information within the menopause question of 'Have your menstrual periods stopped permanently' and a woman responds 'Yes, ovaries removed by surgery', then code as 2.

Code:

0	No ovaries removed
1	One ovary removed
2	(Both) ovaries removed
3	No ovaries removed or one ovary removed, cannot distinguish
4	Ovaries removed, NOS (cannot distinguish between one or two ovaries removed)
8	Structural missing
9	Unknown

I.59 **Date of last natural period**

8 135 142 10/06/2000

9's should be used (99999999) if this variable is not applicable.

(mensdate)

Code:

xxxxxxx

Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

I.60 Days since last menstrual period

1 143 143

Days since last menstrual period. If natural periods stopped permanently, use code 0; otherwise, use codes 1-9. If computed from date of last period, use categories below.

(daylmp)

0	No periods
1	0-7 days ago
2	8-14 days ago
3	15-21 days ago
4	22-33 days ago
5	34+ days ago
8	Structural missing
9	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

I.61 Age at menopause

2 144 145 03/23/2007

If natural menstrual periods stopped permanently, use codes 01-99; otherwise, use code 00. (menoage)

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	U	u	U.	

Oodo.	
00	No menopause
01	Age < 30
02	Age 30-39
03	Age 40-44
04	Age 45-49
05	Age 50-54
06	Age 55+
07	Age 40-49
XX	Actual age (valid range 08-87)
88	Structural missing
99	Unknown

I.62 Ever given birth

1 146 146

(everbrth)

0	No
1	Yes
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

I.63 Age at first birth

2 147 148

Age of woman at first birth. Codes 00, 07, and 08 satisfy the minimal requirements for core; Codes 00-05, xx are used for those with more info; Code xx is actual age

(age1stb)

Code:	
00	Nulliparous
01	Age < 20
02	Age 20-24
03	Age 25-29
04	Age 30-34
05	Age 35-39
06	Age 40+
07	Age <30
08	Age >= 30
XX	Actual age (valid range 09-87)
88	Structural missing

I.64 **Height** 2 149 150 05/11/2004

Current height in inches. For height values greater than 87 inches, code as 87. Code 88 is reserved strictly for structural missing and code 99 for unknown.

(height)

99

Code:		
XX	Height in inches	
88	Structural missing	
99	Unknown	

Unknown

I.65 Weight

3 151 153 06/06/2001

Current weight in pounds. Note structural missing is code 888 and unknown code is 999.

(weight)

Code:		
XXX	Weight in pounds	
888	Structural missing	
999	Unknown	

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

I.66 **Hispanic origin**

1 154 154 01/08/2005

Hispanic, Spanish or Latina origin. Sources other than cancer registry can be used to impute race, as long as the information is available for both cancer and non-cancer cases.

(hispanic)

SEER uses Spanish surname, but this corresponds better to the census definition

Code:	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

I.67 Race - White 1 155 155 02/08/2005

White or Caucasian descent. Code 1 if patient identifies herself as this race. Code 0 otherwise. For combinations, code 1 for each race variable a woman checks. For example, if a woman identifies herself as both Asian and White, the Asian variable should be coded as 1 and the White variable should be coded as 1. Every other race variable should be coded as 0. Sources other than cancer registry can be used to impute race, as long as the information is available for both cancer and non-cancer cases.

(white)

Codes 3 and 4 are to be added to all race fields and the hispanic field. I.66 - I.72 $\,$

0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

I.68 Race - Black 1 156 01/08/2005

Black or African-American descent. Code 1 if patient identifies herself as this race. Code 0 otherwise. For combinations, code 1 for each race variable a woman checks. For example, if a woman identifies herself as both Asian and White, the Asian variable should be coded as 1 and the White variable should be coded as 1. Every other race variable should be coded as 0. Sources other than cancer registry can be used to impute race, as long as the information is available for both cancer and non-cancer cases.

Code:	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

I.69 Race - Asian 1 157 157 01/08/2005

Asian descent (Chinese, Japanese, Filipina, Vietnamese, other Asian). Use code 2 if you can only code woman as Asian/Pacific Islander. Code 1 if patient identifies herself as this race. Code 0 otherwise. For combinations, code 1 for each race variable a woman checks. For example, if a woman identifies herself as both Asian and White, the Asian variable should be coded as 1 and the White variable should be coded as 1. Every other race variable should be coded as 0. Sources other than cancer registry can be used to impute race, as long as the information is available for both cancer and non-cancer cases.

(asian)

Code:	
0	No
1	Yes (Asian)
2	Asian/Pacific Islander NOS
3	No, imputed
4	Yes, imputed
8	Structural Missing
9	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

L70 Race - Native Hawaiian/Pacific Islander

158 1 158 01/08/2005

Native Hawaiian or other Pacific Islander. If a women can only be coded as Asian/Pacific Islander use code 8. Code 1 if patient identifies herself as this race. Code 0 otherwise. For combinations, code 1 for each race variable a woman checks. For example, if a woman identifies herself as both Asian and White, the Asian variable should be coded as 1 and the White variable should be coded as 1. Every other race variable should be coded as 0. Sources other than cancer registry can be used to impute race, as long as the information is available for both cancer and non-cancer cases.

(hawpac)

Code:	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

I.71 Race - American Indian or Alaska Native

American Indian or Alaska Native. Code 1 if patient identifies herself as this race. Code 0 otherwise.

159 01/08/2005

159

For combinations, code 1 for each race variable a woman checks. For example, if a woman identifies herself as both Asian and White, the Asian variable should be coded as 1 and the White variable should be coded as 1. Every other race variable should be coded as 0. Sources other than cancer registry can be used to impute race, as long as the information is available for both cancer and non-cancer cases. (indalsk)

Code:	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

I.72 Race - Other

Race other than identified above. Code 1 if patient identifies herself as this race. Code 0 otherwise. For combinations, code 1 for each race variable a woman checks. For example, if a woman identifies herself as both Asian and White, the Asian variable should be coded as 1 and the White variable should be coded as 1. Every other race variable should be coded as 0. Sources other than cancer registry can be used to impute race, as long as the information is available for both cancer and non-cancer cases.

(otherrac)

	$\overline{}$	_	_	I _
- (n	n	$\boldsymbol{\mathcal{L}}$

Oodo.	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

I.73 **Education**

1 161 161 Highest level of education completed.

(educat)

Code:

1	< High school graduate
2	High school graduate or GED
3	Some college/technical school
4	College or post - college graduate
8	Structural missing
9	Unknown

I.74 Medicare

162 162 06/06/2001

1

160

160 01/08/2005

Covered by Medicare. If patient checks "not sure," code 9. Check codes carefully. More than one can be indicated.

(medicare)

0	No	
1	Yes	
8	Structural missing	
9	Unknown	

Section	Character Position	Last
Field Number	Width Start Stop	Edit

1 I.75 Medicaid

Covered by Medicaid. If patient checks "not sure," code 9. Check codes carefully. More than one can be indicated.

(medicaid)

Code:

0	No
1	Yes
8	Structural missing
9	Unknown

I.76 Private insurance

164 164 06/06/2001 1

Covered by private insurance. If "not sure" is checked by patient, code 9. Check codes carefully. More than one can be indicated.

(privins)

Code:

0	No
1	Yes
8	Structural missing
9	Unknown

I.77 Managed care

Covered by managed care insurance (HMO, PPO...). If "not sure" is checked by patient, code 9. Check codes carefully. More than one can be indicated.

(mancare)

Code:

0	No
1	Yes
8	Structural missing
9	Unknown

I.78 Other insurance

1 166 166 06/06/2001

165

165 06/06/2001

163

163 06/06/2001

Covered by other insurance (not otherwise specified). If "not sure" is checked by patient, code as 9. If patient is known to have coverage, but type is unknown, code as 1. Check codes carefully. More than one can be indicated.

(othinsur)

0000.		
0	No	
1	Yes	
8	Structural missing	
9	Unknown	

Secti	ion		Charac	cter Po	sition	Last
Field	l Number		Width	Start	Stop	Edit
I	PATIENT INFO	ORMATION				
I.79	HRT usage o	luration	1	167	167	05/11/200
	Duration for h	ow long in years a women has taken female hormones. If sit pout HRT usage, then code as structural missing 8.	es do no	t collec	et durat	ion
	(hrtdurat)					
	Code:					
	0	Not using HRT				
	1	Less than 1 year				
	2	1 to 2 years				
	3	3 to 4 years				
	4	5 to 9 years				
	5	10 to 14 years				
	6	15 years or more				
	7	1 - 4 years				
	8	Structural missing				
	9	Unknown				
I.80	HRT year st	arted	4	168	171	05/20/200
	•	man started taking hormone replacement.				
	(hrtyear)					
	Code:					
	XXXX	year (xxxx), i.e., 1998				
	8888	Structural missing				
	9999	Unknown				
I.81	Natural Hor	mone Supplement	1	172	172	05/11/200
		one Supplement (non prescription) refers to current use only	•			
	Code:					
	Coue.					

1

8 9 Yes

Unknown

Structural missing

Secti Field	tion Character Position ld Number Width Start Stop			Last Edit	
I	PATIENT INFORMATION				
I.82	Patient questionnaire version Version of patient questionnaire used to collect information. (pversion)	3	173	175	01/22/2008
	Code:				
	xxx See Appendix 18 for coding scheme				

I.83 Indicator of response to patient questionnaire

1 176 176 01/22/2008

If the patient record contains any information provided by the woman via a patient questionnaire, then code as '1:Yes'. If the patient record only contains information provided via other means (tech form, billing, etc.), then code as '0:No'.

(patresp)

Most records will have this variable coded as 1. Some sites, however, create and send patient records to the SCC even when no patient questionnaire was filled out by the woman, either as 'dummy' records or because patient information can be populated from other (non-patient form) sources.

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

			Character Position		Last		
rieic				Width	Start Stop		Edit
II	RADIOLOGIC IN	NFORMATION					
II.1	Record type		Key field	8	1	8	
	Radiology record	1.					
	(rectype)						
	Code:						
	RADIOLOG	Radiology record. Only one code allowed					
II.2	Study site		Key field	1	9	9	
	Unique site ident	tifier					
	(site)						
	Code:						
	X	Unique assigned letter for your site (Capitalized)				
11 2	C4 J ID		Key field	10	10	19	
II.3	Study ID	L	110) 11010	10	10	19	
	Unique person id (studyid)	lentiner					
	Code:						
	xxxxxxxxx	Encrypted, unique person identifier for site					
TT 4		4	Key field	8	20	27	
II.4	Information da		•	0	20	21	
		was collected on woman. (Typically date of	f exam.)				
	(infodate)						
	Code:						
	xxxxxxx	Three variables: Mo(xx); Day(xx); Year(xxxx)					

Section	Character Position	Last
Field Number	Width Start Stop	Edit

II.5 Exam sequence

Code used to order multiple procedures on the same day and helps to uniquely identify records. If unsure of the exam sequence use the following guidelines: if there is a screen, it should be coded first. Otherwise, the standard procedure for assigning exam sequence (if it is unknown), is to sort by indication (ordered 1,3,4,2). If equal on indication, then sort by assessment (ordered 0-5). Codes 8 and 9 are valid codes and should not be used for structural missing and unknown.

Key field

28

28

10/12/2000

(examseq)

Necessary to distinguish among events on the same day, will almost always be one. If the sequence is unknown, the indication for exam can be used to help with the ordering where 1 (routine screening) typically occurs first.

Code:

- 1 If first interpretation on that date or only one interpretation on that date
- 2 If second interpretation on that date
- 3... If third interpretation on that date, etc...

II.6 SCC date 8 29 36

Date prepared for SCC

(sccdate)

Date prepared or sent to SCC - allows corrections in the future

Code:

XXXXXXX

Three variables: Mo(xx); Day(xx); Year(xxxx)

II.7 Exposure site ID

Unique identifier for radiologic site. If the exposure site ID is structural missing or unknown, it should not be encrypted.

(exposid)

Code:

XXXXXXXX Encrypted ID 88888888 Structural Missing 99999999 Unknown

II.8 Reader site ID

8 45 52

8

37

44

Unique identifier for interpretation site. If the reader site ID is structural missing or unknown, it should not be encrypted. This should be filled in even if the reader site is the same as the exposure site. (readsite)

Code:

XXXXXXXX Encrypted ID 88888888 Structural Missing 99999999 Unknown

Section			Character Position			Last
Field I	Number		Width	Start	Stop	Edit
II)	RADIOLOGIC IN	NFORMATION				
II.9	Reader ID		8	53	60	
	encrypted. If pos (readerid)	for reader. If the reader ID is structural missing or unk ssible, each reader should have a single ID that does not if more than one				
	Code:					
	XXXXXXX 8888888 99999999	Encrypted ID Structural Missing Unknown				
П.10	Exam date		8	61	68	
	Date of radiologi	c event				
	(examdate)					
	Code:					
	xxxxxxxx	Three variables: Month(xx); Day(xx); Year(xxxx); Structural 8888 for year; Unknown = 99 for mo&day 9999 for year	missing =	88 for n	no&day	
I.11	Reading date		8	69	76	
	Date of interpreta (readdate)	ation. Note: This should be on or after exam date.				
	Code:					
	xxxxxxxx	Three variables: Month(xx); Day(xx); Year(xxxx); Structural 8888 for year; Unknown = 99 for mo&day 9999 for year	missing =	88 for n	no&day	
I.12	Previous mamr	nogram date	8	77	84	10/06/20
	situation where the day should not be from an previous mammograms on year ago would be (prevdate) Helps detemin	tous mammogram. 9's should be used (99999999) if this here are two mammograms on the same day, the mammograms on the same day, the mammogram day (i.e., from an earlier series). For example, If a work a single day and a previous mammogram one year earlies coded as the previous mammogram date. The whether this is a diagnostic or screening taken from the database as opposed to in	ogram per here is a p nen had sc er, the ma	formed previou reening mmogn	earlier s mam g and di cam fro This	in the nogram agnostic m one

Code:

xxxxxxxx

Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

Information file based on woman's self-report.

Section Character Pos	sition Last
Field Number Width Start	Stop Edit

II.13 Indication for exam

Indication for exam should be imputed if not directly available. Exams that are "Asymptomatic, history of implants" should be coded as routine screening and breast implants should be coded in the corresponding Patient Information record. Exams that are "Pre-reduction mammoplasty" should also be coded as routine screening. Exams that are "Review of outside study" or "Pre-radiation therapy" should not be sent to the SCC.

1

1

86

87

86

87 01/22/2008

85

85 12/11/2005

(indicate)

Code:

Couc.	
1	Routine screening (asymptomatic)
2	Additional evaluation of recent mammogram
3	Short interval follow-up
4	Evaluation of breast problem (symptomatic)
5	Other procedures
8	Structural missing
9	Unknown

II.14 Imputed indication for exam

Indicator variable for "II.13 - Indication for exam". This variable indicates whether or not the indication for exam variable was imputed. If unable to tell if information was imputed, use code 9.

(indicimp)

Code:

0	No
1	Yes (imputed)
8	Structural missing
9	Unknown

II.15 **Type of mammogram**

Type of mammogram performed

(mammtype)

0	No mammogram	
1	Film	
2	Digital	
3	Mammogram, NOS	
8	Structural missing	
9	Unknown	

Section Field	on Number			Character Position Width Start Stop		Last Edit	
II	RADIOLOGI	C INFORMATION					
II.16	Laterality (of mammogram	1	88	88	01/22/2008	
	Laterality of (mammlat)	mammogram performed					
	Code:						
	0	No mammogram					
	1	Right breast only					

II.17 **Routine views**

2

3

4

5

8

Left breast only

Unilateral, side not specified

Yes, women level information only

Bilateral (both breasts)

Structural missing

Unknown

89 89 10/06/2000 Routine views performed during exam (MLO, CC). Routine views that are performed as part of a

diagnostic exam should be coded here. Refers to type of views that were used to perform the mammogram. Exams with indication for history of breast augmentation, asympstomatic should be coded as unknown.

(routview)

Changed variable name from SCREENING to ROUTINE to be less confusing.

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.18 **Diagnostic views**

1 90 90 10/06/2000

Diagnostic views performed during exam (any views other than MLO or CC, such as spot compression or magnification.) Refers to type of views that were used to perform the mammogram.

(diagview)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.19 Imputed type of views

91 91

Indicator variable for either fields II.17 - Routine Views or II.18 - Diagnostic Views. This indicates whether or not either type of view was imputed. If unable to tell if information was imputed, code as 9. (viewimp)

Code:	
0	No
1	Yes (imputed)
8	Structural missing
9	Unknown

II.20 Used additional views

1 92 92

Use code 1 if additional views were done at this visit or later to reach the assessment for this record. If II.18 - Diagnostic views is coded as being performed, this should be 1.

(useaddv)

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

II.21 Ultrasound

1 93 93

Code as 1-5 if stand-alone ultrasound performed or taken in conjunction with routine or diagnostic mammographic views. This is not being collected consistently across sites. If a radiology visit results in a BI-RADS outcome, it should appear in radiology. Otherwise, it should be reported as Additional Imaging Follow-up.

(ultrasnd)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.22 Used ultrasound

1 94 94

Code as 1 if an ultrasound was done at this visit or later to reach the assessment for this record. If II.21 Ultrasound is coded as being performed, code 1.

(useultra)

9

Code as 1 if ultrasound was used to complete the mammographic assessment

Coue.	
0	No
1	Yes
8	Structural missing

Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.23 Other radiologic events

If information on other radiologic procedures is not being collected, use code 88 (not 00). Scintigraphy should be coded as nuclear medicine. All image-guided biopsies should be recorded in the

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96 10/12/2000

98 10/06/2000

Biopsy/Surgery Follow-up file. A record may also exist in pathology.

(otherrad)

Note that Biopsy and FNA done in conjunction with radiology should be entered in BIOPSY/SURGERY FOLLOW-UP INFORMATION.

Code:	
00	No
01	MRI
02	Xray
03	Chest Xray
04	Cat Scan (CT)
05	Nuclear Medicine
80	Yes, other or not otherwise specified
88	Structural missing
99	Unknown

II.24 Other procedures

(nonimage)

Coae:	
00	None
01	Needle localization
02	Core biopsy
03	Cyst aspiration
04	Fine needle aspiration
05	Ductogram
80	Other
88	Structural missing
99	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

II.25 Density

Breast density. If left and right breasts differ, use breast with higher density. The code descriptions 1-4

shown below reflect the BI-RADS coding system. The following comments only apply if the BI-RADS coding system is NOT used. If the Wolfe system is used, the data should be coded as follows: 1=Fatty; 2=Average; 3=Dense, but normal for age; 4=Highly dense. If a Dichotomous classification is used (dense/not dense) then codes 5 and 6 should be used. If Site G, Form IB is used, the data should be coded as follows: 1=Fatty; 2=Scattered densities; 3=Average (heterogeneous); 4=Dense. If MRS is used, the data should be coded as follows: 1=Fatty; 2=Average; 3=Dense; 4=Very dense. If a classification system not described above is used, let the SCC know how the data are coded.

(density)

Oode.	
1	Almost entirely fat(<25% fibroglandular)
2	Scattered fibroglandular densities(25%-50%)
3	Heterogeneously dense(51%-75%)
4	Extremely dense(>75%)
5	Fat or scattered (codes 1 or 2)
6	Dense (codes 3 or 4)
8	Structural missing
9	Unknown

II.26 Comparison film

1 100 100

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11/01/2005

Films of previous mammograms available at time of exam?

(compfilm)

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0	No
1	Yes, no significant changes
2	Yes, significant changes
3	Yes, not otherwise specified
8	Structural missing
9	Unknown

II.27 Comparison date

8 101 108 10/06/2000

Date of comparison mammogram - use most recent if more than one. 9's should be used (99999999) if this variable is not applicable.

(compdate)

Code:

xxxxxxx

Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.28 Physical findings

Code 0 should be used when the radiologist does not have any information about physical findings. Code 1 should be used when there are no physical findings and that information is made available to the radiologist. Code 2 should be used when there are physical findings and that information is made available to the radiologist. Code 3 should be used when it is unknown if there were physical findings, but the information was made available to the radiologist. Code 9 should be used when it is unknown if the radiologist had any information about physical findings.

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109 05/11/2004

110 05/11/2004

(physfind)

Code:	
0	No info available for exam
1	Info available, No physical findings
2	Info available, Yes physical findings - laterality NOS
3	Info available, Unknown if physical findings
4	Info not available, Not aware of physical findings
5	Right breast only
6	Left breast only
7	Bilateral (both breasts)
8	Structural missing
9	Unknown

II.29 Assessment overall

Assessment at person level - If the assessment is the same for each breast, code that assessment. If the assessment for each breast is different, code the higher assessment using the following order: 1, 2, 3, 0, 4, 5, 6. If only woman-level information is known, the overall assessment should be coded 0-6 and the left and right assessments should be coded as 8. If both a mammogram and ultrasound are done on the same day and a single BI-RADS assessment is given then one record should be created. If the mammogram and ultrasound each receive a BI-RADS assessment then two separate records should be created. In general, a separate record should be created for each exam that receives a BI-RADS assessment.

(assestot)

Please see examples on website at http://www.bcsc-scc.org/dataanly/glossary/curroutcomedef.pdf (page 2) or SCC Appendix 12

Code:	
0	Need additional imaging evaluation
1	Negative
2	Benign finding
3	Probably benign finding
4	Suspicious abnormality
5	Highly suggestive of malignancy
6	Known Malignancy
8	Structural missing (breast not imaged)
9	Unknown

Section Characte	er Position	Last
Field Number Width S	Start Stop	Edit

II.30 Assessment right

Assessment of right breast. If only overall assessment is known (not breast-specific), code as 8. If a unilateral exam is done, the assessment for the breast not imaged should be coded 8. If only woman-level information is known, the overall assessment should be coded 0-6 and the left and right assessments should be coded 8. If both a mammogram and ultrasound are done on the same day and a single BI-RADS assessment is given then one record should be created. If the mammogram and ultrasound each receive a BI-RADS assessment then two separate records should be created. In general, a separate record should be created for each exam that receives a BI-RADS assessment.

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111 05/11/2004

112 05/11/2004

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(assessr)

Please see examples on website at http://www.bcsc-scc.org/dbmdoc1.htm#radi or SCC Appendix 12

Code:	
0	Need additional imaging evaluation
1	Negative
2	Benign finding
3	Probably benign finding
4	Suspicious abnormality
5	Highly suggestive of malignancy
6	Known Malignancy
8	Structural missing (breast not imaged)
9	Unknown

II.31 Assessment left

Assessment of left breast. If only overall assessment is known (not breast-specific), code as 8. If a unilateral exam is done, the assessment for the breast not imaged should be coded 8. If only woman-level information is known, the overall assessment should be coded 0-6 and the left and right assessments should be coded 8. If both a mammogram and ultrasound are done on the same day and a single BI-RADS assessment is given then one record should be created. If the mammogram and ultrasound each receive a BI-RADS assessment then two separate records should be created. In general, a separate record should be created for each exam that receives a BI-RADS assessment.

(assess1)

Last Revised: 1/22/2008

Please see examples on website at http://www.bcsc-scc.org/dbmdoc1.htm#radi or SCC Appendix 12

Code:	
0	Need additional imaging evaluation
1	Negative
2	Benign finding
3	Probably benign finding
4	Suspicious abnormality
5	Highly suggestive of malignancy
6	Known Malignancy
8	Structural missing (breast not imaged)
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.32Recommend normal interval follow-up

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Recommendation made for normal interval follow-up. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations.

(recnorm)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.33 Recommended normal interval follow-up length

2 114 115

If a follow-up time is not given but a standard interval is used, such as 1 year, code 01. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations. (normlen)

Code:	
00	No
01	1 year
02	2 years
03	Return at age 35 or age 40
04	Return at age 50
XX	Actual number of months (valid range 05-87)
88	Structural missing
99	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.34 Recommend short term follow-up

Recommendation made for short-term follow-up mammography. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations.

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(recfu)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.35 Recommended short interval follow-up length

In months - If a follow-up time is not given but a standard interval is used, such as 6 months, this would be coded 06. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations.

(shortlen)

Code:	
00	No
XX	Actual number of months (valid range 01-87)
88	Structural missing
99	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

II.36 Recommend additional views

Recommendation made for additional mammographic views. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations. If you cannot distinguish a recommendation for additional views from a recommendation for an ultrasound then use field II.60 (recimage).

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(recaddy)

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0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.37 Recommend ultrasound

Recommendation made for ultrasound. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations. If you cannot distinguish a recommendation for additional views from a recommendation for an ultrasound then use field II.60 (recimage).

(recultra)

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.38 Recommend nuclear medicine

Recommendation made for nuclear medicine. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations.

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(recnucmd)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.39 Recommend MRI

Recommendation made for magnetic resonance imaging. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations.

(recmri)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

II.40 Recommend for clinical exam

Recommendation made for clinical exam. If cannot distinguish between clinical exam and surgical consult, code as clinical exam. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations. (recexam)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.41 Recommend surgical consult

Recommendation made for surgical consult. If cannot distinguish between surgical consult and biopsy, code as surgical consult. If cannot distinguish between clinical exam and surgical consult, code as clinical exam. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old

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films for comparison' should be coded unknown for all recommendations.

(recsurg)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

II.42 Recommend FNA

Recommendation made for fine needle aspiration. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations. Include cyst aspiration in this variable.

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125 02/08/2005

(recfna)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.43 Recommend biopsy

Recommendation made for biopsy. If cannot distinguish between surgical consult and biopsy, code as surgical consult. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations. "Biopsy should be considered" should be coded as recommendation for biopsy.

(recbiop)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.44 Recommend further work-up

1 127 127

Recommendation made for further work-up, but non-specific. Code only if no additional recommendations about biopsy, FNA, surgical evaluation are made. Code as 0 if other recommendations were made above. Code 1-5 only if a non-specific recommendation for follow-up is made. Code as 0 or 5 if site does not specify laterality. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations. "Ductography" should be coded as recommendation for further work-up.

(recwrkup)

Code:	
0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.45 **Linked** 1 128 128 10/06/2000

Linkage between assessment and recommendation. Note: This variable might be the same for all mammograms at a particular radiology center, but could change over time at that center. A system is considered linked if the software automatically fills in the recommendation or an assessment - even if software allows the assessment or recommendation to be overridden.

(linked)

Code:	
0	No linkage
1	Recommendation based on assessment
2	Assessment based on recommendation
3	Assessment and recommendation linked NOS
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

II.46 Facility

2 129 130

Type of facility where examination was performed. Use code "10 - HMO, PPO, etc..." only if that is the only facility information known. If you know the type of facility (e.g. hospital) happens to be within an HMO, code as "01 - Hospital", etc.

(facility)

Code:	
01	Hospital
02	Radiology private office - multiple modalities
03	Radiology private office - freestanding breast center
04	Comprehensive cancer center
05	Hospital outpatient center
06	OB/GYN office
07	Primary care office; e.g. family practice, internal medicine
08	Oncology office
09	Multispecialty clinic
10	HMO, PPO, etc
11	Mobile unit
12	Others
88	Structural missing
99	Unknown

II.47 Breast Density Coding System

1 131 131 12/11/2006

Coding system used to classify Breast Density as described in variable II.25 The BI-RADS density coding system should only be coded when breast density is collected in four categories (Almost entirely fat, Scattered fibroglandular densities, Heterogeneously dense, Extremely dense). If the BI-RADS density coding system was used but density was only collected in two categories (Dense or Not dense), then code as Dichotomous classification.

(denscode)

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ocac.	
1	BI-RADS
2	Wolfe system
3	Dichotomous classification (dense/not dense)
4	Site G, Form IB
5	MRS
6	Other
8	Structural missing
9	Unknown

Section		Charac	Character Position	
Field Number		Width	Start Stop	Edit
II	RADIOLOGIC INFORMATION			
II.48	Computer Aided Detection	1	132 132	05/11/2004
	Computer Aided Detection Used: CAD			
	(compaid)			

oodo.	
0	No
1	Standard Views
2	Additional Views
3	Both standard and additional views
4	Views NOS
8	Structural Missing
9	Unknown

Section Field Number	Charac Width			Last Edit
II RADIOLOGIC INFORMATION				
II.49 Radiology Data Entry System	2	133	134	01/22/2008
Data entry system used to collect information for radiology file				
(entrysys)				

Code:	
01	Cerner
02	Chase & Trace
03	CMDS
04	Home grown db
05	IDXrad
06	Insight
07	MammoManager
08	MediTech
09	MRS
10	Penrad
11	Progris
12	RIS
13	Scanned Data / Teleform
14	Siemens
15	System Wide db
16	VitalWorks
17	Other Billing System
18	VMRS
19	Kodak
20	MagView
21	Biopsys
22	MARS
87	Other
88	Structural Missing
99	Unknown

Section Charac	ter Position	Last
Field Number Width	Start Stop	Edit

II.50 BI-RADS Assessment Category - Suspicion Level - Overall

This variable corresponds to BI-RADS 4 suspicion level from ACR 4th edition guidelines. Facilities will probably begin collecting codes 4a-4c at different times. If it is known that facilities do not collect codes 4a-4c, then code as 8. If suspicion level is collected and overall assessment is 4 then use codes 1, 2, 3, or

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9. If suspicion level is collected and overall assessment is not 4 then use code 0.

(suspover)

9

Code: 0 Not applicable 1 4A - low 2 4B - moderate 3 4C - high 8 Structurally missing

II.51 BI-RADS Assessment Category - Suspicion Level - Right

Unknown

This variable corresponds to BI-RADS 4 suspicion level from ACR 4th edition guidelines. Facilities will probably begin collecting codes 4a-4c at different times. If it is known that facilities do not collect codes 4a-4c, then code as 8. If suspicion level is collected and assessment of right breast is 4 then use codes 1, 2, 3, or 9. If suspicion level is collected and assessment of right breast is not 4 then use code 0. (suspright)

Code:	
0	Not applicable
1	4A - low
2	4B - moderate
3	4C - high
8	Structurally missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

II RADIOLOGIC INFORMATION

II.52 BI-RADS Assessment Category - Suspicion Level - Left

1 137 137 12/11/2006

This variable corresponds to BI-RADS 4 suspicion level from ACR 4th edition guidelines. Facilities will probably begin collecting codes 4a-4c at different times. If it is known that facilities do not collect codes 4a-4c, then code as 8. If suspicion level is collected and assessment of left breast is 4 then use codes 1, 2, 3, or 9. If suspicion level is collected and assessment of left breast is not 4 then use code 0. (suspleft)

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0040.	
0	Not applicable
1	4A - low
2	4B - moderate
3	4C - high
8	Structurally missing
9	Unknown

II.53 **Mass** 1 138 02/08/2005

Mammogram finding of a mass.

(mass)

Code:

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.54 Calcification

1 139 139 02/08/2005

Mammogram finding of a calcification.

(calcirad)

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section	aracter Position	Last
Field Number Wi	idth Start Stop	Edit

II RADIOLOGIC INFORMATION

II.55 Architectural distortion

1 140 140 02/08/2005

Mammogram finding of architectural distortion.

(archdist)

Code:

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.56 Asymmetric Densities

141 141 01/22/2008

Mammogram finding of asymmetric densities. Include all types of asymmetry (focal and global). (asymdens)

Code:

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

II.57 Practice ID

2 142 143 02/14/2006

Unique identifier for practice. A practice is considered a group of radiologists who work together or a group of facilities within the same hospital or organization. Sites should assign each practice a unique number from 1-87. If a site does not collect this information then the field should be coded as structurally missing.

(practice)

XX	Practice ID (01-87)
88	Structural missing
99	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

II RADIOLOGIC INFORMATION

II.58 **Double read** 1 144 144 02/14/2006

Denotes if the mammogram is read by more than one radiologist.

(dblread)

Code:

0	No
1	Standard Views
2	Additional Views
3	Both standard and additional views
4	Views NOS
8	Structural Missing
9	Unknown

II.59 Second Reader ID

Unique identifier for second reader. If it is known that the mammogram was read by more than one radiologist then send the encrypted ID of the second reader. If the reader ID is structurally missing or unknown it should not be encrypted. If double-reading is not performed or not collected then code this field as structurally missing.

(readerid2)

In this current format, if both standard and additional views were performed we will not know if there are different radiologists performing the double-reads.

Code:

XXXXXXXX	Encrypted ID
8888888	Structural Missing
99999999	Unknown

II.60 Recommendation for additional imaging

Recommendation made for additional imaging. This field would be coded if you cannot distinguish a recommendation for additional views from a recommendation for an ultrasound. If site has no information on laterality then code as 0 or 5. Do not send any pending records unless waiting for a comparison film that never happens. If the comparison films do not materialize, 'request old films for comparison' should be coded unknown for all recommendations.

(recimage)

Code:

0	No
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

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153 01/22/2008

Secti				Charac			Last
Field	Number			Width	Start	Stop	Edit
III	ADDITIONAL IN	MAGING FOLLOW-UP INFOR	MATION				
III.1	Record Type Additional Imag (rectype)	ing follow-up record	Key field	8	1	8	
	Code:						
	IMAGNGFU	Imaging follow-up record. Only one co	ode allowed.				
III.2	Study site		Key field	1	9	9	
	Unique site iden (site)	tifier					
	<u>Code:</u> X	Unique assigned letter for your site (Ca	apitalized)				
III.3	Study ID		Key field	10	10	19	
111.5	Study ID Unique person id (studyid)	lentifier		10	10	1)	
	Code:						
	xxxxxxxxx	Encrypted, unique person identifier for	site				
III.4	Information da Date information (infodate)	nte n was collected on woman. (Typicall	Key field y date of exam.)	8	20	27	
	Code:						
	xxxxxxxx	Three variables: Mo(xx); Day(xx); Yea	nr(xxxx)				
III.5	Imaging proced Code for proced (imgseq)	dure sequence ares on the same day.	Key field	1	28	28	
	Code:						
	1 2 3	If first procedure on that date, or only I If second procedure on that date If third procedure on that date, etc	procedure on that date.				

Last Revised: 1/22/2008

Section	n		Charac	cter Po	sition	Last
Field I	Number		Width	Start	Stop	Edit
III .	ADDITIONAL 1	IMAGING FOLLOW-UP INFORMATION				
III.6	SCC date		8	29	36	
	Date prepared	for SCC.				
	(sccdate)					
	,					
	Code:					
	xxxxxxx	Three variables: Mo(xx); Day(xx); Year(xxxx)				
III.7	Imaging proc	edure date	8	37	44	
	Date imaging v (imgdate)	vas performed.				
	Code:					
	XXXXXXX	Three variables: Month(xx); Day(xx); Year(xxxx); Struct 8888 for year; Unknown = 99 for mo&day 9999 for year		88 for 1	no&day	;
II.8	Imaging later	rality	1	45	45	
	Laterality of br	east imaging follow-up procedure.				
	(imglater)					
	Code:					
	1	Right breast only				
	2	Left breast only				
	3	Unilateral, side not specified				
	4	Bilateral (both breasts)				
	5	Yes, woman-level information only				
	8	Structural missing				
	9	Unknown				
III.9	Imaging proc	edure type	1	46	46	10/06/200
	Type of imagin	g procedure performed.				
	(imgtype)					
	Code:					
	1	Ultrasound				
	2	MRI				
	3	Mammogram (result not in BIRADS)				
	7	Other				
	8	Structural missing				
	9	Unknown/Imaging NOS				

Section	o n		Chara	cter P	osition	Last
Field	Number		Width	Start	Stop	Edit
III	ADDITIONA	L IMAGING FOLLOW-UP INFORMATIO	ON			
III.10	Imaging re	esult	1	47	47	
	Assessment	at person level.				
	(imgrslt)					
	Code:					
	0	Normal				
	1	Abnormal				
	2	Inconclusive				
	3	Pending				
	8	Structural missing				
	9	Unknown				
III.11		dation based on imaging result	1	48	48	
	Code the mo	ost severe (4 = most severe, 1= least severe) if mo	ore than one recomm	endatio:	n.	

1	Normal interval screen
2	Short interval follow-up
3	Additional evaluation (i.e., further imaging)
4	Surgical consult or biopsy
8	Structural missing
9	Unknown

Last Revised: 1/22/2008

Section				Charac	cter Po	sition	Last
Field Nu	mber			Width	Start	Stop	Edit
V BIO	OPSY & SURC	GERY FOLLOW-UP INFORMATION					
V.1	Record type		Key field	8	1	8	
		follow-up record					
	(rectype)	•					
	Code:						
	BIOPSYFU	Biopsy / Surgery follow-up record. Only one cod	e allowed				
V.2	Study site		Key field	1	9	9	
	Unique site iden	tifier					
	(site)						
	Code:						
	X	Unique assigned letter for your site (Capitalized)					
	Α	Clique assigned letter for your site (Capitalized)					
V.3	Study ID		Key field	10	10	19	
	Unique person ic	dentifier	-				
	(studyid)	dentifier					
	(Studylu)						
	Code:						
	XXXXXXXXX	Encrypted, unique person identifier for site					
V.4	Information da	ate	Key field	8	20	27	
		n was collected on woman. If source comes fro	om patholo	ogv. use d			gv exam.
	(infodate)		•				<i></i>
	Code:						
	xxxxxxx	Three variables: Mo(xx); Day(xx); Year(xxxx)					
V.5	Biopsy/Surger	y procedure sequence	Key field	1	28	28	10/12/200
	Code for proced	ures on the same day.					
	(bxfuseq)						
	Code:						
	1	If first procedure on that date, or only procedure of	n that date.				
	2	If second procedure on that date					
	3	If third procedure on that date, etc					

Secti	on		Charac	cter Po	sition	Last
Field	Number		Width	Start Stop		Edit
IV	BIOPSY & SUR	GERY FOLLOW-UP INFORMATION				
IV.6	SCC date		8	29	36	
	Date prepared f	or SCC				
	(sccdate)					
	Code:					
	xxxxxxx	Three variables: Mo(xx); Day(xx); Year(xxxx)				
IV.7	Biopsy/Surgei	y procedure date	8	37	44	10/12/2000
	Date biopsy wa					
	(bxfudate)					
	Code:					
	xxxxxxx	Three variables: Month(xx); Day(xx); Year(xxxx); Structure 8888 for year; Unknown = 99 for mo&day 9999 for year		88 for r	no&day	• • • • • • • • • • • • • • • • • • • •
IV.8	Biopsy/Surger	v laterality	1	45	45	10/12/2000
	Laterality of bre	east biopsy/surgery follow-up procedure.				
	(bxlater)					

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•	\sim	\sim	Δ	1
$\mathbf{\mathcal{L}}$	u	u	ᆫ	

0 0 0.0.	
1	Right breast only
2	Left breast only
3	Unilateral, side not specified
4	Bilateral (both breasts)
5	Yes, woman-level information only
8	Structural missing
9	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

IV BIOPSY & SURGERY FOLLOW-UP INFORMATION

IV.9 **Biopsy procedure type**

2 46 47 02/08/2005

Type of biopsy procedure performed. Use code 03 if it is known that a surgical biopsy was performed, but it is unknown if it was excisional, core, or incisional. If non-biopsy surgery was performed (e.g., mastectomy) code as 06. More detail on surgery procedures type is collection in Pathology and Registry. Sites may code ductogram information in the radiology file instead if that is where it has been coded in the past.

(bxfutype)

Code:	
01	Excisional biopsy
02	Core biopsy
03	Surgical biopsy NOS (excisional biopsy/core biopsy/incisional biopsy)
04	Fine needle aspiration
05	Cyst aspiration
06	Other surgery (non-biopsy, e.g., mastectomy, partial mastectomy)
07	Lymph nodes
08	Ductogram
88	Structural missing
99	Unknown

IV.10 Biopsy/Aspiration guidance

48 49 10/12/2000

Type of guidance used during biopsy/aspiration procedure. For non-biopsy surgery, code as 00. (bxfuguid)

Code:	
00	No guidance
01	Palpation
02	Ultrasound guided
03	Stereotactic guided
04	Mammographic (non-stereotactic) / Needle localization
05	Nuclear Medicine
06	Other
07	Imaging guidance, NOS
88	Structural missing
99	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

IV BIOPSY & SURGERY FOLLOW-UP INFORMATION

IV.11 Biopsy/Surgery result

Assessment at person level. The following should be coded as benign: Negative, Fibroadenoma, Fibrocystic changes, Atypical, Ductal hyperplasia, Calcification. The following should be coded as Malignant/Probably malignant: LCIS, DCIS, Non-invasive cancer, Invasive, Cancer, NOS (including FNA), and Suspicious. The following should be coded as Inconclusive: Unsatisfactory, Insufficient. (bxfurslt)

1

50

50 10/12/2000

Code:	
0	Normal / Benign
1	Malignant/probably malignant
2	Inconclusive
3	Pending
8	Structural missing
9	Unknown

Last Revised: 1/22/2008

ecti	on		Charac	eter Pos	sition	Last
ield	Number		Width	Start	Stop	Edit
I	CARCINOMA / REGISTRY INFORMATION					
I.1	Record type	Key field	8	1	8	02/20/200
	Carcinoma/Registry record.					
	(rectype) Only one code allowed					
	Code:					
	REGISTRY Carcinoma/Registry record. Only one of	code allowed.				
I.2	Study site	Key field	1	9	9	02/20/200
	Unique identifier for study site					
	(site)					
	Code:					
	X Unique assigned letter for your site (Ca	pitalized)				
I.3	Study ID	Key field	10	10	19	02/20/200
2.0	Unique person identifier for study site					
	(studyid)					
	Code:					
	xxxxxxxxx Encrypted, unique person identifier for	site				
I.4	Information date	Key field	8	20	27	02/20/200
	Same as date of diagnosis if available. If day only is n missing (mm/dd) then code as 06/01.	nissing then code as	15. If m	onth an	d day	are
	(infodate)					
	Code:					
	xxxxxxxx Three variables: Mo(xx); Day(xx); Yea	r(xxxx)				
I.5	Registry sequence number	Key field	1	28	28	02/20/200
	Code for registry records on the same day.					
	(regseq)					
	Code:					
	1 If first registry record or only registry re	ecord on that date				
	2 If second registry record on that date					
	3 If third registry record on that date, etc.	••				
	8 Structural missing					

	on							C	harac	eter Po	sition	Last
eld	Number							V	idth	Start	Stop	Edit
	CARCINOMA / I	REGIS	TRY I	NFORM	IATIO	V						
.6	SCC date								8	29	36	02/20/200
	Date prepared for	or SCC										
	(sccdate)											
	Date prepared	d or s	ent to	SCC -	allows	correc	tions in	the f	uture	9		
	Code:	TD1		3.6.4.	· · · · ·							
	XXXXXXX	Thre	e variable	es: Mo(xx)); Day(xx)); Year(xxx	(X)					
.7	County of resid	idence							3	37	39	02/20/200
	FIPS code for co Appendix A, pp. (county)	•			_	am Codin	g and Stag	ing Man	ual 20	004, pp	. 37, an	ıd
	Code:											
	XXX	See S	SCC Data	Dictionar	ry Append	lix 1						
.8	State of resider								2	40	41	02/20/200
	FIPS code for sta NAACCR item #	tate. (R	eference	: NAAC	CR Stan	dards for	Cancer Re	gistries,	2 Volu			
	FIPS code for sta NAACCR item # (state) Anything cod	tate. (R # 80)						-	Volu	me II, 1		
	FIPS code for standard NAACCR item # (state) Anything code:	tate. (R #80) ded as	88 sh	ould be	e chang	red to 9		-	Volu	me II, 1		
	FIPS code for sta NAACCR item # (state) Anything cod	tate. (R #80) ded as	88 sh		e chang	red to 9		-	Volu	me II, 1		
	FIPS code for standard NAACCR item # (state) Anything code: XX	tate. (R #80) ded as	88 sh	ould be	e chang	red to 9		-	code	me II, 1	l 1th ed	•••
.9	FIPS code for standard NAACCR item # (state) Anything code: xx Date of birth	tate. (R # 80) oded as	88 sh	ould be	e chang	red to 9	9. There	is no	volus code	me II, 1 ≥ 88.	1 1th ed	02/20/200
	FIPS code for standard NAACCR item # (state) Anything code: xx Date of birth Cancer registry of NAACCR item #	tate. (R # 80) ded as See S	88 sh	ould be	e chang	red to 9	9. There	is no	volus code	me II, 1 ≥ 88.	1 1th ed	02/20/200
	FIPS code for standard NAACCR item # (state) Anything code: XX Date of birth Cancer registry of NAACCR item # (brthdate)	tate. (R # 80) ded as See S	88 sh	ould be	e chang	red to 9	9. There	is no	volus code	me II, 1 ≥ 88.	1 1th ed	02/20/200
	FIPS code for standard NAACCR item # (state) Anything code: xx Date of birth Cancer registry of NAACCR item # (brthdate) Code:	tate. (R # 80) ded as See S date of # 240)	88 sh	ould be	e chang	lix 2	9. There	is no	Code 8 ag Ma	me II, 1 = 88.	49 004, pp	02/20/200 . 42-43 ,
	FIPS code for standard NAACCR item # (state) Anything code: XX Date of birth Cancer registry of NAACCR item # (brthdate)	tate. (R# 80) ded as See S date of # 240)	88 sh GCC Data birth. (F	Dictionar Reference	e: SEER	lix 2 R Program (xx); Year(9. There	is no	Code 8 ag Ma	me II, 1 = 88.	49 004, pp	02/20/200 . 42-43 ,
	FIPS code for standard NAACCR item # (state) Anything code: xx Date of birth Cancer registry of NAACCR item # (brthdate) Code: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	tate. (R# 80) ded as See S date of # 240)	88 sh GCC Data birth. (F	Dictionar Reference	e: SEER	lix 2 R Program (xx); Year(9. There Coding ar xxxx); Struc	is no	Code 8 ag Ma	me II, 1 = 88.	49 004, pp	02/20/200
.9	FIPS code for standard NAACCR item # (state) Anything code: xx Date of birth Cancer registry of NAACCR item # (brthdate) Code: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	tate. (R# 80) ded as See S date of # 240) Thre 8888	88 sh GCC Data birth. (F	Dictionar Reference es: Month(Unknown	e: SEER (xx); Day(n = 99 for	lix 2 Program (xx); Year(mo&day 9	9. There Coding ar exxxx); Struc 9999 for year	is no	Volume code 8 ng Ma sing =	me II, 1 e 88. 42 nual 20 88 for n	49 004, pp	02/20/200 . 42-43 ,
.9	FIPS code for standard NAACCR item # (state) Anything code: xx Date of birth Cancer registry of NAACCR item # (brthdate) Code: xxxxxxxxxx Place of birth (Reference: SER	tate. (R# 80) ded as See S date of # 240) Thre 8888	88 sh GCC Data birth. (F	Dictionar Reference es: Month(Unknown	e: SEER (xx); Day(n = 99 for	lix 2 Program (xx); Year(mo&day 9	9. There Coding ar exxxx); Struc 9999 for year	is no	Volume code 8 ng Ma sing =	me II, 1 e 88. 42 nual 20 88 for n	49 004, pp	02/20/200 . 42-43 ,
.9	FIPS code for standard NAACCR item # (state) Anything code: xx Date of birth Cancer registry of NAACCR item # (brthdate) Code: xxxxxxxxxx Place of birth (Reference: SEINAACCR item # 1000)	tate. (R# 80) ded as See S date of # 240) Thre 8888	88 sh GCC Data birth. (F	Dictionar Reference es: Month(Unknown	e: SEER (xx); Day(n = 99 for	lix 2 Program (xx); Year(mo&day 9	9. There Coding ar exxxx); Struc 9999 for year	is no	Volume code 8 ng Ma sing =	me II, 1 e 88. 42 nual 20 88 for n	49 004, pp	02/20/200 . 42-43 ,

XX

Section	•	Character Position 1 ast
	ı Number	Last
		Width Start Stop Edit
VI (CARCINOMA / REGISTRY INFORMATI	ON
VI.11	Age at diagnosis	3 53 55 02/20/2006
		exact age in years (truncated) at time of diagnosis. ing Manual 2004, p. 44, NAACCR item # 230)
	(dxage)	
	Code:	
	xxx Actual age	
	999 Unknown age	
VI.12	Race 1	2 56 57 02/20/2006
	(Reference: SEER Program Coding and Stage (carcrace1) More detail for Asian and Pacific 1 Code: xx See SCC Data Dictionary App	
VI.13	Race 2	2 58 59 02/20/2006
	there is only one primary race, code it in Race	egistry. This is the second of five primary race fields. If a 1 in field VI.12. Send historical data if available. ing Manual 2004, pp. 45-56, NAACCR item # 161).
	see see Data Dictionary App	Churx 4
VI.14	Race 3	2 60 61 02/20/2006
		egistry. This is the third of five primary race fields. If there field VI.12. Send historical data if available. (Reference:

See SCC Data Dictionary Appendix 4

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.15 Race 4

2 62 63 02/20/2006

Information comes directly from the cancer registry. This is the fourth of five primary race fields. If there is only one primary race, code it in Race 1 in field VI.12. Send historical data if available. (Reference: SEER Program Coding and Staging Manual 2004, pp. 45-56, NAACCR item # 163).

(carcrace4)

Code:

xx See SCC Data Dictionary Appendix 4

VI.16 Race 5 2 64 65 02/20/2006

Information comes directly from the cancer registry. This is the fifth of five primary race fields. If there is only one primary race, code it in Race 1 in field VI.12. Send historical data if available. (Reference: SEER Program Coding and Staging Manual 2004, pp. 45-56, NAACCR item # 164).

(carcrace5)

Code:

XX

See SCC Data Dictionary Appendix 4

VI.17 Spanish/Hispanic surname or origin

1 66 66 02/20/2006

Note that this coding scheme for Spanish or Hispanic surname may differ from that of the Patient Information file because the information came directly from the cancer registry. (Reference: SEER Program Coding and Staging Manual 2004, p. 57, NAACCR item # 190)

(ssurname)

0	Non-Spanish/Non-Hispanic
1	Mexican
2	Puerto Rican
3	Cuban
4	South or Central American (except Brazil)
5	Other specified Spanish/Hispanic origin (includes European)
6	Spanish NOS; Hispanic NOS; Latino NOS
7	Spanish surname only
9	Unknown whether Spanish or not

Section Character Pos	sition Last
Field Number Width Start	Stop Edit

VI.18 **Diagnosis date**

8 67 74 02/20/2006

Date of initial diagnosis as recorded by SEER or other cancer registry. If day or month is missing, sites should code them as missing or unknown because the SCC maintains a record of unknown diagnosis dates. (Reference: SEER Program Coding and Staging Manual 2004, p. 65-68, NAACCR item # 390) (diagdate)

Code:

xxxxxxxx Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

VI.19 **SEER sequence number**

2 75 76 02/20/2006

Indicates position of this primary cancer with respect to other primary cancers in the same individual. (Reference: SEER Program Coding and Staging Manual 2004, pp. 69-72, NAACCR item # 380) (seerseq)

oodo.	
00	One primary only
01	First of two or more primaries
02	Second of two or more primaries
XX	XX of XX or more primaries (valid range: 03-34)
35	Thirty-fifth of thirty-five or more primaries
99	Unspecified sequence number

VI.20 Primary site

3 77 79 02/20/2006

Indicates whether breast cancer is the primary site. Code is usually C50 for breast. Drop any values to the right of the decimal point in C50.x. (Reference: SEER Program Coding and Staging Manual 2004, pp. 73-77, NAACCR item # 400)

(primsite)

ICD-O code dropping the digit to the right of the decimal place, C50.x

Cxx	Cxx, e.g., C50 for breast - first three characters in SEER four character code.
C99	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VI.21 **Subsite** 1 80 80 02/20/2006

Indicates where the breast cancer was found. Code is the first digit to the right of the decimal place in C50.x, i.e. if SEER code is C50.4 or C504, use code 4. (Reference: SEER Program Coding and Staging Manual 2004, pp. 73-77, NAACCR item # 400)

(subscarc)

Codes derived from the last digit of the ICD-O breast code C50.x (decimal dropped by SEER so last character in SEER 4 character code)

Code:	
0	Nipple
1	Central
2	Upper inner
3	Lower inner
4	Upper outer
5	Lower outer
6	Axillary tail of breast
8	Overlap
9	NOS; unknown

VI.22 Laterality

1 81 81 02/20/2006

Indicates which breast had the cancer. (Reference: SEER Program Coding and Staging Manual 2004, pp. 78-80, NAACCR item # 410)

(latralty)

Code:	
0	Not a paired site (should not apply to breast cancer).
1	Right: origin of primary
2	Left: origin of primary
3	Only one side involved, right or left origin unspecified.
4	Bilateral involvement, lateral origin unknown: stated to be single primary
9	Unknown; midline

VI.23 Morphology ICD-O-2 (though 2000)

5 82 86 02/20/2006

ICD-O-2 morphology codes for cases diagnosed through 2000. This field consists of 5 digits (4-digit morphology + 1-digit behavior code). Cases diagnosed after 2000 are coded in field VI.24, Morphology ICD-O-3. (Reference: SEER Program Code Manual, 3rd edition, Section IV, Field 05, p. 93, NAACCR item # 419).

(morphlgyO2)

ICD-0 2 codes; equivalent to SNOMED morphology codes with M dropped; Codes such as 8140/3 are coded as 81403 with the behavior code in the last digit

(ار	0	a	е	÷

xxxxx See SCC Data Dictionary Appendix 5

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

VI.24 **Morphology ICD-O-3 (2001+)**

5 87 91 02/20/2006

ICD-O-3 morphology codes for cases diagnosed in 2001 or later. Most registries have forward-converted historical data, please send if available. This field consists of 5 digits (4-digit morphology + 1-digit behavior code). Cases diagnosed before 2001 are coded in the field VI.23, Morphology ICD-O-2. (Reference: SEER Program Coding and Staging Manual 2004, p. 83, NAACCR item # 521). (morphlgyO3)

Code:		
xxxxx	See SCC Data Dictionary Appendix 14	

VI.25 Grade, differentiation

1 92 92 02/20/2006

If there is more than one grade, the higher grade is used. Grade codes are the same in both ICD-O-2 and ICD-O-3. (Reference: SEER Program Coding and Staging Manual 2004, pp. 91-97, NAACCR item # 440).

(grade)

Code:	
1	Grade I; grade 1; well-differentiated; differentiated NOS
2	Grade II; grade ii; grade 2; moderately differentiated, moderately well differentiated; intermediate differentiation
3	Grade III; grade iii; grade 3; poorly differentiated; dedifferentiated
4	Grade IV; grade iv; grade 4; undifferentiated; anaplastic
5	T-cell; T-precursor
6	B-cell; Pre-B; B-Precusor
7	Null cell; Non T-non B
8	N K cell (natural killer cell)
9	Cell type not determined, not stated or not applicable

VI.26 **Diagnostic confirmation**

1 93 93 02/20/2006

Records the best method used to confirm the presence of the cancer being reported. (Reference: SEER Program Coding and Staging Manual 2004, p. 81, NAACCR item # 490).

(diagconf)

Last Revised: 1/22/2008

Code:	
1	Positive histology
2	Positive cytology, no positive histology
4	Positive microscopic confirmation, method not specified
5	Positive laboratory test/marker study
6	Direct visualization without microscopic confirmation
7	Radiography and other imaging techniques without microscopic confirmation
8	Clinical diagnosis only (other than 5, 6 or 7)
9	Unknown whether or not microscopically confirmed

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.27 TNM Pathologic T (through 2003)

2 94 95 01/05/2007

Codes for the pathologic tumor (T) as defined by AJCC for cases diagnosed through 2003. Evaluates the primary tumor and reflects the tumor size and/or extension as recorded by the physician. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. For codes consisting of one digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual for 2004, NAACCR item # 880). (tnmtpath)

Code:	
0	T0, No evidence of primary tumor
IS	Tis, Carcinoma in situ (included DCIS, LCIS, and Paget's before AJCC 6th edition)
1M	T1mic, Microinvasion 0.1 cm or less in greatest dimension
1	T1, Tumor 2 cm lor less in greatest dimension
1A	T1a, Tumor more than 0.1 cm but not more than 0.5 cm in greatest dimension
1B	T1b, Tumor more than 0.5 cm but not more than 1 cm in greatest dimension
1C	T1c, Tumor more than 1 cm but not more than 2 cm in greatest dimension
2	T2, Tumor more than 2 cm but not more than 5 cm in greatest dimension
3	T3, Tumor more than 5 cm in greatest dimension
4	T4, Tumor of any size with direct extension to (a) chest wall or (b) skin, only as described below
4A	T4a, Extension to chest wall, not including pectoralis muscle
4B	T4b, Edema (including peau d'orange) or ulceration of the skin of the breast, or satellite skin nodules confined to the same breast
4C	T4c, Both T4a and T4b
4D	T4d, Inflammatory carcinoma
X	TX, Primary tumor cannot be assessed
88	NA, Not applicable
(blank)	Not recorded
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

VI.28 TNM Clinical T (through 2003)

Codes for the clinical tumor (T) as defined by AJCC for cases diagnosed through 2003. Evaluates the primary tumor and reflects the tumor size and/or extension as recorded by the physician. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. For codes consisting of one digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual for 2004, NAACCR item # 940).

2

96

97 01/05/2007

(tnmtclin)

Code:	
0	T0, No evidence of primary tumor
IS	Tis, Carcinoma in situ (included DCIS, LCIS, and Paget's before AJCC 6th edition)
1M	T1mic, Microinvasion 0.1 cm or less in greatest dimension
1	T1, Tumor 2 cm lor less in greatest dimension
1A	T1a, Tumor more than 0.1 cm but not more than 0.5 cm in greatest dimension
1B	T1b, Tumor more than 0.5 cm but not more than 1 cm in greatest dimension
1C	T1c, Tumor more than 1 cm but not more than 2 cm in greatest dimension
2	T2, Tumor more than 2 cm but not more than 5 cm in greatest dimension
3	T3, Tumor more than 5 cm in greatest dimension
4	T4, Tumor of any size with direct extension to (a) chest wall or (b) skin, only as described below
4A	T4a, Extension to chest wall, not including pectoralis muscle
4B	T4b, Edema (including peau d'orange) or ulceration of the skin of the breast, or satellite skin nodules confined to the same breast
4C	T4c, Both T4a and T4b
4D	T4d, Inflammatory carcinoma
X	TX, Primary tumor cannot be assessed
88	NA, Not applicable
(blank)	Not recorded
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.29 **Derived AJCC T (2004+)**

2 98 99 01/05/2007

This is the AJCC "T" component that is derived from coded fields, using the CS algorithm, effective with 2004 diagnosis. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 2940). (ajcct)

Code:	
00	T0, No evidence of primary tumor
05	Tis, Carcinoma in situ (included DCIS, LCIS, and Paget's before 6th edition)
10	T1, Tumor 2 cm lor less in greatest dimension
11	T1mic, Microinvasion 0.1 cm or less in greatest dimension
12	T1a, Tumor more than 0.1 cm but not more than 0.5 cm in greatest dimension
15	T1b, Tumor more than 0.5 cm but not more than 1 cm in greatest dimension
18	T1c, Tumor more than 1 cm but not more than 2 cm in greatest dimension
20	T2, Tumor more than 2 cm but not more than 5 cm in greatest dimension
30	T3, Tumor more than 5 cm in greatest dimension
40	T4, Tumor of any size with direct extension to (a) chest wall or (b) skin, not including pectoralis muscle
41	T4a, Extension to chest wall, not including pectoralis muscle
42	T4b, Edema (including peau d'orange) or ulceration of the skin of the breast, or satellite skin nodules confined to the same breast
43	T4c, Both T4a and T4b
44	T4d, Inflammatory carcinoma
88	NA, Not applicable
99	TX, Primary tumor cannot be assessed
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.30 TNM Pathologic N (through 2003)

Codes for the pathologic nodes (N) as defined by AJCC for cases diagnosed through 2003. Identifies the

101 01/05/2007

100

2

absence or presence of regional lymph node metastasis and describes the extent of regional lymph node metastasis as recorded by the physician. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. For codes consisting of one digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual, for 2004, NAACCR item #890).

(tnmnpath)

Code:		
0	N0, No regional LN (lymph node) metastasis	
1	N1, Metastasis to movable ipsilateral axillary LN(s)	
2	N2, Metastases in ipsilateral axillary LNs fixed or matted, or in clinically apparent ipsilateral internal mammary nodes in the absence of clinically evident axillary LN metastasis	
2A	N2a, Metastasis in ipsilateral axillary LNs fixed to one another (matted) or to other structures	
2B	N2b, Metastasis only in clinically apparent ipsilateral internal mammary nodes and in the absence of clinically evident axillary LN metastasis	
3	N3, Metastasis in ipsilateral infraclavicular LN(s), or in clinically apparent ipsilateral internal mammary LN(s) and in the presence of clinically evident axillary LN metastasis; or metastasis in ipsilateral supraclavicular LN(s)	
3A	N3a, Metastasis in ipsilateral infraclavicular LNs	
3B	N3b, Metastasis in ipsilateral internal mammary LNs and axillary LNs	
3C	N3c, Metastasis in ipsilateral supraclavicular LNs	
X	NX, Regional LNs cannot be assessed (e.g., previously removed)	
88	Not applicable	
(blank)	Not recoded by the physician	
=>	See SCC Data Dictionary Appendix 7 for additional codes and details	

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VI.31 TNM Clinical N (through 2003)

2 102 103 01/05/2007

Codes for the clinical nodes (N) as defined by AJCC for cases diagnosed through 2003. Identifies the absence or presence of regional lymph node metastasis and describes the extent of regional lymph node metastasis as recorded by the physician. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. For codes consisting of one digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual, for 2004, NAACCR item # 950).

(tnmnclin)

Code:	
0	N0, No regional LN (lymph node) metastasis
1	N1, Metastasis to movable ipsilateral axillary LN(s)
2	N2, Metastases in ipsilateral axillary LNs fixed or matted, or in clinically apparent ipsilateral internal mammary nodes in the absence of clinically evident axillary LN metastasis
2A	N2a, Metastasis in ipsilateral axillary LNs fixed to one another (matted) or to other structures
2B	N2b, Metastasis only in clinically apparent ipsilateral internal mammary nodes and in the absence of clinically evident axillary LN metastasis
3	N3, Metastasis in ipsilateral infraclavicular LN(s), or in clinically apparent ipsilateral internal mammary LN(s) and in the presence of clinically evident axillary LN metastasis; or metastasis in ipsilateral supraclavicular LN(s)
3A	N3a, Metastasis in ipsilateral infraclavicular LNs
3B	N3b, Metastasis in ipsilateral internal mammary LNs and axillary LNs
3C	N3c, Metastasis in ipsilateral supraclavicular LNs
X	NX, Regional LNs cannot be assessed (e.g., previously removed)
88	Not applicable
(blank)	Not recoded by the physician
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.32 **Derived AJCC N (2004+)**

2 104 105 01/05/2007

This is the AJCC "N" component that is derived from coded fields, using the CS algorithm, effective with 2004 diagnosis. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 2960). (ajccn)

Code:	
00	N0, No regional LN (lymph node) metastasis
10	N1, Metastasis to movable ipsilateral axillary LN(s)
20	N2, Metastases in ipsilateral axillary LNs fixed or matted, or in clinically apparent ipsilateral internal mammary nodes in the absence of clinically evident axillary LN metastasis
21	N2a, Metastasis in ipsilateral axillary LNs fixed to one another (matted) or to other structures
22	N2b, Metastasis only in clinically apparent ipsilateral interanl mammary nodes and in the absence of clinically evident axillary LN metastasis
30	N3, Metastasis in ipsilateral infraclavicular LN(s), or in clinically apparent ipsilateral internal mammary LN(s) and in the presence of clinically evident axillary LN metastasis; or metastasis in ipsilateral supraclavicular LN(s)
31	N3a, Metastasis in ipsilateral infraclavicular LNs
32	N3b, Metastasis in ipsilateral internal mammary LNs and axillary LNs
33	N3c, Metastasis in ipsilateral supraclavicular LNs
88	NA, Not applicable
99	NX, Regional LNs cannot be assessed (e.g., previously removed)
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

VI.33 TNM Pathologic M (through 2003)

2 106 107 01/05/2007

Codes for the pathologic metastases (M) as defined by AJCC for cases diagnosed through 2003. Identifies the presence or absence of distant metastasis (M) as recorded by the physician. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. For codes consisting of one digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual for 2004, NAACCR item # 900).

(tnmmpath)

Code:	
0	M0, No distant metastasis
1	M1, One or more distant metastasis are identified
X	MX, Distant metastasis cannot be assessed
88	NA, Not applicable
(blank)	Not recorded by physician
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

Section Character Pos	sition Last
Field Number Width Start	Stop Edit

VI.34 TNM Clinical M (through 2003)

Codes for the clinical metastases (M) as defined by AJCC for cases diagnosed through 2003. Identifies the presence or absence of distant metastasis (M) as recorded by the physician. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. For codes consisting of one digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual for 2004, NAACCR item # 960).

(tnmmclin)

Code:

Code.	
0	M0, No distant metastasis
1	M1, One or more distant metastasis are identified
X	MX, Distant metastasis cannot be assessed
88	NA, Not applicable
(blank)	Not recorded by physician
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

VI.35 **Derived AJCC M (2004+)**

2 110 111 01/05/2007 the CS algorithm, effective with

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109 01/05/2007

This is the AJCC "M" component that is derived from coded fields, using the CS algorithm, effective with 2004 diagnosis. See SCC Data Dictionary Appendix 7 for additional codes and details not shown below. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 2980). (ajccm)

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00	M0, Cases in which there is no distant metastasis
10	M1, Cases in which one or more distant metastasis are identified
99	MX, Cases where distant metastasis cannot be assessed
88	NA, Not applicable
=>	See SCC Data Dictionary Appendix 7 for additional codes and details

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.36 TNM Pathologic Stage Group (through 2003)

113 01/05/2007

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Codes for the pathologic stage group as defined by AJCC for cases diagnosed through 2003. Identifies the anatomic extent of disease based on the T, N, and M elements as recorded by the physician. See SCC Data Dictionary Appendix 8 for additional codes and details not shown below. For codes consisting of one digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual for 2004, NAACCR item # 910). (tnmpathstg)

-	C	O	d	_	•

Coae:	
0	Stage 0
1	Stage I
1A	Stage IA
1B	Stage IB
1C	Stage IC
2	Stage II
2A	Stage IIA
2B	Stage IIB
2C	Stage IIC
3	Stage III
3A	Stage IIIA
3B	Stage IIIB
3C	Stage IIIC
4	Stage IV
4A	Stage IVA
4B	Stage IVB
88	Not available
99	Unknown
(blank)	Not applicable
OC	Unknown
=>	See SCC Data Dictionary Appendix 8 for additional codes and details

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VI.37 TNM Clinical Stage Group (through 2003)

Codes for the clinical stage group as defined by AJCC for cases diagnosed through 2003. Identifies the anatomic extent of disease based on the T, N, and M elements as recorded by the physician. See SCC Data Dictionary Appendix 8 for additional codes and details not shown below. For codes consisting of one

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114

115 01/05/2007

digit, leave the second space blank. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed. Also, COC Fords Manual for 2004, NAACCR item # 970).

(tnmclinstg)

Last Revised: 1/22/2008

Code:	
0	Stage 0
1	Stage I
1A	Stage IA
1B	Stage IB
1C	Stage IC
2	Stage II
2A	Stage IIA
2B	Stage IIB
2C	Stage IIC
3	Stage III
3A	Stage IIIA
3B	Stage IIIB
3C	Stage IIIC
4	Stage IV
4A	Stage IVA
4B	Stage IVB
88	Not available
99	Unknown
(blank)	Not applicable
OC	Unknown
=>	See SCC Data Dictionary Appendix 8 for additional codes and details

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VI.38 Derived AJCC Stage Group (2004+)

2 116 117 01/05/2007

This is the AJCC "Stage Group" component that is derived from the CS codes, using the CS algorithm, effective with 2004 diagnosis. See SCC Data Dictionary Appendix 8 for additional codes and details not shown below. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 3000).

(ajccstggrp)

Code:	
00	Stage 0
10	Stage I
11	Stage I, NOS
12	Stage IA
15	Stage IB
18	Stage IC
30	Stage II
31	Stage II, NOS
32	Stage IIA
33	Stage IIB
34	Stage IIC
50	Stage III
51	Stage III, NOS
52	Stage IIIA
53	Stage IIIB
54	Stage IIIC
70	Stage IV
71	Stage IV, NOS
72	Stage IVA
73	Stage IVB
88	Not available
90	Unstaged
99	Unknown, error condition
=>	See SCC Data Dictionary Appendix 8 for additional codes and details

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.39 Summary Stage 1977 (through 2000)

Summary Stage 1977 includes cases diagnosed through 2000. Summary staging is the most basic way of categorizing how far a cancer has spread from its point of origin. Summary staging has also been called General Staging, California Staging, and SEER Staging. Summary staging uses all information available in the medical record; in other words, it is a combination of the most precise clinical and pathological documentation of the extent of disease. SEER Summary Stage 1977 is limited to information available within 2 months of the diagnosis date and should be assigned according to the SEER Summary Stage Guide 1977. (Reference: SEER Program Coding and Staging Manual 2004, pp. 166, NAACCR item # 760).

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119 01/05/2007

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118 01/05/2007

(sumstg1977)

Code:	
0	In situ
1	Localized only
2	Regional, direct extension only
3	Regional, regional lymph nodes only
4	Regional, direct extension and regional lymph nodes
5	Regional, NOS
7	Distant
8	Not applicable
9	Unstaged

VI.40 Summary Stage 2000 (2001+)

Summary Stage 2000 includes cases diagnosed in 2001 or later. Should include all information available through completion of surgery(ies) in the first course of treatment or within 4 months of diagnosis in the absence of disease progression, whichever is longer. Summary stage 2000 is assigned according to SEER Summary Staging Manual 2000. (Reference: SEER Program Coding and Staging Manual 2004, NAACCR item # 759).

(sumstg2000)

Code:	
0	In situ
1	Localized only
2	Regional, direct extension only
3	Regional, regional lymph nodes only
4	Regional, direct extension and regional lymph nodes
5	Regional, NOS
7	Distant
8	Not applicable
9	Unstaged

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.41 Derived Summary Stage 1977 (2004+)

Derived SEER Summary Stage 1977 is from the CS algorithm (or EOD codes) effective with 2004 diagnosis. (Reference: NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, Version 11.1, p. 142, NAACCR item # 3010).

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120 01/05/2007

121 01/05/2007

(sumstg1977d)

Code:

ocac.	
(blank)	Processing error (no storage code needed)
blank	None (internal use only, no storage code needed)
0	In situ
1	Localized
2	Regional, direct extension
3	Regional, lymph nodes only
4	Regional, extension and nodes
5	Regional, NOS
7	Distant
8	Not applicable
9	Unknown/Unstaged

VI.42 Derived Summary Stage 2000 (2004+)

Derived SEER Summary Stage 2000 is from the CS algorithm (or EOD codes) effective with 2004 diagnosis. (Reference: NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, Version 11.1, p. 143, NAACCR item # 3020).

(sumstg2000d)

(blank)	Processing error (no storage code needed)
, ,	
blank	None (internal use only, no storage code needed)
0	In situ
1	Localized
2	Regional, direct extension
3	Regional, lymph nodes only
4	Regional, extension and nodes
5	Regional, NOS
7	Distant
8	Not applicable
9	Unknown/Unstaged

Section Character Pos	sition Last
Field Number Width Start	Stop Edit

VI.43 Tumor Marker 1 - Estrogen receptors (through 2003)

1 122 122 01/05/2007

Tumor marker I - Estrogen receptor status for cases diagnosed through 2003. Data for cases diagnosed in 2004 and later are coded in next field. (Reference: SEER Program Code Manual, 3rd edition, Section IV, Field 07.A, p. 106, NAACCR item # 1150).

(estrecep)

Code:	
0	None done (SX)
1	Positive/elevated
2	Negative/normal; within normal limits (S0)
3	Borderline; undetermined whether positive or negative
8	Ordered, but results not in chart
9	Unknown or no information

VI.44 CS Factor 1 - Estrogen receptors (2004+)

3 123 125 01/05/2007

CS Site-Specific Factor 1- Estrogen Receptor Assay (ERA) for cases diagnosed in 2004+. Cases diagnosed prior to 2004 are coded in previous field. The CS site-specific factors 1-6 may be used in deriving TNM and AJCC stage. (Reference: SEER Program Coding and Staging Manual 2004, pp. 154-155, and Appendix C, p. C-481, NAACCR item # 2880. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(estrecepcs)

Code:	
000	None done (SX)
010	Positive/elevated
020	Negative/normal; within normal limits (S0)
030	Borderline; undetermined whether positive or negative
080	Ordered, but results not in chart
999	Unknown or no information
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VI.45 Tumor Marker 2 - Progesterone receptors (through 2003)

Tumor marker II - Progesterone receptor status for cases diagnosed through 2003. Cases diagnosed in 2004 and later are coded in next field. (Reference: SEER Program Code Manual, 3rd edition, Section IV, Field 07.B, p. 108, NAACCR item # 1160).

(prorecep)

C	0	d	e

0	None done (SX)
1	Positive/elevated
2	Negative/normal; within normal limits (S0)
3	Borderline; undetermined whether positive or negative
8	Ordered, but results not in chart
9	Unknown or no information

VI.46 CS Factor 2 - CS Progesterone receptors (2004+)

127 129 01/05/2007

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126

126 01/05/2007

CS Site-Specific Factor 2 - Progesterone Receptor Assay for cases diagnosed in 2004+. Cases diagnosed prior to 2004 are coded in previous field. The CS site-specific factors 1-6 may be used in deriving TNM and AJCC stage. (Reference: SEER Program Coding and Staging Manual 2004, pp. 156-157, and Appendix C, p. C-481, NAACCR item # 2890. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(prorecepcs)

000	None done (SX)
010	Positive/elevated
020	Negative/normal; within normal limits (S0)
030	Borderline; undetermined whether positive or negative
080	Ordered, but results not in chart
999	Unknown or no information
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.47 **EOD Tumor size (through 2003)**

3 130 132 01/05/2007

This is the EOD tumor size and contains data for cases diagnosed through 2003. Due to coding changes in 1998 SEER, many pathology reports sent to site registries were given an unknown size when there were both invasive and in situ components of the same tumor. SEER is rectifying the Extension fields for breast cancer back to 1998. See SCC Data Dictionary Appendix 10 for more detail. Starting in 2004, tumor size is coded in the next field (CS Tumor Size). (Reference: SEER EOD-88, 3rd edition, p. 110, NAACCR item # 780).

(tumorsiz)

Last Revised: 1/22/2008

Sites that calculate AJCC stage and TNM from EOD will need to modify programs to use the Collaborative Staging tumor size field starting with 2004 cases.

Code:	
000	No mass; no tumor found; no Paget's disease
001	Microscopic focus or foci only
002	Mammography/xerography diagnosis only with no size given (tumor not clinically
003	<=3 mm (minimum reportable size)
XXX	Actual tumor size in mm (valid range 004-989)
990	>=990 mm (maximum reportable size)
997	Paget's disease of the nipple with no demonstrable tumor
998	Diffuse; widespread: 3/4's more of breast; inflammatory carcinoma
999	Not stated
=>	See SCC Data Dictionary Appendix 10 for additional details about codes

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.48 **CS Tumor size (2004+)**

3 133 135 01/05/2007

Records the largest dimension or diameter of the primary tumor, and is always recorded in millimeters. This is a Collaborative Staging variable and is valid for cases diagnosed in 2004+. This field replaces EOD Tumor Size which was used for cases diagnosed prior to 2004. (Reference: SEER Program Coding and Staging Manual 2004, pp. 126-129, NAACCR item # 2800. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(cstumsz)

=>

Last Revised: 1/22/2008

Code:	
000	No mass/tumor found
XXX	001 - 988 millimeters (code exact size in millimeters)
989	989 millimeters or larger.
990	Microinvasion; microscopic focus or foci only, no size given; described as less than 1 mm
991	Described as less than 1 cm
992	Described as less than 2 cm
993	Described as less than 3 cm
994	Described as less than 4 cm
995	Described as less than 5 cm
996	Mammographic/xerographic diagnosis only, no size given; clinically not palpable
997	Paget's Disease of nipple with no demonstrable tumor
998	Diffuse
999	Unknown; size not stated; not stated in patient record.

See SCC Data Dictionary Appendix 6d for additional details about codes

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.49 CS Factor 6 - Size of tumor, invasive component (2004+)

3 136 138 01/05/2007

CS Site-Specific Factor 6 - Size of tumor, invasive component for cases diagnosed in 2004+. The CS site-specific factors 1-6 may be used in deriving TNM and AJCC stage. (Reference: CS Manual and Coding Instructions, Part II, Version 01.03.00, p. 371-379, NAACCR item # 2930. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(tumszinvcs)

Last Revised: 1/22/2008

Code:	
000	Entire tumor reported as invasive (no insitu component)
010	Entire tumor reported as in situ (no invasive component)
020	Invasive and in situ components present, size of invasive component reported in CS Tumor Size (NAACCR #2840)
030	Invasive and in situ components present, size of entire tumor reported in CS Tumor Size, and in situ described as minimal
040	Invasive and in situ components present, size of entire tumor reported in CS Tumor Size, and in situ described as extensive
050	Invasive and in situ components present, size of entire tumor reported in CS Tumor Size, and proportions of in situ and invasive not known
060	Invasive and in situ components present, unknown size of tumor (CS Tumor Size coded 999)
888	Unknown if invasive and in situ components are present
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.50 **EOD Extension (through 2003)**

2 139 140 01/05/2007

Extension based on EOD for cases diagnosed through 2003. Due to coding changes in 1998 SEER, many pathology reports sent to site registries were given an unknown extent of disease when there were both invasive and in situ components of the same tumor. SEER is rectifying the Extension fields for breast cancer back to 1998. See SCC Data Dictionary Appendix 10 for more detail. Starting in 2004, extension is coded in the next field, CS Extension. (Reference: SEER EOD-88, 3rd edition, pp. 110-111, NAACCR item # 790).

(extenson)

Sites that calculate AJCC stage and TNM from EOD will need to modify programs to use the Collaborative Staging extension field starting with 2004 cases.

Code:	
00	In situ: noninfiltrating, intraductal without infiltration, lobular neoplasia
05	Paget's disease (without underlying tumor)
10	Confined to breast tissue and fat including nipple and/or areola; Paget's disease (with underlying tumor)
11,13-18	Confined to breast tissue and fat including nipple and/or areola (see Appendix 10 for specificodes)
20	Invasion of subcutaneous tissue, skin infiltration of primary breast including skin of nipple and/or areola
21,23-28	Invasion of subcutaneous tissue (see Appendix 10 for specific codes)
30	Invasion of (or fixation to) pectoral fascia or muscle; fixation to pectoral muscle or underlying tissue
31,33-38	Invasion of (or fixation to) pectoral fascia or muscle (see Appendix 10 for specific codes)
40	Invasion of (or fixation to) chest wall, ribs, intercostals, or serratus anterior muscles
50	Extensive skin involvement: skin edema, peau d'orange, "pigskin", 'en cuirasse lenticular nodule(s), inflammation of the skin, erythema, ulceration of skin, stellite nodules in skin of primary breast
60	(40)+(50)
70	Inflammatory carcinoma, including diffuse dermal lymphatic permeation or infiltration (beyond that directly overlying the tumor)
80	Further contiguous extension: skin over sternum, upper abdomen, axilla, or opposite breast
85	Metastasis: bone (other than adjacent rib), lung, breast contralateral (if stated as metastatic), adrenal glan, ovary, satellite nodules(s) in skin other than primary breast
99	Unknown if extension of metastasis
=>	See SCC Data Dictionary Appendix 10 for additional details about codes

Section Charact	er Position	Last
Field Number Width S	Start Stop	Edit

VI.51 **CS Extension (2004+)**

2 141 142 01/05/2007

This is a Collaborative Staging variable and is valid for cases diagnosed in 2004+. Identifies contiguous growth (extension) of the primary tumor within the organ of origin or its direct extension into neighboring organs. This field replaces EOD Extension which was used for cases diagnosed prior to 2004. See SCC Data Dictionary Appendix 6c for details. (Reference: SEER Program Coding and Staging Manual 2004, pp. 130-132, and Appendix C, pp. C-476-C478, NAACCR item # 2810. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(extensoncs)

Coae:	
00	In situ: noninfiltrating, intraepithelial, intraductal without infiltration, lobular neoplasia
05	Paget disease of nipple (without underlying tumor)
07	Paget disease of nipple (without underlying invasive carcinoma pathologically)
10	Confined to breast tissue and fat including nipple and/or areola, localized, NOS
20	Invasion of subcutaneous tissue, local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension, skin infiltration of primary breast including skin of nipple and/or areola
30	Attached or fixation to pectoral muscles(s) or underlying tissue, deep fixation, invasion/fixation to pectoral fascia or muscle
40	Invasion/fixation to: chest wall, intercostal or serratus anterior muscle(s), rib(s)
51	Extensive skin involvement, including: satellite nodule(s), ulceration of skin, any of the following, involving <=50% of breast: edema, en cuirasse, erythema, inflammation, peau d'orange
52	Any of the following, involving >50% of breast (w/o inflammatory carcinoma): edema, encuirasse, erythema, inflamation, peau d'orange
61	(40)+(51)
62	(40)+(52)
71	Inflammatory carcinoma with clinical descrip of inflammation, erythema, edema, peu d'orange, etc of <=50% (or unknown %) of breast skin w/ or w/o dermal lymphatic infiltration; inflammatory carcinoma NOS
72	OBSOLETE (should be combined with code 71)
73	Inflammatory carcinoma with clinical descrip of inflammation, erythema, edema, peu d'orange, etc of >50% (or unknown %) of breast skin w/ or w/o dermal lymphatic infiltratio
95	No evidence of primary tumor
99	Unknown extension; primary tumor cannot be assessed; not documented in patient record
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section Characte	er Position	Last
Field Number Width S	Start Stop	Edit

VI.52 EOD Lymph nodes (through 2003)

1 143 143 01/05/2007

Lymph node involvement from EOD for cases diagnosed through 2003. Starting in 2004, this is coded in the next field, CS Lymph Nodes. (Reference: SEER EOD-88, 3rd edition, p. 111, NAACCR item # 810). (lymphnod)

Sites that calculate AJCC stage and TNM from EOD will need to modify programs to use the Collaborative Staging lymph nodes field starting with 2004 cases.

Code:	
0	No lymph node involvement
1	Micrometastasis (<=0.2 cm)
2	>0.2-<2.0 cm, no extension beyond capsule
3	< 2.0 cm with extension beyond capsule
4	>=2.0 cm
5	Fixed/matted ipsilateral axillary nodes
6	Axillary/regional lymph nodes NOS, lymph nodes NOS
7	Internal mammary node(s), ipsilateral
8	Cervical, NOS; Contralateral/bilateral axillary and/or internal mammary; Supraclavicular (transverse cervical); Other than above
9	Unknown; not stated

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.53 **CS Lymph nodes (2004+)**

2 144 145 01/05/2007

This is a Collaborative Staging variable and is valid for cases diagnosed in 2004+. Identifies the regional lymph nodes involved with cancer at the time of diagnosis. This field replaces EOD Lymph Nodes, which was used for cases diagnosed prior to 2004. See SCC Data Dictionary Appendix 6c for details. (Reference: SEER Program Coding and Staging Manual 2004, pp. 136-142, and Appendix C, pp. C-478-C479, NAACCR item # 2830. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00). (Incs)

Code:	
88	Not applicable for this site.
00	None; no regional LN involvement, or ITCs detected by IHC or molecular methods only
05	None; no regional LN(s) but with ITCs detected on routine H & E stains
13	Axillary LN(s), ipsilateral, micrometasis ONLY detected by IHC means only
15	Axillary LN(s), ipsilateral, micrometasis ONLY detected or verified on H & E
25	Movable axillary LNs, ipsilateral, positive with more than micrometastasis
26	Stated as N1, NOS
28	Stated as N2, NOS
50	Fixed/matted ipsilateral axillary nodes, positive with more than micrometastasis
60	Axillary/regional LN(s), NOS; LN(s), NOS
71-74	Internal mammary LN(s), ipsilateral, positive on sentinel nodes but not clinically apparent without axillary LN(s), ipsilateral (see Appendix 6d/CS Lymph Nodes)
75	Infraclavicular LN(s)
76	Internal mammary LN(s), ipsilateral, clinically apparent with axillary LN(s), ipsilateral, codes 15-60, w/ or w/o infraclavicular LN(s)
77	Internal mammary LN(s), ipsilateral, clinically apparent; unknown if positive axillary LN(s), ipsilateral
78	(75)+(77)
79	Stated as N3, NOS
80	Superclavicular LN(s)
=>	See SCC Data Dictionary Appendix 6d for additional details about codes
99	Unknown; not stated; regional LN(s) cannot be assessed; not documented in patient record

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.54 CS Metastasis at diagnosis (2004+)

2 146 147 01/05/2007

Identifies the site(s) of metastatic involvement at the time of diagnosis. This field is collapsible into AJCC M code. (Reference: CS Manual and Coding Instructions, Part II, Version 01.03.00, p. 371-379, NAACCR item # 2850. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(metsdxcs)

Code:	
00	No; none
10	Distant lymph node(s)
40	Distant metastases except distant lymph node(s)
42	Further continguous extension
44	Metastasis
50	10 + any of [40 to 44]
99	Unknown
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

VI.55 Regional lymph nodes examined by pathologist positive

148 149 01/05/2007

Records the exact number of regional lymph nodes examined by the pathologist and found to contain metastases. (Reference: SEER Program Code Manual, 4rd edition, pp. 146-147, NAACCR item # 820. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(posnods)

Codes have changed slightly.

Code:	
00	All nodes examined negative
XX	Actual number of positive lymph nodes (valid range 01-89)
90	90 or more nodes positive
95	Positive aspiration of lymph node(s) was performed
97	Positive nodes are documented, but the number is unspecified
98	No nodes examined
99	Unknown if nodes are positive or negative; not applicable
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VI.56 Regional lymph nodes examined by pathologist

2 150 151 01/05/2007

The total number of regional lymph nodes that were removed and examined by the pathologist. (Reference: SEER 4th Edition, pp. 148-149, NAACCR item # 830).

(pathnods)

Code:	
00	No nodes examined
01	One node examined
02	Two nodes examined
XX	Number of lymph nodes examined (valid range 00-89)
90	Ninety or more regional lymph nodes examined
95	No regional lymph node(s) removed, but aspiration of regional lymph node(s) was performed
96	Regional lymph node removal documented as a sampling and number of lymph nodes unknown/not stated
97	Regional lymph node removal documented as a dissection and number of lymph nodes unknown/not stated
98	Regional lymph nodes surgically removed but number of lymph nodes unknown/not stated and not documented as a sampling or dissection; nodes examined but number unknown
99	Unknown if nodes were examined; not applicable or negative

VI.57 CS Factor 3 - Positive ipsilateral axillary nodes (2004+)

3 152 154 01/05/2007

CS Site-Specific Factor 3 - Positive ipsilateral axillary lymph nodes for cases diagnosed in 2004+. The CS site-specific factors 1-6 may be used in deriving TNM and AJCC stage. (Reference: CS Manual and Coding Instructions, Part II, Version 01.03.00, p. 371-379, NAACCR item # 2900. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(posipsics)

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Codo.	
000	All ipsilateral axillary nodes examined negative
001-089	1-89 nodes positive (code exact number of nodes positive)
090	90 or more nodes positive
095	Positive aspiration of lymph node(s)
097	Positive nodes, number unspecified
098	No axillary nodes examined
099	Unknown if axilllary nodes are positive, not applicable, not documented
999	Unknown; Insufficient information; Not documented in patient record.
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VI.58 CS Factor 4 - IHC of regional nodes (2004+)

3 155 157 12/14/2006

CS Site-Specific Factor 4 - Immunohistochemistry (IHC) of regional nodes for cases diagnosed in 2004+. The CS site-specific factors 1-6 may be used in deriving TNM and AJCC stage. (Reference: CS Manual and Coding Instructions, Part II, Version 01.03.00, p. 371-379, NAACCR item # 2910. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(ihcnodscs)

Code:	
000	Regional lymph nodes negative on H and E, no IHC studies done
001	Regional lymph nodes negative on H and E, IHC studies done, negative for tumor
002	Regional lymph nodes negative on H and E, IHC studies done, positive for ITCs
009	Regional lymph nodes negative on H and E, positive for tumor detected by IHC studies, size not stated
888	Not applicable, CS Lymph Nodes (NAACCR #2840) not coded 00
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

VI.59 CS Factor 5 - Molecular studies of regional nodes (2004+)

158 160 12/14/2006

CS Site-Specific Factor 5 - Molecular studies of regional nodes for cases diagnosed in 2004+. The CS site-specific factors 1-6 may be used in deriving TNM and AJCC stage. (Reference: CS Manual and Coding Instructions, Part II, Version 01.03.00, p. 371-379, NAACCR item # 2920. Also, CS Manual and Coding Instructions, Part II, Version 01.03.00).

(molnodscs)

Code:	
000	Regional lymph nodes negative on H and E, no RT-PCR molecular studies done
001	Regional lymph nodes negative on H and E, RT-PCR molecular studies done, negative for tumor
002	Regional lymph nodes negative on H and E, RT-PCR molecular studies done, positive for tumor
888	Not applicable, CS Lymph Nodes not coded 00
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.60 TNM Edition stage flag (through 2003)

2 161 162 12/14/2006

Edition of the AJCC manual used to stage the case. This applies to the manually coded AJCC fields; it does not apply to the Derived AJCC fields (AJCC T, N, M and Stage Group fields -- NAACCR # 2940, 2960, 2980, 3000). (Reference: NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, Version 11.1, p. 327, NAACCR item # 1060).

(tnmsourc)

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

VI.61 CS Tumor size/extension evaluation (2004+)

1 163 163 12/14/2006

Records how the codes for the two fields CS Tumor Size and CS Extension were determined, based on the diagnostic methods employed. This field is used primarily to describe whether the staging basis for the T category in the TNM system is clinical or pathological. (Reference: SEER Program Coding and Staging Manual 2004, pp. 133, NAACCR item # 2820).

(tumszcsevl)

Last Revised: 1/22/2008

Code:	
0	No surgical resection done. Based on physical exam, imaging, or other non-invasive clinical evidence. No autopsy evidence used.
1	No surgical resection done. Based on endoscopic exam, diagnostic biopsy, including fine needle aspiration biopsy, or other invasive techniques. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging.
2	No surgical resection done, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy).
3	Surgical resection performed without/unknown pre-surgical treatment/radiation. Meets criteria for AJCC pathologic staging.
5	Surgical resection performed with pre-surgical systemic treatment/radiation; tumor size/extension based on clinical evidence.
6	Surgical resection performed with pre-surgical systemic treatment/radiation; tumor size/extension based on pathological evidence.
8	Evidence from autopsy only (tumor was unsuspected/undiagnosed prior to autopsy).
9	Unknown if surgical resection done; not assessed; for sites with no TNM schema: not applicable.

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.62 **CS Lymph node evaluation (2004+)**

1 164 164 12/14/2006

Records how the code for the field CS Lymph Nodes was determined, based on the diagnostic methods employed. (Reference: SEER Program Coding and Staging Manual 2004, pp. 143, NAACCR item # 2840). (IncsevI)

Code:	
0	No regional LNs removed for exam. Based on physical exam, imaging, or other non-invasive clinical evidence. No autopsy evidence used.
1	No regional LNs removed for exam. Based on endoscopic exam, diagnostic biopsy, including fine needle aspiration of LNs, or other invasive techniques. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging.
2	No surgical resection done, but evidence derived from autopsy (tumor was suspected or diagnosed prior to autopsy).
3	Regional LNs removed for exam without/unknown pre-surgical treatment/radiation. Meets criteria for AJCC pathologic staging.
5	Regional LNs removed for exam with pre-surgical treatment/radiation, and LN evaluation based on clinical evidence.
6	Regional LNs removed for exam with pre-surgical treatment/radiation, and LN evaluation based on pathological evidence.
8	Evidence from autopsy; tumor was unsuspected/undiagnosed prior to autopsy.
9	Unknown if LNs removed for exam; not assessed; for sites with no TNM schema: not applicable.

VI.63 CS Metastasis evaluation (2004+)

Last Revised: 1/22/2008

1 165 165 12/14/2006

Records how the code for the field CS Mets at Dx was determined, based on the diagnostic methods employed. (Reference: SEER Program Coding and Staging Manual 2004, pp. 143, NAACCR item # 2860). (metsdxcsevl)

Code:	
0	No pathologic exam of metastatic tissue performed. Based on physical exam, imaging, or other non-invasive clinical evidence. No autopsy evidence used.
1	No pathologic exam of metastatic tissue performed. Based on endoscopic exam, diagnostic biopsy, including fine needle aspiration biopsy, or other invasive techniques. No autopsy evidence used. Does not meet criteria for AJCC pathologic staging.
2	No pathologic exam of metastatic tissue done prior to death, but evidence derived from autopsy.
3	Pathologic exam of metastatic tissue performed without/unknown pre-surgical systemic treatment or radiation. Meets criteria for AJCC pathologic staging.
5	Pathologic exam of metastatic tissue performed with pre-surgical systemic treatment or radiation, and metastasis based on clinical evidence.
6	Pathologic exam of metastatic tissue performed with pre-surgical systemic treatment or radiation, but metastasis based on pahtologic evidence.
8	Evidence from autopsy; tumor was unsuspected/undiagnosed prior to autopsy.
9	Unknown if assessed; not assessed; for sites with no TNM schema: not applicable.

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VI.64 CS Version first (2004+)

6 166 171 01/05/2007

This item indicates the version number used to initially code CS fields. This item is returned as part of the output of the CS algorithm. As long as the CS algorithm is run and the output values stored at the time of initial abstracting, the returned values from the program should be automatically stored in this field. (Reference: NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, Version 11.1, p. 126, NAACCR item #2935).

(verfstcs)

Code:

XXXXXX

6-digit code: digits 1-2 indicate major version number; remaining 4 digits represent minor changes (i.e. 01.03.00).

VI.65 CS Version latest (2004+)

6 172 177 01/05/2007

This item indicates the version number used most recently to derive the CS output fields. This item is recorded the first time the CS output fields are derived and should be updated each time the CS Derived items are recomputed. This item is returned as part of the output of the CS algorithm. The returned values from the program should be automatically stored in this field. This item should not be blank if the CS Derived items contain stored values. This item should be blank if the CS Derived items are empty or the CS algorithm has not been applied. (Reference: NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, Version 11.1, p. 126, NAACCR item #2936).

(verlatcs)

Code:

XXXXXX

6-digit code: digits 1-2 indicate major version number; remaining 4 digits represent minor changes (i.e. 01.03.00).

VI.66 Derived AJCC T Descriptor

1 178 178 01/05/2007

This is the AJCC "T Descriptor" component that is derived from coded fields, using the CS algorithm, effective with 2004 diagnosis. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 2950).

(ajcctdesc)

oouo.	
С	Clinical stage
p	Pathologic stage
a	Autopsy stage
у	Surgical resection performed after presurgical systemic treatment or radiation; tumor size/extension based on pathologic evidence
N	Not applicable
(blank)	Not derived
0	Not derived

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.67 Derived AJCC N Descriptor

This is the AJCC "N Descriptor" descriptor dervied from coded fields, using the CS algorithm, effective with 2004 diagnosis. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 2970).

(ajccndesc)

Code:	
С	Clinical stage
p	Pathologic stage
a	Autopsy stage
У	Lymph nodes removed for examination after presurgical systemic treatment or radiation, and lymph node evaluation based on pathologic evidence
N	Not applicable
(blank)	Not derived
0	Not derived

VI.68 **Derived AJCC M Descriptor**

This is the AJCC "M Descriptor" component that is derived from coded fields, using the CS algorithm, effective with 2004 diagnosis. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., item # 2990).

(ajccmdesc)

Code:	
c	Clinical stage
p	Pathologic stage
a	Autopsy stage
У	Pathologic examination of metastatic tissue performed after presurgical systemic treatment or radiation, and extension based on pathologic evidence
N	Not applicable
(blank)	Not derived
0	Not derived

VI.69 **Derived AJCC Stage Flag**

Flag to indicate whether the derived AJCC stage was derived from CS or EOD codes. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 3030).

(ajccconflag)

Code:	
1	AJCC 6th edition derived from Collaborative Staging Manual and Coding Instructions, Version 1.0
2	AJCC 6th edition derived from EOD (prior to 2004)
8	Structural missing
9	Unknown
(blank)	Not derived

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Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.70 Derived Summary Stage 1977 flag (2004+)

Flag to indicate whether the derived SEER Summary Stage 1977 was derived from CS or EOD codes. (Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 3040). (sumstg1977flg)

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Code:

1	Derived from Collaborative Staging Manual and Coding Instructions, Version 1.0
2	Derived from EOD (prior to 2004)
blank	Not derived

VI.71 Derived Summary Stage 2000 flag (2004+)

Flag to indicate whether the derived SEER Summary Stage 2000 was derived from CS or EOD codes.(Reference: NAACCR Standards for Cancer Registries, Volume II, 11th ed., NAACCR item # 3050).

(sumstg2000flg)

Code:

1	Derived from Collaborative Staging Manual and Coding Instructions, Version 1.0
2	Derived from EOD (prior to 2004)
blank	Not derived

VI.72 Treatment: Regional lymph nodes examined with surgery (1998-2002)

The number of regional lymph nodes examined in conjunction with surgery performed as part of the first-course treatment for cases diagnosed between 1998 and 2002. Starting in 2003, this item is no longer collected - it has been incorporated into the Scope of Regional Lymph Node Surgery 2003+ field, NAACCR #1292. (Reference: SEER Program Code Manual, 3rd edition, Section V, Field 02.C and Appendix C, p. C-65, NAACCR item # 1296).

(numbnods)

Last Revised: 1/22/2008

00	No regional lymph nodes examined
01	One regional lymph node examined
XX	xx regional lymph nodes examined (valid range 00-89)
90	Ninety or more regional lymph nodes examined
95	No regional lymph node(s) removed, but aspiration of regional lymph node(s) was performed.
96	Regional lymph node removal documented as a sampling and number of lymph nodes examined unknown/not stated
97	Regional lymph node removal documented as dissection and number of lymph nodes examined unknown/not stated
98	Regional lymph nodes surgically removed, but number of lymph nodes examined unknown/not stated
99	Unknown; not stated; death certificate ONLY

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.73 Treatment: Scope of regional lymph node surgery (1998-2002)

Describes the removal, biopsy, or aspiration of regional lymph nodes(s) at the time of surgery of the primary site or during a separate surgical event. SEER collected this field for cases diagnosed 1998-2002. Data for cases diagnosed 2003+ are located in the Scope of Regional Lymph Node Surgery 2003+ field, NAACCR #1292. (Reference: SEER Program Code Manual, 3rd edition, p. 127 and Appendix C, p. C-65, NAACCR item # 1647).

(lympsurg)

These are SEER codes.

Code:

Couo.	
0	No regional lymph nodes removed
1	Sentinel lymph node(s) removed
2	Regional lymph node(s) removed NOS; axillary NOS (Lvls I, II or III lymph nodes); Intramammary NOS
3	Combination of 1 and 2
4	Internal mammary
5	Combination of 4 WITH any of 1-3
9	Unknown; not stated; death certificate ONLY

VI.74 Treatment: Scope of regional lymph node surgery (2003+)

Describes the removal, biopsy, or aspiration of regional lymph nodes(s) at the time of surgery of the primary site or during a separate surgical event. This field was added as a revision to the SEER 3rd edition manual and is valid for cases diagnosed in 2003+. Please send historical data if available. Data for cases

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SEER Program Coding and Staging Manual 2004, pp. 179-180, NAACCR item # 1292).

(lnsurgf)

These are FORDS codes.

Code:

oouo.	
0	No regional lymph nodes removed or aspirated; diagnosed at autopsy.
1	Biopsy or aspiration of regional lymph node, NOS
2	Sentinel lymph node biopsy [only]
3	Number of regional lymph nodes removed unknown, not stated; regional lymph nodes removed, NOS
4	1 to 3 regional lymph nodes removed
5	4 or more regional lymph nodes removed
6	Sentinel node biopsy and code 3, 4, or 5 at same time or timing not noted
7	Sentinel node biopsy and code 3, 4, or 5 at different times
9	Unknown or not applicable; death certificate only

diagnosed prior to 2003 is coded in the previous two fields, NAACCR #1296 and 1647. (Reference:

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VI.75 Treatment: Date first therapy initiated

8 188 195 01/05/2007

Date of initiation of first course of therapy. If day is unknown, code as 99 and SCC program will set equal to 15th. (Reference: SEER Program Coding and Staging Manual 2004, pp. 174-176, NAACCR item # 1260)

(dfthdate)

Coding has been added for structural missing. Seer sites should not try to change SEER codes if unknown.

Code:	
00000000	No cancer-directed therapy or autopsy only
xxxxxxx	Three variables: Month(xx); Day(xx); Year(xxxx)
88888888	Structural missing = 88 for mo&day 8888 for year
99999999	Unknown if cancer-directed therapy was administered or death certificate only

VI.76 **Treatment: Radiation**

1 196 196 01/05/2007

The method of administration of radiation administered as a part of the first course of treatment. (Reference: SEER Program Coding and Staging Manual 2004, pp. 184-187, NAACCR item # 1360). (radiaton)

Code:	
0	None
1	Beam radiation
2	Radioactive implants
3	Radioisotopes
4	Combination of 1 with 2 or 3
5	Radiation NOS - method or source not specified
7	Refused / Contraindicated / Recommended but not given
8	Radiation recommended, unknown if administered
9	Patient died / Unknown

VI.77 Treatment: Radiation sequence with surgery

1 197 197 01/05/2007

For patients who received both radiation and surgery therapies, the codes indicate the sequencing of radiation and surgery given as part of the first course of treatment. Related fields are VI.74, VI.76, VI.86, and VI.88. Reference: SEER Program Coding and Staging Manual 2004, p. 188, NAACCR item # 1380). (radwsurg)

Code:	
0	No radiation and/or cancer-directed surgery
2	Radiation before surgery
3	Radiation after surgery
4	Radiation both before and after surgery
5	Intraoperative radiation
6	Intraoperative radiation with other radiation given before or after surgery
9	Sequence unknown, but both surgery and radiation were given

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.78 **Treatment: Chemotherapy**

2 198 199 01/05/2007

Chemotherapy given as part of the first course of treatment or the reason chemotherapy was not given. SEER reports this field using FORDS codes and has forward-converted historical data to the new format. The conversion table that maps SEER codes to FORDS codes is in Appendix 15. (Reference: SEER Program Coding and Staging Manual 2004, pp. 189-191, NAACCR item # 1390).

(chemof)

The codes for this field have changed and the width has increased.

Code:	
00	None, chemotherapy was not part of the planned first course of therapy; diagnosed at autopsy
01	Chemotherapy administered as first course therapy, but the type and number of agents is not documented in the patient record.
02	Single agent chemotherapy administered as first course therapy.
03	Multiagent chemotherapy administered as first course therapy.
82	Chemotherapy was not recommended/administered because it was contraindicated due patient risk factors (i.e., comorbid conditions, advanced age).
85	Chemotherapy was not administered because the patient died prior to planned or recommended therapy.
86	Chemotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in the patient record.
87	Chemotherapy was not administered. It was recommended by the patient's physician, but the treatment was refused by the patient, a patient's family member, or the patient's guardian.
88	Chemotherapy was recommended, but it is unknown if it was administered.
99	It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in the patient record. Death certificate only.

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.79 **Treatment: Hormone therapy**

2 200 201 01/05/2007

Records whether systemic hormonal agents were administered as first-course treatment at any facility, or the reason they were not given. This field was previously named "Endocrine". SEER reports this field using FORDS codes and has forward-converted historical data to the new format. The conversion table that maps SEER codes to FORDS codes is in Appendix 15. (Reference: SEER Program Coding and Staging Manual 2004, pp. 192-193, NAACCR item # 1400).

(hormf)

The codes for this field have changed and the width has increased.

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

Section	Character Position	Last
Field Number V	Width Start Stop	Edit

VI.80 **Treatment: Immunotherapy**

2 202 203 01/05/2007

This field was previously named "Biological modification". SEER reports this field using FORDS codes and has forward-converted historical data to the new format. The conversion table that maps SEER codes to FORDS codes is in Appendix 15. Note: Marrow and stem cell transplant coding has been moved to the Hematologic Transplant and Endocrine Procedures field. (Reference: SEER Program Coding and Staging Manual 2004, pp. 194-196, NAACCR item # 1410).

(imunof)

The codes for this field have changed and the width has increased.

Code:	
00	None, immunotherapy was not part of the planned first course of therapy; not customary therapy for this cancer; diagnosed at autopsy only.
01	Immunotherapy was administered as first course therapy.
82	Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age etc.).
85	Immunotherapy was not administered because the patient died prior to planned or recommended therapy.
86	Immunotherapy was not administered; it was recommended by the patient's physician, but was not administered as part of the first-course of therapy. No reason was noted in the patient's record.
87	Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian The refusal was noted in the patient record.
88	Immunotherapy was recommended, but it is unknown if it was administered.
99	It is unknown if immunotherapy was recommended or administered because it is not stated in patient record; death certificate only cases.

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.81 Treatment: Hematologic transplant and endocrine procedures (2003+)

Records systemic therapeutic procedure administered as part of the first course of treatment. These procedures include bone marrow transplants (BMT) and stem cell harvests with rescue (stem cell transplant), endocrine surgery and/or radiation performed for hormonal effect (when cancer originates at another site), as well as combination of transplants and endocrine therapy. This field was added by SEER in 2003 as a revision to the SEER 3rd edition manual. Historical data is forward converted to these codes from SCC DD 2.5 fields VI.33 and VI.34 per the conversion chart in Appendix 15. (Reference: SEER Program Coding and Staging Manual 2004, pp. 197-199, NAACCR item # 3250).

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(trnsend)

Code:	
00	None, transplant procedure or endocrine therapy was not a part of the first course of therapy; not customary therapy for this cancer; diagnosed at autopsy only.
10	Bone marrow transplant, NOS. A bone marrow transplant procedure was administered as first course therapy, but the type was not specified.
11	Bone marrow transplant autologous
12	Bone marrow transplant allogeneic
20	Stem cell harvest (stem cell transplant) as first course therapy.
30	Endocrine surgery and/or endocrine radiation therapy as first course therapy.
40	Combination of transplant procedure with endocrine surgery and/or endocrine radiation (Code 30 in combination with 10, 11, 12, or 20) as first course therapy.
82	Transplant procedure and/or endocrine therapy was not recommended/administered because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.).
85	Transplant procedures and/or endocrine therapy were not administered because the patient died prior to planned or recommended therapy.
86	Transplant procedures and/or endocrine therapy were not administered; it was recommended by the patient's physician, but was not administered as part of first course therapy. No reason was noted in the patient record.
87	Transplant procedures and/or endocrine therapy were not administered; treatment was recommended by the patient's physician but was refused by the patient, a patient's family member, or the patient's guardian. Refusal was noted in the patient record.
88	Transplant procedures and/or endocrine therapy was recommended, but it is unknown if it was administered.
99	It is unknown if a transplant procedure or endocrine therapy was recommended or administered because it is not stated in patient record; death certificate only cases.

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VI.82 Treatment: Other cancer-directed therapy

Other Therapy identifies other treatment given that cannot be classified as surgery, radiation, systemic therapy, or ancillary treatment. (Reference: SEER Program Code Manual, 4rd edition, pp. 200-201, NAACCR item # 1420)

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(oththerp)

Code:	
0	None
1	Other
2	Other-experimental
3	Other-double blind
6	Other-unproven
7	Refusal
8	Recommended, unknown if administered
9	Unknown

VI.83 Treatment: Reconstruction - First course (1998-2002)

Reconstruction begun as part of first course of treatment. SEER collected this for cases diagnosed 1998-2002. Starting in 2003, this item is no longer collected by SEER - it has been incorporated into the Site-Specific Surgery (2003+) field. Prior to 1998, it was coded as the Site-Specific Surgery (1988-1997) field. Because both of these items are now being collected, no additional re-coding is required. (Reference: SEER Program Code Manual, 3rd edition, Section V, Field 02.E, Appendix C, p. C-66, NAACCR item # 1330).

(seerrec)

Sites no longer need to recode based on surgery codes that end in "8" because we are now collecting pre-1998 surgery as a separate field.

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\cup	u	℧.

0	No reconstruction/restoration
1	Reconstruction NOS (unknown if flap)
2	Implant; reconstruction WITHOUT flap
3	Reconstruction WITH flap NOS
4	Latissimus dorsi flap
5	Abdominis recti flap
6	Flap NOS + implant
7	Latissimus dorsi flap + implant
8	Abdominis recti + implant
9	Unknown; not stated; death certificate ONLY

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.84 Treatment: Site-specific surgery (1988-1997)

2 208 209 01/22/2008

This data is valid for diagnoses 1988-1997. Surgery of primary site describes a surgical procedure that removes and/or destroys tissue of the primary site performed as part of the initial work-up or first course of therapy. See SCC Data Dictionary Appendix 6a for details. Code blank or '99' for structural missing. (Reference: SEER Program Code Manual, 2nd edition, revised June 1992, pp. 113-115, and Appendix C, pp. 190-191, NAACCR item # 1640).

(surg88)

Last Revised: 1/22/2008

This field was not included in the SCC 2.5 data dictionary and sites were asked to recode this data into field 71 using SEER 3rd edition manual. Recoding is no longer necessary.

Code:	
00, 07	No cancer-directed surgery or non-excisional biopsy
01-06	Incisional, needle, or aspiration biopsy OR exploratory OR bypass surgery
09	Unknown if surgery performed
10	Partial mastectomy NOS, without dissection of axillary LNs
20	Partial mastectomy NOS, with dissection of axillary LNs
30	Subcutaneous mastectomy
40, 48	Total (simple) mastectomy
50, 58	Modified radical mastectomy
60, 68	Radical mastectomy
70, 78	Extended radical mastectomy
80,88	Surgery of regional and/or distant sites/nodes only
90	Mastectomy or Surgery, NOS
99	Unknown if surgery performed
Note:	Surgery codes that end in an 8 indicate reconstruction
=>	See SCC Appendix 6a and Appendix 6b (table on p. 46-47) for additional details about codes

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.85 Treatment: Site-specific surgery (1998-2002)

2 210 211 01/05/2007

Surgery of primary site from the 1998 SEER manual. This field applies to diagnoses 1998-2002. SEER has three separate fields that code for surgery of primary site for three different time periods: 2003+, 1998-2002, and pre-1998. The SCC is now requesting that sites send all three fields as collected. If historical data is available, then please send it. (Reference: SEER Program Code Manual, 3rd edition, pp. 124-126, Appendix C, pp. 63-64, NAACCR item # 1646).

(surgery)

Cada.

The SCC previously requested that sites modify codes for cancers prior to 1998 to conform to the 1998 standards. This has changed.

Code:	
00	Non-excisional biopsy OR no cancer-directed surgery
10	Partial mastectomy NOS
11	Partial mastectomy NOS nipple resection
12	Partial mastectomy NOS lumpectomy or excision biopsy
13	Partial mastectomy NOS re-excision of the biopsy site
14	Partial mastectomy NOS wedge resection
15	Partial mastectomy NOS quadrantectomy
16	Partial mastectomy NOS segmental mastectomy
17	Partial mastectomy NOS tylectomy
30	Subcutaneous mastectomy
40	Total (simple) mastectomy
41	Total (simple) mastectomy, without removal of uninvolved contralateral breast
42	Total (simple) mastectomy, with removal of uninvolved contralateral breast
50	Modified radical mastectomy
51	Modified radical mastectomy, without removal of uninvolved contralateral breast
52	Modified radical mastectomy, with removal of uninvolved contralateral breast
60	Radical mastectomy
61	Radical mastectomy, without removal of uninvolved contralateral breast
62	Radical mastectomy, with removal of uninvolved contralateral breast
70	Extended radical mastectomy
71	Extended radical mastectomy, without removal of uninvolved contralateral breast
72	Extended radical mastectomy, with removal of uninvolved contralateral breast
80	Mastectomy NOS
90	Surgery NOS
99	Unknown
=>	See SCC Appendix 6b (pp. 43-47 and table on p. 46-47) for additional details about codes

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VI.86 **Treatment: Site-specific surgery (2003+)**

Surgery of primary site describes a surgical procedure that removes and/or destroys tissue of the primary site performed as part of the initial work-up or first course of therapy. This field was added by SEER in 2003 as a revision to the SEER 3rd edition manual. This field is valid for cases diagnosed in 2003+.

2

212

213 01/05/2007

Please send historical data if available. See SCC Data Dictionary Appendix 6c for details. (Reference: SEER Program Coding and Staging Manual 2004, pp. 177-178, and Appendix C, pp. C-485-C486, NAACCR item # 1290).

(surgf)

These are FORDS codes.

Code:	
00	None; no surgery of primary site; autopsy only
19	Local tumor destruction NOS
20	Partial mastectomy NOS
21	Partial mastectomy NOS nipple resection
22	Partial mastectomy NOS lumpectomy or excision biopsy
23	Partial mastectomy NOS re-excision of the biopsy site
24	Partial mastectomy NOS segmental mastectomy
30	Subcutaneous mastectomy
40	Total (simple) mastectomy
41, 43-46	Total (simple) mastectomy, without removal of uninvolved contralateral breast
42, 47-49, 75	Total (simple) mastectomy, with removal of uninvolved contralateral breast
50	Modified radical mastectomy
51, 53-56	Modified radical mastectomy, without removal of uninvolved contralateral breast
52, 57-59, 63	Modified radical mastectomy, with removal of uninvolved contralateral breast
60	Radical mastectomy
61, 64-67	Radical mastectomy, without removal of uninvolved contralateral breast
62, 68-74	Radical mastectomy, with removal of uninvolved contralateral breast
70	Extended radical mastectomy
71	Extended radical mastectomy, without removal of uninvolved contralateral breast
72	Extended radical mastectomy, with removal of uninvolved contralateral breast
80	Mastectomy NOS
90	Surgery NOS
99	Unknown if surgery performed, death certificate only
=>	See SCC Appendix 6c and Appendix 6b (table on p. 46-47) for additional details about code

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VI.87 Treatment: Surgery other (1998-2002)

Surgery of other regional sites, distant sites, or distant lymph nodes. SEER collected this field for cases diagnosed 1998-2002. Data for cases diagnosed 2003+ are located in the Surgery Other (2003+) field. (Reference: SEER Program Code Manual, 3rd edition, Section V, Field 02.D, Appendix C, p. C-66, NAACCR item # 1648).

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215

214

214 01/05/2007

215 01/05/2007

(surgoth)

These are SEER codes.

Code

Coue.	
0	None; no surgery to other regional or distant sites
1	Surgery to other site(s) or node(s), NOS; unknown if regional or distant
2	Other regional site(s)
3	Distant lymph node(s)
4	Distant site(s)
5	Removal of involved contralateral breast (single primary only)
6	Combination of 4 or 5 WITH 2 or 3
9	Unknown; not stated; death certificate ONLY

VI.88 Treatment: Surgery other (2003+)

Describes the surgical removal of distant lymph node(s) or other tissue(s) or organ(s) beyond the primary site. This field was added by SEER in 2003 as a revision to the SEER 3rd edition manual. Removal of involved contralateral breast now coded in site specific surgery. This field is valid for cases diagnosed in 2003+. Please send historical data if available. Data for cases diagnosed prior to 2003 is coded in the previous field. (Reference: SEER Program Coding and Staging Manual 2004, pp. 181, NAACCR item # 1294).

(surgothf)

These are FORDS codes.

0	None; diagnosed at autopsy
1	Nonprimary surgical procedure performed
2	Nonprimary surgical procedure to other regional sites
3	Non-primary surgical procedure to distant lymph node(s)
4	Nonprimary surgical procedure to distant site
5	Combination of codes 2, 3, or 4
9	Unknown; death certificate only

Section Character Characte	er Position	Last
Field Number Width S	Start Stop	Edit

VI.89 Follow-up: Date of last follow-up

8 216 223 12/14/2006

Date of last contact with patient or date of death. SEER typically collects only month and year, but if day is available, Data Managers should send this information. If day is unknown, code as 99. (Reference: SEER Program Coding and Staging Manual 2004, p. 204; NAACCR item #1750) (cafudate)

Code:

xxxxxxxx Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

VI.90 Follow-up: Status of last follow-up

1 224 224 12/14/2006

Vital status at the date of last follow-up. (Reference: SEER Program Coding and Staging Manual 2004, p. 206; NAACCR item #1760)

(cafustat)

Code:

0	Dead (COC)	
1	Alive	
4	Dead (SEER)	

VI.91 Follow-up: Cancer status at follow-up

1 225 225 12/14/2006

Records the presence or absence of the tumor at the date of last follow-up (Reference: SEER Program Coding and Staging Manual 2004, p. 207; NAACCR item #1770).

(tumstat)

Code:

1	No evidence of this tumor
2	Evidence of this tumor
9	Unknown not stated

VI.92 Follow-up: Cause of death

4 226 229 12/14/2006

Underlying cause of death as coded from the death certificate in valid ICD-7, ICD-8, ICD-9, or ICD-10 codes. (Reference: SEER Program Coding and Staging Manual 2004, pp. 208-209; NAACCR item #1910). (cacod)

XXXX	Actual ICD-7, ICD-8, ICD-9, or ICD-10 code, if known
0000	Patient alive at last contact
7777	State death certificate not available
7797	State death certificate available but underlying cause of death not coded
8888	Structural missing
9999	Unknown

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VI.93 Follow-up: ICD revision number

1 230 230 12/14/2006

ICD code revision number used for cause of death (Reference: SEER Program Coding and Staging Manual 2004, p. 207; NAACCR item #1920).

(caicdrev)

Code:	
0	Patient alive at last follow-up
1	ICD-10
7	ICD-7
8	ICD-8
9	ICD-9

VI.94 Her2 / Neu 1 231 231 01/05/2007

If Her2 Neu information is collected by the cancer registry, code here. If this information is not collected, code as blank.

(her2neur)

Code:	
0	Not done
1	Positive
2	Negative
3	Borderline
8	Ordered, results not in chart
9	Unknown or no information
(blank)	Not collected

VI.95 Systemic treatment / Surgery sequence

Records the sequence of any systemic therapy and surgery given as first course of therapy. Systemic therapy: Chemotherapy, Hormone therapy, Biological response therapy/immunotherapy, Bone marrow transplant, Stem cell harvests, Surgical and/or radiation endocrine therapy (Reference: SEER Program Coding and Staging Manual 2007, pp. 198, NAACCR Item #1639 NAACCR Name: RX SUMM-Systemic/SurSeq)

(syswsurg)

Code:	
0	No systemic therapy and/or surgical treatment
2	Systemic therapy before surgery
3	Systemic therapy after surgery
4	Systemic therapy both before and after surgery
5	Intraoperative systemic therapy
6	Intraoperative systemic therapy with other therapy administered before or after surgery
9	Sequence unknown

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232 01/22/2008

Sectio			Chara	cter Po	osition	Last
Field	Number		Width	Start	Stop	Edit
VII	VITAL STATUS FOLLOW-UP INFORMATION					
VII.1	Record type	Key field	8	1	8	12/14/200
	Vital Status follow-up record.					
	(rectype)					
	Only one code allowed					
	Code:					
	VITLSTAT Vital Status follow-up record. Only one code allow	ed				
VII.2	Study site	Key field	1	9	9	
	Unique identifier for study site					
	(site)					
	Code:					
	X Unique assigned letter for your site (Capitalized)					
VII.3	Study ID	Key field	10	10	19	
	Unique person identifier for study site (studyid)					
	Code:					
	xxxxxxxxxx Encrypted, unique person identifier for site					
VII.4	Information date	Key field	8	20	27	
	Date information was collected on woman (typically the last follows:	ow-up da	ate for thi	is wom	an).	
	(infodate)	_				
	Code:					
	xxxxxxxx Three variables: Mo(xx); Day(xx); Year(xxxx)					
VII.5	SCC date		8	28	35	
	Date prepared for SCC					
	(sccdate)					
	Date prepared or sent to SCC - allows corrections	in the	e futur	е		
	Code:					
	xxxxxxxx Three variables: Mo(xx); Day(xx); Year(xxxx)					

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VII.6 **Date last follow-up/death**

8 36 43 01/05/2007

Date of last follow-up or date of death.

(fudate

This file will only contain vital status information from non-cancer registry sources so delete cancer registry related comments.

Code:

XXXXXXX

Three variables: Month(xx); Day(xx); Year(xxxx); Structural missing = 88 for mo&day; 8888 for year; Unknown = 99 for mo&day; 9999 for year

VII.7 Status at last follow-up

1 44 44 01/05/2007

Vital status at the date of last follow-up.

(fustat)

Code:

1	Alive
4	Dead
9	Unknown

VII.8 **ICD revision**

2 45 46 01/05/2007

ICD code revision used for cause of death. Use the following SEER-based codes. ICD 10 codes should be used for deaths occurring on or after 1/1/99. SEER Program Code Manual, 4th edition, p 207. (icdrevis)

00	Patient alive at last follow-up
01	ICD-10
08	ICDA-8
09	ICD-9
88	Structural missing - ICD revision not used
99	Unknown

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VII.9 Primary cause of death

4 47 50 01/22/2008

Primary cause of death should be coded in this field. SEER Program Code Manual, 4th edition, pp. 208-209.

(cod)

Code:	•
-------	---

XXXX	Actual code, if known
0000	Patient alive at last contact
7777	State death certificate or listing not available
7797	State death certificate or listing available, but underlying cause of death not coded
OTHR	"Other" (actual value)
8888	Structural missing
9999	Unknown (also an actual code for Other or unspecified complications of medical care not elsewhere classified)

VII.10 Breast cancer present at death

1 51 51 03/06/2006

Was breast cancer listed as a cause of death? If breast cancer was present at death, regardless of whether or not it was the primary cause of death, it should be coded in this field.

(bcdeath)

C	oa	le:

0	No
1	Yes
8	Structural missing
9	Unknown

VII.11 Race from death tape - Hispanic origin

1 52 52 01/05/2007

Hispanic, Spanish or Latina origin information obtained from death tapes should be coded here. If record does not come from a death tape, code as structurally missing.

(hispadth)

0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VII.12 Race from death tape - White

1 53 53 01/05/2007

White or Caucasian descent information obtained from death tapes should be coded here. If record does not come from a death tape, code as structurally missing.

(whitedth)

Code:	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

VII.13 Race from death tape - Black

1 54 54 01/05/2007

Black or African-American descent information obtained from death tapes should be coded here. If record does not come from a death tape, code as structurally missing.

(blackdth)

Coue.	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

VII.14 Race from death tape - Asian

1 55 55 01/05/2007

Asian descent (Chinese, Japanese, Filipina, Vietnamese, other Asian) information obtained from death tapes should be coded here. If record does not come from a death tape, code as structurally missing.

(asiandth)

Code:	
0	No
1	Yes (Asian)
2	Asian/Pacific Islander NOS
3	No, imputed
4	Yes, imputed
8	Structural Missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VII.15 Race from death tape - Native Hawiian / Pacific Islander

1 56 56 01/05/2007

Native Hawaiian or other Pacific Islander information obtained from death tapes should be coded here. If record does not come from a death tape, code as structurally missing.

(hawpidth)

Code:	
0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

VII.16 Race from death tape - American Indian / Alaska Native

57 57 01/05/2007

American Indian or Alaska Native information obtained from death tapes should be coded here. If record does not come from a death tape, code as structurally missing.

(indaldth)

Code:

0	No
1	Yes
3	No, imputed
4	Yes, imputed
8	Structural missing
9	Unknown

VII.17 Race from death tape - Other

1 58 58 01/05/2007

Race other than identified above, information obtained from death tapes should be coded here. Information from the tumor registry should be coded in the Registry file. If record does not come from a death tape, code as structurally missing.

(otherdth)

0	No	
1	Yes	
3	No, imputed	
4	Yes, imputed	
8	Structural missing	
9	Unknown	

Unknown

Section Field Number				Character Position		Last	
				Width	Start	Stop	Edit
VII V	TAL STATU	S FOLLOW-UP INFORMATION					
VII.18	Source of rec	cord	Key field	1	59	59	12/14/2006
	Source of the	Vital Status Follow-up Information record					
	(dmsource)						
	Code:						
	1	Death tapes					
	2	Other					
	8	Structural missing					

Section Field Number		Character Position			Last	
		Width	Start Stop		Edit	
VIII P	PATHOLOGY INFORMATION					
VIII.1	Record type	Key field	8	1	8	
	Pathology record.					
	(rectype)					
	Only one code allowed					
	Code:					
	PATHOLOG Pathology record. Only one code allowed					
VIII.2	Study site	Key field	1	9	9	
V 111.2	Unique identifier for study site					
	(site)					
	Code:					
	X Unique assigned letter for your site (Capitalized)					
VIII.3	Study ID	Key field	10	10	19	
	Unique person identifier for study site					
	(studyid)					
	Code:					
	xxxxxxxxxx Encrypted, unique person identifier for site					
VIII.4	Information date	Key field	8	20	27	
V 111T	Date information was collected on woman. Use procedure date	e if known	, otherwis	se use t	he patho	ology
	report date.		,		1	O,
	(infodate)					
	Code:					
	xxxxxxxx Three variables: Mo(xx); Day(xx); Year(xxxx)					

Section	VIII, Variables 5 to 8					
Section				cter Pos		Last
Field N	umber		Width	Start	Stop	Edit
VIII P	PATHOLOGY INFORMATION					
VIII.5	Pathology sequence K	Key field	1	28	28	
	Code for multiple tissue samples on the same day. This is a KEY records. If the order is unknown, assign a unique ordering to each order (1, 2, 3,) Codes 8 and 9 are valid codes and should not be unknown. (pathseq) Necessary to distinguish among pathologies on the be one	h record e used fo	on the sa	ame day ıral miss	in a nu sing and	imerical d
	Code:					
	1 If first pathology on that date, or only pathology on t	that date.				
	2 If second pathology on that date					
	3 If third pathology on that date, etc					
VIII.6	SCC date		8	29	36	
VIII. 0	Date prepared for SCC					
	(sccdate)					
	Date prepared or sent to SCC - allows corrections	in the	futur	e		
	Code:					
	xxxxxxxx Three variables: Mo(xx); Day(xx); Year(xxxx)					
VIII.7	Procedure date		8	37	44	
V 111. /	Use date the tissue sample was collected, otherwise use pathology	v renort i				96
	information date in VIII.4	y roport	uuto. 1410	iy oo in	bullio	us
	(procdate)					
	Code:	Van - 4 - 1 - 1	••	00 6	. 0 1	
	xxxxxxxx Three variables: Month(xx); Day(xx); Year(xxxx); S 8888 for year; Unknown = 99 for mo&day 9999 for		missing =	88 for m	o&day	
VIII.8	Surgery code		2	45	46	05/11/2004
	The 1998 SEER manual (SEER Program Manual, 3rd edition, Jar to describe the type of surgery used to obtain the pathology samp data originating from SEER should not be included. Only records be included. More detailed information on biopsy type may be for (typeproc)	le. Altho generat	ough SEE ed by a p	ER codes patholog	s are be y result	ing used, should

Code:

 $\mathbf{x}\mathbf{x}$

See SCC Data Dictionary Appendix 6b for codes (SEER Program Code Manual, 3rd ed. - Site-Specific Surgery Codes: Breast)

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VIII.9 **Procedure type**

2 47 48 05/11/2004

Type of procedure performed. Additional guidance in coding the procedure type variable is located in Appendix 9. More detailed information of code 10 (surgery - not biopsy) may be found in variable VIII.8 Surgery code

(bioptype)

Code:	
01	Nipple aspirate / discharge
02	Excisional biopsy
03	Incisional biopsy
04	Core biopsy small diameter
05	Core biopsy large diameter (vacuum assist, e.g., MIBB, mammotome)
06	Core biopsy NOS
07	Surgical biopsy NOS (excisional/core/incisional)
08	Fine needle aspiration
09	Combined image guided and large core removal system (e.g., ABBI)
10	Surgery that was coded in VIII.8
11	Breast reduction only
12	Implant removal
88	Structural Missing
99	Unknown

VIII.10 Type of guidance

2 49 50 10/06/2000

(typeguid)

00 NA or no guidance 01 Palpitation 02 Ultrasound guided	
•	
02 Ultrasound guided	
02 Citrasouna guided	
03 Stereotactic guided	
04 Mammographic (non-stereotactic)	
Needle localization	
Other	
88 Structural missing	
99 Unknown	

Section			Charac	Character Position			
Field N	umber		Width	Start	Stop	Edit	
VIII P	ATHOLOGY I	NFORMATION					
VIII.11	Path report d	ate	8	51	58		
	Date report was	s filled out.					
	(pathdate)						
	Optional if	procedure date reported					
	Code:						
	XXXXXXXX	Three variables: Month(xx); Day(xx); Year(xxxx); 8888 for year; Unknown = 99 for mo&day 9999 for		88 for 1	no&day:	;	
VIII.12	Laterality		1	59	59		
	Laterality of bro	east tissue.					
	(lateral)						
	Code:						
	1	Right breast only					
	2	Left breast only					
	3	Unilateral, side not specified					
	4	Bilateral (both breasts)					
	8	Structural missing					
	9	Unknown					
VIII.13	Snomedm1		5	60	64	06/06/20	

Intended to capture M morphology. Sites not using SNOMED code as 88888. Sites using SNOMED but not applicable for this record, code as 99999. If more than 5 M-codes, choose the most serious using the behavior code (last digit). There are three artificial SNOMED codes created to capture pathology findings for which a SNOMED code does not exist. The created codes are 917LN (lymph nodes), 780DF (diabetic fibrous mastopathy), and 780RS (radial scar). These conditions may not be recorded often in pathology. We also record detail about lymph nodes in both the registry and pathology files.

(snomedm1)

First diagnosis

Code:

xxxxx SNOMED M morphology code; 88888=structural missing; 99999=unknown/NA

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VIII.14 Snomedm2

5 65 69

Intended to capture M morphology. Sites not using SNOMED code as 88888. Sites using SNOMED but not applicable for this record, code as 99999. If more than 5 M-codes, choose the most serious using the behavior code (last digit).

(snomedm2)

Second diagnosis if present

Code:

xxxxx

SNOMED M morphology code; 88888=structural missing; 99999=unknown/NA

VIII.15 Snomedm3

5 70 74

Intended to capture M morphology. Sites not using SNOMED code as 88888. Sites using SNOMED but not applicable for this record, code as 99999. If more than 5 M-codes, choose the most serious using the behavior code (last digit).

(snomedm3)

Third diagnosis if present

Code:

xxxxx

SNOMED M morphology code; 88888=structural missing; 99999=unknown/NA

VIII.16 Snomedm4

5 75 79

Intended to capture M morphology. Sites not using SNOMED code as 88888. Sites using SNOMED but not applicable for this record, code as 99999. If more than 5 M-codes, choose the most serious using the behavior code (last digit).

(snomedm4)

Fourth diagnosis if present

Code:

xxxxx

SNOMED M morphology code; 88888=structural missing; 99999=unknown/NA

VIII.17 Snomedm5

5 80 84

Intended to capture M morphology. Sites not using SNOMED code as 88888. Sites using SNOMED but not applicable for this record, code as 99999. If more than 5 M-codes, choose the most serious using the behavior code (last digit).

(snomedm5)

Fifth diagnosis if present

Code:

xxxxx

SNOMED M morphology code; 88888=structural missing; 99999=unknown/NA

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

VIII.18 **Snomedd1** 6 85 90 05/11/2004

Intended to capture D morphology. If structural missing or unknown, code as 888888 or 999999 rather than leaving blank. In the unlikely event of multiple D codes, code with the following precedence: first, D790364 Galactocele; second D790370 Mammary duct ectasia (fibrocystic changes); third D790300 Benign mammary dysplasia, NOS; fourth, D790400 Macromastia; fifth, D790380 Mazoplasia. Please exclude altogether: D790420 Gynecomastia. Older synonym for mastoplasia = enlargement of the breast. Probably used for reduction mammoplasty but could also be used in men if not sure whether it is gynecomastia.

(snomedd1)

Use for Snomed D codes that require a field length of 6 characters.

Code:

XXXXXX

Intended to capture SNOMED D morphology code; 888888=structural missing; 999999=unknown/NA

VIII.19 Invasive carcinoma

This field should only include invasive breast carcinomas and should not include lymphomas or sarcomas. If the first four digits of the SNOMED code describe a breast carcinoma and the last digit of the SNOMED code (behavior code) is a 3 (i.e., xxxx3), code as invasive (codes 1-5), otherwise code as 0. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1-5 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9

91 02/14/2006

91

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this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1-5 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. Lymphomas and Sarcomas should be coded as code 0 - NO. For FNA procedures the result should be recorded in variable VIII.30 FNA result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

(invasive)

Specify this field is for breast carcinomas only and should not include lymphomas or sarcomas which are coded elsewhere. Can be directly ascertained or computed from SNOMED codes.

0	No
1	Invasive - Not otherwise specified
2	Invasive ductal (includes all subtypes of ductal)
3	Invasive lobular
4	Mixed (both ductal and lobular)
5	Other (non-epithelial tumors)
8	Structural missing
9	Unknown

Section	naracter Position	Last
Field Number W	idth Start Stop	Edit

VIII.20 **In situ** 1 92 92 02/20/2006

If the first four digits of the SNOMED code describe a breast carcinoma and the last digit of the SNOMED code (behavior code) is a 2 (i.e., xxxx2), code as in situ (codes 1 - 5), otherwise code as 0. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1-5 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

Can be directly ascertained or computed from SNOMED codes.

Code:	
0	No
1	In situ - Not otherwise specified
2	In situ ductal (includes all subtypes of ductal)
3	In situ lobular
4	In situ - both (ductal and lobular)
5	In situ other (non-epithelial tumors)
8	Structural missing
9	Unknown

VIII.21 Atypical hyperplasia

SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1-5 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

Can be directly ascertained or computed from SNOMED codes.

Code:	
0	No
1	Atypical Hyperplasia - not otherwise specified
2	Atypical Hyperplasia ductal (includes all subtypes of ductal)
3	Atypical Hyperplasia lobular
4	Atypical Hyperplasia - both (ductal and lobular)
5	Atypical Hyperplasia other
8	Structural missing
9	Unknown

93

93 02/20/2006

1

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VIII.22 **Ductal hyperplasia**

SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

1

94

94 02/20/2006

(ducthyp)

Can be directly ascertained or computed from SNOMED codes.

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

VIII.23 **Metastatic** 1 95 95 01/22/2008

Refers to tumors known to be metastatic to the breast. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified. Only metastases to the breast are collected because pathology does not include biopsies from other body parts.

(metastat)

Code:		
0	No	
1	Yes	
8	Structural missing	
9	Unknown	

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VIII.24 Fibroadenoma

SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

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96

96 02/20/2006

97 02/20/2006

Can be directly ascertained or computed from SNOMED codes.

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

VIII.25 Cystosarcoma phyllodes/phyllodes tumor

SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

Section Character Pos	sition Last
Field Number Width Start	Stop Edit

VIII.26 Calcification

If calcification is noted or coded from the pathology report, then this question can be answered. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified. (calcific)

1

98

99

98 02/20/2006

99 02/20/2006

Can be directly ascertained or computed from SNOMED codes.

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

VIII.27 Benign

(benign)

This category includes all fibrocystic changes, but if there is atypical hyperplasia or ductal hyperplasia, these should also be addressed in variables VIII.21 and VIII.22. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

Code:		
0	No	
1	Yes	
8	Structural missing	
9	Unknown	

Section Character Pos	sition Last
Field Number Width Start	Stop Edit

VIII.28 Inconclusive

Inconclusive/unsatisfactory for evaluation. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

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100

101

100 02/20/2006

101 02/20/2006

(inconclu)

Can be directly ascertained or computed from SNOMED codes.

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

VIII.29 Lymph node tissue

SCC will classify for sites, if desired, based on SNOMED codes. (e.g. pseudo SNOMED code 917LN) Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. Note: more detail on lymph nodes is collected in VIII.38. This variable, VIII.29 just records that lymph nodes were examined. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

(lympnode)

Code:		
0	No	
1	Yes	
8	Structural missing	
9	Unknown	

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VIII.30 Aspiration result

1 102 102 12/11/2006

Results from an aspiration procedure should be recorded here.

(fnareslt)

C	O	d	е	٠
_	_	٠.	_	•

Codo.	
0	Negative/benign
1	Atypia
2	Suspicious for malignancy
3	Positive
4	Inconclusive/unsatisfactory
8	Structural missing
9	Unknown

VIII.31 Grade, differentiation

1 103 103 03/06/2005

If there is more than one grade, the higher grade is used. Codes 5, 6, 7, & 8 are not applicable to breast cancer. If this information is not collected or missing code as 9. (Reference: SEER Program Code Manual, 3rd edition, Section IV, Field 06.C, p.101).

(pgrade)

Code:	
1	Grade I; grade i; grade1; well-differentiated NOS
2	Grade II; grade ii; grade 2; moderately differentiated; moderately well differentiated; intermediate differentiation
3	Grade III; grade iii; grade 3; poorly differentiated; dedifferentiated
4	Grade IV; grade iv; grade 4; undifferentiated; anaplastic
5	T-cell; T-precursor
6	B-cell; Pre-B; B-precursor
7	Null cell; Non T - Non B
8	N K cell (natural killer cell)
9	Cell type not determined, not stated or not applicable

VIII.32 Estrogen receptors

1 104 104 03/06/2005

Tumor marker I - Estrogen receptor status. If this information is not collected or is missing, code as 9. (Reference: SEER Program Code Manual, 3rd edition, Section IV, Field 07.A, p. 106).

(pestrec)

Code:

0	None done (SX)
1	Positive/elevated
2	Negative/normal; within normal limits (S0)
3	Borderline; undetermined whether positive or negative
8	Ordered, but results not in chart
9	Unknown or no information

Section	Character Position	Last
Field Number	Width Start Stop	Edit

VIII.33 AJCC Stage

2 105 106 12/11/2006

1

107

107 03/06/2005

If this information is not collected or missing, code as 99. If this information is collected, the codes shown in Appendix 8 under the column labelled "Comparative Staging Guide Recode Program" should be used. (pajcstag)

Code:

xx See Comparative Staging Guide Recode Program codes in SCC Data Dictionary Appendix 8

VIII.34 Stage

If sites can convert stage information from pathology reports to AJCC, use VIII.33. If this information is not collected or missing, code as 9.

(pstage)

Code:	
0	In situ
1	Localized only
2	Regional by direct expansion
3	Ipsilateral regional lymph node(s) involved only
4	Both 2 and 3
5	Regional NOS
7	Distant site(s) / lymph node(s) involved
9	Unknown

VIII.35 Tumor size

3 108 110 02/15/2005

Note that all tumor sizes should be coded in millimeters. If this information is not collected or missing code as 999. (Reference: SEER 4th edition, Appendix C; p. 475-476. Field 2800). (ptsize)

Code:	
000	No mass/tumor found
XXX	001 - 988 millimeters (code exact size in millimeters)
989	989 millimeters or larger.
990	Microinvasion; microscopic focus or foci only, no size given; described as less than 1 mm
991	Described as less than 1 cm
992	Described as less than 2 cm
993	Described as less than 3 cm
994	Described as less than 4 cm
995	Described as less than 5 cm
996	Mammographic/xerographic diagnosis only, no size given; clinically not palpable
997	Paget's Disease of nipple with no demonstrable tumor
998	Diffuse
999	Unknown; size not stated; not stated in patient record.
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VIII.36 Lymph node surgery

Scope of regional lymph node surgery. (Reference: SEER Program Code Manual, 3rd edition, Section V,

1

111

111 09/12/2005

Field 02.B and Appendix C, p. C-65).

(plymsurg)

Code:	
0	No regional lymph nodes removed
1	Sentinel lymph node(s) removed
2	Regional lymph node(s) removed NOS; axillary NOS (Lvls I, II or III lymph nodes); Intramammary NOS
3	Combination of 1 and 2
4	Internal mammary
5	Combination of 4 WITH any of 1-3
6	Sentinel node biopsy and code 3, 4, or 5 at same time or timing not noted
7	Sentinel node biopsy and code 3, 4, or 5 at different times
9	Unknown; not stated; death certificate ONLY

VIII.37 Number of regional lymph nodes examined

2 112 113 03/06/2005

If this information is not collected or missing, code as 99. (Reference: SEER Program Code Manual, 3rd edition, Section V, Field 02.C and Appendix C, p. C-65).

(pnumbnod)

Code:	
00	No regional lymph nodes examined
01	One regional lymph node examined
XX	xx regional lymph nodes examined (valid range 00-89)
90	Ninety or more regional lymph nodes examined
95	No regional lymph node(s) removed, but aspiration of regional lymph node(s) was performed.
96	Regional lymph node removal documented as a sampling and number of lymph nodes examined unknown / not stated.
97	Regional lymph node removal documented as dissection and number of lymph nodes wxamined unknown/not stated.
98	Regional lymph nodes surgically removed, but number of lymph nodes examined unknown/not stated
99	Unknown; not stated; death certificate ONLY

Section Ch	naracter Position	Last
Field Number Wi	idth Start Stop	Edit

VIII.38 Pathology lymph nodes

1 114 114 03/06/2005

If this information is not collected or missing, code as 9. (Reference: SEER EOD-88, 3rd edition, p. 111). (plympnod)

Code:	
0	No lymph node involvement
1	Micrometastasis (<=0.2 cm)
2	>0.2-<2.0 cm, no extension beyond capsule
3	< 2.0 cm with extension beyond capsule
4	>=2.0 cm
5	Fixed/matted ipsilateral axillary nodes
6	Axillary/regional lymph nodes NOS, lymph nodes NOS
7	Internal mammary node(s), ipsilateral
8	Cervical, NOS; Contralateral/bilateral axillary and/or internal mammary; Supraclavicular (transverse cervical); Other than above
9	Unknown; not stated

VIII.39 Positive regional lymph nodes

2 115 116 03/11/2005

If this information is not collected or missing, code as 99. (Reference: SEER EOD-88, 3rd edition, p. 9). (pposnods)

Code:	
00	All nodes examined negative
XX	Actual number of positive lymph nodes (valid range 01-89)
90	90 or more nodes positive
95	Positive aspiration of lymph node(s) was performed
97	Positive nodes are documented, but the number is unspecified
98	No nodes examined
99	Unknown if nodes are positive or negative; not applicable
=>	See SCC Data Dictionary Appendix 6d for additional details about codes

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VIII.40 Lymphomas

If the first four digits of the SNOMED code is in "9590 - 9729" then code "Yes". Otherwise, code "No" unless this information is structurally missing or unknown. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED code is classified.

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117

118

117 05/11/2004

118 02/08/2005

(lymphoma)

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

VIII.41 Progesterone receptors

Tumor marker II - Progesterone receptor status. (Reference: SEER Program Code Manual, 3rd edition, Section IV, Field 07.B, p. 108) If this information is not collected or is missing then code as 9. (progrecp)

Code:

Coue.	
0	None done (SX)
1	Positive/elevated
2	Negative/normal; within normal limits (S0)
3	Borderline; undetermined whether positive or negative
8	Ordered, but results not in chart
9	Unknown or no information

Section Character Characte	er Position	Last
Field Number Width S	Start Stop	Edit

VIII.42 Sarcoma (not including cystosarcoma phyllodes/phyllodes tumor)

This field should contain information about breast sarcomas, not including cystosarcoma phyllodes/phyllodes tumor which should be coded in VIII.25. SCC will classify for sites, if desired, based on SNOMED codes. Code as 8 if you want the SCC to do this. Sites without SNOMED codes do the following: Code 0 if the tissue does not have this characteristic. Code 1 if the tissue does have this characteristic. Code 8 if not collected at all. Code 9 if SNOMEDs are typically collected, but were not collected on this tissue sample. For FNA procedures the result should be recorded in variable VIII.30 FNA Result and this field should be coded as 8. See SCC Data Dictionary Appendix 11 for a description of how the SNOMED morphology codes are classified.

(sarcoma)

note: VII.42 used to be Her2neu, this is now replaced by 3 variables VII.43-VII.45

Code:	
0	No
1	Yes
8	Structural missing
9	Unknown

VIII.43 Her2neu based on IHC test

Her2neu result based in immunohistochemical (IHC) test. If the type of Her2neu test is not known, code here.

(her2neui)

Code:	
0	Not done
1	Positive
2	Negative
3	Borderline
4	Pending
8	Ordered, results not in chart
9	Unknown or no information

119

120

119 02/14/2006

120 01/22/2008

1

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VIII.44 Her2neu based on FISH test

1 121 121 01/22/2008

Her2neu result based in fluorescent in-situ hybridization (FISH) test. If the type of Her2neu test is not known, code in VIII.43 Her2neu based on IHC test.

(Her2neuf)

_	. ~	_	
U	u	e.	

Oodo.	
0	Not done
1	Positive
2	Negative
3	Borderline
4	Pending
8	Ordered, results not in chart
9	Unknown or no information

VIII.45 Her2neu test type

1 122 122 02/14/2006

Type of test(s) used to determine Her2neu result.

(Her2neut)

Code:

Oodo.	
0	Not done
1	IHC (immunohistochemical) only
2	FISH (fluorescent in-situ hybridization) only
3	IHC first, then FISH if IHC borderline/indeterminate
4	Both IHC and FISH, order unknown
5	Other
8	Structural missing
9	Unknown

Section Char	acter Position	Last
Field Number Widt	h Start Stop	Edit

VIII.46 Pathology Tumor Extension

2 123 124 01/22/2008

This is a Collaborative Staging variable and is valid for cases diagnosed in 2004+. Identifies contiguous growth (extension) of the primary tumor within the organ of origin or its direct extension into neighboring organs. See SCC Data Dictionary Appendix 6c for details. (Reference: SEER Program Coding and Staging Manual 2004, pp. 130-132, and Appendix C, pp. C-476-C478, NAACCR item # 2810).

(pextenson)	
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Code:	
00	In situ: noninfiltrating, intraepithelial, intraductal without infiltration, lobular neoplasia
05	Paget disease of nipple (without underlying tumor)
07	Paget disease of nipple (without underlying invasive carcinoma pathologically)
10	Confined to breast tissue and fat including nipple and/or areola, localized, NOS
20	Invasion of subcutaneous tissue, local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension, skin infiltration of primary breast including skin on nipple and/or areola
30	Attached or fixation to pectoral muscles(s) or underlying tissue, deep fixation, invasion/fixation to pectoral fascia or muscle
40	Invasion/fixation to: chest wall, intercostal or serratus anterior muscle(s), rib(s)
51	Extensive skin involvement, including: satellite nodule(s), ulceration of skin, any of the following, involving <=50% of breast: edema, en cuirasse, erythema, inflammation, peau d'orange
52	Any of the following, involving >50% of breast (w/o inflammatory carcinoma): edema, encuirasse, erythema, inflamation, peau d'orange
61	(40)+(51)
62	(40)+(52)
71	Inflammatory carcinoma with clinical descrip of inflammation, erythema, edema, peu d'orange, etc of <=50% (or unknown %) of breast skin w/ or w/o dermal lymphatic infiltration; inflammatory carcinoma NOS
72	OBSOLETE (should be combined with code 71)
73	Inflammatory carcinoma with clinical descrip of inflammation, erythema, edema, peu d'orange, etc of >50% (or unknown %) of breast skin w/ or w/o dermal lymphatic infiltrati
95	No evidence of primary tumor
99	Unknown extension; primary tumor cannot be assessed; not documented in patient record
XX	=> See SCC Data Dictionary Appendix 6d for additional details about codes

County Codes

CALIFORNIA 06

001=Alameda 087=Santa Cruz 003=Alpine 089=Shasta 005=Amador 091=Sierra 007=Butte093=Siskiyou 009=Calaveras 095=Solano 011=Colusa 097=Sonoma 013=Contra Costa 099=Stanislaus 015=Del Norte 101=Sutter 017=El Dorado 103=Tehama 019=Fresno 105=Trinity 107=Tulare 021=Glenn 023 = Humboldt109=Tuolumne 025=Imperial 111=Ventura 027=Inyo113=Yolo 029=Kern 115=Yuba

029=Kern 031=Kings 033=Lake 035=Lassen 037=Los Angeles 039=Madera 041=Marin 043=Mariposa 045=Mendocino 047=Merced 049=Modoc 051=Mono

053=Monterey 055=Napa 057=Nevada 059=Orange 061=Placer 063=Plumas 065=Riverside 067=Sacramento 069=San Benito

071=San Bernardino 073=San Diego

075=San Francisco

077=San Joaquin

079=San Luis Obispo

081=San Mateo

083=Santa Barbara

085=Santa Clara

County Codes

COLORADO 08

001=Adams 085=Montrose 003=Alamosa 087=Morgan 005=Arapahoe 089=Otero 007=Archuleta 091=Ouray 009=Baca 093=Park011=Bent 095=Phillips 013=Boulder 097=Pitkin 015=Chaffee 099=Prowers 017=Cheyenne 101=Pueblo 019=Clear Creek 103=Rio Blanco 021=Conejos 105=Rio Grande 023=Costilla 107=Routt 025=Crowley 109=Saguache 111=San Juan 027=Custer 029=Delta 113=San Miguel 031=Denver 115=Sedgwick 033=Dolores 117=Summit 035=Douglas 119=Teller 037=Eagle 121=Washington 039=Elbert 123=Weld 041=El Paso 125=Yuma 043=Fremont

041=El Paso 043=Fremont 045=Garfield 047=Gilpin 049=Grand 051=Gunnison 053=Hinsdale

055=Huerfano 057=Jackson 059=Jefferson

061=Kiowa

063=Kit Carson

065=Lake 067=La Plata 069=Larimer

071=Las Animas

073=Lincoln

075=Logan 077=Mesa

079=Mineral

081 = Moffat

083=Montezuma

County Codes

NEW HAMPSHIRE 33

001=Belknap

003=Carroll

005=Cheshire

007=Coos

009=Grafton

011 = Hillsborough

013=Merrimack

015=Rockingham

017 = Strafford

019=Sullivan

County Codes

NEW MEXICO 35

- 001=Bernalillo
- 003=Catron
- 005=Chaves
- 006=Cibola
- 007 = Colfax
- 009=Curry
- 011=DeBaca
- 013=Dona Ana
- 015=Eddy
- 017=Grant
- 019=Guadalupe
- 021=Harding
- 023=Hidalgo
- 025=Lea
- 027=Lincoln
- 028=Los Alamos
- 029=Luna
- 031=McKinley
- 033=Mora
- 035=Otero
- 037=Quay
- 039=Rio Arriba
- 041=Roosevelt
- 043=Sandoval
- 045=San Juan
- 047=San Miguel
- 049=Santa Fe
- 051=Sierra
- 053=Socorro
- 055=Taos
- 057=Torrance
- 059=Union
- 061=Valencia

FIPS (Federal Information Processing Standard) County Codes

199=Yancey

NORTH CAROLINA 37

001=Alamance	101=Johnston
003=Alexander	103=Jones
005=Alleghany	105=Lee
007=Anson	107=Lenoir
009=Ashe	109=Lincoln
011=Avery	111=McDowell
013=Beaufort	113=Macon
015=Bertie	115=Madison
017=Bladen	117=Martin
019=Brunswick	119=Mecklenburg
021=Buncombe	121=Mitchell
023=Burke	123=Montgomery
025=Cabarrus	125=Moore
027=Caldwell	127=Nash
029=Camden	127=Nash 129=New
031=Carteret	Hanover
033=Caswell	131=Northampton
035=Catawba	133=Onslow
037=Chatham	135=Onslow 135=Orange
039=Cherokee	137=Pamlico
041=Chowan	139=Pasquotank
043=Clay	141=Pender
045=Cleveland	143=Perquimans
047=Columbus	145=Person
049=Craven	147=Pitt
051=Cumberland	149=Polk
053=Currituck	151=Randolph
055=Dare	153=Richmond
057=Davidson	155=Robeson
059=Davie	157=Rockingham
061=Duplin	159=Rowan
063=Durham	161=Rutherford
065=Edgecombe	163=Sampson
067=Forsyth	165=Scotland
069=Franklin	167=Stanly
071=Gaston	169=Stokes
073=Gates	171=Surry
075=Graham	173=Swain
077=Granville	175=Transylvania
079=Greene	177=Tyrrell
081=Guilford	179=Union
083=Halifax	181=Vance
085=Harnett	183=Wake
087=Haywood	185=Warren
089=Henderson	187=Washington
091=Hertford	189=Watauga
093=Hoke	191=Wayne
095=Hyde	193=Wilkes
097=Iredell	195=Wilson
099=Jackson	197=Yadkin
	100 Vanasa

County Codes

VERMONT 50

- 001=Addison
- 003=Bennington
- 005=Caledonia
- 007=Chittenden
- 009=Essex
- 011=Franklin
- 013=Grand Isle
- 015=Lamoille
- 017=Orange
- 019=Orleans
- 021=Rutland
- 023=Washington
- 025=Windham
- 027=Windsor

County Codes

WASHINGTON 53

- 001 = Adams
- 003=Asotin
- 005=Benton
- 007=Chelan
- 009=Clallam
- 011=Clark
- 013=Columbia
- 015=Cowlitz
- 017=Douglas
- 019=Ferry
- 021=Franklin
- 023=Garfield
- 025=Grant
- 027=Grays Harbor
- 029=Island
- 031=Jefferson
- 033=King
- 035=Kitsap
- 037=Kittitas
- 039=Klickitat
- 041=Lewis
- 043=Lincoln
- 045=Mason
- 047=Okanogan
- 049=Pacific
- 051=Pend Oreille
- 053=Pierce
- 055=San Juan
- 057=Skagit
- 059=Skamania
- 061 = Snohomish
- 063=Spokane
- 065=Stevens
- 067 = Thurston
- 069=Wahkiakum
- 071=Walla Walla
- 073=Whatcom
- 075=Whitman
- 077=Yakima

FIPS (Federal Information Processing Standard) State codes and their State names

01 = Alabama
02 = Alaska
04 = Arizona
05 = Arkansas
06 = California
08 = Colorado
09 = Connecticut
10 = Delaware
11 = District of Columbia
12 = Florida
13 = Georgia

12 = Florida 13 = Georgia 15 = Hawaii 16 = Idaho 17 = Illinois 18 = Indiana 19 = Iowa 20 = Kansas

21 = Kentucky 22 = Louisiana 23 = Maine 24 = Maryland 25 = Massachusetts 26 = Michigan 27 = Minnesota

28 = Mississippi 29 = Missouri 30 = Montana 31 = Nebraska 32 = Nevada 33 = New Hampshire

34 = New Jersey 35 = New Mexico 36 = New York 37 = North Carolina 38 = North Dakota 39 = Ohio

40 = Oklahoma

41 = Oregon 42 = Pennsylvania 44 = Rhode Island 45 = South Carolina 46 = South Dakota 47 = Tennessee 48 = Texas 49 = Utah 50 = Vermont 51 = Virginia 53 = Washington 54 = West Virginia

55 = Wisconsin

56 = Wyoming

60 = American Samoa 61 = Canal Zone 62 = Canton/Enderbury Is

64 = Fed State Micronesia 66 = Guam

67 = Johnston Atoll 68 = Marshall Islands 69 = Northern Mariana Isl

70 = Palau

71 = Midway Island 72 = Puerto Rico

74 = US Minor Outlying Is
75 = Trust Territories Pa
76 = US Misc Carib Isl
77 = Navassa Island
78 = Virgin Islands
79 = Wake Island
81 = Baker Island
84 = Howland Island
86 = Jarvis Island
89 = Kingman Reef
95 = Palmyra Atoll

98 = Outside USA country

99 = Unknown

APPENDIX B

SEER GEOCODES

For Coding Place of Birth and Place of Death

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CONTINENTAL UNITED STATES AND HAWAII

000 United States

001 New England States

002 Maine

003 New Hampshire

004 Vermont

005 Massachusetts

006 Rhode Island

007 Connecticut

008 New Jersey

010 North Mid-Atlantic States

011 New York

014 Pennsylvania

017 Delaware

020 South Mid-Atlantic States

021 Maryland

022 District of Columbia

023 Virginia

024 West Virginia

025 North Carolina

026 South Carolina

030 Southeastern States

031 Tennessee

033 Georgia

035 Florida

037 Alabama

039 Mississippi

040 North Central States

041 Michigan

043 Ohio

045 Indiana

047 Kentucky

050 Northern Midwest States

051 Wisconsin

052 Minnesota

053 Iowa

054 North Dakota

055 South Dakota

056 Montana

060 Central Midwest States

061 Illinois

063 Missouri

065 Kansas

067 Nebraska

070 Southern Midwest States

071 Arkansas

073 Louisiana

075 Oklahoma

077 Texas

080 Mountain States

081 Idaho

082 Wyoming

083 Colorado

084 Utah

085 Nevada

086 New Mexico

087 Arizona

090 Pacific Coast States

091 Alaska

093 Washington

095 Oregon

097 California

099 Hawaii

UNITED STATES POSSESSIONS

When SEER geocodes were originally assigned during the 1970s, the United States owned or controlled islands in the Pacific. Since then many of these islands have either been given their independence or had control turned over to another country. In order to maintain consistent information over time, these islands are still to be coded to the original codes. Earlier designations are listed in parentheses.

100 Atlantic/Caribbean Area101 Puerto Rico102 U.S. Virgin Islands109 Other Atlantic/CaribbeanArea

110 Canal Zone

120 Pacific Area

- 121 American Samoa
- 122 Kiribati (Canton and Enderbury Islands, Gilbert Islands, Southern Line Islands, Phoenix Islands)
- 123 Micronesia [Federated States of] (Caroline Islands, Trust Territory of Pacific Islands)
- 124 Cook Islands (New Zealand)
- 125 Tuvalu (Ellice Islands)
- 126 Guam
- 127 Johnston Atoll
- 129 Mariana Islands (Trust Territory of Pacific Islands) Northern Mariana Islands
- 131 Marshall Islands (Trust Territory of Pacific Islands)
- 132 Midway Islands
- 133 Nampo-Shoto, Southern
- 134 Ryukyu Islands (Japan)
- 135 Swan Islands
- 136 Tokelau Islands (New Zealand)
- 137 Wake Island
- 139 Palau (Trust Territory of Pacific Islands)

NORTH AND SOUTH AMERICA, EXCLUSIVE OF THE UNITED STATES AND ITS POSSESSIONS

210 Greenland

220 Canada

221 Maritime provinces

Labrador

New Brunswick Newfoundland Nova Scotia

Prince Edward Island

222 Quebec

223 Ontario224 Prairie Provinces

Alberta Manitoba Saskatchewan

225 Northwest Territories

Yukon Territory

226 British Columbia

227 Nunavut (Nunavut became an official Territory of Canada on April 1, 1999)

230 Mexico

240 North American Islands

241 Cuba 242 Haiti

243 Dominican Republic

244 Jamaica

245 Other Caribbean Islands

Anguilla

Antigua and Barbuda

Antilles, NOS

Aruba Barbados

British Virgin Islands

British West Indies, NOS

Caribbean, NOS

Cayman Islands

Curacao Dominica

French West Indies

Grenada

Grenadines, The

Guadeloupe

Leeward Island, NOS

Martinique

Montserrat

Netherlands Antilles St. Christopher-Nevis

St. Kitts St. Lucia

St. Vincent and The

Grenadines

Trinidad and Tobago Turks Islands Antilles,

NOS

British West Indies, NOS

Carribean, NOS

245 Other Caribbean Islands,

continued

Leeward islands, NOS West Indies, NOS

Windward Islands, NOS

246 Bermuda 247 Bahamas, The

249 St. Pierre and Miguelon

250 Central America

251 Guatemala

252 Belize (British Honduras)

253 Honduras 254 El Salvador 255 Nicaragua 256 Costa Rica

257 Panama

260 North America, NOS

265 Latin America, NOS

- 300 South America, NOS
 - 381 Colombia
 - 321 Venezuela
 - 331 Guyana (British Guiana)
 - 332 Suriname (Dutch Guiana)
 - Netherlands Guiana
 - 333 French Guiana
 - 341 Brazil
 - 345 Ecuador

Galapagos Islands

- 351 Peru
- 355 Bolivia
- 361 Chile
- 365 Argentina
- 371 Paraguay
- 375 Uruguay
- 380 South American Islands 381 Falkland Islands

EUROPE

former or alternative names are in parentheses	441 F	ance-language Countries France Corsica
Europe, NOS (See code 499) *	1	Monaco Spain
400 United Kingdom, NOS 401 England Channel Islands Guernsey	<i>,</i> [Andorra Balearic Islands Canary Islands
Isle of Man Jersey	* Effective cas	ses diagnosed 1/1/1992.
402 Wales 403 Scotland Orkney Islands Shetland Islands	445	Portugal Azores Cape Verde Islands Madeira Islands
404 Northern Ireland (Ulster) 410 Ireland (Eire) Ireland, NOS	447	Italy San Marino Sardinia Sicily
Republic of Ireland 420 Scandinavia Lapland, NOS	449	Vatican City (Holy See) Romania
421 Iceland 423 Norway Svalbard	451	Slavic Countries Poland (former)Czechoslovakia
425 Denmark Faroe (Faeroe) Islands 427 Sweden 429 Finland		region Bohemia Czech Republic Moravia
430 Germanic Countries 431 Germany	450	Slovak Republic Slovakia
East Germany including East Berlin West Germany including West Berlin Federal Republic of Germany German Democratic Republic Germany, East Germany, Federal Republic of Germany, West		(former) Yugoslavia region Bosnia-Herzogovina Croatia Dalmatia Jugoslavia Macedonia Montenegro Serbia Slavonia Slovenia
432 Netherlands Holland 433 Belgium 434 Luxembourg 435 Switzerland 436 Austria 437 Liechtenstein		Bulgaria Russia Russian Federation (former) U.S.S.R. Russia, NOS (Russian S.F.S.R.)

456 Ukraine and Moldova (Bessarabia) Moldavia (Moldavian S.S.R.) (Ukranian S.S.R.) 457 Belarus (Byelorussian S.S.R.) (White Russia) 458 Estonia (Estonian S.S.R.) 459 Latvia (Latvian S.S.R.) 461 Lithuania (Lithuanian S.S.R.) 463 Baltic Republic(s), NOS (Baltic States, NOS)	520 Sudanese Countries Burkina Faso (Upper Volta) Chad Mali Mauritania Niger Sudan (Anglo-Egyptian Sudan) Western (Spanish) Sahara 530 West Africa French West Africa, NOS 531 Nigeria 539 Other West African Countries Benin (Dahomey)
470 Other mainland Europe 471 Greece Crete 475 Hungary 481 Albania 485 Gibraltar 490 Other Mediterranean Islands 491 Malta 495 Cyprus 499 Europe, NOS*	Cameroon (Kameroon) Central African Republic (French Equatorial Africa) Cote d'Ivoire (Ivory Coast) Congo (Congo-Brazzaville, French Congo) Equatorial Guinea (Spanish Guinea) (Bioko {Fernando Poo}, Rio Muni) Gabon Gambia, The Ghana
Central Europe, NOS Eastern Europe, NOS Northern Europe, NOS Southern Europe, NOS Western Europe, NOS * Effective cases diagnosed 1/1/1992.	Guinea Guinea Bissau (Portuguese Guinea) Liberia Senegal Sierra Leone Togo
500 Africa, NOS Central Africa, NOS Equatorial Africa, NOS 510 North Africa, NOS 511 Morocco 513 Algeria 515 Tunisia 517 Libya (Cyrenaica) (Tripoli) (Tripolitania) 519 Egypt (United Arab Republic)	540 South Africa 541 Zaire (Congo-Leopoldville, Belgian Congo, Congo Kinshasa) 543 Angola (Sao Tome, Principe, Cabinda) 545 Republic of South Africa (Bophuthatswana, Cape Colony, Ciskei, Natal, Free State {Orange Free State}, Transkei, Transvaal, Venda) Botswana (Bechuanaland) Lesotho (Basutoland) Namibia (South West Africa) Swaziland Union of South Africa

547 Zimbabwe (Rhodesia, Southern Rhodesia)	Kuwait Oman
549 Zambia (Northern	Muscat
Rhodesia)	Persian Gulf States, NOS
	Qatar
551 Malawi (Nyasaland)	
553 Mozambique	Saudi Arabia
555 Madagascar (Malagasy	United Arab Emirates
Republic)	(Trucial States)
F70 Fact Africa	Yemen (Aden, People's
570 East Africa	Democratic Republic of
571 Tanzania (Tanganyika,	Yemen, Southern
Tanzanyika, Zanzibar)	Yemen)
573 Uganda	631 Israel and former Jewish
575 Kenya	Palestine
577 Rwanda (Ruanda)	Gaza
579 Burundi (Urundi)	Palestine (Palestinian
581 Somalia (Somali Republic,	National AuthorityPNA)
Somaliland)	Palestine, NOS
583 Djibouti (French Territory	West Bank
of the Afars and Issas,	633 Caucasian Republics of
French Somaliland)	the former U.S.S.R.
585 Ethiopia (Abyssinia)	Armenia
Eritrea	Azerbaijan (Nagorno-
	Karabakh)
580 African Coastal Islands	Azerbaizhan S.S.R
(previously included in 540)	Georgia
Comoros	634 Other Asian Republics of
Mauritius	the former U.S.S.R.
Mayotte	Kazakhstan (Kazakh
Reunion	S.S.R.)
St. Helena	Kyrgystan (Kirghiz S.S.R.,
Seychelles	Kyrgyz)
* Eff. (' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Tajikistan (Tadzhik S.S.R.)
* Effective cases diagnosed 1/1/1992	Turkmenistan (Turkmen
4014	S.S.R.)
ASIA	Uzbekistan (Uzbek S.S.R.)
000 4 : NOO*	637 Iran (Persia)
600 Asia, NOS*	638 Afghanistan
040 N	639 Pakistan (West Pakistan)
610 Near East	640 Mid-East Asia, NOS
Mesopotamia, NOS	Maldives
611 TurkeyAnatolia	641 India
Armenia (Turkey)	Andaman Islands
Asia Minor, NOS	643 Nepal
000 4 : 4 1 0 4:	Bhutan
620 Asian Arab Countries	Sikkim
Iraq-Saudi Arabia Neutral	645 Bangladesh (East
Zone	Pakistan)
621 Syria	647 Sri Lanka (Ceylon)
623 Lebanon	649 Myanmar (Burma)
625 Jordan (Trans-Jordan,	050.0
former Arab Palestine)	650 Southeast Asia
627 Iraq	651 Thailand (Siam)
629 Arabian Peninsula	
Bahrain	

660 Indochina 661 Laos 663 Cambodia Kampuchea 665 Vietnam (Tonkin, Annam, Cochin China) 671 Malaysia Brunei Malay Peninsula North Borneo Singapore 673 Indonesia (Dutch East Indies) Borneo Java New Guinea, except Australian and North East Sumatra 675 Philippines (Philippine	721 Melanesian Islands Fiji Futuna New Hebrides Solomon Islands Vanuatu Wallis 723 Micronesian Islands ~ Christmas Island Nauru 725 Polynesian Islands ~ French Polynesia New Caledonia Pitcairn Islands Samoa, Western Tonga Western Samoa 750 Antarctica
Islands) 680 East Asia 681 China, NOS 682 China (People's Republic of China) 683 Hong Kong 684 Taiwan (Formosa, Republic of China) 685 Tibet 686 Macao (Macau) 691 Mongolia 693 Japan 695 Korea North Korea South Korea	 Except possessions of the U.S.A. PLACE OF BIRTH UNKNOWN 998 Place of Birth stated not to be in United States, but no other information available 999 Place of Birth unknown References: CIA World Factbook, 1995. U.S. Bureau of the Census Place of Birth Technical Documentation, 1997.

^{*} Effective cases diagnosed 1/1/1992.

AUSTRALIA AND OCEANIA

711 Australia

Cartier Islands Cocos (Keeling) Islands

New Guinea, Australian

New Guinea, North East

Norfolk Island Papau New Guinea

715 New Zealand

Niue

720 Pacific Islands ~ Oceania, NOS Polynesia, NOS

ALPHABETICAL LISTING

* Effective cases diagnosed 1/1/1992.

Α

629	Abyssinia Aden Afars and Issas		Asian Arab Countries Asian Republics of the former U.S.S.R.
638	Afghanistan Africa	109	Atlantic/Caribbean area, other U.S. possessions
570	Africa, East Africa, North	100	Atlantic/Caribbean area, U.S. possessions
	Africa, South	711	Australia
545	Africa, South West	711	Australian New Guinea
	Africa, West		Austria
	African Coastal Islands (previously included in 540)	633	Azerbaijan Azerbaizhan S.S.R.
	Alabama	445	Azores
	Alaska		
	Albania Alberta		В
	Algeria		В
	America, Central	247	Bahamas, The
	America, Latin		Bahrain
	America, North (use a more		Balearic Islands
	specific term; see also	463	Baltic Republic(s), NOS
	North America)	463	Baltic States, NOS
	America, South	645	Bangladesh
	American Samoa	245	Barbados
	Anatolia		Barbuda
	Andaman Islands		Basutoland
	Andorra		Bavaria
520	Anglo-Egyptian Sudan		Bechuanaland
	Angola		Belarus
	Anguilla Annam		Belgian Congo Belgium
	Antarctica		Belize
	Antigua		Benin
	Antilles, NOS		Bermuda
	Antilles, Netherlands		Bessarabia
	Arab Palestine (former)		Bhutan
	Arabia, Saudi		Bioko (Fernando Poo)
	Arabian Peninsula	452	
365	Argentina	355	Bolivia
	Arizona		Bophuthatswana
	Arkansas		Borneo
	Armenia (Turkey)		Bosnia-Herzogovina
	Armenia (U.S.S.R.)		Botswana
	Aruba	341	
	Asia, NOS*		British Columbia
	Asia, East	331	British Guiana British Honduras
	Asia, Mid-East Asia Minor, NOS		British Virgin Islands
	Asia, Near-East		British West Indies, NOS
	Asia, Southeast		Brunei
	-		

520 649 579 457	Bulgaria Burkina Faso (Upper Volta) Burma (see Myanmar) Burundi Byelorussian S.S.R.	124 441 256 539 471 453 241 245	Croatia Cuba Curacao
245 097 663 539	Cabinda Caicos Islands California Cambodia Cameroon Canada	517 452	Cyprus Cyrenaica Czechoslovakia Czech Republic
110	Canal Zone		D
122 545 445 245 245 123 711 633 245 500 539	Canary Islands Canton Islands Cape Colony Cape Verde Islands Caribbean, NOS Caribbean Islands, other Caroline Islands Cartier Islands Caucasian Republics of the former U.S.S.R. Cayman Islands Central Africa, NOS Central African Republic	453 017 425 022 583 449 245 243 673	Dahomey Dalmatia Delaware Denmark District of Columbia Djibouti Dobruja Dominica Dominican Republic Dutch East Indies Dutch Guiana
	Central America Central Europe, NOS		Е
060 647 520 401 361 681 682 684 723 545 665 711 381 083 580 226	Central Midwest States Ceylon (see Sri Lanka) Chad Channel Islands (British) Chile China, NOS China, Cochin China, People's Republic of China, Republic of Christmas Island Ciskei Cochin China Cocos (Keeling) Islands Colombia Colorado Comoros Columbia, British Columbia, District of Congo, NOS Congo-Brazzaville Congo, Belgian Congo, French	680 431 673 645 499 345 519 410 254 125 122 401 122 500 539 585 458 458 585	East Africa East Asia East Germany East Indies, Dutch East Pakistan Eastern Europe, NOS Ecuador Egypt Eire El Salvador Ellice Islands Enderbury Islands England Enterbury Islands Equatorial Africa, NOS Equatorial Guinea (Spanish Guinea) Eritrea Estonia Estonia S.S.R. (Estonia) Ethiopia Europe, NOS*

F

381 431 123 539 721 429 035 684 441 545 539 333 725 583 530 245	Faroe (Faeroe) Islands Falkland Islands Federal Republic of Germany Federated States of Micronesia Fernando Poo Fiji Finland Florida Formosa France Free State (Orange Free State) French Congo French Guiana French Polynesia French Somaliland French West Africa, NOS French West Indies Futuna	242 099 432 253 252 683	Guinea, New (see New Guinea) Guinea, Portuguese Guyana H Haiti Hawaii Holland Honduras Honduras, British Hong Kong Hungary
			Iceland
	C		Idaho Illinois
	G		India
	Gabon		Indiana
	Galapagos Islands		Indies, Dutch East Indochina
	Gambia, The Gaza Strip		Indociina Indonesia
	Georgia (U.S.A.)		Iowa
633	Georgia (U.S.S.R.)	637	
	German Democratic Republic		Iraq
	Germanic Countries Germany	620 410	Iraq-Saudi Arabian Neutral Zone Ireland (Eire)
	Germany, East		Ireland, NOS
431	Germany, Federal Republic of	404	Ireland, Northern
431	Germany, West		Ireland, Republic of
	Ghana Gibraltar		Isle of Man Israel
	Gilbert Islands		Issas
	Greece	447	Italy
	Greenland	539	Ivory Coast
	Grenada Grenadines, The		
	Guadaloupe		J
	Guam	044	Lamada
	Guatamala Guernsey		Jamaica Jan Mayen
	Guiana, British		Japan
332	Guiana, Dutch	673	Java
	Guiana, French	401	
	Guinea Guinea-Bissau (Portuguese	631 127	
559	Guinea)		Jordan
539			Jugoslavia

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r	•

663 065 634 634 047 575 634 122 695 695 695 629 634	Kameroon Kampuchea Kansas Kazakh S.S.R. Kazakhstan Kentucky Kenya Kirghiz S.S.R. Kiribati Korea Korea, North Korea, South Kuwait Kyrgystan Kyrgyz	221 131 245 021 005 520 580 580 490 721 610 230 041 123	Martinique Maryland Massachusetts Mauritania Mauritius Mayotte Mediterranean Islands, Other Melanesian Islands Mesopotamia, NOS Mexico Michigan
	L		Midway Islands
	_	052	
221	Labrador	249	Miquelon
	Laos	039	
	Lapland, NOS	063	
	Latin America, NOS		Moldavian C. C. D.
	Latvia		Moldavian S.S.R.
	Latvian S.S.R. (Latvia) Lebanon		Moldova Monaco
	Leeward Island, NOS	691	
	Lesotho		Mongolia Montana
	Liberia		Montenegro
	Libya		Montserrat
	Liechtenstein		Moravia
	Line Islands, Southern		Morocco
	Lithuania	080	
	Lithuanian S.S.R. (Lithuania)	553	
	Louisiana	629	
	Luxembourg	649	Myanmar (see Burma)
	-		,
	М		
606	Magaa		N
	Macao Macau	545	Namibia
	Macedonia		Nampo-shoto, Southern
	Madagascar	545	
	Madeira Islands		Nauru
	Maine		Near-East Asia
	Malagasy Republic	067	
551			Nepal
	Malay Peninsula		Netherlands
671			Netherlands Antilles
	Maldives		Netherlands Guiana
520	Mali		Nevada
491	Malta	245	Nevis
224	Manitoba	221	New Brunswick

	New Caledonia New England		Р
	New Guinea, except Australian	120	Pacific area, U.S. possessions
075	and North East	720	Pacific Islands
711	New Guinea, Australian		Pacific Islands, Trust Territory of
711	New Guinea, North East	120	the (code to specific islands if
003	New Hampshire		possible)
721	New Hebrides	nan	Pacific Coast States
	New Jersey		Pakistan
	New Mexico		Pakistan, East
	New York		Pakistan, West
	New Zealand		Palau (Trust Territory of the Pacific
	Newfoundland	100	Islands)
	Nicaragua	625	Palestine, Arab
	Niger		Palestine, Jewish
	Nigeria		Palestine, NOS
	Niue		Palestinian National Authority
	North Africa, NOS	001	PNA
	North America, NOS (use more	257	Panama
200	specific term if possible)		Papua New Guinea
240	North American Islands	371	Paraguay
	North Borneo (Malaysia)	014	Pennsylvania
	North Carolina		People's Democratic Republic of
	North Central States	020	Yemen
	North Dakota	682	People's Republic of China
	North East New Guinea		Persia
	North Korea		Persian Gulf States, NOS
	North Mid-Atlantic States		Peru States, 1133
	Northern Europe, NOS		Philippine Islands
404	Northern Ireland	675	Philippines
	Northern Mariana Islands	122	Phoenix Islands
	Northern Midwest States		Pitcairn Islands
	Northern Rhodesia		Poland
	Norfolk Island		Polynesian Islands
	Northwest Territories (Canada)		Portugal
	Norway		Portuguese Guinea
	Not United States, NOS	224	Prairie Provinces, Canada
	Nova Scotia		Prince Edward Island
227	Nunavut	543	Principe
551	Nyasaland		Puerto Rico
	,		
	0		Q
720	Oceania	629	Qatar
	Ohio		Quebec
	Oklahoma		Q.0.000
	Oman		
	Ontario		
	Orange Free State		
	Oregon		
	Orkney Islands		

R

684 Republic of China 453 Slovenia 545 Republic of South Africa 721 Solomon Islands 580 Reunion 581 Somali Republic 006 Rhode Island 581 Somalia 547 Rhodesia 581 Somaliland 549 Rhodesia, Northern 583 Somaliland, French 547 Rhodesia, Southern 540 South Africa 545 South Africa, Republic of 539 Rio Muni 545 South Africa, Union of 440 Romance-language Countries 300 South America 449 Romania 449 Roumania 380 South American Islands 577 Ruanda 026 South Carolina 449 Rumania 055 South Dakota 695 South Korea 455 Russia, NOS 457 Russia, White 020 South Mid-Atlantic States 455 Russian Federation (former 545 South West Africa U.S.S.R.) 650 Southeast Asia 455 Russian S.F.S.R. 030 Southeastern States 577 Rwanda 499 Southern Europe, NOS 122 Southern Line Islands 134 Ryukyu Islands (Japan) 070 Southern Midwest States 133 Southern Nampo-shoto547 Southern Rhodesia S 629 Southern Yemen 520 Sahara, Western (Spanish) — Soviet Union (see individual 121 Samoa, American republics) 725 Samoa, Western 443 Spain 245 St. Christopher-Nevis 520 Spanish Sahara 580 St. Helena 647 Sri Lanka (see Ceylon) 245 St. Kitts 520 Sudan (Anglo-Egyptian Sudan) 245 St. Lucia 520 Sudanese Countries 673 Sumatra 249 St. Pierre 245 St. Vincent 332 Suriname 447 San Marino 423 Svalbard 543 Sao Tome447 Sardinia 135 Swan Islands 545 Swaziland 224 Saskatchewan 427 Sweden 629 Saudi Arabia 435 Switzerland 621 Syria 420 Scandinavia 403 Scotland 539 Senegal 453 Serbia 580 Seychelles 403 Shetland Islands 651 Siam 447 Sicily 539 Sierra Leone 643 Sikkim 671 Singapore 450 Slavic Countries 453 Slavonia 452 Slovak Republic

452 Slovakia

	Т		V
684 634 571 571 571 031 077 651	Tadzhik S.S.R. Taiwan Tajikistan Tanzania Tanganyika Tanzanyika Tennessee Texas Thailand (Siam) Tibet	447 545 321 004 665 245 102	Vanuatu Vatican City Venda Venezuela Vermont Vietnam Virgin Islands (British) Virginia
	Tobago Togo		W
136 725 665 625 545 545 449 245 517 629 515 611 634 634 245	Tokelau Islands Tonga Tonkin Trans-Jordan Transkei Transvaal Transylvania Trinidad Tripoli Tripolitania Trucial States Tunisia Turkey Turkmen S.S.R. Turkmenistan Turks Islands Tuvalu	402 449 721 093 022 530 539 631 431 245 639 024 499 520 725 457	Wake Island Wales Wallachia Wallis Washington (state) Washington D.C. West Africa, NOS West African Countries, other West Bank West Germany West Indies, NOS (see also individual islands) West Pakistan West Virginia Western Europe, NOS Western (Spanish) Sahara Western Samoa White Russia
	U	051	Windward islands Wisconsin Wyoming
456 456 404	Uganda Ukraine Ukranian S.S.R. Ulster Union of South Africa Union of Soviet Socialist Republics (U.S.S.R.) (see individual	629	Yemen Yemen, People's Democratic Republic of
519 400 000	republics) United Arab Emirates United Arab Republic United Kingdom United States	453 225	Yugoslavia (former Yugoslavia region) Yukon Territory
999	U.S. Virgin Islands Unknown		Z
520 375 579 084 634	Upper Volta Uruguay Urundi Utah Uzbekistan Uzbek S.S.R.	549 571	Zaire Zambia Zanzibar Zimbabwe

RACE 1

Item Length: 2 NAACCR Item #: 160 NAACCR Name: Race 1

Race (and ethnicity) is defined by specific physical, hereditary and cultural traditions or origins, not necessarily by birthplace, place of residence, or citizenship. 'Origin' is defined by the US Census Bureau as the heritage, nationality group, lineage, or in some cases, the country of birth of the person or the person's parents or ancestors before their arrival in the United States.

All resources in the facility, including the medical record, face sheet, physician and nursing notes, photographs, and any other sources, must be used to determine race. If a facility does not print race in the medical record but does maintain it in electronic form, the electronic data must also be reviewed. Recommendation: document how the race code was determined in a text field.

The data item Race 1 identifies the primary race of the patient.

Codes

- 01 White
- 02 Black
- American Indian, Aleutian, Alaskan Native or Eskimo (includes all indigenous populations of the Western hemisphere)
- 04 Chinese
- 05 Japanese
- 06 Filipino
- 07 Hawaiian
- 08 Korean (Effective with 1/1/1988 dx)
- 09 Asian Indian, Pakistani (Effective with 1/1/1988 dx)
- 10 Vietnamese (Effective with 1/1/1988 dx)
- 11 Laotian (Effective with 1/1/1988 dx)
- 12 Hmong (Effective with 1/1/1988 dx)
- 13 Kampuchean (including Khmer and Cambodian) (Effective with 1/1/1988 dx)
- 14 Thai (Effective with 1/1/1994 dx)
- 20 Micronesian, NOS (Effective with 1/1/1991)
- 21 Chamorran (Effective with 1/1/1991 dx)
- 22 Guamanian, NOS (Effective with 1/1/1991 dx)
- 25 Polynesian, NOS (Effective with 1/1/1991 dx)
- 26 Tahitian (Effective with 1/1/1991 dx)
- 27 Samoan (Effective with 1/1/1991 dx)
- 28 Tongan (Effective with 1/1/1991 dx)
- 30 Melanesian, NOS (Effective with 1/1/1991 dx)
- 31 Fiji Islander (Effective with 1/1/1991 dx)
- 32 New Guinean (Effective with 1/1/1991 dx)
- 96 Other Asian, including Asian, NOS and Oriental, NOS (Effective with 1/1/1991 dx)

- 97 Pacific Islander, NOS (Effective with 1/1/1991 dx)
- 98 Other
- 99 Unknown

SEER Participants San Francisco, San Jose-Monterey, and Los Angeles are permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1987. Greater California is permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1988. Other SEER participants may choose to recode cases diagnosed prior to 1991 using 14 and 20-97 if all cases in the following race codes are reviewed: 96 Other Asian; 97 Pacific Islander, NOS; 98 Other; and 99 unknown.

Coding Instructions

- Code the primary race(s) of the patient in fields Race 1, Race 2, Race 3, Race 4, and Race
 The five race fields allow for the coding of multiple races consistent with the Census
 Rules 2 8 further specify how to code Race 1, Race 2, Race 3, Race 4 and Race
 See Editing Guidelines below for further instructions.
- 2. If a person's race is a combination of white and any other race(s), code the appropriate other race(s) first and code white in the next race field.
- 3. If a person's race is a combination of Hawaiian and any other race(s), code Race 1 as 07 Hawaiian and code the other races in Race 2, Race 3, Race 4, and Race 5 as appropriate.

Example: Patient is described as Japanese and Hawaiian. Code Race 1 as 07 Hawaiian, Race 2 as 05 Japanese, and Race 3 through Race 5 as 88.

4. If the person is not Hawaiian, code Race 1 to the first stated non-white race (02-98).

Example: Patient is stated to be Vietnamese and Black. Code Race 1 as 10 Vietnamese, Race 2 as 02 Black, and Race 3 through Race 5 as 88.

Note: in the following scenarios, only the race code referred to in the example is coded. For cases diagnosed after January 1, 2000, all race fields must be coded.

- 5. The fields Place of Birth, Race, Marital Status, Name, Maiden Name, and Hispanic Origin are inter-related. Use the following guidelines in priority order:
 - a. Code the patient's stated race, if possible. Refer to Appendix "Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics" for guidance.
 - **Example 1**: Patient is stated to be Japanese. Code as 05 Japanese.
 - **Example 2:** Patient is stated to be German-Irish. Code as 01 White.
 - **Example 3:** Patient is described as Arabian. Code as 01 White.

Exception: When the race is recorded as Oriental, Mongolian, or Asian (coded to 96 Other Asian) and the place of birth is recorded as China, Japan, the Philippines, or another Asian nation, code the race based on birthplace information.

- **Example 4:** The person's race is recorded as Asian and the place of birth is recorded as Japan. Code race as 05 Japanese because it is more specific than 96 Asian, NOS.
- **Example 5:** The person describes himself as an Asian-American born in Laos. Code race as 11 Laotian because it is more specific than 96 Asian, NOS.
- 6. If the patient's race is determined on the basis of the races of relatives, there is no priority to coding race, other than to list the non-white race(s) first.
 - **Example:** The patient is described as Asian-American with Korean parents. Code race as 08 Korean because it is more specific than 96 Asian [-American].
- 7. If no race is stated in the medical record, or if the stated race cannot be coded, review the documentation for a statement of a race category.
 - **Example 1**: Patient described as a black female. Code as 02 Black.
 - *Example 2:* Patient describes herself as multi-racial (nothing more specific) and nursing notes say "African-American." Code as 02 Black.
 - **Example 3:** Patient states she has a Polynesian mother and Tahitian father. Code Race 1 as 25 Polynesian, Race 2 as 26 Tahitian and Race 3 through Race 5 as 88.
- 8. If race is unknown or not stated in the medical record and birth place is recorded, in some cases race may be inferred from the nationality. Refer to the Appendix entitled "Race and Nationality Descriptions from the 2000 Census and Bureau of Vital Statistics" to identify nationalities from which race codes may be inferred.
 - **Example 1:** Record states: "this native of Portugal..." Code race as 01 White per the Appendix.
 - **Example 2**: Record states: "this patient was Nigerian..." Code race as 02 Black per the Appendix.
 - *Exception:* If the patient's name is incongruous with the race inferred on the basis of nationality, code Race 1 through Race 5 as 99, Unknown.
 - **Example 1:** Patient's name is Siddhartha Rao and birthplace is listed as England. Code Race 1 through Race 5 as 99 Unknown.

Example 2: Patient's name is Ping Chen and birthplace is Ethiopia. *Code* Race 1 through Race 5 as 99 Unknown.

- 9. Use of patient name in determining race:
 - a. Do not code race from name alone, especially for females with no maiden name given.
 - b. In general, a name may be an indicator of a racial group, but should not be taken as the only indicator of race.
 - c. A patient name may be used to identify a more specific race code.
 - *Example 1*: Race reported as Asian, name is Hatsu Mashimoto. Code race as 05 Japanese.
 - **Example 2**: Birthplace is reported as Guatemala and name is Jose Chuicol [name is identified as Mayan]. Code race as 03 Native American
 - d. A patient name may be used to infer Spanish ethnicity or place of birth, but a Spanish name alone (without a statement about race or place of birth) cannot be used to determine the race code. Refer to ethnicity guidelines for further information.
 - **Example:** Alice Gomez is a native of Indiana (implied birthplace: United States). Code Race 1 through Race 5 as 99 Unknown, because nothing is known about her race..
- 10. Persons of Spanish or Hispanic origin may be of any race, although persons of Mexican, Central American, South American, Puerto Rican, or Cuban origin are usually white. Do NOT code a patient stated to be Hispanic or Latino as 98 Other Race in Race 1 and 88 in Race 2 through Race 5.
 - *Example:* Sabrina Fitzsimmons is a native of Brazil. Code race as 01 White per Appendix.
- 11. When the race is recorded as Negro or African-American, code race as 02 Black.
- 12. Code 03 should be used for any person stated to be Native American or [western hemisphere] Indian, whether from North, Central, South, or Latin America. For Central, South, or Latin American Indians, see additional ethnicity coding guidelines under Spanish Surname or Origin.
- 13. Death certificate information may be used to supplement antemortem race information only when race is coded unknown in the patient record or when the death certificate information is more specific.

Example 1: In the cancer record Race 1 through Race 5 are coded as 99 Unknown. The death certificate states race as black. Change cancer record for Race 1 to 02 Black and Race 2 through Race 5 to 88.

Example 2: Race 1 is coded in the cancer record as 96 Asian. Death certificate gives birthplace as China. Change Race 1 in the cancer record to 04 Chinese and code Race 2 through Race 5 as 88.

EDITING GUIDELINES

All tumors for the same patient should have the same race code(s).

Cases diagnosed prior to January 1, 2000:

For cases diagnosed prior to January 1, 2000, Race 2 through Race 5 must be blank **unless** the patient has multiple records and at least one primary is diagnosed on or after January 1, 2000. In this case, the race codes must be identical on each record.

Cases diagnosed on or after January 1, 2000:

- 1. If only one race is reported for the person, use code 88 for the remaining race fields (Race 2 Race 5).
- 2. If the patient is multiracial, code all races using items Race 1 through Race 5.
- 3. If any race code is 99 Unknown, then all race codes must be 99 Unknown.
- 4. If Race 1 is 01-98, Race 2 through Race 5 cannot be 99.
- 5. If more than Race 1 is coded, and if any Race 2 through Race 5 is 88, then all subsequent race codes must be 88.
- 6. A unique race code (other than 88, 99 or blank {for diagnoses prior to 01/01/2000}) can be coded only once in Race 1 through Race 5. For example, do not code 01 White in Race 1 for one parent and 01 White in Race 2 for the other parent.
- 7. Document the specified race in a remarks field when any of the race fields are coded as 96 Other Asian, 97 Pacific Islander, NOS or 98 Other Race and a more specific race is given that is not included in the list of race codes. If there is no information on race in the medical record, document that there is no race information in a remarks field. If the information in the medical record is not consistent (for example, if the patient is identified as black in nursing notes and white in a dictated physical exam), document why the coded race was chosen.

Note: Do not code 96 Other Asian in a subsequent race field if a specific Asian race(s) has already been coded.

Example 1: Patient is described as Asian in a consult note and as second generation Korean American in the history. Code Race 1 as 08 Korean and Race 2 through Race 5 as 88.

HISTORY

- 1. Race 1 is the field used to compare with race data on cases diagnosed prior to January 1, 2000.
- 2. For cases diagnosed prior to January 1, 2000, Race 2 through Race 5 must be blank **unless** the patient has multiple records with at least one primary diagnosed on or after January 1, 2000. In this case, the race codes must be identical on each record..
- 3. Codes 08 13 became effective with diagnoses on or after January 1, 1988.
- 4. Code 14 became effective with diagnoses on or after January 1, 1994.
- 5. Codes 20 97 became effective with diagnoses on or after January 1, 1991. SEER participants in San Francisco, San Jose-Monterey, and Los Angeles are permitted to use codes 14 and 20 97 for cases diagnosed after January 1, 1987; Greater California is permitted to use codes 14 and 20-97 for cases diagnosed after January 1, 1988. Other SEER participants may choose to recode cases diagnosed prior to 1991 using 14 and 20-97 if all cases in the following race codes are reviewed: 96 Other Asian; 97 Pacific Islander, NOS; 98 Other; and 99 unknown.

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MORPHOLOGY

Section IV, Field 06, Introduction

Morphology

The *International Classification of Diseases for Oncology*, Second Edition (ICD-O-2), is used for coding the morphology of all cancers. In the Alphabetic Index all morphology codes are indicated by an 'M-' preceding the code number. The 'M-' should not be coded. The '/' appearing between the histology and behavior codes is also not recorded.

Morphology is a 6-digit code consisting of three parts:

- A Histologic type (4 digits)
- B Behavior code (1 digit)
- C Grading or differentiation; or for lymphomas and leukemias, designation of T-cell, B-cell, null cell, or NK cell (1 digit)

The morphology of a tumor can be coded only after the determination of multiple primaries has been completed. (See pages 7-37 for rules to determine the number of primaries.)

To code morphology (histology, behavior and grade), use the best information from the entire pathology report (microscopic description, final diagnosis, comments).

General Rule

If the final diagnosis gives a specific histology, code it. Similarly, if grade is specified in the final diagnosis, code it. Exceptions are found on the following pages under "Histologic Type," "Behavior Code," and "Grade, Differentiation, or Cell Indicator."

Histologic Type

The morphology can be coded only after the determination of multiple primaries has been completed. (See pages 7-37 for rules to determine the number of primaries.)

In coding histologic type, usually the FINAL pathologic diagnosis is coded. All pathology reports for the primary under consideration should be used. Although the report from the most representative tissue is usually the best, sometimes all of the cancerous tissue may be removed at biopsy and therefore the report from the biopsy must be used.

If a definitive statement of a more specific histologic type (higher code in ICD-O-2) is found in the microscopic description or in the comment, the more specific histologic diagnosis should be coded.

Code the histology using the following rules:

Single lesion – same behavior

- 1. Code the histologic type using the following rules in sequence.
 - A. a combination code if one exists

Examples of when to use the combination code

- "...predominantly lobular with a ductal component." *Use the combination code for lobular and ductal carcinoma* (8522/3).
- "Invasive breast carcinoma predominantly lobular with foci of ductal carcinoma." *Use the combination code for lobular and ductal carcinoma (8522/3).*
- B. the more specific term if one is an 'NOS' term (carcinoma) and the other term is more specific

Examples of when to use the more specific codes

- "Adenocarcinoma (8140/3) of the sigmoid colon, predominantly mucin-producing." *Code to mucin-producing adenocarcinoma* (8481/3).
- "Invasive carcinoma, probably squamous cell type." *Code squamous cell* (8070/3) *since it is more specific than carcinoma* (8010/3).
- "Adenocarcinoma of prostate, with cribriform differentiation." Code cribriform carcinoma (8201/3) since it is more specific than adenocarcinoma.
- C. the majority of the tumor if Rule 1A or Rule 1B above cannot be used

```
Terms that indicate a majority of tumor
"predominantly..."
"...with features of..."
"...major"
"type"‡
"with ... differentiation"‡

Terms that do not indicate a majority of tumor
"...with foci of..."
"...focus of/focal..."
"...areas of..."
"...elements of..."
"...component"‡
```

‡ Terms approved for use effective with 1/1/1999 diagnoses and after.

continued...

HISTOLOGIC TYPE (cont.)

Single lesion – same behavior Rule 1C (continued)

Ignore terms that do not indicate a majority of tumor. When both terms are specific (in other words, not NOS) and no combination code exists, code the majority of the tumor.

Example of majority tumors:

"Predominantly leiomyosarcoma associated with foci of well-developed chondrosarcoma." *Code the majority tumor – leiomyosarcoma (8890/3).*

2. Histologies with the same behavior code are coded to the higher histology code in ICD-O-2 unless a combination histology code is available. Rule 1 takes precedence over rule 2.

Example Ductal carcinoma (8500/3) and medullary carcinoma (8510/3) would be coded to the higher number (8510/3).

Single lesion – different behaviors

1. Histologies with different behavior codes are coded to the histology associated with the malignant behavior.

Example Squamous cell carcinoma in situ (8070/2) and papillary squamous cell carcinoma (8052/3) would be coded papillary squamous cell carcinoma (8052/3).

Exception: If the histology of the invasive component is an 'NOS' term (e.g., carcinoma, adenocarcinoma, melanoma, sarcoma), then use the specific term associated with the in situ component and an invasive behavior code.

Example of exception: Squamous cell carcinoma in situ (8070/2) with areas of invasive carcinoma (8010/3) would be coded squamous cell carcinoma (8070/3).

Multiple lesions – considered a single primary

- 1. If one lesion is stated to be an 'NOS' term (e.g., carcinoma, adenocarcinoma, melanoma, sarcoma) and the second lesion is an associated but more specific term (e.g., large cell carcinoma, mucinous adenocarcinoma, spindle cell sarcoma, respectively) code to the more specific term.
- 2. For colon and rectum primaries:

When an adenocarcinoma (8140/_; in situ or invasive) arises in the same segment of the colon or rectum as an adenocarcinoma in a polyp (8210/_, 8261/_, 8263/_), code as adenocarcinoma (8140/_).

When a carcinoma (8010/_; in situ or invasive) arises in the same segment of the colon or rectum as a carcinoma in a polyp (8210), code as carcinoma (8010/_).

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

NEW HISTOLOGY CODES FOR LYMPHOMAS AND LEUKEMIAS

The following new terms, synonyms and codes have been added to the *International Classification of Diseases* for Oncology, Second Edition.

New Lymphoma Terms. Effective for cases diagnosed January 1, 1995, and after.

ICD-O-2 Code	Term
9673/3	Mantle cell lymphoma (*)
9688/36	T-cell rich B-cell lymphoma
9708/3	Subcutaneous panniculitic T-cell lymphoma
9710/3	Marginal zone lymphoma, NOS
9714/3	Anaplastic large cell lymphoma (ALCL), CD30+ (*)
9715/3	Mucosal-Associated Lymphoid Tissue (MALT) lymphoma
9716/3	Hepatosplenic OO (gamma - delta) cell lymphoma
9717/3	Intestinal T-cell lymphoma
	Enteropathy associated T-cell lymphoma

New Leukemia Terms Effective for cases diagnosed January 1, 1998, and after.

ICD-O-2 Code	<u>Term</u>
9821/3	Acute lymphoblastic leukemia, L1 type (*)
	Acute lymphocytic leukemia, L1 type (*)
	Acute lymphoid leukemia, L1 type (*)
	Acute lymphatic leukemia, L1 type (*)
	Lymphoblastic leukemia, L1 type (*)
	FAB L1 (*)
9826/3	FAB L3 (*)
9828/3	Acute lymphoblastic leukemia, L2 type
	Acute lymphocytic leukemia, L2 type
	Acute lymphoid leukemia, L2 type
	Acute lymphatic leukemia, L2 type
	Lymphoblastic leukemia, L2 type
İ	FAB L2
9840/3	FAB M6 (*)
9861/3	Acute myeloid leukemia, NOS (*)
	Acute myeloblastic leukemia, NOS (*)
	Acute granulocytic leukemia, NOS (*)
	Acute myelogenous leukemia, NOS (*)
	Acute myelocytic leukemia, NOS (*)
9866/3	FAB M3 (*)
9867/3	Acute myelomonocytic leukemia, NOS (*)
	FAB M4 (*)
9871/3	Acute myelomonocytic leukemia with eosinophils
	FAB M4E

continued

^(*) new term(s) for an existing number

HISTOLOGIC TYPE (cont.)

Section IV, Field 06.A

| NEW HISTOLOGY CODES FOR LYMPHOMAS AND LEUKEMIAS, continued

9872/3 	Acute myeloid leukemia, minimal differentiation Acute myeloblastic leukemia, minimal differentiation Acute granulocytic leukemia, minimal differentiation Acute myelogenous leukemia, minimal differentiation Acute myelocytic leukemia, minimal differentiation FAB M0
9873/3 	Acute myeloid leukemia without maturation Acute myeloblastic leukemia without maturation Acute granulocytic leukemia, without maturation Acute myelogenous leukemia, without maturation Acute myelocytic leukemia, without maturation FAB M1
9874/3	Acute myeloid leukemia with maturation Acute myeloblastic leukemia with maturation Acute granulocytic leukemia, with maturation Acute myelogenous leukemia, with maturation Acute myelocytic leukemia, with maturation FAB M2
9891/3	FAB M5 (*) FAB M5A (*) FAB M5B (*)
9910/3	Megakaryoblastic leukemia, NOS (C42.1) FAB M7

^(*) new term(s) for an existing number

BEHAVIOR CODE

Section IV, Field 06.B

Behavior Code

Code

- 2 Carcinoma in situ; intraepithelial; noninfiltrating; noninvasive
- 3 Malignant

The usual behavior codes are listed in both the numeric and alphabetic indices of ICD-O-2, following the histology code. If a pathologist calls a cancer in situ ('/2') or malignant ('/3') when it is not listed as such in ICD-O-2, code the stated behavior. (See Table 1, pages xxvi and xxvii, in ICD-O-2.)

SEER does not accept behavior codes 0, 1, 6, or 9. If the only specimen was from a metastatic site, code the histologic type of the metastatic site and code a '3' for the behavior code. The primary site is assumed to have the same histologic type as the metastatic site.

Code the fact of invasion, no matter how limited. Even a pathological diagnosis qualified as "micro-invasive" must be coded malignant, '3.'

Note that in situ is a concept based on histologic evidence. Therefore, clinical evidence alone cannot justify the use of this term.

Synonymous terms for in situ (behavior code '2') are:

	Bowen's disease (not reportable for C44.0-C44.9)
	Clark's level 1 for melanoma (limited to epithelium)
	confined to epithelium
1	Hutchinson's melanotic freckle, NOS (C44)
i	intracystic non-infiltrating
1	intraductal
	intraepidermal, NOS
	intraepithelial, NOS
	•
	involvement up to but not including the basement membrane
	lentigo maligna (C44)
	lobular neoplasia (C50)
	lobular, noninfiltrating (C50)
	noninfiltrating
	noninvasive
	no stromal invasion
	papillary, noninfiltrating or intraductal
	precancerous melanosis (C44)
	Queyrat's erythroplasia (C60)
	VAIN III (C52.9)
	VIN III (C51)
	The following in situ diagnoses are not reportable to SEER after 1/1/1996:
i	CIN III (C53)
i	Carcinoma in situ of the cervix (C53)
1	· · · · · · · · · · · · · · · · · · ·

GRADE, DIFFERENTIATION, OR CELL INDICATOR

Section IV, Field 06.C

Grade, Differentiation

Code

- 1 Grade I; grade i; grade 1; well differentiated; differentiated, NOS
- 2 Grade II; grade ii; grade 2; moderately differentiated; moderately well differentiated; intermediate differentiation
- 3 Grade III; grade iii; grade 3; poorly differentiated; dedifferentiated
- 4 Grade IV; grade iv; grade 4; undifferentiated; anaplastic
- 5 T-cell; T-precursor
- 6 B-cell; Pre-B; B-Precursor
- 7 Null cell; Non T-non B;
- 8 N K cell (natural killer cell)
- 9 Cell type not determined, not stated or not applicable

Code '8' was implemented effective with cases diagnosed 1/1/95 and after. The grading or differentiation— or for lymphomas and leukemias the designation of T-cell, B-cell, null cell, or NK (natural killer) cell—is described on updated pages xxix, xxxv and 23 of ICD-O-2.

Code the grade or degree of differentiation as stated in the *FINAL* pathologic diagnosis. If the grade or degree of differentiation is *not* stated in the final pathologic diagnosis, code the grade or degree of differentiation as given in the microscopic description or comment.

Example Microscopic Description: Moderately differentiated squamous cell carcinoma with poorly

differentiated areas

Final Pathologic Diagnosis: Moderately differentiated squamous cell carcinoma

Code to the final diagnosis: Moderately differentiated, '2.'

If a diagnosis indicates two different grades or degrees of differentiation (e.g., "well and poorly differentiated," "grade II-III," or "well differentiated grade II"), code to the higher grade code (Rule 6, page *xxvii* or *xlii* in ICD-O-2). Always code the higher grade/differentiation code, even if it does not represent the majority of the lesion.

Example Final Diagnosis: Predominantly grade II, focally grade III.

Code as grade III.

- If a needle biopsy or incisional biopsy of a primary site has a differentiation given and the excision or resection does not, code the information from the needle/incisional biopsy.
- If there is a difference between the grade given for a biopsy of the primary site and the grade given for the resected specimen, use the higher grade.
- If there is no grade provided for the primary site, code as 9, even if a grade is given for a metastatic site.

Usually there will be no statement as to grade for in situ lesions. However, if a grade is stated, it should be coded.

GRADE, DIFFERENTIATION, OR CELL INDICATOR (cont.)

Section IV, Field 06.C

When there is variation in the usual terms for degree of differentiation, code to the higher grade as specified below:

Term	Grade	Code
Low grade	I-II	2
Medium grade; intermediate grade	II-III	3
High grade	III-IV	4
Partially well differentiated	I-II	2
Moderately undifferentiated	III	3
Relatively undifferentiated	III	3

Occasionally a grade is written as "2/3" or "2/4," meaning this is grade 2 of a 3-grade system or grade 2 of a 4-grade system, respectively. To code in a three grade system, refer to the terms "low grade," "medium grade," and "high grade," above.

Do not code low, intermediate or high grade for lymphomas. See the note on page 104.

Coding Grade for Prostate Cases

Usually prostate cancers are graded using Gleason's score or pattern. Gleason's grading for prostate primaries is based on a 5-component system (5 histologic patterns). Prostatic cancer generally shows two main histologic patterns. The primary pattern—that is, the pattern occupying greater than 50% of the cancer—is usually indicated by the first number of the Gleason's grade and the secondary pattern is usually indicated by the second number. These two numbers are added together to create a pattern score, ranging from 2 to 10.

If the pathologist gives only one number and it is less than or equal to 5, assume that it describes a pattern. If only one number is given and it is greater than 5, assume that it is a score. If there are two numbers, assume that they refer to two patterns (the first number being the primary and the second number being the secondary) and sum them to obtain the score.

If expressed as a specific number out of a total of 10, the first number given is the score, e.g., Gleason's 3/10 would be a score of 3.

1. If Gleason's score (2-10) is given, code as follows:

Gleason's score		Grading
2, 3, 4	I	Well Differentiated
5, 6, 7	II	Moderately Differentiated
8, 9, 10	III	Poorly Differentiated

2. If Gleason's pattern (1-5) is given, code as follows:

Gleason's pattern		Grading
1, 2	I	Well Differentiated
3	II	Moderately Differentiated
4, 5	III	Poorly Differentiated

If not identified as Gleason's, assume a non-Gleason grade system and code appropriately. If both are given, code the non-Gleason grade.

GRADE, DIFFERENTIATION, OR CELL INDICATOR (cont.)

Section IV, Field 06.C

Coding Grade for Breast Cases

The following statement was approved by the Uniform Data Standards Committee of NAACCR on 12/13/1995:

Effective with breast cancer cases diagnosed 1/1/96 and later, when the terms "low," "intermediate," and "high" grade are used and the grading system is specified as (Scarff) Bloom-Richardson, code [the sixth digit] as grade code 1, 2, and 3 respectively. This is an exception to the usual rule for all other grading systems that "low," "intermediate," and "high" are coded 2, 3, and 4 respectively. In the (Scarff) Bloom-Richardson system, if grades 1, 2, and 3 are specified, these should be coded 1, 2 and 3 respectively.

Use grade or differentiation information from the breast pathology report in the following order:

- 1. Terminology (differentiation: well, moderately, poorly, moderately-well, etc.; grade: i, ii, iii, etc.)
- 2. Histologic grade (grade i, grade ii, grade iii)
- 3. Bloom-Richardson scores (range 3-9, converted to grade) (see below)
- 4. Bloom-Richardson grade (low, intermediate, high)
- 5. Nuclear grade only

The Bloom-Richardson grading scheme is a semi-quantitative grading method based on three morphologic features of "*invasive no-special-type*" breast cancers. The morphologic features are:

- 1) degree of tumor tubule formation
- 2) tumor mitotic activity
- 3) nuclear pleomorphism of tumor cells (nuclear grade)

For details of the scoring system, see Dalton, Leslie W et al. "Histologic grading of breast carcinoma" in *Cancer* 1994, Vol 73(11), page 2766, Table 2.

To obtain the final Bloom-Richardson score, add score from tubule formation plus number of mitotic score, plus score from nuclear pleomorphism. Seven possible scores are condensed into three BR grades. The three grades then translate into well differentiated (BR low grade), moderately differentiated (BR intermediate grade), and poorly differentiated (BR high grade).

CONVERSION TABLE FOR BLOOM RICHARDSON (BR) SCORE AND GRADE

	BR combine	ed Differentiation/BR Grade	Grade
	scores		Code
	3, 4, 5	Well-differentiated (BR low grade)	1
	6, 7	Moderately differentiated (BR inter	mediate grade) 2
Ì	8, 9	Poorly differentiated (BR high grad	e) 3
	Note: I	Bloom-Richardson score may also be called a	modified Bloom-Richardson, Scarff-
	F	Bloom-Richardson, SBR Grading, BR gradin	g, Elston-Ellis modification of

score, Nottingham-Tenovus or Nottingham grade.

SEER Program Code Manual, 3rd Edition

Bloom-Richardson score, the Nottingham modification of Bloom Richardson

GRADE, DIFFERENTIATION, OR CELL INDICATOR (cont.)

Section IV, Field 06.C

Grading of Non-Histologically Proven Cases

Where there is no tissue diagnosis, it may still be possible to establish the grade of a tumor through Magnetic Resonance Imaging (MRI) or Positron Emission Tomography (PET). In particular, it is now possible to grade brain tumors by this method. Thus, if there is no tissue diagnosis, but there is a grade/differentiation available from an MRI or PET report, code grade based on those reports. If there is a tissue diagnosis, grade should be from the pathology report only.

SEER Versus AJCC Grade Requirements

SEER requires grade for all primaries if available. According to the *Manual for Staging of Cancer*, Fifth Edition, from the American Joint Committee on Cancer, grade of tumor is required for the following sites to be staged:

C48	Retroperitoneum and peritoneum (soft tissue sarcoma)
C38.0-C38.3	Heart and mediastinum (soft tissue sarcoma)
C40, C41	Bone
C47, C49	Connective, Subcutaneous and other soft tissue
C61.9	Prostate gland
C73.9	Thyroid (undifferentiated carcinoma only)

For Lymphomas and Leukemias, Designation of T-cell, B-cell, Null Cell, or NK Cell

Code *ANY* statement of T-cell, B-cell, null cell, or NK cell involvement whether or not marker studies are documented in the patient record. (See page xxiii of ICD-O-2.) Additional terms that should be coded are T-precursor, T-cell phenotype and gamma-delta T (code 5); B-precursor, B-cell phenotype and Pre-B (code 6); non-T-non-B and common cell (code 7); and natural killer (code 8).

For lymphomas and leukemias, information on T-cell, B-cell, null cell, or NK cell has precedence over information on grading or differentiation.

For lymphomas, do not code the descriptions "high grade," "low grade," or "intermediate grade" in the Grade, Differentiation, or Cell Indicator field. These terms refer to categories in the Working Formulation of lymphoma diagnoses and not to histologic grade.

Grading Astrocytomas

Astrocytomas are graded according to ICD-O-2 rules in this field. The use of World Health Organization coding of aggressiveness is reserved for assignment of grade for staging. In the absence of other information on grade, code cases as follows:

	<u>Term</u>	ICD-O-2	<u>Te</u> :	<u>rm</u>	ICD-O-2
		6 th digit			6 th digit
	Anaplastic astrocytoma	4	As	trocytoma Grade 1	1
	Astrocytoma (low grade)	2	As	trocytoma Grade 2	2
	Glioblastoma multiforme	9	As	strocytoma Grade 3	3
Ī	Pilocytic astrocytoma	9	As	trocytoma Grade 4	4

APPENDIX C SITE-SPECIFIC SURGERY CODES

BREAST C50.0-C50.9

Code:

No Cancer-Directed Surgery/Unknown

- 00 No surgical procedure
- 01 Incisional, needle, or aspiration biopsy of other than primary site
- 02 Incisional, needle, or aspiration biopsy of primary site
- 03 Exploratory ONLY (no biopsy)
- 04 Bypass surgery, -ostomy ONLY (no biopsy)
- 05 Exploratory ONLY AND incisional, needle or aspiration biopsy of primary site or other sites
- 06 Bypass surgery, -ostomy ONLY AND incisional, needle or aspiration biopsy of primary site or other sites
- 07 Non-cancer directed surgery, NOS
- 09 Unknown if surgery done

Type of Cancer-Directed Surgery

- 10 Partial/less than total mastectomy (includes segmental mastectomy, lumpectomy, quadrantectomy, tylectomy, wedge resection, nipple resection, excisional biopsy, or partial mastectomy, NOS) WITHOUT dissection of axillary lymph nodes
- 20 Partial/less than total mastectomy WITH dissection of axillary lymph nodes
- 30 Subcutaneous mastectomy WITH/WITHOUT dissection of axillary nodes
- 40 Total (simple) mastectomy (breast only) WITHOUT dissection of axillary lymph nodes
- 50 Modified radical/total (simple) mastectomy (may include portion of pectoralis major) WITH dissection of axillary lymph nodes
- 60 Radical mastectomy WITH dissection of majority of pectoralis major WITH dissection of axillary lymph nodes
- 70 Extended radical mastectomy (code 60 PLUS internal mammary node dissection; may include chest wall and ribs)
- 80 Surgery of regional and/or distant site(s)/node(s) ONLY
- 90 Mastectomy, NOS; Surgery, NOS

APPENDIX C SITE-SPECIFIC SURGERY CODES

BREAST (cont'd)

NOTE: Codes '10'-'78' apply to unilateral resection of primary cancer.

Ignore removal of fragments or tags of muscle; removal of pectoralis minor; resection of pectoralis muscles, NOS; and resection of fascia with no mention of muscle.

Oophorectomy, adrenalectomy, and hypophysectomy will be coded as Endocrine (Hormone/Steroid) Therapy.

Codes '10'-'90' have priority over codes '00'-'09'.

Codes '10'-'78' have priority over codes '80'-'90'.

Surgery of primary not included in any category should be coded '90'.

In the range '10'-'78', the higher code has priority.

Codes '01'-'07' have priority over code '09'.

In the range '01'-'06', the higher code has priority.

Codes '01'-'07' and '09' cannot be used in combination with codes '10'-'90'.

Codes '01'-'06' have priority over code '07'.

Second digit is to be coded '8' when reconstructive surgery of the primary site is done as part of the planned first course of therapy.

SEER Program Code Manual (3rd Edition, 1998) Site-Specific Surgery Codes: Breast C50.0 - C50.9

(SEER Appendix C, pp. C-63 and C-64; NAACCR item # 1646)

These codes apply to cancers diagnosed 1998-2002 from SEER/NAACCR <u>and all years of pathology data from any source</u>. Any pathology data prior to 1998 or after 2002 may need to be converted since SEER/NAACCR coding is different in these years. The SCC has added some information to the SEER/NAACCR descriptions.

No Cancer Directed Surgery/Unknown (includes some biopsies)

00 Non-excisional Biopsy or No Cancer Directed Surgery

This category includes incisional, needle, or aspiration biopsies, but does not include excisional biopsies. Type of biopsy is recorded elsewhere in the Pathology Information File.

00 Non-excisional Biopsy or No Cancer Directed Surgery

Type of Cancer Directed Surgery/Surgery of Primary Site

These codes should be used when the intent of the surgical procedure was to remove the entire breast lesion REGARDLESS of whether the final margin status was positive or negative and REGARDLESS of whether the final diagnosis was benign or malignant.

10-17 Partial mastectomy, NOS; less than total mastectomy NOS

This category allows for detail if known. If the actual procedure is known, it should be coded as 11 to 17. Note that excisional biopsies are included here as 12. If the exact procedure is not known, code as 10.

Procedures coded as 10-17 remove the gross primary tumor and some of the breast tissue around the tumor (breast-conserving or preserving procedure). There may be microscopic residual tumor or positive surgical margins. For pathology data, enter the lymph node data in variables VIII.29 and VIII.38.

- Partial mastectomy, NOS; less than total mastectomy NOS (includes segmental mastectomy, lumpectomy, quadrantectomy, tylectomy, wedge resection, nipple resection, excisional biopsy)
 - 11 Nipple resection
 - 12 Lumpectomy or excision biopsy
 - 13 Re-excision of the biopsy site for gross or microscopic residual disease
 - 14 Wedge resection
 - 15 Quadrantectomy
 - 16 Segmental mastectomy
 - 17 Tylectomy

30 Subcutaneous mastectomy

A Subcutaneous mastectomy is the removal of breast tissue with the nipple and areolar complex or overlying skin. This procedure is rarely performed to treat malignancies. For pathology data, use VIII.29 and VII.38 to report removal of lymph nodes.

30 Subcutaneous mastectomy

40 Total (simple) mastectomy

A simple mastectomy removes all breast tissue, the nipple, and areolar complex. An axillary dissection is not done. A simple mastectomy WITH axillary dissection is coded as 50 (modified radical mastectomy) and node information should also be given in VIII.29 and VII.38. Codes 41 and 42 may be useful for identifying women with prophylactic mastectomies.

40 Total (simple) mastectomy NOS

- 41 WITHOUT removal of uninvolved contralateral breast
- 42 WITH removal of uninvolved contralateral breast

50 Modified radical mastectomy

Removes all breast tissue, the nipple, the areolar complex, and an en bloc resection of the axillary lymph nodes. The specimen may or may not include a portion of the pectoralis major muscle. Total mastectomy and axillary dissection is often used synonymously with modified radical mastectomy. For pathology data, lymph node information should also be included in variables VIII.29 and VII.38.

50 Modified radical mastectomy NOS

- 51 WITHOUT removal of uninvolved contralateral breast
- 52 WITH removal of uninvolved contralateral breast

60 Radical mastectomy

Removes all of the breast tissue, nipple, areolar complex, a variable amount of skin, pectoralis minor muscle, and pectoralis major muscle. Includes an en bloc resection of the axillary lymph nodes. This procedure was used prior to the introduction of partial mastectomy. It is now used very infrequently and only for advanced local breast cancer without evidence of distant metastatic disease. For pathology data, lymph node data should also be included in variables VIII.29 and VII.38.

60 Radical mastectomy NOS

- 61 WITHOUT removal of uninvolved contralateral breast
- 62 WITH removal of uninvolved contralateral breast

70 Extended radical mastectomy

This is code 60 with the addition of internal mammary node dissection and may include chest wall and ribs. Removes all of the breast tissue, nipple, areolar complex, variable amounts of skin, pectoralis minor, and pectoralis major. Includes removal of internal mammary lymph nodes and an en bloc resection of the axillary lymph nodes. This procedure would be very unlikely to be used currently. Biopsy of internal mammary nodes may be performed as part of breast surgery, particularly when a sentinel node procedure is employed. In this situation DO NOT use code 70. If an internal mammary node biopsy is performed, procedure code 10 (partial mastectomy) or procedure code 50 (total mastectomy) should be used. For pathology data, lymph node data should included in variables VIII.29 and VII.38.

70 Extended radical mastectomy

71 WITHOUT removal of uninvolved contralateral breast 72 WITH removal of uninvolved contralateral breast

80 Mastectomy, NOS

This code should be used only when it is known that a mastectomy was done, but the type is unknown. Prior to 1998 SEER collapsed mastectomy NOS and surgery NOS into the same category. It may be difficult to split these out retrospectively, so use code 90 when not sure.

80 Mastectomy, NOS

90 Surgery, NOS

This code should be used when it is known that surgery was done, but the type is unknown. Prior to 1998 SEER collapsed mastectomy NOS and surgery NOS into the same category. It may be difficult to split these out retrospectively, so use code 90 when not sure.

90 Surgery, NOS

99 Unknown

If it is unknown whether surgery was performed, then code as 99.

99 Unknown if cancer-directed surgery performed; death certificate ONLY

Mapping of Site-Specific Surgery Codes to 1998-2002 Codes for Pathology

	Year of Diagnosis			
Type of surgery		1998-	2003	
	Pre-1998	2002	and later	
No cancer-directed surgery or non-excisional biopsy	00, 07			
Incisional, needle or aspiration biopsy of other than	01			
primary site				
Incisional, needles, or aspiration biopsy of primary site	02			
Exploratory ONLY (no biopsy)	03	00	00	
Bypass surgery, -ostomy ONLY (no biopsy)	04			
Exploratory ONLY and 01 or 02	05			
Bypass surgery, -ostomy ONLY and 01 or 02	06			
Surgery of regional and/or distant site(s)/node(s) ONLY	80, 88*			
Local tumor destruction, NOS			19	
Partial mastectomy NOS	10, 20**	10	20	
Nipple resection		11	21	
Lumpectomy or excision biopsy		12	22	
Re-excision of the biopsy site		13	23	
Wedge resection		14		
Quadrantectomy		15		
Segmental mastectomy		16	24	
Tylectomy		17		
Subcutaneous mastectomy	30	30	30	
Total (simple) mastectomy	40, 48*	40	40	
WITHOUT removal of uninvolved contralateral breast			41	
Reconstruction, NOS			43	
Tissue		41	44	
Implant			45	
Combined (Tissue and Implant)			46	
WITH removal of uninvolved contralateral breast			42	
Reconstruction, NOS			47	
Tissue		42	48	
Implant			49	
Combined (Tissue and Implant)			75	
Modified radical mastectomy	50, 58*	50	50	
WITHOUT removal of uninvolved contralateral breast			51	
Reconstruction, NOS			53	
Tissue		51	54	
Implant			55	
Combined (Tissue and Implant)			56	
WITH removal of uninvolved contralateral breast			52	
Reconstruction, NOS			57	
Tissue		52	58	
Implant			59	
Combined (Tissue and Implant)			63	

Mapping of Site-Specific Surgery Codes to 1998-2002 Codes for <u>Pathology</u> (continued)

	Year of Diagnosis		
		1998-	2003
	Pre-1998 ¹	2002^{2}	and later ³
Radical mastectomy	60, 68*	60	60
WITHOUT removal of uninvolved contralateral breast			61
Reconstruction, NOS			64
Tissue		61	65
Implant			66
Combined (Tissue and Implant)			67
WITH removal of uninvolved contralateral breast			62
Reconstruction, NOS			68
Tissue		62	69
Implant			73
Combined (Tissue and Implant)			74
Extended radical mastectomy	70, 78*	70	70
WITHOUT removal of uninvolved contralateral breast		71	71
WITH removal of uninvolved contralateral breast		72	72
Mastectomy NOS		80	80
Surgery NOS		90	90
Mastectomy or Surgery, NOS	90***		
Unknown	09	99	99

¹ SEER Program Code Manual, Revised Edition, 1992 (Appendix C, pp. C-190 and C-191)

² SEER Program Code Manual, 3rd Edition, 1998 (Appendix C, pp. C-63 and C-64)

³ SEER Program Coding and Staging Manual 2004 (Appendix C, pp C-485 and C-486)

^{*} Prior to 1998, surgery codes that ended in 8 indicated reconstruction and the first digit indicated the type of surgery. After 2002, reconstruction is indicated by more-detailed surgery codes (43, 47, 53, 57, 64, and 68).

^{**} Prior to 1998, SEER category 10 was Partial/less than total mastectomy *without* dissection of axillary lymph nodes while those *with* axillary lymph nodes were coded as 20. This distinction was eliminated after 1998 since information about axillary lymph nodes is recorded elsewhere.

^{***} If supplementary information is known to distinguish between mastectomy and surgery, code as either 80 or 90 as appropriate. If supplementary information is not known, code as 90.

SEER Site-Specific Coding Guidelines BREAST C500-C509

Primary Site

C500 Nipple (areolar)

Paget disease without underlying tumor

C501 Central portion of breast (subareolar) area extending 1 cm around areolar complex

Retroareolar Infraareolar

Next to areola, NOS

Behind, beneath, under, underneath, next to, above, cephalad to, or below nipple

Paget disease with underlying tumor

C502 **Upper inner quadrant** (UIQ) of breast

Superior medial Upper medial Superior inner

C503 Lower inner quadrant (LIQ) of breast

Inferior medial Lower medial Inferior inner

C504 Upper outer quadrant (UOQ) of breast

Superior lateral Superior outer Upper lateral

C505 Lower outer quadrant (LOQ) of breast

Inferior lateral Inferior outer Lower lateral

C506 Axillary tail of breast

Tail of breast, NOS Tail of Spence

C508 Overlapping lesion of breast

Inferior breast, NOS Inner breast, NOS Lateral breast, NOS Lower breast, NOS Medial breast, NOS Midline breast NOS Outer breast NOS Superior breast, NOS Upper breast, NOS 3:00, 6:00, 9:00, 12:00 o'clock

C509 Breast, NOS

Entire breast

Multiple tumors in different subsites within breast

Inflammatory without palpable mass

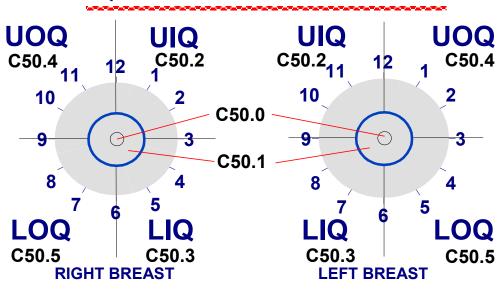
3/4 or more of breast involved with tumor

Diffuse (tumor size 998)

Additional Subsite Descriptors

The position of the tumor in the breast may be described as the positions on a clock

O'Clock Positions and Codes Quadrants of Breasts



Priority Order for Coding Subsites

Use the information from reports in the following priority order to code a subsite when the medical record contains conflicting information:

- 1 Pathology report
- 2 Operative report
- 3 Physical examination
- 4 Mammogram, ultrasound

If the pathology proves **invasive** tumor in **one subsite** and **insitu tumor** in all **other** involved subsites, code to the subsite involved with invasive tumor

When to Use Subsites 8 and 9

- A. Code the primary site to C508 when there is a **single tumor** that **overlaps** two or more subsites, and the **subsite** in which the tumor **originated** is **unknown**
- B. Code the primary site to C508 when there is a **single tumor** located at the **12**, **3**, **6**, **or 9 o'clock** position on the breast

Code the primary site to C509 when there are multiple tumors (two or more) in at least two quadrants of the breast

Laterality

Laterality must be coded for all subsites.

Single Tumor with Complex Histology

If the diagnosis is both **lobular and ductal** (insitu or invasive, or a combination of insitu and invasive) use code 8522

Example 1: Code duct carcinoma and lobular carcinoma insitu to the combination code 8522/3

Example 2: Code LCIS and DCIS to the combination code 8522/2

If the diagnosis is **mixed invasive and insitu**, code the invasive diagnosis

Example 1: Code ductal carcinoma with extensive cribriforming DCIS to the invasive ductal carcinoma (8500/3)

Example 2: Code mucinous carcinoma in a background of ductal carcinoma insitu to the invasive mucinous carcinoma (8480/3)

Example 3: Code infiltrating ductal carcinoma with DCIS, solid, cribriform, and comedo type to the invasive infiltrating ductal carcinoma (8500/3)

Use a **combination code** if the diagnosis is either ductal carcinoma OR lobular carcinoma mixed with another type of carcinoma. Look for the words "and" or "mixed" in the diagnosis.

Code duct carcinoma mixed with another type of carcinoma (excluding lobular) to 8523/

Example 1: Code duct carcinoma and tubular carcinoma to 8523/3

Example 2: Code DCIS and cribriform carcinoma insitu to 8523/2

Code lobular carcinoma mixed with another type of carcinoma (excluding ductal) to 8524

Example 1: Code lobular and adenoid cystic carcinoma to 8524/3

Example 2: Code tubular carcinoma and lobular carcinoma as 8524/3

Code the infiltrating ductal subtype even if the code is numerically lower than infiltrating ductal (8500/_) when
the following terms are used
Type: Duct carcinoma, type
Predominantly: Duct carcinoma, predominantly
With features of: Duct carcinoma with features of
Subtype: Infiltrating ductal, subtype
Variant: Duct carcinoma, variant
Other terms that indicate the majority of tumor

Example 1: Duct carcinoma, tubular type. Code the histology as tubular carcinoma, 8211/3

Example 2: Duct carcinoma with apocrine features. Code the histology as aprocrine carcinoma 8401/3

If the diagnosis includes **more than one subtype**, use a combination code

Example 1: Duct carcinoma, cribriform and comedo types. Code the histology to 8523/3

Example 2: Duct carcinoma insitu showing both solid and cribriforming subtypes. Code the histology as 8523/2

Separate Tumors of Different Histologies in One Breast

If different histologies occur in **separate tumors in the same breast**, use the multiple primary rules to determine if there is one or more primaries. If, according to the rules, there are two primaries, abstract and stage separately. If, according to the rules, there is one primary, abstract and stage as one primary. Use a combination code for combinations of duct and lobular or combinations of duct and Paget disease.

Example 1: Lobular carcinoma insitu in the upper inner quadrant of the right breast and duct carcinoma in the lower inner quadrant of the right breast. Code the histology as 8522/3

Example 2: Paget disease of nipple and intraductal carcinoma, upper outer quadrant. Code the histology as 8543/3

Grade

Priority Rules for Grading Breast Cancer

Code the tumor grade using the following priority order:

Bloom-Richardson (Nottingham) scores 3-9 converted to grade (see conversion table below) **Bloom Richardson grade** (low, intermediate, high)

Nuclear grade only

Terminology

Differentiation (well differentiated, moderately differentiated, etc)

Histologic grade

Grade i, grade ii, grade iii, grade iv

Bloom-Richardson (BR)

BR may **also** be **called**: modified Bloom-Richardson, Scarff-Bloom-Richardson, SBR grading, BR grading, Elston-Ellis modification of Bloom Richardson score, the Nottingham modification of Bloom Richardson score, Nottingham-Tenovus, or Nottingham grade

BR may be expressed in **scores** (range 3-9)

The score is based on three morphologic features of "invasive no-special-type" breast cancers (degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism of tumor cells)

Use the following table to convert the score into SEER code

BR may be expressed as a grade (low, intermediate, high)

BR grade is derived from the BR score

For cases diagnosed 1996 and later, use the following table to convert the BR grade into SEER code (Note that the conversion of low, intermediate, and high is different from the conversion used for all other tumors)

Convert BR Score to SEER Code

Use the table below to convert BR score to SEER code.

BR Combined Score	Differentiation	Grade	SEER Code
3, 4, 5	Well differentiated	I	1
6, 7	Moderately differentiated	II	2
8, 9	Poorly differentiated	III	3

Convert BR Grade to SEER Code

Use the table below to convert BR **grade** to SEER code.

BR Grade	Differentiation	Grade	SEER Code
BR low grade	Well differentiated	I	1
BR intermediate grade	Moderately differentiated	II	2
BR high grade	Poorly differentiated	III	3

Three-Grade System (Nuclear Grade)

There are several sites for which a three-grade system is used. The patterns of cell growth are measured on a scale of 1, 2, and 3 (also referred to as low, medium, and high grade). This system measures the proportion of cancer cells that are growing and making new cells and how closely they resemble the cells of the host tissue. Thus, it is similar to a four-grade system, but simply divides the spectrum into three rather than four categories (see comparison table above). The expected outcome is more favorable for lower grades.

If a grade is written as 2/3 that means this is a grade 2 of a three-grade system. Do not simply code the numerator. Use the table below to convert the grade to SEER codes.

Term	Grade	SEER Code
1/3, 1/2	Low grade	2
2/3	Intermediate grade	3
3/3, 2/2	High grade	4

Laterality

Laterality must be coded for all subsites.

Tumor Markers

Estrogen and progesterone receptors (ERA and PRA) are positive in most breast cancers. A positive ERA and PRA indicates a better prognosis and response to estrogen therapy.

Size of Primary Tumor

General Coding Guidelines

If multiple masses are present, code the diameter of the largest invasive mass. Ignore the insitu even if it is larger than the invasive.

If the patient had **neoadjuvant** treatment, code the **largest** tumor size **documented**, clinical or pathologic.

Tumors That Are Purely Invasive or Purely Insitu

For purely invasive or purely insitu tumors, record the size of tumor based on the following priority of reports.

Priority in which to use Reports to Code Tumor Size

- 1. Pathology report
- 2. Operative report
- 3. Physical examination
- 4. Imaging (mammography)
- 5. Imaging (ultrasound)

Single Tumors with Both Invasive and Insitu Components

Record the size of the invasive component, if given.

If **both** an *insitu* and an **invasive** component are present, and the invasive component is measured, record the size of the invasive component even if it is smaller.

Example: Tumor is 37 mm mixed insitu and invasive adenocarcinoma. Pathology documents that 14 mm is invasive. *Record tumor size as 014.*

General Staging Guidelines

DO NOT USE the following to determine tumor extension:

- A. Dimpling of the skin, tethering, nipple retraction, nipple involvement or skin changes other than those listed in CS extension code 51 (See also CS Extension, Note 1)
- B. **Micro**scopic satellite skin nodules (macroscopic or gross nodules in skin of primary breast are used in staging)
- C. Microscopically proven invasion of lymphatic vessels within the breast

Site-Specific Surgery Codes

Breast

C500-C509

(Except for M-9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9964, 9980-9989)

Codes

- None; **no surgery** of primary site; **autopsy** ONLY
- 19 Local tumor destruction, NOS

No specimen was sent to **pathology** for surgical events coded 19 (principally for cases diagnosed prior to January 1, 2003)

- 20 Partial mastectomy, NOS; less than total mastectomy, NOS
 - 21 Partial mastectomy WITH nipple resection
 - 22 Lumpectomy or excisional biopsy
 - 23 Reexcision of the biopsy site for gross or microscopic residual disease
 - 24 Segmental mastectomy (including wedge resection, quadrantectomy, tylectomy)

Procedures coded **20–24** remove **the gross primary tumor** and some of the breast tissue (breast-conserving or preserving). There may be microscopic residual tumor.

30 Subcutaneous mastectomy

A subcutaneous mastectomy is the removal of breast tissue without the nipple and areolar complex or overlying skin

[**SEER Note:** This procedure is rarely used to treat malignancies]

- 40 Total (simple) mastectomy, NOS
 - 41 WITHOUT removal of uninvolved contralateral breast
 - 43 Reconstruction, NOS
 - 44 Tissue
 - 45 Implant
 - 46 Combined (Tissue and implant)
 - WITH removal of uninvolved contralateral breast
 - 47 Reconstruction, NOS
 - 48 Tissue
 - 49 Implant
- 75 Combined (Tissue and implant)

[SEER Notes: If axillary lymph nodes are present in the specimen, code the Surgery of Primary Site field to 51. If there are no axillary lymph nodes present in the specimen, code the Surgery of Primary Site field to 41. Placement of a tissue expander at the time of original surgery means that reconstruction is planned as part of the first course of treatment.]

A total (simple) mastectomy removes all breast tissue, the nipple, and areolar complex. An axillary dissection is not done.

For **single** primaries only, code removal of involved contralateral breast under the data item **Surgical Procedure/Other Site** (NAACCR Item # 1294)

If **contralateral breast** reveals a **second primary**, each breast is abstracted separately. The surgical procedure is coded 41 for the first primary. The surgical code for the contralateral breast is coded to the procedure performed on that site.

- 50 Modified radical mastectomy
 - 51 WITHOUT removal of uninvolved contralateral breast
 - 53 Reconstruction, NOS
 - 54 Tissue
 - 55 Implant
 - 56 Combined (Tissue and Implant)
 - WITH removal of uninvolved contralateral breast
 - 57 Reconstruction, NOS
 - 58 Tissue
 - 59 Implant
- 63 Combined (Tissue and Implant)

Removal of all breast tissue, the nipple, the areolar complex, and variable amounts of breast skin in continuity with the axilla. The specimen may or may not include a portion of the pectoralis major muscle. If contralateral breast reveals a second primary, it is abstracted separately. The surgical procedure is coded 51 for the first primary. The surgical code for the contralateral breast is coded to the procedure performed on that site.

For single primaries only, code removal of involved contralateral breast under the data item Surgical Procedure/Other Site (NAACCR Item # 1294)

[SEER Notes: In continuity with or "en bloc" means that all of the tissues were removed during the same procedure, but not necessarily in a single specimen. "Tissue" for reconstruction is defined as human tissue such as muscle (latissimus dorsi or rectus abdominis) or skin in contrast to artificial prostheses (implants). Placement of a tissue expander at the time of original surgery indicates that reconstruction is planned as part of the first course of treatment. Assign code 51 or 52 if a patient has an excisional biopsy and axillary dissection followed by a simple mastectomy during the first course of therapy.]

- 60 Radical mastectomy, NOS
 - 61 WITHOUT removal of uninvolved contralateral breast
 - 64 Reconstruction, NOS
 - 65 Tissue
 - 66 Implant
 - 67 Combined (Tissue and Implant)
 - 62 WITH removal of uninvolved contralateral breast
 - 68 Reconstruction, NOS
 - 69 Tissue
- 73 Implant
- 74 Combined (Tissue and Implant)

[SEER Notes: Removal of breast tissue, nipple, areolar complex, variable amount of skin, pectoralis minor, pectoralis major. Includes en bloc axillary dissection. Placement of a tissue expander at the time of original surgery indicates that reconstruction is planned as part of the first course of treatment.]

- 70 Extended radical mastectomy
 - 71 WITHOUT removal of uninvolved contralateral breast
 - 72 WITH removal of uninvolved contralateral breast

[SEER Note: Removal of breast tissue, nipple, areolar complex, variable amount of skin, pectoralis minor, pectoralis major. Includes removal of internal mammary nodes and en bloc axillary dissection.]

- 80 Mastectomy, NOS
- 90 Surgery, NOS
- 99 Unknown if surgery performed; death certificate ONLY

Breast

C50.0-C50.6, C50.8-C50.9

C50.0 Nipple

C50.1 Central portion of breast

C50.2 Upper-inner quadrant of breast

C50.3 Lower-inner quadrant of breast

C50.4 Upper-outer quadrant of breast

C50.5 Lower-outer quadrant of breast

C50.6 Axillary tail of breast

C50.8 Overlapping lesion of breast

C50.9 Breast, NOS

Note: Laterality must be coded for this site.

CS Tumor Size CS Extension CS TS/Ext-Eval CS Lymph Nodes CS Reg Nodes Eval Reg LN Pos Reg LN Exam CS Mets at DX CS Mets Eval	CS Site-Specific Factor 1 - Estrogen Receptor Assay (ERA) CS Site-Specific Factor 2 - Progesterone Receptor Assay (PRA) CS Site-Specific Factor 3 - Number of Positive Ipsilateral Axillary Lymph Nodes CS Site-Specific Factor 4 - Immunohistochemistry (IHC) of Regional Lymph Nodes CS Site-Specific Factor 5 - Molecular Studies of Regional	The following tables are available at the collaborative staging website: Histology Exclusion Table AJCC Stage Extension Size Table Extension Behavior Table Lymph Nodes Positive Axillary Nodes Table IHC MOL Table Lymph Nodes Pathologic Evaluation Table Lymph Nodes Clinical Evaluation
	-	

Breast

CS Tumor Size (Revised: 07/28/2006)

Note 1: For tumor size, some breast cancers cannot be sized pathologically.

Note 2: When coding pathologic size, code the measurement of the invasive component. For example, if there is a large in situ component (e.g., 4 cm) and a small invasive component see Site-Specific Factor 6 to code more information about the reported tumor size. If the size of invasive component is not given, code the size of the entire tumor and record what it represents in Site-Specific Factor 6.

Note 3: Microinvasion is the extension of cancer cells beyond the basement membrane into the adjacent tissues with no focus more than 0.1 cm in greatest dimension. When there are multiple foci of microinvasion, the size of only the largest focus is used to classify the microinvasion. (Do not use the sum of all the individual foci.)

Code	Description
000	No mass/tumor found
001-988	001 - 988 millimeters (code exact size in millimeters)
989	989 millimeters or larger
990	Microinvasion; microscopic focus or foci only, no size given; described as less than 1 mm
991	Described as "less than 1 cm"
992	Described as "less than 2 cm," or "greater than 1 cm," or "between 1 cm and 2 cm"
993	Described as "less than 3 cm," or "greater than 2 cm," or "between 2 cm and 3 cm"
994	Described as "less than 4 cm," or "greater than 3 cm," or "between 3 cm and 4 cm"
995	Described as "less than 5 cm," or "greater than 4 cm," or "between 4 cm and 5 cm"
996	Mammographic/xerographic diagnosis only, no size given; clinically not palpable

997	Paget's Disease of nipple with no demonstrable tumor
998	Diffuse
999	Unknown; size not stated Not documented in patient record

Breast

CS Extension (Revised: 08/15/2006)

Note 1: Changes such as dimpling of the skin, tethering, and nipple retraction are caused by tension on Cooper's ligament(s), not by actual skin involvement. They do not alter the classification.

Note 2: Consider adherence, attachment, fixation, induration, and thickening as clinical evidence of extension to skin or subcutaneous tissue, code '20'.

Note 3: Consider "fixation, NOS" as involvement of pectoralis muscle, code '30'.

Note 4: If extension code is 00, then Behavior code must be 2; if extension code is 05 or 07, then behavior code may be 2 or 3; and, if extension code is 10, then behavior code must be 3.

Note 5: Inflammatory Carcinoma. AJCC includes the following text in the 6th edition Staging Manual (p. 225-6), "Inflammatory carcinoma is a clinicopathologic entity characterized by diffuse erythema and edema (peau d'orange) of the breast, often without an underlying palpable mass. These clinical findings should involve the majority of the skin of the breast. Classically, the skin changes arise quickly in the affected breast. Thus the term of inflammatory carcinoma should not be applied to a patient with neglected locally advanced cancer of the breast presenting late in the course of her disease. On imaging, there may be a detectable mass and characteristic thickening of the skin over the breast. This clinical presentation is due to tumor emboli within dermal lymphatics, which may or may not be apparent on skin biopsy. The tumor of inflammatory carcinoma is classified T4d. It is important to remember that inflammatory carcinoma is primarily a clinical diagnosis. Involvement of the dermal lymphatics alone does not indicate inflammatory carcinoma in the absence of clinical findings. In addition to the clinical picture, however, a biopsy is still necessary to demonstrate cancer either within the dermal lymphatics or in the breast parenchyma itself."

Note 6: For Collaborative Staging, the abstractor should record a stated diagnosis of inflammatory carcinoma, and also record any clinical statement of the character and extent of skin involvement in the text area. Code 71 should be used if there is a stated diagnosis of inflammatory carcinoma and a clinical description of the skin involvement in less than 50% of the skin of the breast. Code 73 should be used if there is a stated diagnosis of inflammatory carcinoma and a clinical description of the skin involvement in more than 50% (majority) of the skin of the breast. Cases with a stated diagnosis of inflammatory carcinoma but no such clinical description should be coded 71. A clinical description of inflammation, erythema, edema, peau d'orange, etc. without a stated diagnosis of inflammatory carcinoma should be coded 51 or 52, depending on described extent of the condition.

Code	Description	TNM	SS77	SS2000
00	In situ: noninfiltrating; intraepithelial Intraductal WITHOUT infiltration Lobular neoplasia	Tis	IS	IS
05	Paget Disease of nipple (WITHOUT underlying tumor)	Tis	**	**
07	Paget Disease of nipple (WITHOUT underlying invasive carcinoma pathologically)	Tis	**	**
10	Confined to breast tissue and fat including nipple and/or areola Localized, NOS	*	L	L
20	Invasion of subcutaneous tissue Local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension Skin infiltration of primary breast including skin of nipple and/or areola	*	RE	RE
30	Attached or fixation to pectoral muscle(s) or underlying tissue Deep fixation Invasion of (or fixation to) pectoral fascia or muscle	*	RE	RE

-				
40	Invasion of (or fixation to): Chest wall Intercostal or serratus anterior muscle(s) Rib(s)	T4a	RE	RE
51	Extensive skin involvement, including: Satellite nodule(s) in skin of primary breast Ulceration of skin of breast Any of the following conditions described as involving not more than 50% of the breast, or amount or percent of involvement not stated: Edema of skin En cuirasse Erythema Inflammation of skin Peau d'orange ("pigskin")	T4b	RE	RE
52	Any of the following conditions described as involving more than 50% of the breast WITHOUT a stated diagnosis of inflammatory carcinoma: Edema of skin En cuirasse Erythema Inflammation of skin Peau d'orange ("pigskin")	T4b	RE	RE
61	(40) + (51)	T4c	RE	RE
62	(40) + (52)	T4c	RE	RE
71	Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., involving not more than 50% of the skin of the breast, or percent of involvement not stated, WITH or WITHOUT dermal lymphatic infiltration Inflammatory carcinoma, NOS	T4d	RE	RE
72	OBSOLETE - Description: Diagnosis of inflammatory WITH a clinical diagnosis of inflammation, erythema, edema, peau d'orange, etc., of more than 50% of the breast, WITH or WITHOUT dermal lymphatic infiltration Inflammatory carcinoma, NOS NOTE: Code 72 has been combined with code 71. Any cases coded to 72 should be re-coded to code 71.	T4d	RE	RE
73	Diagnosis of inflammatory carcinoma WITH a clinical description of inflammation, erythema, edema, peau d'orange, etc., of more than 50% of the skin of the breast, WITH or WITHOUT dermal lymphatic infiltration	T4d	RE	RE
95	No evidence of primary tumor	Т0	U	U
99	Unknown extension Primary tumor cannot be assessed Not documented in patient record	TX	U	U
	•			

^{*} For Extension codes 10, 20, and 30 ONLY, the T category is assigned based on value of CS Tumor Size as shown in the Extension Size Table for this site.

^{**} For codes 05 and 07 ONLY, summary stage is assigned based on the value of Behavior Code ICD-0-3 as shown in the Extension Behavior Table for this site.

Breast CS TS/Ext-Eval SEE STANDARD TABLE

Breast

CS Lymph Nodes (Revised: 10/03/2007)

Note 1: Code only regional nodes and nodes, NOS, in this field. Distant nodes are coded in the field Mets at DX.

Note 2: If the pathology report indicates that nodes are positive but size of the metastases is not stated, assume the metastases are greater than 0.2 mm and code the lymph nodes as positive in this field. Use code 60 in the absence of other information about regional nodes.

Note 3: If no lymph nodes were removed for evaluation (Reg Nodes Eval code 0, 1, or 9), or if neoadjuvant therapy was given and clinical lymph node involvement is AS extensive or MORE extensive than pathologic lymph node involvement (Reg Nodes Eval code 5), then use only the following codes for clinical evaluation of regional nodes: 0, 29, 51, 60, 74, 75, 76, 77, 78, 80, and 99. Do not use codes 29 and 51 under any other circumstances (Reg Nodes Eval 2, 3, 6, or 8).

Note 4: Isolated tumor cells (ITC) are defined as single tumor cells or small clusters not greater than 0.2 mm, usually detected only by immunohistochemical (IHC) or molecular methods but which may be verified on H and E stains. ITCs do not usually show evidence of malignant activity (e.g., proliferation or stromal reaction). Lymph nodes with ITCs only are not considered positive lymph nodes.

Note 5: Codes 13-52 are used for positive axillary nodes without internal mammary nodes.

Code	Description	TNM	SS77	SS2000
00	None; no regional lymph node involvement, or ITCs detected by immunohistochemistry or molecular methods ONLY. (See Note 5 and Site-specific Factors 4 and 5.)	*	NONE	NONE
05	None; no regional lymph node(s) but with (ITCs) detected on routine H and E stains. (See Note 5)	N0(i+)	NONE	NONE
13	Axillary lymph node(s), ipsilateral, micrometastasis ONLY detected by immunohistochemical (IHC) means ONLY (at least one micrometastasis greater than 0.2 mm and all micrometastases less than or equal to 2 mm)	N1mi	RN	RN
15	Axillary lymph node(s), ipsilateral, micrometastasis ONLY detected or verified on H&E (at least one micrometastasis greater than 0.2 mm and all micrometastases less than or equal to 2 mm) Micrometastasis, NOS	N1mi	RN	RN
25	Movable axillary lymph node(s), ipsilateral, positive with more than micrometastasis (i.e., at least one metastasis greater than 2 mm)	**	RN	RN
26	Stated as N1, NOS	**	RN	RN
28	OBSOLETE - Stated as N2, NOS	**	RN	RN
29	Clinically stated only as N2, NOS (clinical assessment because of neoadjuvant therapy or no pathology)	**	RN	RN
30	Pathologically stated only as N2 NOS; no information on which nodes were involved	**	RN	RN
50	OBSOLETE - Fixed/matted ipsilateral axillary nodes, positive with more than micrometastasis (i.e., at least one metastasis greater than 2 mm) Fixed/matted ipsilateral axillary nodes, NOS	**	RN	RN
51	Fixed/matted ipsilateral axillary nodes clinically (clinical assessment because of neoadjuvant therapy or no pathology) Stated clinically as N2a, NOS (clinical assessment because of neoadjuvant therapy or no pathology)	**	RN	RN

52	Fixed/matted ipsilateral axillary nodes clinically with pathologic involvement of lymph nodes at least one metastasis greater than 2mm	**	RN	RN
60	Axillary/regional lymph node(s), NOS Lymph nodes NOS	**	RN	RN
71	Internal mammary node(s), ipsilateral, positive on sentinel nodes but not clinically apparent (no positive imaging or clinical exam) WITHOUT axillary lymph node(s), ipsilateral	N1b	RN	RN
72	Internal mammary node(s), ipsilateral, positive on sentinel nodes but not clinically apparent (no positive imaging or clinical exam) WITH axillary lymph node(s), ipsilateral	**	RN	RN
73	Internal mammary node(s), ipsilateral, positive on sentinel nodes but not clinically apparent (no positive imaging or clinical exam) UNKNOWN if positive axillary lymph node(s), ipsilateral	N1b	RN	RN
74	Internal mammary node(s), ipsilateral, clinically apparent (on imaging or clinical exam) WITHOUT axillary lymph node(s), ipsilateral	N2b	RN	RN
75	Infraclavicular lymph node(s)(subclavicular)	N3a	D	RN
76	Internal mammary node(s), ipsilateral, clinically apparent (on imaging or clinical exam) WITH axillary lymph node(s), ipsilateral, codes 15 to 60 WITH or WITHOUT infraclavicular lymph nodes	N3b	RN	RN
77	Internal mammary node(s), ipsilateral, clinically apparent (on imaging or clinical exam) UNKNOWN if positive axillary lymph node(s), ipsilateral	N2b	RN	RN
78	(75) + (77)	N3a	D	RN
79	Stated as N3, NOS	N3NOS	RN	RN
80	Supraclavicular node(s)	N3c	D	D
99	Unknown; not stated Regional lymph node(s) cannot be assessed Not documented in patient record	NX	U	U

^{*} For code 00 ONLY, the N category is assigned based on the coding of Site-Specific Factors 4 and 5 using the IHC MOL Table for this site.

Breast CS Reg Nodes Eval SEE STANDARD TABLE

^{**} For codes 25, 26, 28, 29, 30, 50, 51, 52, 60, and 72 ONLY, the N category is assigned based on the values of Site-Specific Factor 3 (Number of Positive Ipsilateral Axillary Lymph Nodes) and CS Reg Nodes Eval. If the Eval code is 2 (p), 3 (p), 6 (y), or 8 (a), the N category is determined by reference to the Lymph Nodes Pathologic Evaluation Table. If the Eval code is 0 (c), 1(c), 5(c), or 9 (c), the N category is determined by reference to the Lymph Nodes Clinical Evaluation Table. If the Eval field is not coded, the N category is determined by reference to the Lymph Nodes Positive Axillary Node Table.

Breast

Reg LN Pos (Revised: 08/21/2006)

Note 1: Record this field even if there has been preoperative treatment.

Note 2: Lymph nodes with only isolated tumor cells (ITCs) are NOT counted as positive lymph nodes. Only lymph nodes with metastases greater than 0.2mm (micrometastases or larger) should be counted as positive. If the pathology report indicates that nodes are positive but size of the metastases is not stated, assume the metastases are > 0.2mm and code the lymph nodes as positive in this field.

Note 3: Record all positive regional lymph nodes in this field. Record the number of positive regional axillary nodes separately in the appropriate Site-Specific Factor field.

Code	Description						
00	All nodes examined negative.						
01-89	- 89 nodes positive (code exact number of nodes positive)						
90	0 or more nodes positive						
95	Positive aspiration or core biopsy of lymph node(s)						
97	Positive nodes - number unspecified						
98	No nodes examined						
99	Unknown if nodes are positive; not applicable Not documented in patient record						

Breast Reg LN Exam SEE STANDARD TABLE

Breast

CS Mets at DX (Revised: 05/06/2004)

Note: Supraclavicular (transverse cervical) is moved to CS Lymph Nodes.

Code	Description	TNM	SS77	SS2000
00	No; none	M0	NONE	NONE
10	Distant lymph node(s) Cervical, NOS Contralateral/bilateral axillary and/or internal mammary Other than above Distant lymph node(s), NOS	M1	D	D
40	Distant metastases except distant lymph node(s) (code 10) Distant metastasis, NOS Carcinomatosis	M1	D	D
42	Further contiguous extension: Skin over: Axilla Contralateral (opposite) breast Sternum Upper abdomen	M1	D	D

44	Metastasis: Adrenal (suprarenal) gland Bone, other than adjacent rib Contralateral (opposite) breast - if stated as metastatic Lung Ovary Satellite nodule(s) in skin other than primary breast	M1	D	D
50	(10) + any of [(40 to 44)] Distant lymph node(s) plus other distant metastases	M1	D	D
99	Unknown if distant metastasis Distant metastasis cannot be assessed Not documented in patient record	MX	U	U

Breast CS Mets Eval SEE STANDARD TABLE

Breast

$CS\ Site-Specific\ Factor\ 1\ Estrogen\ Receptor\ Assay\ (ERA)\ {\tiny (Revised:\ 09/07/2007)}$

Note 1:

- A. In cases where ER and PR are reported on more than one tumor specimen, record the highest value (if any sample is positive, record as positive).
- B. If neoadjuvant therapy is given, record the assay from tumor specimens prior to neoadjuvant therapy.
- C. If neoadjuvant therapy is given and there are no ER or PR results from pre-treatment specimens, report the findings from post-treatment specimens.

Note 2: In general, ER/PR is only done on one sample. In cases where it is done on more than one sample, there is not necessarily any reason to think that the most accurate is the test done on the "largest" tumor specimen. Clinically, treatment will be based on any positive test - in other words, given the benefit and minimal toxicity of hormonal therapy, most patients will be given the "benefit of the doubt" and given hormonal therapy if any ER test is positive.

Code	Description						
000	not done (test was not ordered and was not performed)						
010	ve/elevated						
020	tive/normal; within normal limits						
030	orderline; undetermined whether positive or negative						
080	Ordered, but results not in chart						
999	Unknown or no information Not documented in patient record						

Breast

CS Site-Specific Factor 2 Progesterone Receptor Assay (PRA) (Revised: 09/07/2007)

- A. In cases where ER and PR are reported on more than one tumor specimen, record the highest value (if any sample is positive, record as positive).
- B. If neoadjuvant therapy is given, record the assay from tumor specimens prior to neoadjuvant therapy.
- C. If neoadjuvant therapy is given and there are no ER or PR results from pre-treatment specimens, report the findings from post-treatment specimens.

Note 2: In general, ER/PR is only done on one sample. In cases where it is done on more than one sample, there is not necessarily any reason to think that the most accurate is the test done on the "largest" tumor specimen.

Code	Description						
000	t not done (test was not ordered and was not performed)						
010	tive/elevated						
020	ative/normal; within normal limits						
030	orderline; undetermined whether positive or negative						
080	Ordered, but results not in chart						
999	Unknown or no information Not documented in patient record						

Breast

CS Site-Specific Factor 3 Number of Positive Ipsilateral Axillary Lymph Nodes (Revised: 07/29/2004)

- **Note 1:** Record this field even if there has been preoperative treatment.
- **Note 2:** Lymph nodes with only isolated tumor cells (ITCs) are NOT counted as positive lymph nodes. Only lymph nodes with metastases greater than 0.2 mm (micrometastases or larger) should be counted as positive. If the pathology report indicates that nodes are positive but size of the metastases is not stated, assume the metastases are greater than 0.2 mm and code the lymph nodes as positive in this field.
- **Note 3:** This field is based on pathologic information only. If no ipsilateral axillary nodes were removed for examination, or if an ipsilateral axillary lymph node drainage area was removed but no lymph nodes were found, code 098.
- **Note 4**. The general coding instructions in Part I for Regional Nodes Positive also apply to this field (although the codes in Regional Nodes Positive are 2 digits rather than 3). When positive ipsilateral axillary lymph nodes are coded in this field, the number of positive ipsilateral axillary lymph nodes must be less than or equal to the number coded in Regional Nodes Positive (i.e., the number of positive ipsilateral axillary nodes will always be a subset of the number of positive regional nodes.)

Code	Description					
000	All ipsilateral axillary nodes examined negative					
001-089	1 - 89 nodes positive (code exact number of nodes positive)					
090	more nodes positive					
095	ositive aspiration of lymph node(s)					
097	Positive nodes - number unspecified					
098	No axillary nodes examined					
099	Unknown if axillary nodes are positive; not applicable Not documented in patient record					

Breast

CS Site-Specific Factor 4 Immunohistochemistry (IHC) of Regional Lymph Nodes (Revised: 03/17/2004)

Note 1: Use codes 000-009 only to report results of IHC on otherwise histologically negative lymph nodes on routine H and E stains., i.e., only when CS Lymph Nodes is coded 00. Otherwise code 888 in this field.

Note 2: Isolated tumor cells (ITC) are defined as single tumor cells or small clusters 0.2 mm, usually detected only by immunohistochemical (IHC) or molecular methods (RT-PCR: Reverse Transcriptase Polymerase Chain Reaction) but which may be verified on H and E stains. ITCs do not usually show evidence of malignant activity (e.g., proliferation or stromal reaction.)

Note 3: If it is unstated whether or not IHC tests were done, assume they were not done.

Code	Description					
000	Regional lymph nodes negative on H and E, no IHC studies done or unknown if IHC studies done Nodes clinically negative, not examined pathologically					
001	degional lymph nodes negative on H and E, IHC studies done, negative for tumor					
002	Regional lymph nodes negative on H and E, IHC studies done, positive for ITCs (tumor cell clusters not greater than 0.2mm)					
009	Regional lymph nodes negative on H and E, positive for tumor detected by IHC, size of tumor cell clusters or metastases not stated					
888	Not applicable CS Lymph Nodes not coded 00					

Breast

CS Site-Specific Factor 5 Molecular Studies of Regional Lymph Nodes (Revised: 12/03/2003)

Note 1: Use codes 000-002 only to report results of molecular studies on otherwise histologically negative lymph nodes on routine H and E stains., i.e., only when CS Lymph Nodes is coded 00. Otherwise code 888 in this field. **Note 2:** Isolated tumor cells (ITC) are defined as single tumor cells or small clusters less than or equal to 0.2 mm, usually detected only by immunohistochemical (IHC) or molecular methods (RT-PCR: Reverse Transcriptase Polymerase Chain Reaction) but which may be verified on H and E stains. ITCs do not usually show evidence of malignant activity (e.g., proliferation or stromal reaction.)

Note 3: If it is not stated whether molecular tests were done, assume they were not done.

Code	Description
000	Regional lymph nodes negative on H and E, no RT-PCR molecular studies done or unknown if RT-PCR studies done Nodes clinically negative, not examined pathologically
001	Regional lymph nodes negative on H and E, RT-PCR molecular studies done, negative for tumor
002	Regional lymph nodes negative on H and E, RT-PCR molecular studies done, positive for tumor
888	Not applicable CS Lymph Nodes not coded 00

Breast

CS Site-Specific Factor 6 Size of Tumor--Invasive Component (Revised: 02/03/2005)

Note 1: Record the code that indicates how the pathological tumor size was coded in CS Tumor Size.

Note 2: For this field, "mixed" indicates a tumor with both invasive and in situ components. Such a "mixed" tumor may be a single histology such as mixed infiltrating ductal and ductal carcinoma in situ or combined histology such as mixed infiltrating ductal and lobular carcinoma in situ. "Pure" indicates a tumor that contains only invasive or only in situ tumor.

Note 3: This information is collected for analytic purposes and does not affect the stage grouping algorithm. Different codes in this field may explain differences in outcome for patients in the same T category or stage group. Example: Patient 1 has a "mixed" (see Note 2) tumor measuring 2.5 cm with extensive areas of in situ tumor, and the size of the invasive component is not stated. This would be coded 025 in CS Tumor Size, and would be classified as T2. It would be coded 040 in Site-Specific Factor 6. Patient 2 has a purely invasive tumor measuring 2.5 cm. This would also be coded 025 in CS Tumor Size and would also be classified as T2. However, it would be coded 000 in Site-Specific Factor 6. Patient 1's tumor would probably have a better survival than Patient 2's tumor, since it would more likely be a T1 lesion if the true dimensions of the invasive component were known.

Code	Description							
000	Entire tumor reported as invasive (no in situ component reported)							
010	Entire tumor reported as in situ (no invasive component reported)							
020	Invasive and in situ components present, size of invasive component stated and coded in CS Tumor Size							
030	Invasive and in situ components present, size of entire tumor coded in CS Tumor Size because size of invasive component not stated AND in situ described as minimal (less than 25%)							
040	Invasive and in situ components present, size of entire tumor coded in CS Tumor Size because size of invasive component not stated AND in situ described as extensive (25% or more)							
050	Invasive and in situ components present, size of entire tumor coded in CS Tumor Size because size of invasive component not stated AND proportions of in situ and invasive not known							
060	Invasive and in situ components present, unknown size of tumor (CS Tumor Size coded 999)							
888	Unknown if invasive and in situ components present, unknown if tumor size represents mixed tumor or a "pure" tumor. (See Note 2.) Clinical tumor size coded.							

Comparison of Codes for TNM Staging System for Breast Cancer

Primary Tumor (T) ¹ Definition		TNM T Pathologic and Clinical ² (NAACCR # 880 & 940 - Registry fields VI.27 & 28) (through 2003)	Derived AJCC T ³ (NAACCR # 2940 - Registry field VI.29) (2004+)	CS Recode Program ⁴ (Historical codes)	
T0 (no tumor) T0a T0b	*	0	00	70 71 72	
Та		A	01	01	
Tis (in situ) Tis (DCIS)	*	IS	05	00 02	
Tis (DCIS) Tis (LCIS) Tis (Paget)	+ + +			02 03 04	
T1 (<= 2cm) T1mic	*	1 1M	10 11	10 14	
T1a T1a1 T1a2	*	1A A1 A2	12 13 14	11 16 17	
T1b T1b1 T1b2 T1c	*	1B B1 B2 1C	15 16 17 18	12	
T1x, T1 NOS		10	19	19	
T2 (>2, <=5 cm) T2a T2b T2c T2x, T2 NOS	*	2 2A 2B 2C	20 21 22 23 29	20 21 22 23 29	
T3 (>5 cm) T3a T3b T3c T3x, T3 NOS	*	3 3A 3B 3C	30 31 32 33 39	30 31 32 33 39	
T4 (any size, direct extension) T4a T4b T4c T4d T4x, T4 NOS	* * * *	4 4A 4B 4C 4D	40 41 42 43 44 49	40 41 42 43 44 49	
TX (cannot be assessed) TXa TXb TXc TXd	*	X	99	99 81 82 83 84	
Not applicable Not recorded		88 (blank)	88		

Sources:

- AJCC Cancer Staging Manual, American Joint Committee on Cancer, 6th edition, 2002, Chpt. 25
- Facility Oncology Registry Data Standards (FORDS) Manual, Commission on Cancer (COC), Revised for 2004
- NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, 11th ed, Vers 11.1 (April 2006)
- ⁴ SEER Program: Comparative Staging (CS) Guide for Cancer, Version 1.1, June 1993
- * Listed in AJCC 5th and 6th edition manuals as a breast cancer code.
- + Additional breast cancer code listed in AJCC 6th edition manual only.

 Note: Code without * or + is not a breast cancer code: code is listed in the FORDS or NAACCR manual, but not in AJCC manual

For full descriptions of codes, see Revision of the AJCC Staging System for Breast Cancer, Journal of Clinical Oncology, Vol 20, No 1, Sept. 2002, pp. 3628-3636 or AJCC 6th edition, Chpt 25

Comparison of Codes for TNM Staging System for Breast Cancer

Regional lymph nodes (N) ¹ Definition		TNM N Pathologic and Clinical ² (NAACCR # 890 & 950 - Registry fields VI.30 & 31) (through 2003)	Derived AJCC N ³ (NAACCR # 2960 - Registry field VI.32) (2004+)	CS Recode Program ⁴ (Historical codes)	
N0 (no regional LN metastasis) N0(i-) N0(i+) N0(mol-) N0(mol+) N0 NOS	*	0 0 (NAACCR #890 only) 0 (NAACCR #890 only) 0 (NAACCR #890 only) 0 (NAACCR #890 only)	00 01 02 03 04 09	00	
N1 (movable ipsilateral axillary) N1a N1b N1c N1mi N1x, N1 NOS	*	1 1A 1B 1C (NAACCR #890 only) 1M (NAACCR #890 only)	10 11 12 13 18 19	10 11 12	
N2 (fixed/matted ipsilateral axillary) N2a N2b N2c N2 NOS	* *	2 2A 2B 2C	20 21 22 23 29	20 21 22 23	
N3 (internal mammary LN, ipsilateral) N3a N3b N3c N3 NOS	* + +	3 3A 3B 3C	30 31 32 33 39	30 31 32 33	
NX (cannot be assessed) Nxu NXr	*	х	99	99 70 80	
Not applicable Not recorded		88 (blank)	88		

Distant metastasis (M) ¹ Definition		TNM M Pathologic and Clinical ² (NAACCR # 900 & 960 - Registry fields VI.33 & 34) (through 2003)	Derived AJCC M ³ (NAACCR # 2980 - Registry field VI.35) (2004+)	CS Recode Program ⁴ (Historical codes)	
M0 (no distant metastasis)	*	0	00	00	
M1 (distant metastases)	*	1	10	10	
M1a		1A	11	11	
M1b		1B	12	12	
M1c		1C	13		
M1 NOS			19		
MX (cannot be assessed)	*	X	99	99	
Not applicable Not recorded		88 (blank)	88		

Sources:

- ¹ AJCC Cancer Staging Manual, American Joint Committee on Cancer, 6th edition, 2002, Chpt. 25
- Facility Oncology Registry Data Standards (FORDS) Manual, Commission on Cancer (COC), Revised for 2004
- NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, 11th ed, Vers 11.1 (April 2006)
- SEER Program: Comparative Staging (CS) Guide for Cancer, Version 1.1, June 1993
- * Listed in AJCC 5th and 6th edition manuals as a breast cancer code.
- + Additional breast cancer code listed in AJCC 6th edition manual only.

 Note: Code without * or + is not a breast cancer code: code is listed in the FORDS or NAACCR manual, but not in AJCC manual

For full descriptions of codes, see Revision of the AJCC Staging System for Breast Cancer, Journal of Clinical Oncology, Vol 20, No 1, Sept. 2002, pp. 3628-3636 or AJCC 6th edition, Chpt 25

Comparison of Codes for AJCC Stage Group for Breast Cancer

Stage Groupir Definition	ng ¹	TNM Stage ² (NAACCR # 910 & 970 - Registry fields VI.36 & 37) (through 2003)	Derived AJCC Stage ³ (NAACCR # 3000 - Registry fields VI.38) (2004+)	CS Recode Program ⁴ (Pathology field VIII.33, Historical codes for Registry)		
0 OA Ois	*	0 0A 0S	00 01 02	00		
I, NOS IA 1A1 1A2 IB 1B1 1B2 IC	*	1 1A A1 A2 1B B1 B2 1C	10 11 12 13 14 15 16 17	10 19 11 12 13		
IS II II, NOS IIA IIB IIC	*	1S 2 2A 2B 2C	19 30 31 32 33 34	20 29 21 22 23		
III III, NOS IIIA IIIB IIIC	* * +	3 3A 3B 3C	50 51 52 53 54	30 39 31 32 33		
IV IV, NOS IVA IVB IVC	*	4 4A 4B 4C	70 71 72 73 74	40 49 41 42		
Not available Not applicable Unstaged, Occ Unknown, erro		88 OC (NAACCR #970 only) 99	88 90 99	88 98 90 99		

Sources:

- AJCC Cancer Staging Manual, American Joint Committee on Cancer, 6th edition, 2002, Chpt. 25
- Facility Oncology Registry Data Standards (FORDS) Manual, Commission on Cancer (COC), Revised for 2004
- NAACCR Standards for Cancer Registries, Vol II: Data Standards and Data Dictionary, 11th ed, Vers 11.1 (April 2006)
- ⁴ SEER Program: Comparative Staging (CS) Guide for Cancer, Version 1.1, June 1993
- * Listed in AJCC 5th and 6th edition manuals as a breast cancer code.
- Additional breast cancer code listed in AJCC 6th edition manual only.
 Note: Code without * or + is not a breast cancer code: code is listed in the FORDS or NAACCR manual, but not in AJCC manual

For full descriptions of codes, see Revision of the AJCC Staging System for Breast Cancer, Journal of Clinical Oncology, Vol 20, No 1, Sept. 2002, pp. 3628-3636 or AJCC 6th edition, Chpt 25

VIII.9 Procedure type

(bioptype)

These codes should be used when the intent of the procedure was to establish a diagnosis of a breast abnormality REGARDLESS of whether the final diagnosis was benign or malignant. The procedure would NOT have been intended to remove the entire lesion but MAY have removed the lesion (e.g. focal DCIS may have been entirely removed with multiple large core stereotactic biopsies). Below are clarifications of the aspiration, incisional, and needle of PRIMARY SITE codes for this variable

CODE

01 Nipple aspirate or discharge

A clinician may submit a cytologic sample of a nipple discharge or a nipple scraping or an aspirate of a nipple mass. The clinician is usually trying to establish a diagnosis of Paget's Disease, intraductal papilloma, intraductal papillary carcinoma or DCIS in the large nipple ducts under the nipple.

02 Excisional biopsy

03 Incisional biopsy

An irregular portion of tissue is removed from the lesion by a surgeon with a scalpel. The surgeon cuts directly into the lesion and removes a small piece for biopsy. There is no attempt toremove the lesion or obtain a rim of normal tissue around the lesion (negative margins). This procedure has generally been replaced by FNA or needle core biopsy. An incisional biopsy should not be confused with an excisional biopsy where the surgeon intended to remove the entire lesion but microscopic disease was left in the breast (positive margins).

O4 Core biopsy small diameter (approximately 1mm diameter)

A cylindrical portion of tissue is removed from the lesion with a cutting needle (usually 14 gauge). The resulting biopsy is approximately 1 mm in diameter and 1-1.5 cm long. The tissue is handled like other surgical procedures, tissue sections are cut and examined by surgical pathology.

O5 Core biopsy large diameter – vacuum assist (approximately 3mm diameter, such as mammotome system)

A cylindrical portion of tissue is removed from the lesion with a cutting needle (usually 11 gauge). Vacuum assistance is used to pull the tissue into the cutting device. The resulting biopsies are approximately 3 mm in diameter and 1.5 cm long. The tissue is handled like other surgical procedures, tissue sections are cut and examined by surgical pathology. This code would be used for a large core needle biopsy of an invasive breast carcinoma or biopsy of DCIS with mammographic calcifications

06 Core biopsy NOS

O7 Surgical biopsy NOS (excisional biopsy/core biopsy/incisional biopsy)

08 FNA

Fine needle aspiration biopsy is generally performed through a small needle (21-23 gauge). Cells are obtained from the lesion and examined by cytology. This code would be used for a fine needle aspiration of a fibroadenoma or a cyst aspirate.

09 ABBI

Combined image guided and removal systems, such as the "ABBI" system (US Surgicals), use radiologic imaging combined with an integrated very large core tissue removal apparatus (0.5 – 2.0 cm diameter).



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Date: March 14th, 2002

To: All SEER participants

From: April Fritz and Lynn Ries

REVISION OF EXTENSION FIELDS FOR BREAST CANCER

The SEER Program will expand the choices of EOD Extension codes for the breast cancer to document whether the tumor size recorded is other than for purely invasive cancers.

Purpose: To reduce the number of cases that are unstageable in the TNM conversion algorithm.

Background: In the 1999 breast cancer data, it became apparent that more and more path reports were only recording

the size of the entire lesion and not the invasive component (resulting in 999 codes for breast tumor size). This has lead to many breast cancer cases being staged as unknown instead of stage I or II. The graph (Appendix 2) shows that the reate of unknown breast cancer has nearly doubled between 1998 and 1999 for women 50-64, and stage I has dropped dramatically. This shift is highly likely to be due

to the tumor size rule rather than an actual shift in stage.

Cases affected: All breast cancer cases with Tumor Size code 999 and Extension code 10, 20, or 30.

Diagnosis date: Current SEER registries: diagnosed between January 1, 1998 and December 31, 2002.

Expansion SEER Registries: diagnosed between January 1, 2000 and December 31, 2002.

Procedure: Select all breast cancer cases (non-lymphomas) with '10, ''20, ' or '30' in the EOD extension and

'999' for tumor size diagnosed after January 1, 1998. For each case, review the case and code size and

EOD extension according to the attached dorumentation (Appendix 1). Changes should be recorded in the file that is submitted to NCI-SEER.

Completion date: Review of cases diagnosed January 1, 1998 through December 31, 2000 must be completed by and

included with the Feb 1, 2003 submission. If possible, the cases diagnosed in 2001 should also be reviewed by February 1, 2003, but if this is a problem for 2001 cases, they may be submitted in the

August 2003 submission.

SEER Edits: To accommodate the new codes, SEER*Edits will be revised and the changes will be distributed to

participating regions as soon as possible.

Note 1: Several registries have asked whether they should also review cases with tumor size codes 009 and

019. The answer is that NCI-SEER is not requiring review of those cases. If an individual registry chooses to review them, they can. The purpose of this review is to derive a tumor size that allows as many cases as possible to be converted to a TNM stage group. Codes 009 and 019 already indicate that the tumor, whether purely invasive or mixed invasive and in situ, is less than 2 cm, and therefore a

TNM Tumor category of T1 can be inferred. Summary staging is not affected.

Note 2: A number of people asked about requiring software vendors to make changes in hospital registry

software. The consensus is that, assuming that SEER changes over to the Collaborative Staging System with cases diagnosed January 1, 2003, and after, the ability to collect tumor size information will be captured in a different way. It is not feasible to require hospital software vendors to make the

changes for the remainder of 2002 cases and then change again for 2003.

GUIDELINES FOR 3/2002 SEER BREAST EOD CHANGES:

(If you have a question as to whether or not any of these guidelines fit the case you are coding, do not hesitate to ask.)

- 1) For cases diagnosed 1998 and later, it appears flat SEER's intention is that extension codes 10, 20, and 30 should never be used. It looks like you must always select one of the codes listed as a subcategory. See Nancy or Chris if you have a problem in selecting what you think is the appropriate code.
- 2) If tumor size is coded to unknown (999), extension must to be coded to one of the following codes: 11, 17, 18, 21, 27, 28, 31, 37, or 38.
- 3) When you have a clinical size and your only path is an incisional biopsy, remember that what you are coding in the subcategories under 10, 20, and 30, included a description of what you know about the size you coded in cols. 1-3. For example: An H&P described a 6 cm. breast mass that was fixed to the skin. The only path was a core needle bx of the breast tumor showing invasive ductal carcinoma. EOD cols. 1-3 were coded to 060 and extension was code to 28 (Skin infil. Of primary breast, unknown if invasive and in situ components present unknown if tumor size represents mixed tumor of a "pure" tumor). Coding rationale: You know that the entire core needle bx is invasive, but you do not know if this is true for the remainder of the 6 cm. tumor.
- 4) A path report for a breast case will usually say one or more of the following about an intraductal component:
 - It meets the requirement for EIC (extensive intraductal component)
 - It does not meet the requirement for EIC
 - It represents a given percentage
 - It is a minor component, NOS (we will consider "minor component NOS" to be equivalent to "minimal")
- 5) The mention of focal/focus/foci of in situ ca does not necessarily mean it fits the definition of "minimal". For example, it may state "The foci of in situ tumor meet the requirement of EIC". Because this is stated to meet the requirement of extensive intraductal component (EIC), it would be coded to 15, 25, or 35 and not to 14, 24, or 34.

If the path report states focal/focus/foci of in situ ca (and there is no mention of whether or not it is minimal or extensive), do not assume that it is minimal. Example: Path report states: Invasive ductal carcinoma with focal DCIS. Tumor size 3 cm. size would be coded 030. Extension would be coded 16 (Invasive and in situ components present size of entire tumor coded in Tumor Size [size of invasive component not stated] AND proportions of in situ and invasive not known).

6) The in situ and invasive components described in path reports may be found intermixed in the same tumor or may be separate tumors. For example, the description might say "Invasive ductal carcinoma, 2 cm. in diameter with an adjacent intraductal tumor." This would be coded to 13 (Invasive and in situ components present size of invasive component stated and coded in Tumor Size).

7) The incisional bx may show the presence of both in situ and invasive tumor, but the excisional bx, where a tumor size is given, may show only one of these behaviors. This type of case should be coded to an extension code that includes both in situ and invasive tumor in the description. Example: Core needle bx path states that there is intraducal and invasive ductal tumor. Excisional bx path shows only invasive ductal and gives a tumor size of 2 cm. Size would be coded to 020 and extension coded to 13 (Invasive and in situ components present size of invasive component stated and coded in Tumor Size).

Notes-rev.breast EOD3-20-02.doc (rev. 3-22-02)

Appendix 1. Revised Breast Cancer EOD Codes
Effective for cases diagnosed January 1, 1998 through December 31, 2002

BREAST

C50.0-C50.6, C50.8-C50.9

C50.0	Nipple	;
C50.1	Central portion of breast (subareolar)	;
C50.2	Upper inner quadrant of breast	;
C50.3	Lower inner quadrant of breast	;
C50.4	Upper outer quadrant of breast	;
C50.5	Lower outer quadrant of breast	;
C50.6	Auxiliary tail of breast	;
C50.8	Overlapping lesion of breast	;
C50.9	Breast, NOS	;

^{*} Laterality must be coded for this site.

SIZE OF PRIMARY TUMOR

(from pathology report, operative report physical examination; mammography examination—in priority order, if multiple masses, code largest diameter)

- a. Record the size of the invasive component, if given.
- b. If both is *in situ* and an invasive component are present, and the invasive component is measured, record the size of the invasive component even if it is smaller.

Example: Tumor is mixed in situ and invasive adenocarcinoma, total 3.7 cm in size, of which 1.4 cm is invasive. Record tumor size ay 014.

c. If the size of the invasive component is *not* given, record the size of the entire tumor from the surgical report, pathology report, radiology report or clinical examination and document how the size was determined in the EOD Extension field.

Example: Infiltrating duct carcinoma with 20% in situ component; total size 2.3 cm.

Record tumor size as 023. EOD Extension code 14, 24, or 34.

Example: Extensive duct carcinoma in situ covering a 1.9 cm area with small areas of invasive ductal carcinoma. Record tumor size as 019. EOD Extension code 15, 25, or 35.

d. For purely *in situ* lesions, code the size as stated.

Co	OC	le

000	Nor mass; no tumor found; no Paget's disease	
001	Microscopic focus or foci only	
002	Mammography/xerography diagnosis only with no size given (tumor not clinically palpable)	
	<u>mm</u>	<u>cm</u>
003	≥3	≥.03
•••		
009	9	0.9
010	10	1.0
099	99	9.9
100	100	10.0
•••		
•••		
990	900 +	99.0+
997	Paget's Disease of nipple with no demonstrable tumor	
998	Diffuse; widespread: 3/4's or more of breast; inflammatory carcinoma	
999	Not stated	
	*Pagetoid involvement is synonymous with Pagets disease when talkin	g about the nipple of

*Pagetoid involvement is synonymous with Pagets disease when talking about the nipple of the breast. If talking about the skin of other areas of the breast, it should not be accepted as Paget's unless the nipple is also stated to be involved. If the nipple is not involved, code Pagetoid involvement of the skin of the breast to direct extension to the skin.

5/77 Dr. Roth; 12/92 Dr. Roth

EXTENSION

- IN SITU: Noninfiltrating, intraductal WITHOUT infiltration; lobular neoplasia
- *Paget's disease (WITHOUT underlying tumor)
- 10 Confined to breast tissue and fit including nipple and/or areola; *Paget's disease (with underlying tumor) 10/28/91 CN
 - 11 Entire tumor reposted as invasive (no in situ component reported)
 - 13 Invasive and in situ components present, size of invasive component stated and coded in Tumor Size
 - 14 Invasive and in situ components present, size of entire tumor coded in Tumor Size (size of invasive component not stated) AND in situ described as minimal (less than 25%)
 - 15 Invasive and in situ components present, size of entire tumor coded in Tumor Size (size of invasive component not stated) AND in situ described as extensive (25% or more)
 - 16 Invasive and in situ components present size if entire tumor coded in Tumor Size (size of invasive component not stated) AND proportions of in situ and invasive not known
 - 17 Invasive and in situ components present, unknown size of tumor (Tumor Size coded 999)
 - 18 Unimown if invasive and in situ components present, unknown if tumor size represents mixed tumor or a "pure" tumor
- 20 Invasion of subcutaneous tissue

Skin infiltration of primary breast including skin of nipple and/or areola

Local infiltration of dermal lymphatics adjacent to primary tumor involving skin by direct extension

- 21 Entire tumor reported as invasive (no in situ component reported)
- 23 Invasive and in situ components present, size of invasive component stated and coded in Tumor Size
- 24 Invasive and in situ components present, size of entire tumor coded in Tumor Size (size of invasive component not stated) AND in situ described as minimal (less than 25%)

- 25 Invasive and in situ components present, size of entire tumor coded in Tumor Size (size of invasive component not stated) AND in situ described as extensive (25% or more)
- 26 Invasive and in situ components present, size of entire tumor coded in Tumor Size (size of invasive component not stated) AND proportions of in situ and invasive not known
- 27 Invasive and in situ components present, unknown size of tumor (Tumor Size coded 999)
- 28 Unknown if invasive and in situ components present unknown if tumor size represents mixed tumor of a "pure" tumor
- Invasion of (or fixation to) pectoral fascia or muscle; deep fixation' attachment or fixation to pectoral muscle or underlying tissue
 - 31 Entire tumor reported as invasive (no in situ component reported)
 - 33 Invasive and in situ components present, size of invasive component stated and coded in Tumor Size
 - 34 Invasive and in situ components present, size of entire tumor coded in Tumor Size (size of invasive component not stated) AND in situ described as minimal (less than 25%)
 - 35 Invasive and in situ components present size of entire tumor coded in Tumor Size (size of invasive component not stated) AND in situ described as extensive (25% or more)
 - 36 Invasive and in situ components present size of entire tumor coded in Tumor Size (size of invasive component not stated) AND proportions of in situ and invasive not known
 - 37 Invasive and in situ components present unknown size of tumor (Tumor Size coded 999)
 - 38 Unknown if invasive and in situ components present, unknown if tumor size represents mixed tumor or a "pure" tumor
- 40 Invasion of (or fixation to) chest wall, ribs, intercostals or serratus anterior muscles
- 50 Extensive skin involvement:

Skin edema, peau d'orange, "pigskin", 'en cuirasse lenticular nodule(s), inflammation of skin, erythema, ulceration of skin of breast, stellite nodule(s) in skin of primary breast

- 60 (50) + (40)
- 70 Inflammatory carcinoma, incl. Diffuse (beyond that directly overlying the tumor) dermal lymphatic permeation or infiltration
- 80 FURTHER contiguous extension:

Skin over sternum, upper abdomen, axilla or opposite breast

85 Metastasis:

Bone, other than adjacent rib

Lung

Breast contralateral—if stated as metastatic

Adrenal gland

Ovary

Satellite nodule(s) in skin other than primary breast

- 99 UNKNOWN if extension or metastasis
- Note 1: Changes such as dimpling of the skin, tethering, and nipple retraction are caused by tension on Cooper's ligament(s), not by actual skin involvement. They do not alter the classification.
- Note 2: Consider adherence, attachment, fixation, induration, and thickening as clinical evidence of extension to skin or subcutaneous tissue; code '20'
- Note 3: Consider "fixation, Nos" as involvement of pectoralis muscle; code '30'

Note 4:	If extension code is:	Behavior code must be:
	00	2
	05	2 or 3
	10	3

Note 5: Measure the size of the metastasis in the lymph node to determine codes 1-4, not the size of the lymph node itself.

Reference: Breast Cancer Protocol and Case Summary, not E, College of American Patbologists, August 2000. [http://www.cap.org/html/ftpdirectory/cancerftp.htm]

The Lymph Nodes Extension field is unchanged

SCC Appendix 11

SNOMED M (morphology) code conversion

In the Pathology Information file, each record (tissue sample) is coded into one or more of the following variables describing the pathology result:

- Invasive, sub-types: Ductal, Lobular, Mixed, Other, NOS
- In situ, subtypes: Ductal, Lobular, Mixed, Other, NOS
- Atypical hyperplasia, sub-types: Ductal, Lobular, Mixed, Other, NOS
- Ductal hyperplasia
- Metastases
- Fibroadenoma
- Phyllodes tumor
- Calcification
- Benign
- Inconclusive
- Lymph node tissue

Sites can either send pathology results directly coded into the variables above or send up to five SNOMED (morphology) codes per tissue sample that will be converted into the above results by the SCC. If a site sends SNOMED codes, the SCC conversion overwrites any information that was coded in the specific variables above.

The SNOMED codes in the pathology file consist of five digits where the first four digits is the histology and the last digit is the behavior. All codes are accepted except the following:

- Codes containing an 'X'
- Codes 88888 (structural missing) or 99999 (unknown)
- Codes ending in 4, 7, or 9
- Codes with first four digits less than 8000 (non-neoplasm) and ending in 2, 3 or 6

In general, the SCC conversion is as follows:

- Invasive behavior code 3, first four digits used to determine sub-type
- In situ behavior code 2, first four digits used to determine sub-type
- Atypical hyperplasia includes atypical hyperplasia of any kind, ductal or lobular
- Ductal hyperplasia includes ductal hyperplasia and ductal papilloma
- Metastases behavior code=6
- Fibroadenoma
- Phyllodes tumor includes malignant Pyllodes tumor
- Calcification
- Benign behavior code of '0' or '1' and not classified into one of the above results, includes the artificial SNOMED codes 780DF and 780RS
- Inconclusive poor specimen

• Lymph node tissue – includes the artificial SNOMED code 917LN

If there is more than one Invasive, In situ, or Atypical hyperplasia sub-type, the most serious result is taken in the following order (from most to least serious): Mixed, Ductal, NOS, Lobular, Other.

Invasive results of all sub-types and In situ results of sub-type Ductal, Mixed, or NOS are considered a cancer diagnosis. All other results are not considered cancer including In situ of sub-type Lobular or Other and Phyllodes tumor, malignant.

Lymphomas have SNOMED codes between 9590x-9729x and may be included in the pathology file, but they are not given a result or included as cancer. Sarcomas have SNOMED codes between 880xx-958xx, but not all codes in this range are sarcomas. Sarcomas with a behavior code of '2' or '3', including cystosarcoma pyllodes (or phyllodes tumor), are not included as cancer. Sarcomas with a behavior code of '0' are classified as Benign.

If the tissue sample was obtained by fine needle aspiration and the result is missing, the SNOMED codes are used to code the result as follows:

	Coding of FNA result from SNOMED conversion								
Code	ode Description SNOMED conversion								
0	Negative/benign In situ of subtype Other, Ductal hyperplasia, Metastases,								
	Fibroadenoma, Phyllodes tumor, Calcification, Benign,								
	Lymph node tissue, and Lymphoma								
1	Atypia	Atypical hyperplasia							
2	Suspicious for malignancy								
3	Positive	Invasive							
4	Inconclusive/unsatisfactory	Inconclusive							
9	Unknown	Missing							

The following are some examples of how to code Radiologic events. If you encounter an event which is not covered by these examples, please e-mail the SCC for assistance and instructions on how it should be coded. We encourage you to send us your comments and suggestions. Contact us if you have any questions.

Example 1 - The most common radiologic event you will code is the case of a simple bilateral screening with one interpretation. The following table summarizes the fields and codes you should use to capture this event in a radiologic record. For example - we have a screening mammogram on 4/23/98.

Indication for Exam	Mammogram	Screening Diagnostic Views		Ultrasound	Used Additional View	Used Ultrasound	Information Date
1	4	4	0	0	0	0	4/23/98

Example 2 - Two radiologic events occur in one day. The first is a simple bilateral screening. The second is an additional view of the left breast (e.g., unilateral left) taken in conjunction with the screening mammogram. Both these events are used to make one interpretation. The following table summarizes the fields and codes you should use to capture these radiologic events in a record. **Note**: Since there is only one interpretation, you would send one record.

Indication for Exam	Mammogram	Screening Views	Diagnostic Views	Ultrasound	Used Additional View	Used Ultrasound	Information Date	
1	4	4	2	0	1	0	3/21/98	

Example 3 - A woman receives a diagnostic (symptomatic) mammogram, but the interpretation is not done until an ultrasound is completed the next day. The following table summarizes the fields and codes you should use to capture this radiologic event in a record.

Indication for Exam	Mammogram	Screening Views	Diagnostic Views	Ultrasound	Used Additional View	Used Ultrasound	Information Date
4	4	0	4	0	0	1	4/4/98

Note that we've coded Ultrasound = 0 because the ultrasound was done on a different day. For cases where it is not possible to determine whether or not the ultrasound was done on the same day as the mammogram, code as if it were done on the same day (e.g. Ultrasound = 1).

Note also that a second record should be created that corresponds to the ultrasound performed in this example, and the type of record created depends on how the ultrasound result is coded. Use these guidelines to determine which type of second record you should create:

I. Create a Radiology record if the ultrasound result is given in the ACR lexicon. If this were the case, for example, and the Assessment overall = "normal with benign finding", you would create a Radiology record that looked like this:

Indication for Exam	Mammogram	Screening Views	Diagnostic Views	Ultrasound	Used Additional View	Used Ultrasound	Assessment Overall	Information Date
4	0	0	0	2	0	1	2	4/5/98

II. Create a Radiology Follow-up record if the ultrasound result is NOT given in the ACR lexicon. If this were the case, for example, and the ultrasound result = "Normal", you would create an Additional Imaging Follow-up record that looked like this:

Procedure Sequence	Procedure Type	Procedure Result	Information Date
1	1	0	4/5/98

Example 4 - Two interpretations occur on the same day. In the first interpretation, a screening assessment is done and found to be incomplete (first record). Then a stand-alone diagnostic additional view is done on the left breast (second record). The following table summarizes the fields and codes you should use to capture these two radiologic events in two records. Note: Since two interpretations are made, you should send two records. In the first record you would code EXAM SEQUENCE = 1, and in the second record you would code EXAM SEQUENCE = 2. This is done to distinguish among events on the same day. Note also that the Assessment Overall (ACR lexicon value) will usually reflect the greater of the two Left and Right Accessment values, except that a zero indicates more assessment is being done on one of the breasts. An example of this exception is demonstrated in the first record below. In the second record, you would code Assessment Right=8 because an additional view was only done on the left breast.

Indication for Exam	Mammogram	Screening Views	Diagnostic Views	Ultra- sound		Used Ultrasound		Assessment Left	Assessment Overall	Information Date
1	4	4	0	0	0	0	1	0	0	4/23/98
2	2	0	2	0	1	0	8	3	3	4/23/98

SCC Coding Instructions for Self-reported Breast Symptoms

Last updated: 6/19/03

Symptoms should be coded as marked when check boxes or bubbles for Lump, Nipple discharge, Pain, and Other are on the Patient Information Form. If none of the check boxes or bubbles are filled in, but a symptom description is written in, then code as "Other" symptom. If **only** free text information is available, the description should be used to classify the symptom(s). Below are descriptions (from GHC data) that can be used as a general guideline to do the classification. If doing a word search, you may need to include misspelled words such as "Ahce" for Ache. Also, you should check that that a symptom that has gone away is not being coded such as "Lump removed".

Lump

Lump

Hardness

Description of size such as Penny-size

(do not include: Lumpectomy, Lumps, Lumpy, Lumpiness, Cyst-type lump, Fibrocystic lump)

Nipple discharge

Discharge Fluid, Liquid, Color Blood, Bleed

Pain

Pain

Ache, Achy, Achiness, Aching

Tender, Tenderness

Sore, Soreness

Discomfort, Uncomfortable, Sensation, Sensitivity, Twinge

Other, includes but is not limited to:

Fibroadenoma/Fibrocystic changes/Nodularity

Lumps, Soft lumps, Lumpy, Lumpiness, Fibroids, Fibrous, Fibrosis, Small nodule, Ropey, Ropiness

Cyst

Cyst, Lump was drained, Fluid was removed, Cyst type lump, Fibrocystic lump *Nipple retraction*

Invert, Inversion, Recessed, or Flattened with reference to the nipple

Rash or Redness

Rash, Red, Redness, Reddish (do not include Reduction)

Swelling

Swell, Swelling, Swollen, Fullness

Asymmetry

Asymmetry, Larger, Bigger, Grown, Smaller, Engorged, Size in reference to one breast *Itching*

Itch, Itchy, Itchiness, Itching

Burning

Burn, Burning, Hot

Other, includes but is not limited to: (continued)

Thickening

Thick, Thickening

Bruise

Bruise, Bruising

Previous cancer diagnosis or treatment

Cancer, Lumpectomy, Mastectomy, Radiation

Breast implants

Implant

Mole

Dimple

Lymph node

Spots

Skin

Histologic Type ICD-O-3

Item Length: 4 NAACCR Item #: 522

NAACCR Name: Histologic Type ICD-O-3

The data item Histologic Type describes the microscopic composition of cells and/or tissue for a specific primary. In the rare instance where there is no tissue pathology, code the histology the medical practitioner uses to describe the tumor. The tumor type or histology is a basis for staging and determination of treatment options. It affects the prognosis and course of the disease.

The *International Classification of Diseases for Oncology*, Third Edition (ICD-O-3) is the standard reference for coding the histology for tumors diagnosed in 2001 and later. Do not record the 'M' that precedes the histology code. Refer to *ICD-O-3* for guidance in coding the histology. See sections *Coding Guidelines for Topography and Morphology*. and *Summary of Principal Rules for Using the ICD-O*, Third Edition.

The histology can be coded only after the determination of multiple primaries has been made.

Synonyms and Equivalent Terms

Mixed, combined, and complex are usually used as synonyms when describing histology.

Definitions

Cancer, NOS (8000) and carcinoma, NOS (8010) are not interchangeable.

Carcinoma, NOS (8010) and adenocarcinoma (8140) are interchangeable (See ICD-O-3).

Complex (mixed, combined) histology: The pathologist uses multiple histologic terms to describe a tumor. The histologic terms are frequently connected by the word "and" (for example ductal and lobular carcinoma).

Different histology: The first three digits of the ICD-O-3 histology code are different.

Different subtypes: The NOS cell types often have multiple subtypes; for example, scirrhous adenocarcinoma (8143), adenocarcinoma, intestinal type (8144), and linitis plastica (8141) are subtypes of Adenocarcinoma, NOS (8140).

TA /	• • ,	e T	٦.
VIQI	inritu	Ot I	umor:
1114	ULILY	O1 1	umu.

Terms that mean the majority of tumor	Terms that DO NOT mean the majority of tumor
Predominantly	With foci of
With features of	Focus of/focal
Major	Areas of
Type ¹	Elements of
With Differentiation ¹	Component ¹
Pattern (Only if written in College of	
American Pathologists [CAP] Protocol) ²	
Architecture (Only if written in College of	
American Pathologists [CAP] Protocol) ²	

Note: Examples of CAP protocols for specific primary sites may be found on the website - http://www.cap.org/cancerprotocols/protocols intro.html

Mixed/combined histology: Different cell types in one tumor; terms used interchangeably. In most cases, the terms mixed and combined are used as synonyms; however the term mixed may designate a specific tumor.

Not Otherwise Specified (NOS): "Not Otherwise Specified."

Same histology: The first three digits of the ICD-O-3 histology code are identical.

Coding Instructions

Refer to "Determining Multiple Primaries" in the first section of this manual to determine the number of primaries. Use all of the information for a single primary to code the histology.

1. If there is no tumor specimen, code the histology described by the medical practitioner.

Example 1: The patient has a CT scan of the brain with a final diagnosis of glioblastoma multiforme (9440). The patient refuses all further workup or treatment. Code the histology to glioblastoma multiforme (9440).

Example 2: If the physician says that the patient has carcinoma, code carcinoma, NOS (8010).

2. Use the histology stated in the **final diagnosis** from the pathology report. Use the pathology from the procedure that resected the majority of the primary tumor.

If a more specific histologic type is definitively described in the microscopic portion of the pathology report or the comment, code the more specific diagnosis.

3. Lymphomas may be classified by the **WHO** Classification, **REAL** system, **Rappaport**, or **Working Formulation**. The WHO Classification is preferred. See page 13 in the ICD-O-3 for a discussion of hematologic malignancies.

¹ Effective 1/1/1999 diagnosis

4. Cases reported to SEER cannot have a metastatic (/6) behavior code. If the only pathology specimen is from a metastatic site, code the appropriate histology code and the malignant behavior code /3. The primary site and its metastatic site(s) have the same basic histology.

Histology Coding Rules for Single Tumor

- The rules are in hierarchical order. Rule 1 has the highest priority.
- Use the rules in priority order.
- Use the first rule that applies to the case. (Do not apply any additional rules.)
- 1. Code the histology if only one type is mentioned in the pathology report.
- 2. Code the **invasive histology** when both invasive and in situ tumor are present

Example: Pathology report reads infiltrating ductal carcinoma and cribriform ductal carcinoma in situ. Code the invasive histology 8500/3.

Exception: If the histology of the invasive component is an 'NOS' term (e.g., carcinoma, adenocarcinoma, melanoma, sarcoma), then code the histology of the specific term associated with the in situ component and an invasive behavior code.

3. Use a **mixed** histology code if one exists

Examples of mixed codes: (This is not a complete list, these are examples only)

8490 Mixed tumor, NOS

9085 Mixed germ cell tumor

8855 Mixed liposarcoma

8990 Mixed mesenchymal sarcoma

8951 Mixed mesodermal tumor

8950 Mixed Mullerian tumor

9362 Mixed pineal tumor

8940 Mixed salivary gland tumor, NOS

9081 Teratocarcinoma, mixed embryonal carcinoma and teratoma

4. Use a **combination** histology code if one exists

Examples of combination codes: (This is not a complete list; these are examples only)

8255 Renal cell carcinoma, mixed clear cell and chromophobe types

8523 Infiltrating duct carcinoma mixed with other types of carcinoma

8524 Infiltrating lobular carcinoma mixed with other types of carcinoma

8560 Adenosquamous carcinoma

8045 Combined small cell carcinoma, combined small cell-large cell

5. Code the **more specific term** when one of the terms is 'NOS' and the other is a more specific description of the same histology.

Example 1: Pathology report reads poorly differentiated carcinoma, probably squamous in origin. Code the histology as squamous cell carcinoma rather than the non-specific term "carcinoma."

Example 2: The pathology report from a nephrectomy reads renal cell carcinoma (8312) (renal cell identifies the affected organ system rather than the histologic cell type) in one portion of the report and clear cell carcinoma (8310) (a histologic cell type) in another section of the report. Code clear cell carcinoma (8310); renal cell carcinoma (8312) refers to the renal system rather than the cell type, so renal cell is the less specific code.

- 6. Code the **majority** of tumor.
 - a. Based on the pathology report description of the tumor.
 - b. Based on the use of majority terms. See definition for majority terms.
- 7. Code the **numerically higher** ICD-O-3 code. This is the rule with the lowest priority and should be used infrequently.

Histology Coding Rules for Multiple Tumors with Different Behaviors in the Same Organ Reported as a Single Primary

1. Code the histology of the invasive tumor when one lesion is in situ (/2) and the other is invasive (/3).

Example: At mastectomy for removal of a 2 cm invasive ductal carcinoma, an additional 5 cm area of intraductal carcinoma was noted. Code histology and behavior as invasive ductal carcinoma (8500/3).

Histology Coding Rules for Multiple Tumors in Same Organ Reported as a Single Primary

- 1. Code the histology when multiple tumors have the same histology.
- 2. Code the histology to adenocarcinoma (8140/_; in situ or invasive) when there is an adenocarcinoma and an adenocarcinoma in a polyp (8210/_, 8261/_, 8263/) in the same segment of the colon or rectum.
- 3. Code the histology to carcinoma (8010/_; in situ or invasive) when there is a carcinoma and a carcinoma in a polyp (8210/_) in the same segment of the colon or rectum.
- 4. Use a **combination** code for the following:
 - a. Bladder: Papillary and urothelial (transitional cell) carcinoma (8130)
 - b.Breast: Paget Disease and duct carcinoma (8541)
 - c. Breast: Duct carcinoma and lobular carcinoma (8522)
 - d. Thyroid: Follicular and papillary carcinoma (8340)
- 5. Code the more specific term when one of the terms is 'NOS' and the other is a more specific description of the same histology.
- 6. Code all other multiple tumors with different histologies as multiple primaries.

How to determine same vs different histologies for benign and borderline primary intracranial and CNS tumors (C70.0-C72.9, C75.1-C75.3) (Based on histologic groupings)

When there are **multiple tumors**, use the following table to determine if the tumors are the same histology or different histologies.

Histologic groupings to determine same histology for non-malignant brain tumors

Histologic Group	ICD-O-3 Code
Choroid plexus neoplasm	9390/0, 9390/1
Ependymoma	9383, 9394, 9444
Neuronal and neuronal-glial neoplasm	9384, 9412, 9413, 9442, 9505, 9506
Neurofibroma	9540/0, 9540/1, 9541, 9550, 9560
Neurinomatosis	9560
Neurothekeoma	9562
Neuroma	9570
Perineurioma, NOS	9571

Instructions for Using Histologic Group Table

- 1. **Both** histologies are listed **in** the **table**
 - a. Histologies that are in the same **grouping** or row in the table are the **same histology**.

Note: Histologies that are in the same grouping are a progression, differentiation or subtype of a single histologic category.

- b. Histologies listed in **different groupings** in the table
- 2. One or both of the **histologies** is **not** listed **in** the **table** are **different histologies**.
 - a. If the **ICD-O-3 codes** for both histologies have the **identical** first three digits, the histologies are the **same**.
 - b. If the first three digits of the **ICD-O-3** histology code are **different**, the histology types are different.

Leukemia/Lymphoma (Chronic Lymphocytic Leukemia [CLL] and Small Lymphocytic Lymphoma [SLL])

1. Code the diagnosis of chronic lymphocytic leukemia (9823/3) and/or small lymphocytic lymphoma (9670/3) to SLL if there are positive lymph nodes or deposits of lymphoma/leukemia in organs or in other tissue. Code the histology to CLL if there are no physical manifestations of the disease other than a positive blood study or positive bone marrow.

Behavior Code

Item Length: 1 NAACCR Item #: 523 NAACCR Name: Behavior Code ICD-O-3

SEER requires registries to collect malignancies with in situ /2 and malignant /3 behavior codes as described in ICD-O-3. SEER requires registries to collect benign /0 and borderline /1 intracranial and CNS tumors for cases diagnosed on or after 1/1/2004. Behavior is the fifth digit of the morphology code after the slash (/). See ICD-O-3 (page 66) for a discussion of the behavior code.

Codes

- 0 Benign (Reportable for intracranial and CNS sites only)
- Uncertain whether benign or malignant, borderline malignancy, low malignant potential, and uncertain malignant potential (Reportable for intracranial and CNS sites only)
- 2 Carcinoma in situ; intraepithelial; noninfiltrating; noninvasive
- 3 Malignant, primary site (invasive)

Coding Instructions

Behavior codes 0 (benign) and 1 (borderline) are reportable for intracranial and CNS sites only, beginning with January 1, 2004 diagnoses.

Metastatic or Nonprimary Sites

Cases reported to SEER cannot have a metastatic (/6) behavior code. If the only pathologic specimen is from a **metastatic** site, code the appropriate histology code and the malignant behavior code /3. The primary site and its metastatic site(s) have the same basic histology.

In situ

Clinical evidence alone cannot identify the behavior as in situ; the code must be based on pathologic examination and documentation.

In situ and Invasive

Code the behavior as malignant /3 if any portion of the primary tumor is invasive no matter how limited; i.e. microinvasion.

Example: Pathology from mastectomy: Large mass composed of intraductal carcinoma with a single focus of invasion. Code the behavior as malignant /3.

ICD-O-3 Histology/Behavior Code Listing

ICD-O-3 may have only one behavior code, either in situ /2 or malignant /3, listed for a specific histology. If the pathology report describes the histology as in situ /2 and the ICD-O-3 histology code is only listed with a malignant /3 behavior code, assign the histology code listed and change the behavior code to in situ /2. If the pathology report describes histology as malignant /3 and the ICD-O-3 histology code is only listed with an in situ /2 behavior code, assign the histology code listed and change the behavior code to malignant /3. See the Morphology and Behavior Code Matrix discussion on page 29 in ICD-O-3.

Example: The pathology report says large cell carcinoma in situ. The ICD-O-3 lists large cell carcinoma as 8013/3; there is only a malignant listing. Change the /3 to /2 and code the histology and behavior code to 8013/2 as specified by the physician.

Synonyms for In situ

AIN III (C211)

Behavior code '2'

Bowen disease (not reportable for C440-C449)

Clark level I for melanoma (limited to epithelium)

Confined to epithelium

Hutchinson melanotic freckle, NOS (C44)

Intracystic, non-infiltrating

Intraductal

Intraepidermal, NOS

Intraepithelial, NOS

Involvement up to, but not including the basement membrane

Lentigo maligna (C44)

Lobular, noninfiltrating (C50)

Noninfiltrating

Noninvasive

No stromal invasion/involvement

Papillary, noninfiltrating or intraductal

Precancerous melanosis (C44)

Queyrat erythroplasia (C60)

Stage 0 (except Paget's disease (8540/3) of breast and colon or rectal tumors confined to the lamina propria)

VAIN III (C529)

VIN III (C51)

Grade, Differentiation or Cell Indicator

Item Length: 1 NAACCR Item #: 440 NAACCR Name: Grade

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

Pathologic testing determines the grade, or degree of differentiation, of the tumor. For cancers, the grade is a measurement of how closely the tumor cells resemble the parent tissue (organ of origin). Well differentiated tumor cells closely resemble the tissue from the organ of origin. Poorly differentiated and undifferentiated tumor cells are disorganized and abnormal looking; they bear little or no resemblance to the tissue from the organ of origin.

Pathologists describe the tumor grade by levels of similarity. Pathologists may define the tumor by describing two levels of similarity (two-grade system which may be used for colon); by describing three levels of similarity (three-grade system); or by describing four levels of similarity (four-grade system). The four-grade system describes the tumor as grade I, grade II, grade III, and grade IV (also called well differentiated, moderately differentiated, poorly differentiated, and undifferentiated/anaplastic). These similarities/differences may be based on pattern (architecture), cytology, or nuclear features or a combination of these elements depending upon the grading system that is used. The information from this data item is useful for determining prognosis.

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

Describes the lineage or phenotype of the cell that became malignant. Cell indicator codes apply to lymphomas and leukemias and for these diagnoses, cell indicator takes precedence over grade/differentiation.

See the ICD-O-3 chapter *Morphology* for further instructions on coding grade.

Codes

- 1 Grade I; grade i; grade 1; well differentiated; differentiated, NOS
- 2 Grade II; grade ii; grade 2; moderately differentiated; moderately well differentiated; intermediate differentiation
- 3 Grade III; grade iii, grade 3; poorly differentiated; dedifferentiated
- 4 Grade IV; grade iv; grade 4; undifferentiated; anaplastic
- 5 T-cell; T-precursor
- 6 B-Cell; Pre-B; B-precursor
- 7 Null cell; Non T-non B
- 8 NK cell (natural killer cell) (effective with diagnosis 1/1/1995 and after)
- 9 Grade/differentiations unknown, not stated, or not applicable

General Coding Rules

- 1. The site-specific coding guidelines in Appendix C also include rules for coding grade for the following primary sites: prostate, kidney, lymphoma, leukemia, astrocytoma, and sarcoma.
- 2. Code the grade from the final diagnosis in the pathology report. If there is more than one path report, and the grades in the final diagnoses differ, code the highest grade for the primary site from any pathology report.
- 3. If grade is not stated in the final pathology diagnosis, use the information in the microscopic section, addendum, or comment to code grade.
- 4. If more than one grade is recorded for a single tumor, code the highest grade, even if it is a focus

Example: Pathology report reads: Grade II adenocarcinoma with a focus of undifferentiated adenocarcinoma. Code the tumor grade as grade 4.

- 5. Code the grade from the **primary tumor** only, never from a metastatic site or a recurrence.
- 6. Code the grade for all **unknown primaries** to 9 (unknown grade) unless grade is explicit by histology (i.e. anaplastic carcinoma (grade = 4).
- 7. Code the grade of the invasive component when the tumor has **both in situ** and **invasive** portions. If the **invasive** component **grade** is **unknown**, code the grade as unknown (9).
- 8. Code the information from the **consult** if the specimen is sent to a specialty pathology department for a consult.
- 9. If there are **multiple pathology consults**, ask the pathologist or physician advisor to determine which information should be used.
- 10. Do **not code** the grade assigned to **dysplasia**, i.e.: High grade dysplasia (adenocarcinoma in situ) would be coded to 9 (unknown grade).

Coding Grade for Cases without Pathology or Cytology Confirmation

Code the grade of tumor given on a Magnetic Resonance Imaging (MRI) or Positron Emission Tomography (PET) report if there is no tissue diagnosis (pathology or cytology report). Use the MRI or PET grade only when there is no tissue diagnosis.

In situ Tumors

In situ tumors are not always graded. Code the grade if it is specified for an in situ lesion unless there is an invasive component. Do not code the in situ grade if the tumor has both in situ and invasive components.

Terminology Conversion Table

Terminology Conversion Table

Description	Grade	SEER
		Code
Differentiated, NOS	I	1
Well differentiated	I	1
Fairly well differentiated	II	2
Intermediate differentiation	II	2
Low grade	I-II	2
Mid differentiated	II	2
Moderately differentiated	II	2
Moderately well differentiated	II	2
Partially differentiated	II	2
Partially well differentiated	I-II	2
Relatively or generally well differentiated	II	2
Medium grade, intermediate grade	II-III	3
Moderately poorly differentiated	III	3
Moderately undifferentiated	III	3
Pleomorphic	III	3
Poorly differentiated	III	3
Relatively poorly differentiated	III	3
Relatively undifferentiated	III	3
Slightly differentiated	III	3
Dedifferentiated	III	3
High grade	III-IV	4
Undifferentiated, anaplastic, not differentiated	IV	4
Non-high grade		9

Two-Grade System

Some cancers are graded using a two-grade system, for an example, colon cancer. If the grade is listed as 1/2 or as low grade, assign code 2. If the grade is listed as 2/2 or as high grade, assign code 4.

Two-Grade Conversion Table

Grade	Differentiation / Description	SEER Code
1/2, I/II	Low grade	2
2/2, II/II	High grade	4

Three-Grade System

There are several sites for which a three-grade system is used, such as peritoneum, endometrium, fallopian tube, prostate, bladder and soft tissue sarcoma. The patterns of cell growth are measured on a scale of 1, 2, and 3 (also referred to as low, medium, and high grade). This system measures the proportion of cancer cells that are growing and making new cells and how closely they resemble the cells of the host tissue. Thus, it is similar to a four-grade system, but simply divides the spectrum into 3 rather than 4 categories (see Three-Grade Conversion Table below). The expected outcome is more favorable for lower grades.

If a grade is written as 2/3 that means this is a grade 2 of a three-grade system. Do not simply code the numerator. Use the following table to convert the grade to SEER codes:

Three-Grade Conversion Table*

Grade	Differentiation /	SEER Code
	Description	
1/3, I/III	Low grade	2
2/3, II/III	Intermediate grade	3
3/3, III/III	High grade	4

Do not use for breast primaries

Breast Cancer

Priority Order for Coding Breast Cancer Grade

Code grade in the following priority order:

- 1. Bloom-Richardson scores 3-9 converted to grade (See following table)
- 2. Bloom Richardson grade (low, intermediate, high)
- 3. Nuclear grade only
- 4. Terminology
 - a. Differentiation (well differentiated, moderately differentiated, etc).
- 5. Histologic grade
 - a. Grade 1/I/i, grade 2/II/ii, grade 3/III/iii, grade 4/IV/iv

Breast Grading Conversion Table

BR	BR Grade	Nuclear	Terminology	Histologic	SEER
Scores		Grade		Grade	Code
3-5	Low	1/3; 1/2	Well differentiated	I/III; 1/3	1
6, 7	Intermediate	2/3	Moderately	II/III; 2/3	2
			differentiated		
8, 9	High	2/2; 3/3	Poorly differentiated	III/III; 3/3	3

Bloom-Richardson (BR)

- 1. **BR** may **also** be **called**: modified Bloom-Richardson, Scarff-Bloom-Richardson, SBR grading, BR grading, Elston-Ellis modification of Bloom Richardson score, the Nottingham modification of Bloom Richardson score, Nottingham-Tenovus, or Nottingham grade
- 2. BR may be expressed in **scores** (range 3-9)
- 3. The score is based on three morphologic features of "invasive no-special-type" breast cancers (degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism of tumor cells).
- 4. Use the Breast Grading Conversion Table to convert the score, grade or term into the SEER code
- 5. BR may be expressed as a **grade** (low, intermediate, high)
- 6. BR grade is derived from the BR score. Note that the conversion of low, intermediate, and high for breast is different from the conversion used for all other tumors.

Chemotherapy

Effective for SEER revision 1 of 3rd ed codes:

Chemotherapy field expanded to two digits (see conversion table which follows). Treatments (none or actual) in 00-09 range. Reasons treatment not administered in 80-89 range. Unknown is now 99. Codes are the same as the FORDS manual.

00 None; chemotherapy was not part of the planned first course of therapy 01 Chemotherapy administered as first course therapy, but the type and number of agents is not documented in patient record. 02 Single-agent chemotherapy administered as first course therapy. 03 Multi-agent chemotherapy administered as first course therapy. Chemotherapy was not recommended/administered because it was contraindicated 82 [new] due to patient risk factors (i.e., comorbid conditions, advanced age). 85 [new] Chemotherapy was not administered because the patient died prior to planned or recommended therapy. **86** [new] Chemotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record. 87 Chemotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record. 88 Chemotherapy was recommended, but it is unknown if it was administered. 99 It is unknown whether a chemotherapeutic agent(s) was recommended or administered because it is not stated in patient record. Death certificate only.

CHEMOTHERAPY CONVERSION TABLE

SEER Code Manual 3 rd Edition Chemotherapy	SEER Code Manual 3rd ed revision 1 Chemotherapy
0	00
1	01
2	02
3	03
7	87
8	88
9	99

Note: for SEER 3rd edition, codes 82-86 are invalid for SEER.

Hormone Therapy

Effective for SEER revision 1 of 3rd ed codes: Hormone Therapy field expanded to two digits (see conversion table which follows). Endocrine surgery and radiation moved to new Hematologic Transplant and Endocrine Procedures field. Treatments (none or actual) in 00-09 range. Reasons treatment not administered in 80-89 range. Unknown is now 99. Codes are the same as the FORDS manual.

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

it is not stated in patient record. Death certificate only.

HORMONE THERAPY CONVERSION TABLE

SEER Code Manual 3 rd Edition Hormone therapy	SEER Code Manual 3rd ed revision 1 Hormone therapy
0	00
1	01
2	00
3	01
7	87
8	88
9	99

Note: for SEER 3rd edition, codes 82-86 are invalid for SEER.

SEER 3^{rd} edition revision 1: information on endocrine surgery and/or endocrine radiation will no longer be collected in this field. See Hematologic Transplant and Endocrine Procedures.

Immunotherapy

Effective for SEER revision 1 of 3rd ed codes: Immunotherapy field expanded to two digits (see conversion table which follows). Bone marrow transplant and stem cell procedures have been moved to new Hematologic Transplant and Endocrine Procedures field. Treatments (none or actual) in 00-09 range. Reasons treatment not administered in 80-89 range. Unknown is now 99. Codes are the same as the FORDS manual.

00 None, immunotherapy was not part of the planned first course of therapy. 01 Immunotherapy administered as first course therapy. 82 [new] Immunotherapy was not recommended/administered because it was contraindicated due to patient risk factors (i.e., comorbid conditions, advanced age). 85 [new] Immunotherapy was not administered because the patient died prior to planned or recommended therapy. 86 [new] Immunotherapy was not administered. It was recommended by the patient's physician, but was not administered as part of the first course of therapy. No reason was stated in patient record. **87** Immunotherapy was not administered. It was recommended by the patient's physician, but this treatment was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in patient record. 88 Immunotherapy was recommended, but it is unknown if it was administered. 99 It is unknown whether an immunotherapeutic agent(s) was recommended or

administered because it is not stated in patient record. Death certificate only.

IMMUNOTHERAPY CONVERSION TABLE

SEER Code Manual 3 rd Edition Immunotherapy	SEER Code Manual 3rd ed revision 1 Immunotherapy
0	00
1	01
21	00
3 ²	00
4 ³	00
54	00
65	01
7	87
8	88
9	99

Note: for SEER 3rd edition, codes 82-86 are not valid.

- Note: bone marrow transplant--autologous has been moved to Hematologic Transplant and Endocrine Procedures code 11.
- Note: bone marrow transplant--allogenic has been moved to Hematologic Transplant and Endocrine Procedures code 12.
- Note: bone marrow transplant, NOS has been moved to Hematologic Transplant and Endocrine Procedures code 10.
- Note: stem cell transplant has been moved to Hematologic Transplant and Endocrine Procedures code 20 and has been renamed "Stem cell harvest."
- Note: combination of biological response modifier and bone marrow transplant or stem cell transplant will be recorded as separate fields. Record biological response modifier in the immunotherapy field and the appropriate bone marrow or transplant procedure in Hematologic Transplant and Endocrine Procedures.

Hematologic Transplant and Endocrine Procedures

NEW field effective for SEER revision 1 of 3rd ed codes: Bone marrow and stem cell procedures are now coded in this field. Endocrine surgery or radiation is now coded in this field. Treatments (none or actual) in 00-30 range. Combination hematologic transplant and endocrine procedures coded as 40. Reasons treatment not administered in 80-89 range. Unknown is now 99. Codes are the same as the FORDS manual.

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

HEMATOLOGIC TRANSPLANT AND ENDOCRINE PROCEDURES CONVERSION TABLE

For SEER, Conversion from RX Summ - Hormone and RX Summ - BRM to RX Summ - Transplnt/Endocr (#3250)						
SEER Program Code	Manual 3 rd edition	RX Summ - Transplnt/Endocr				
Rx Summ - Hormone	Rx Summ - BRM	- (#3250)				
0, 1, 7, 8	0, 1, 7, 8	00				
0, 1, 7, 8, 9	2	11				
	3	12				
	4, 6	10				
	5	20				
2, 3	0, 1, 7, 8, 9	30				
	2, 3, 4 , 5, 6	40				
9	0, 1, 7, 8	00				
0, 1, 7, 8	9	00				
9	9	99				

Note for SEER: After analysis of data, it was decided that codes 7 and 8 in RX Summ - Hormone would be treated as though they only referred to hormonal therapy and not endocrine surgery. Similarly for RX Summ -BRM, codes 7 and 8 would only rarely reflect transplants refused or recommended. Therefore, for SEER, codes 82, 85, 86, 87, and 88 are invalid for cases using this conversion algorithm.

2/25/2008

Cancer Registry File Reference Guide

- 2 2	2.2	3.1	3.0		SCC DD				NAAC Item	CR 11.1 Start		
3.3 #	3.2 #	J.1 #	# SAS name	Now Fields	Field Name	Width	Start	Stop		Column	Ref 1	Src ²
	#	#	# SAS Hallie	New Fields	S Field Name	width	Start	Зюр		Column	····	0.0
DATIE	NT/DE		D IDENTIFICATION									
PATIE 1	N I / K E 1	:COR 1	D IDENTIFICATION 1 rectype		Record type	8	1	8				
2	2	2	2 site		Study site	1	9	9				
3	3	3	3 studyid		Study ID	10	10	19				
4	4	4	4 infodate		Information date	8	20	27				
5	5	5	5 regseq		Registry sequence number	1	28	28				
6	6	6	6 sccdate		SCC date	8	29	36				_
7	7	7	8 county		County of residence	3	37	39	90	83	S04 NAC	s C
8 9	8 9	8 9	9 state 10 brthdate		State of residence Date of birth	8	40 42	41 49	80 240	72 122	S04, NAC S04	S, C
10	10	10	11 bplace		Place of birth	3	50	52	250	130	S04	S, C
11	11	11	12 dxage		Age at diagnosis	3	53	55	230	119	S04	S, C
12	12	12	13 carcrace1		Race 1	2	56	57	160	103	S04	S, C
13	13	13	47 carcrace2	3.0	Race 2	2	58	59	161	105	S04	S, C
14	14	14	48 carcrace3	3.0	Race 3	2	60	61	162	107	S04	S, C
15	15	15	49 carcrace4	3.0	Race 4	2	62	63	163	109	S04	S, C
16	16	16	50 carcrace5	3.0	Race 5	2	64	65	164	111	S04	S, C
17	17	17	14 ssurname		Spanish surname or origin	1	66	66	190	115	S04	S, C
CANC	EB IDI	ENTI	FICATION									
18	18	18	7 diagdate		Diagnosis date	8	67	74	390	283	S04	S, C
19	19	19	15 seerseq		SEER sequence number	2	75	76	380	281	S04	S, C
20	20	20	16 primsite		Primary site	3	77	79	400	291	S04	S, C
21	21	21	17 subscarc		Subsite	1	80	80	400	294	S04	S, C
22	22	22	18 latralty		Laterality	1	81	81	410	295	S04	S, C
23	23	23	19 morphlgyO2		Morphology ICD-O-2 (to 2000)	5	82	86	419	296	S98	
24	24	24	51 morphlgyO3	3.0	Morphology ICD-O-3 (2001+)	5	87	91	521	301	S04	
25	25	25	20 grade		Grade, differentation	1	92	92	440	306	S04	S, C
26	26	26	23 diagconf		Diagnostic confirmation	1	93	93	490	311	S04	S, C
A ICC	CANC	ED C	TAGING									
27	27	30	37 tnmtpath	3.1	TNM Pathologic T (to 2003)	2	94	95	880	563	NAC, FOR	Α
28	28	31	tnmtclin	3.1	TNM Clinical T (to 2003)	2	96	97	940	573	NAC, FOR	A
29	29	32	ajcct	3.1	Derived AJCC T (2004+)	2	98	99	2940	659	NAC	A
30	30	34	38 tnmnpath	3.1	TNM Pathologic N (to 2003)	2	100	101	890	565	NAC, FOR	Α
31	31	35	tnmnclin	3.1	TNM Clinical N (to 2003)	2	102	103	950	575	NAC, FOR	Α
32	32	36	ajccn	3.1	Derived AJCC N (2004+)	2	104	105	2960	662	NAC	Α
33	33	38	39 tnmmpath	3.1	TNM Pathologic M (to 2003)	2	106	107	900	567	NAC, FOR	Α
34	34	39	tnmmclin	3.1	TNM Clinical M (to 2003)	2	108	109	960	577	NAC, FOR	Α
35	35	40	ajccm	3.1	Derived AJCC M (2004+)	2	110	111	2980	665	NAC	Α
36	36	42	tnmpathstg	3.1	TNM Pathologic Stage group (to 2003)	2	112	113	910	569	NAC, FOR	A
37	37	43	tnmclinstg	3.1	TNM Clinical Stage group (to 2003)	2	114	115	970	579	NAC, FOR	A
38	38 39	44	40 ajccstggrp	3.0	Derived AJCC Stage group (2004+) ajccstag in DD 3.0	2	116	117 118	3000 760	668 529	NAC S04	A S
39 40	40	27 28	sumstg1977 sumstg2000	3.1	Summary stage 1977 (to 2000) Summary stage 2000 (2001+)	1	118 119	119	759	529	S04	S
41	41	76	sumstg1977d	3.2	Derived Summary stage 1977 (2004+)	1	120	120	3010	670	NAC	A
42		77	sumstg2000d	3.2	Derived Summary stage 2000 (2004+)	1	121	121	3020	671	NAC	Α
			-									
EOD/C	S STA	AGIN	G INPUTS									
43	43	46	21 estrecep		Tumor Marker 1- Estrogen receptors (to 2003)	1	122	122	1150	626	S98	S
44	44	47	52 estrecepcs	3.0	CS Factor 1 - Estrogen receptors (2004+)	3	123	125	2880	641	CS2, S04	A
45	45	48	22 prorecep	2.0	Tumor Marker 2 - Progesterone receptors (to 2003)	1	126	126	1160	627	S98	S
46 47	46	49	53 prorecepcs	3.0	CS Factor 2 - Progesterone receptors (2004+)	3	127	129	2890	644 521	CS2, S04	A
47 48	47 48	50 51	36 tumorsiz 55 cstumsz	3.0	EOD Tumor size (to 2003) CS Tumor size (2004+)	3	130 133	132 135	780 2800	531 629	EOD CS2, S04	S, C A
49	49	01	tumszinvcs	3.2	CS Factor 6 - Tumor size - invasive component (2004+)	3	136	138	2930	656	CS2, S04	A
50	50	52	42 extenson		EOD Extension (to 2003)	2	139	140	790	534	EOD	S
51	51	53	56 extensoncs	3.0	CS Extension (2004+)	2	141	142	2810	632	CS2, S04	A
52	52	54	43 lymphnod		EOD Lymph nodes (to 2003)	1	143	143	810	538	EOD	S
53	53	55	57 Incs	3.0	CS Lymph nodes (2004+)	2	144	145	2830	635	CS2, S04	Α
54	54		metsdxcs	3.2	CS Metastasis at diagnosis (2004+)	2	146	147	2850	638	CS2, S04	Α
55	55	56	44 posnods		Regional lymph nodes examined by pathologist positive	2	148	149	820	539	CS2, S04	S, C
56	56	57	45 pathnods		Regional lymph nodes examined by pathologist	2	150	151	830	541	CS2	S, C
57	57		posipsics	3.2	CS Factor 3 - Positive ipsilateral axillary lymph nodes (2004+)	3	152	154	2900	647	CS2, S04	A
58	58		ihcnodscs	3.2	CS Factor 4 - IHC of regional lymph nodes (2004+)	3	155	157	2910	650	CS2, S04	A
59	59		molnodscs	3.2	CS Factor 5 - Molecular studies of regional lymph nodes (2004+)	3	158	160	2920	653	CS2, S04	Α
CANC	ER ST	AGIN	IG DESCRIPTORS									
60	60	29	41 tnmsourc	3.1	TNM Edition stage flag (through 2003)	2	161	162	1060	593	NAC	С
61	61		tumszcsevl	3.2	CS Tumor size/extension evaluation (2004+)	1	163	163	2820	634	S04	Α

	SCC DD					NAAC	CR 11.1						
3.3	3.2	3.1	3_0							Item	Start		
#	#	#	#	SAS name	New Fields	Field Name	Width	Start	Stop	#	Column	Ref 1	Src 2
62	62			Incsevl	3.2	CS Lymph node evaluation (2004+)	1	164	164	2840	637	S04	А
63	63			metsdxcsevl	3.2	CS Metastasis evaluation (2004+)	1	165	165	2860	640	S04	Α
64	64			verfstcs	3.2	CS Version first (2004+)	6	166	171	2935	705	NAC	Α
65	65			verlatcs	3.2	CS Version latest (2004+)	6	172	177	2936	711	NAC	Α
66	66	33		ajcctdesc	3.1	Derived AJCC T descriptor (2004+)	1	178	178	2950	661	NAC	Α
67	67	37		ajccndesc	3.1	Derived AJCC N descriptor (2004+)	1	179	179	2970	664	NAC	Α
68	68	41		ajccmdesc	3.1	Derived AJCC M descriptor (2004+)	1	180	180	2990	667	NAC	Α
69	69	45		ajccconflg	3.0	Derived AJCC stage flag (2004+)	1	181	181	3030	672	NAC	Α
70	70			sumstg1977flg	3.2	Derived Summary stage 1977 flag (2004+)	1	182	182	3040	673	NAC	Α
71	71			sumstg2000flg	3.2	Derived Summary stage 2000 flag (2004+)	1	183	183	3050	674	NAC	Α
FIRST	coul	RSE (OF TE	REATMENT									
72	72	58	27	numbnods		Treatment: Regional lymph nodes examined with surgery (1998-2002)	2	184	185	1296	863	NAC	S, C
73	73	59	26	lympsurg		Treatment: Scope of regional lymph node surgery (1998-2002)	1	186	186	1647	941	S98	S, C
74	74	60	60	Insurgf	3.0	Treatment: Scope of regional lymph node surgery (2003+)	1	187	187	1292	861	S04, NAC	S, C
75	75	61	24	dfthdate		Treatment: Date first therapy initiated	8	188	195	1260	835	S04, NAC	S
76	76	62	30	radiaton		Treatment: Radiation	1	196	196	1360	873	S04, NAC	S
77	77	63	31	radwsurg		Treatment: Radiation sequence with surgery	1	197	197	1380	875	S04, NAC	S, C
78	78	64	32	chemof		Treatment: Chemotherapy	2	198	199	1390	878	S04, NAC	S, C
79	79	65	33	hormf		Treatment: Hormone therapy	2	200	201	1400	880	S04, NAC	S, C
80	80	66	34	imunof		Treatment: Immunotherapy	2	202	203	1410	882	S04, NAC	S, C
81	81	67	54	trnsend	3.0	Treatment: Hematologic transplant/endrocine proc (2003+)	2	204	205	3250	876	S04, NAC	С
82	82	68	35	oththerp		Treatment: Other cancer-directed therapy	1	206	206	1420	884	S04, NAC	S, C
83	83	69	29	seerrec		Treatment: Reconstruction - First course (1998-2002)	1	207	207	1330	867	S98	S
84	84	70		surg88	3.0	Treatment: Site-specific surgery (1988-1997)	2	208	209	1640		S88, NAC	S
85	85	71		surgery		Treatment: Site-specific surgery (1998-2002)	2	210	211	1646		S98, NAC	S, C
86	86	72 73		surgf	3.0	Treatment: Site-specific surgery (2003+)	2	212 214	213 214	1290		S04	S, C S, C
87 88	87 88	74		surgoth surgothf	3.0	Treatment: Surgery other (1998-2002) Treatment: Surgery other (2003+)	1	215	214	1648 1294		S98, NAC S04	S, C S, C
OUTC	OMES	S/OT	HER										
89	89			cafudate	3.2	Follow-up: Date of last follow-up	8	216	223	1750	1294	S04, NAC	S, C
90	90			cafustat	3.2	Follow-up: Status of last follow-up	1	224	224	1760		S04, NAC	S, C
91	91			tumstat	3.2	Follow-up: Cancer status at follow-up	1	225	225	1770		S04, NAC	S, C
92	92			cacod	3.2	Follow-up: Cause of death	4	226	229	1910		S04, NAC	S
93	93	7.		caicdrev	3.2	Follow-up: ICD revision number	1	230	230	1920		S04, NAC	S
94 95	94	75		her2neur syswsurg	3.1 3.3	Her2neu (SF only) Systemic treatment / Surgery sequence	1	231 232	231 232	2700 1639	5925 931	S05, NAC	S, C
93				syswsurg	5.5	Systemic treatment / Surgery Sequence	1	232	232	1039	931	JUD, INAC	3, C

^{3.0 =} New to DD version 3.0 (17 variables).

EOD = SEER EOD 1988, Codes and Coding Instructions, 3rd edition (Jan 1998)

S88 = SEER Program Code Manual 1988, Revised edition (June 1992)

S98 = SEER Program Code Manual, 3rd edition (Jan 1998)

S04 = SEER Program Coding and Staging Manual 2004, Revision 1 (August 2006)

S05 = SEER Program Coding and Staging Manual 2007 (May 2007)

NAC = NAACCR Standards for Cancer Registries, Volume II: Data Standards and Data Dictionary, 11th edition, Version 11.1 (April 2006)

CS1 = CS Manual and Coding Instructions, Part I, Version 01.03.00 (Sept 2006)

CS2 = CS Manual and Coding Instructions, Part II, Version 01.03.00 (Sept 2006)

FOR = FORDS Manual, CoC, Revised for 2004

^{3.1 =} New to DD version 3.1 (20 variables). Note: One variable has been dropped in DD version 3.1 (ajccder)

^{3.2 =} New to DD version 3.2 (19 variables). Note: the 2 derived summary stage variables were added post Data Dictionary 3.1.

^{3.3 =} New to DD version 3.3 (1 variable).

¹ References for codes:

² Source of variable: A=AJCC, S=SEER, C=COC

BCSC Glossary of Terms

(Last updated 12/12/2005)

DEFINITIONS

Screening mammography

The radiologist's indication for exam is the primary determinant of whether a mammogram is screening or diagnostic. However, the BCSC typically applies additional criteria to examinations indicated to be screening to eliminate possible non-screening exams. The "working" definition for a screening mammogram must meet all of conditions 1-4 and conditions 5-7 are applied to select a screening population:

- 1. We start with examinations indicated to be for "screening" by the radiologist (inclusion criteria #1 in computed variables (scrcrit_c1), based on variable in Radiology file II.13 indicate=1).
- 2. Because there may be multiple exams on the same day, we only include the first exam in the sequence (inclusion criteria #2 in computed variables (scrcrit_c2), based on variable in Radiology file II.5 examseq=1). [Note that when the exam sequence is unknown, the SCC guidelines are to sort first by indication (ordered 1,3,4,2), then by overall assessment (ordered 0-5)].
- 3. We require that bilateral routine views be performed (inclusion criteria #4 in computed variables (scrcrit_c4), based on variable in Radiology file II.17 routview = 4 or 5; if routview is missing then we require II.15 mamm = 4 or 5 or II.15 digimamm = 4 or 5). Unilateral exams are excluded because this often indicates that the woman may have had a previous unilateral mastectomy or that the exam was done for diagnostic purposes.
- 4. We exclude screening exams that are preceded by any radiologic exam within the prior nine months based on examinations in the database, (inclusion criteria #7 (scrcrit_c7), based on the Radiology and Additional imaging files), woman's self-report of a previous mammogram (Patient file I.20 lastdate), radiologist's report of a previous mammogram (Radiology file II.12 prevdate), or a comparison film date (Radiology file II.27 compdate). The combination of these last three sources of a radiologic exam within the prior nine months is inclusion criteria #8 in the computed variables (scrcrit_c8).
- 5. We exclude exams on women with a history of breast cancer based on either self-report (inclusion criteria #5 in computed variables (scrcrit_c5), based on variables in Patient file I.23 bchist = 1-5 or I.25 ageatdx = age given or I.26 dxdate = date given) or breast cancer diagnosis found in the cancer registry or pathology file (inclusion criteria #6 in computed variables (scrcrit_c6_, based on newdxdt (date of first breast cancer from cancer registry or pathology) prior to exam date).
- 6. We exclude women who report breast implants at the time of that exam (inclusion criteria #9 in computed variables, based on Patient information file I.35 brstaugm = 1-5).
- 7. We exclude exams with a left, right, or overall assessment of '6' (known biopsy proven malignancy). This assessment code was added in the ACR BI-RADS[®] Mammography, 4th Edition Atlas.

The above describes the BCSC "standard" definition of a screening mammogram which has been used in many papers, including a paper describing screening performance by time since last mammogram by Yankaskas et al. (*Radiology*, 2005). However, the definition of a screening mammogram may vary depending on the analysis. For example, an analysis may also require that there be no self-report of breast symptoms. The SCC has a computed variable for

symptoms (ordered by level of concern: lump, nipple discharge, other not including pain, pain, other not specified, and none), so that any level of symptoms can easily be excluded.

Alternatively, when an analysis includes both screening and diagnostic mammograms, one may prefer to only use a radiologist's indication for the exam to categorize the mammogram type.

Diagnostic mammography

The definition of a diagnostic mammogram may differ among analyses. For example, in a paper by Sickles et al. (*Radiology*, 2005), diagnostic mammograms were defined as those where the radiologist's indication for exam is additional work-up of an abnormality detected at screening examination, short-interval follow-up, or evaluation of a breast problem, and results were shown separately for these different types of diagnostic mammograms. However, in papers by Barlow et al. (*JNCI*, 2002) and Geller et al. (*Radiology*, 2002), diagnostic mammograms only included those where the radiologist's indication for exam is evaluation of breast problem. It is important to stress that the performance characteristics are different for the different types of diagnostic mammograms, so we do not recommend combining results across the different types of diagnostic mammograms.

There can be more than one diagnostic mammogram on the same day. However, we require diagnostic mammograms be at least 180 days apart if they both have a BI-RADS[®] assessment '0' and there are no Radiology exams with a non-zero assessment or Additional Imaging Follow-up exams with a resolved result between them. We assume any unresolved exams within the 180 days are from the same work-up period. This is our current definition of diagnostic mammograms, but other definitions may have been used in earlier papers.

Overall assessment of mammogram

The BI-RADS[®] assessments range from 0-6 where:

- BI-RADS[®] 0 indicates additional imaging evaluation is needed
- B-IRADS[®] 1-5 indicates the level of suspicion for malignancy
- BI-RADS[®] 6 indicates there is a known malignancy from a biopsy

Each record in the Radiology record contains a field for the left assessment, right assessment, and overall assessment. The overall assessment reflects the most serious assessment between the left and right breast. If the left and right assessments are different, the overall assessment is the 'highest' assessment in the following list ordered from the least to most concern: 1, 2, 3, 0, 4, 5 and 6. For exams where the laterality is unknown, the left and right assessments are missing, but an overall assessment is given. The SCC also computes the overall assessment as a data check and the SCC variable is used in all analyses.

Initial (before work-up) assessment of mammogram

The initial assessment for screening mammograms is the assessment made before any additional imaging is performed. The use of additional imaging is determined from the screening exam record using variables II.18 diagview = 1-5, II.20 useaddv = 1, II.21 ultrasnd = 1-5, and II.22 useultra = 1 and checking whether other imaging examinations (mammogram or ultrasound) are performed on the same day from both the Radiology and Additional Imaging Follow-up files.

If additional imaging is done on the same day as the screening mammogram, the initial assessment is set to BI-RADS $^{(8)}$ 0. Otherwise, the initial assessment is considered the first recorded assessment in that imaging series. This definition was used in the paper by Yankaskas, et al. (Radiology, 2005) which looked at screening performance by time since last mammogram.

We do not give an initial assessment for diagnostic mammograms because they are performed to resolve a problem and should only result in a $\mathsf{BI-RADS}^{@}$ assessment of 1-5 at the end of all imaging work-up.

Final (end of work-up) assessment of mammogram

In general, only screening mammograms with an initial assessment of BI-RADS $^{\circledR}$ 0 or BI-RADS $^{\circledR}$ 3 with a recommendation for immediate follow-up and diagnostic mammograms with an assessment of BI-RADS $^{\circledR}$ 0 are followed up for a final assessment. For all other mammograms, the final assessment is taken to be the initial assessment. Also, in the case where a screening mammogram has a non-zero assessment but the initial assessment is set to BI-RADS $^{\circledR}$ 0 because of additional imaging performed on the same day, the final assessment is the non-zero assessment.

We look up to 180 days from the mammogram for the first non-zero assessment in the Radiology file and first record in the Additional Imaging Follow-up file with a resolved result (not Inconclusive, Pending, or missing) or recommendation (not Additional evaluation or missing). If there is a record from both files, the earliest one is used. If the earliest record is from the Additional Imaging Follow-up file, the BI-RADS assessment will be missing but the mammogram result can still be classified as positive or negative based on the imaging result and recommendation.

The follow-up period is truncated at the time of a breast biopsy or surgery if it occurs before 180 days. If there is no breast biopsy or surgery and there is a cancer diagnosis, the follow-up period is truncated at the cancer diagnosis date if it occurs before 180 days. The first cancer diagnosis is used for screening mammograms and all cancers are used for diagnostic mammograms.

It is possible that some of these mammograms will not be resolved and will have a final assessment of $\mathsf{BI-RADS}^{\circledR}$ 0.

There may be variations of this definition depending on the analysis being done. For example, the paper by Miglioretti, et al. (*JAMA*, 2004) on breast augmentation and accuracy of mammography used a follow-up period of 90 days instead of 180 days.

Points to keep in mind are the following:

- Even though the initial mammogram is coded 1-5, the assessment may change during the work-up period. Some argue that the final assessment and initial assessment can differ even though the first was non-zero.
- Some cancer registries define the date of diagnosis as the first evidence of breast cancer. Therefore, if an abnormality is noted on a screening mammogram and the radiologist gives it an assessment of zero, that screening mammogram date may be taken as the diagnosis date even if additional imaging is performed on a different day. Therefore, we may be truncating the follow-up period too soon. This will only occur if we have no record of a biopsy being performed within 180 days.

Positive and negative mammography result

A mammogram result is determined to be positive or negative based on the BI-RADS[®] assessment and recommendation given. The BCSC/SCC has adopted the use of the plus sign "+" to mean there was some recommendation for immediate follow-up.

The term "3+" means the assessment is BI-RADS[®] 3 with a recommendation for any immediate follow-up (additional imaging, ultrasound, MRI, nuclear medicine, clinical exam, fine needle aspiration, biopsy, surgical consult or some other non-specified work-up). The term "3-" is not often used but it means the assessment is BI-RADS[®] 3 with a recommendation for normal or short interval follow-up only (no immediate follow-up).

The term "0+" means the assessment is BI-RADS[®] 0 with a recommendation for biopsy, fine needle aspiration, or surgical consult.

	Screening mammogram	Diagnostic mammogram
Positive	BI-RADS [®] assessment: 3+, 0, 4 or 5	BI-RADS [®] assessment: 0+, 4, or 5
Negative	BI-RADS [®] assessment 1, 2, or 3 with recommendation for normal or short interval follow-up	BI-RADS [®] assessment 1, 2, 3, or 0 without a recommendation for biopsy, fine needle aspiration, or surgical consult

Assessments 1 and 2 are negative regardless of recommendations. Assessments 4 and 5 are positive regardless of recommendations. Assessment 0 is positive for screening mammography and depends on the recommendation for diagnostic mammography. Assessment 3 is negative for diagnostic mammography and depends on the recommendation for screening mammography.

For the purposes of ROC analysis we order the outcomes as either (1, 2, 3, 0, 4, 5) or (1, 2, 3-, 3+, 0, 4, 5) for screening mammography and (1, 2, 3, 0, 4, 5) or (1, 2, 3, 0-, 0+, 4, 5) for diagnostic mammography.

If the mammogram result is based on a record from the Additional Imaging Follow-up file (with resolved result or recommendation), the result is classified as positive if the recommendation is 'Surgical consult or biopsy' and negative if the recommendation is 'Normal interval screen' or 'Short interval follow-up'. If the recommendation is 'Additional evaluation' or missing, the result is used where 'Abnormal' is positive and 'Normal' is negative. Records with a final result from the Additional Imaging Follow-up file would not be included in any ROC analysis.

Breast cancer cases

The first diagnosis of breast cancer, invasive or ductal carcinoma *in situ* (DCIS), for each woman is identified through the cancer registry and pathology files. If the pathology and cancer registry files disagree and the diagnoses are within 60 days of each other, we use the pathology diagnosis at NC and VT and cancer registry diagnosis at GH and NM. For NH, the earlier diagnosis is used. If there are diagnoses of both invasive cancer and DCIS, the earliest result is taken if the two diagnoses are more than 60 days apart. If the two diagnoses are within 60 days of each other, the invasive result is taken but the DCIS date is retained as the diagnosis date. For cancer characteristics (e.g., size, stage, nodal status), we take the most severe result from all records with the same cancer type (invasive or DCIS) within 60 days of diagnosis.

Only invasive and DCIS breast cancer cases are included as breast cancer. Sarcomas (including cystosarcoma phyllodes), lymphomas, and LCIS are excluded.

Follow-up period post-mammogram for cancer diagnosis

Both screening and diagnostic mammograms are followed for one year (365 days) for cancer diagnosis. For screening mammograms, the follow-up period is truncated at the next screening exam if the screening exam is 270-365 days after the mammogram. This definition was adopted based on a paper by Rosenberg et al (*Acad Radiol*, 2000). However, non-screening mammograms occurring less than 270 days after the exam do not terminate the follow-up period. Note that this definition is different from the definition described in the ACR BI-RADS[®] manual that uses a strict 365-day follow-up period.

PERFORMANCE MEASURES

Below are definitions for performance measures that are often used in BCSC papers. Note, that the BCSC definitions of positive and negative mammogram and cancer in the follow-up period may be different from those used by the American College of Radiology.

False positive: positive mammogram with no breast cancer diagnosed by the end of the follow-up period.

True positive: positive mammogram with DCIS or invasive breast cancer diagnosed by the end of the follow-up period.

False negative: negative mammogram with DCIS or invasive breast cancer diagnosed by the end of the follow-up period.

True negative: negative mammogram with no breast cancer is diagnosed by the end of the follow-up period.

2x2 table:

Outcome	Positive mammogram	Negative mammogram	Total
Cancer diagnosis by end of follow-up	A (true positive)	C (false negative)	A+C
No cancer diagnosis by end of follow-up	B (false positive)	D (true negative)	B+D
Total	A+B	C+D	

Sensitivity is the proportion of cancers within the follow-up period of the mammogram that had a positive mammography assessment

Sensitivity =
$$\frac{A}{A+C}$$

Specificity is the proportion of non-cancers within the follow-up period of the mammogram that had a negative mammography assessment

Specificity =
$$\frac{D}{B+D}$$

Positive Predictive Value (PPV) has three separate definitions:

PPV₁ is the proportion of exams with a positive assessment that had a cancer diagnosis in the follow-up period (referred to as PPV if no other definitions are used)

$$PPV_1 = \frac{A}{A+B}$$

PPV₂ is the proportion of exams with a recommendation for biopsy or surgical consult (based on recommendation alone or combination of assessment and recommendation) that had a cancer diagnosis in the follow-up period.

 PPV_3 is the proportion of exams with a recommendation for biopsy or surgical consult (based on recommendation alone or combination or assessment and recommendation) and a biopsy performed that had a cancer diagnosis in the follow-up period. Note: data on biopsy procedures is not complete and completeness may depend on site.

All three definitions of PPV were used in a paper by Sickles et al. (*Radiology*, 2005) which looked at performance benchmarks for diagnostic mammography.

Negative Predictive Value (NPV) is the proportion of exams with a negative assessment that did not have a cancer diagnosis in the follow-up period

$$\mathsf{NPV} = \frac{\mathsf{D}}{\mathsf{C} + \mathsf{D}}$$

The consequence of shortening the follow-up period for screening mammograms must be understood. Consider the following example:

Date	Event	Assessment	Classification
Jan 1, 2000	Screening mammogram	Negative	True negative
Nov 1, 2000	Screening mammogram	Positive	True positive
Nov 1, 2000	Cancer diagnosed		

By the ACR definition, the first mammogram would be classified as false negative exam because a breast cancer was diagnosed within 365 days of a negative exam. However, based on our definitions, the follow-up period ended October 31, 2000 because of the Nov 1 screening exam so the first mammogram would be classified as a true negative exam. This would result in increasing the sensitivity. For the purpose of classification, there are two entries for this woman into the analysis.

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PRESENTATIONS

Linn Abraham and Erin Aiello. Definitions used for Performance Assessment, Time to Re-visit? April 2005 BCSC meeting

Patient Questionnaire Version

	Site	Patient Form	Code
Α		12.1.1993	100
Α		1.5.1995	101
Α		4.18.1995	102
Α		7.12.1995	103
Α		8.8.1995	104
Α		3.2.1996	105
Α		3.18.1996	106
Α		8.26.1996	107
Α		1.6.1997	108
Α		10.5.1998	109
Α		2.10.1999	110
Α		5.1.1999	111
A		11.1.1999	112
A A		4.1.2001 9.1.2001	113 114
A		5.1.2003	115
A		1.1.2004	116
Ĉ		A9999999	200
C		D9999999	201
D		001	300
D D		002	301
D		003	302
D		004	303
D		005	304
D		860	305
D		861	306
D		862	307
D		863	308
D		864	309
D		865	310
D		866	311
D D		867	312
ר		868	313
		IMRS V1 IMRS V2	400 401
F		IMRS V3	401
F		IMRS V4	403
F		BSRR V2.1	404
E		BSRR V2.2	405
E		BSRR V2.3	406
		BSRR V2.4	407
G		IA	500
G		IB	501
G		IIA	502
G		IIB	503
G		IIIA	504
G		IIIB	505
G		IIIC	506
G		IIID	507
G		IVB	508
G		VA	509
G		VB	510
00000000000		VIA	511
G		VIIA	512
G		VIIIA	513

G	IXC	517
G	XA	518
G	XB	519
G	XIA	520
Ğ	XIB	521
G	XIC	522
	_	
1	48	600
I	2787	601
1	3501	602
1	4204	603
1	5200	604
İ	6466	605
i	7606	606
1	7791	607
1	7983	608
I	10476	609
1	12051	610
1	13201	611
1	13852	612
i	14384	613
i	14939	
		614
1	18731	615
I	20101	616
1	21269	617
1	21506	618
1	26133	619
İ	26995	620
i	30278	621
1	31789	622
I	35323	623
I	35583	624
1	35673	625
1	35697	626
1	38214	627
1	38780	628
i	39603	629
i	40242	630
1	41186	631
I	45618	632
I	47783	633
1	48324	634
1	49575	635
1	51581	636
1	54152	637
i	55098	638
i	55975	639
-		
!	56164	640
I	60958	641
I	61254	642
1	61455	643
1	61771	644
İ	63594	645
i	64550	646
•	Info only from	040
	•	000
	rad/tech form	886
	Other	887
	Structurally missi	888
	Unknown	999