Commonwealth of Virginia

Department of Health

The Honorable Terry McAuliffe,
Governor
Marissa J Levine, MD, MPH, FAAFP
State Health Commissioner

VIRGINIA CANCER REGISTRY MANUAL

August 2012

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TABLE OF CONTENTS

TABLE OF CONTENTS

PREFACE……II

PART ONE:REPORTING REQUIREMENTS 1

WHAT IS THE VCR ……3
WHY REPORT TO THE VCR……...3
HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)……4
VCR REFERENCE DATE……4
VCR REPORTING SOURCES……..4
Hospitals 5
Laboratories 5
Non-Hospital Sources 5
Data Exchange 5
HOSPITAL REPORTING METHODS……..6
REPORTABLE CONDITIONS……6
VCR List of Reportable Conditions..... 6
Ambiguous Terminology 6
REPORTABLE CODES…….....9
ICD-9-CM Codes..... 9
ICD-O Behavior Codes..... 14
MULTIPLE PRIMARY DETERMINATION……..14
More Than One Cancer..... ……14
Determining Multiple Primary Cancers..... 14
DATE OF DIAGNOSIS REPORTABILITY……15
REPORTABLE CASES……16
Reportable Diagnosis 16
Reportable Situations 17
EXCLUSIONS……...19
Non-Reportable Diagnosis..... 19
Non-Reportable Situations..... 20
CONFLICTING STANDARDS …….……22
WHEN IN DOUBT……...22
VCR REQUIRED DATA ITEMS…… ……22
CHANGING INFORMATION……23
Importance of Change/Deletion Procedure..... 23
What to Change 23
When to Submit Changes..... 23
How to Change Information 23
VCR SUBMISSION FORM…… …….24
Instructions for Paper Reporting form 24
HOW TO REPORT…….. ……26
WHEN TO REPORT…… ..26
Transmission Date 26
Timeliness of Reporting..... 26
Long-Term Hospitalizations 26
WHERE TO REPORT…… …27
E-Mail Instructions 27
DOCUMENT RETENTION……27
FACILITY CONTACT PERSON FOR VCR……...27
TRAININGS……27

TABLE OF CONTENTS

VCR PHONE NUMBERS……28

PART TWO: CASEFINDING.....6

CASEFINDING……30
Casefinding Procedures 30
Reportable Conditions 30
Casefinding Sources.....30
Completeness of Casefinding 32
Most Effective Casefinding Procedure 32

PART THREE:DATA ITEM INSTRUCTIONS 32

GENERAL INFORMATION……...37
Data Item Completion.....37
Data Item Completion.....37
Recording Unknown or Not Applicable Information 37
Ill-defined Sites.....40
Hematopoietic, lymphoid, reticuloendothelial, immunoproliferative, and myeloproliferative diseases 41
NAME - LAST ……43
Recording Name – Last 43
NAME - SUFFIX……..44
Recording Name-Suffix 44
NAME - FIRST ……45
Recording Name-First.....45
NAME - MIDDLE……46
Recording Name-Middle 46
NAME - MAIDEN……47
Recording Name-Maiden.....47
NAME - ALIAS……48
Recording Name-Alias.....48
GUIDELINES FOR RECORDING PATIENT ADDRESS……..49
Rules for Persons Without Apparent Residences: 49
ADDR AT DX - NO & STREET……..50
Recording Addr At Dx - No & Street 50
VCR STANDARD ABBREVIATIONS FOR STREET ADDRESS……52
ADDR AT DX - SUPPLEMENTL……53
Recording Addr at Dx – Supplemental.....53
Recording Addr at DX-City.....54
ADDR AT DX - STATE……...55
Recording Addr at DX-State.....55
Abbreviations - US States & Possessions.....55
Abbreviations – Other US Possessions.....56
Abbreviations – Canadian Provinces.....56
Abbreviations – Other.....56
ADDR AT DX - POSTAL CODE……57
Recording Addr At DX- Postal Code 57
Codes and Definitions.....57
Special Instructions.....57

TABLE OF CONTENTS

COUNTY AT DX……58
(RESIDENCE AT DIAGNOSIS – COUNTY)……58
Recording County At Dx 58
Additional Codes and Definitions..... 58
AGE AT DX……59
Recording Age At Diagnosis 59
Special Instructions..... 59
BIRTH DATE……..60
Recording Birth Date 60
BIRTH PLACE ……61
Recording Birth Place 61
Born in the United States 61
Additional Codes and Definitions..... 61
SOCIAL SECURITY NUMBER……..62
Recording Social Security Number..... 62
SEX……..63
Codes and Definitions..... 63
Special Instructions..... 63
SPANISH/HISPANIC ORIGIN…… …..64
Codes and Definitions..... 64
Recording Spanish/Hispanic Origin 64
RACE……65
Codes and Definitions..... 65
Recording Race..... 65
Special Instructions..... 67
Reference 67
PRIMARY PAYER AT DIAGNOSIS……..68
Recording Primary Payer at Diagnosis 69
TEXT - USUAL OCCUPATION……..70
Recording Text-Usual Occupation 70
TEXT - USUAL INDUSTRY……..71
Recording Text-Usual Industry..... 71
MEDICAL RECORD NUMBER……..72
Recording Medical Record Number 72
SEQUENCE NUMBER - HOSPITAL……..73
Sequence Numbers for Malignant or In Situ Primaries 73
Sequence Numbers for Non-Malignant Tumors..... 73
Recording Sequence Number 73
CLASS OF CASE……76
Analytic and Non-analytic Cases..... 77
CASEFINDING SOURCE……78
Codes and Definitions..... 78
Recording Casefinding Source 79
TYPE OF REPORTING SOURCE……..80
Recording Type of Reporting Source 80
DATE OF 1ST CONTACT……81
Recording Date of 1st Contact..... 81
DATE OF DIAGNOSIS ……83
Recording Date of Diagnosis..... 83

TABLE OF CONTENTS

PRIMARY SITE……..85
Coding Primary Site.....85
Determining Primary Site 85
Text 88
LATERALITY……..89
Codes and Definitions.....89
Recording Laterality 89
Text 91
HISTOLOGY……92
Coding Histology 92
Determining Histology.....92
Text 93
BEHAVIOR……..94
Coding Behavior 94
Determining Behavior.....94
Text 96
GRADE/DIFFERENTIATION……97
Coding Grade 97
Codes and Definitions.....97
Determining Grade/Differentiation.....98
Text 101
DIAGNOSTIC CONFIRMATION……..……..102
Codes and Definitions - solid tumors.....102
Recording Diagnostic Confirmation - solid tumors 103
Codes and Definitions - Hematopoietic or Lymphoid Tumors (9590-9992).....104
Recording Diagnostic Confirmation - Hematopoietic and Lymphoid Neoplasms 104
Text 105
GUIDELINES FOR COLLECTING COLLABORATIVE STAGE……..106
The Collaborative Staging (CS) System 106
Effective Date 106
Obsolete Codes 106
"Flavors of Obsolete" 107
How Collaborative Staging Works 108
Understanding TNM and AJCC Definitions.....108
General CS Guidelines.....109
Recording CS Data Items.....113
CS Data Items 116
CS Data Item Descriptions, Instructions, and Schemas 116
CS TUMOR SIZE……...117
Recording CS Tumor Size 117
Text 119
CS EXTENSION……120
Recording CS Extension 120
Text 122
CS TUMOR SIZE/EXT EVAL……...123
Recording CS Tumor Size/Ext Eval 123
CS LYMPH NODES……..125
Recording CS Lymph Nodes 125
Coding Regional Lymph Nodes for Head and Neck Sites.....129
Text 131

CS REG NODES EVAL……132

TABLE OF CONTENTS

Recording CS Reg Nodes Eval 133
REGIONAL NODES POSITIVE 135
Recording Regional Nodes Positive 135
Text 136
REGIONAL NODES EXAMINED 137
Recording Regional Nodes Examined 137
Text 138
CS METS AT DX 139
Recording CS Mets at DX 139
Text 140
CS METS EVAL 142
Recording CS Mets Eval 142
CS SITE SPECIFIC FACTORS 1 - 25 144
Purpose of SSFs 144
Recording SSFs 147
LYMPH-VASCULAR INVASION 149
Codes and Descriptions 149
Recording Lymph-Vascular Invasion 149
GRADE PATH VALUE 150
Codes and Descriptions 150
Recording Grade Path Value 150
GRADE PATH SYSTEM 151
Codes and Descriptions 151
Recording Grade Path System 151
GUIDELINES FOR RECORDING FIRST COURSE OF TREATMENT 152
Treatment Plan 152
Guidelines for Determining *First Course of Treatment* 153
Time Period Rules for First Course of Treatment 153
Watchful Waiting 153
Treatment Failure 153
Treatment for Recurrence or Progression 154
Non Cancer-Directed Treatment 154
Cancer-Directed Treatment 155
DATE 1ST COURSE OF TREATMENT 156
Recording Date 1st Course of Treatment 156
DATE 1ST CRS RX FLAG 157
Codes and Definitions 157
Recording Date 1st Crs Rx Flag 157
RX SUMM – TREATMENT STATUS 158
Instructions for Coding 158
Recording Surgery to Primary Site 159
Text 161
Special Instructions 161
RX DATE - SURGERY 162
Recording RX Date-Surgery 162
Special Instructions 162
Text 162

TABLE OF CONTENTS

RX DATE - SURGERY FLAG……...163
Codes and Definitions.....163
Recording Date 1st Crs Rx Flag 163
RX SUMM - SCOPE REG LN SURG……164
Codes and Definitions.....164
Recording Scope of Regional Lymph Node Surgery.....168
Special Instructions.....168
Text 168
RX SUMM - SURG OTH REG/DIS……...169
Codes and Definitions.....169
Recording Surgery to Other Sites 169
Special Instructions.....170
Text 170
REASON FOR NO SURGERY……..171
Codes and Definitions.....171
Recording Reason for No Surgery 171
Text 171
RAD- REGIONAL RX MODALITY……172
Codes and Definitions.....172
Recording Radiation Regional Treatment Modality.....174
Text 174
RX DATE - RADIATION……...175
Recording RX Date- Radiation.....175
Text 175
RX DATE - RADIATION FLAG……...176
Codes and Definitions.....176
Recording Rx Date - Radiation Flag.....176
RX SUMM- SURG/RAD SEQ……...177
Codes and Definitions.....177
Recording RX Summ-Surg/Rad Seq.....178
Text 178
RX SUMM - CHEMO……179
Codes and Definitions.....179
Recording Chemotherapy 180
Methods of Administration.....181
Clarification of Terms.....181
Chemotherapy Group Classifications 182
Text 182
RX SUMM - HORMONE……...183
Codes and Definitions.....183
Recording Hormone Therapy 184
Text 184
RX SUMM - BRM……..185
Codes and Definitions.....185
Recording Immunotherapy 185
Text 186
RX SUMM- TRANSPLNT/ENDROCR……187
Codes and Definitions.....187
Recording Hematologic Transplant and Endocrine Procedures 188
Text 188

TABLE OF CONTENTS

RX DATE - SYSTEMIC……189
Recording Rx Date – Systemic 189
Text 189
RX DATE - SYSTEMIC FLAG ……190
Codes and Definitions 190
Recording Rx Date - Systemic Flag 190
RX SUMM – SYSTEMIC/SUR SEQ……191
Codes and Definitions 191
Recording RX Summ-Systemic Sur Seq 192
Text 192
RX SUMM - OTHER……..193
Codes and Definitions 193
Recording Other Treatment 194
Text 194
RX DATE - OTHER……..195
Recording RX Date- Other 195
Text 195
RX DATE - OTHER FLAG……196
Codes and Definitions 196
Recording Rx Date - Other Flag 196
DATE OF 1ST CRS RX - COC……..197
Recording Date of 1st CRS RX- COC 197
DATE OF 1ST CRS RX - COC FLAG……..198
Codes and Definitions 198
Recording Date of 1st Crs Rx - CoC Flag 198
DATE OF LAST CONTACT……199
Recording Date of Last Contact 199
DATE OF LAST CONTACT FLAG……..200
Codes and Definitions 200
Recording Date of Last Contact Flag 200
VITAL STATUS……201
Codes and Definitions 201
REPORTING HOSPITAL……..202
Special Instructions 202
ABSTRACTED BY……203
Special Instructions 203
GUIDELINES FOR REPORTING TEXT……..204
Text Requirements 204
Completion of Text Fields 204
Amount of Text 204
TEXT-DX PROC-PE……..205
Source Records: 205
Suggestions for Text: 205
Data Item(s) to be verified/validated using the text entered in this field: 205
TEXT-DX PROC-X-RAY/SCAN……..206
Source Records: 206
Suggestions for Text 206
Data Item(s) to be verified/validated using the text entered in this field 206
SEER SUMMARY STAGE 2000……206

TABLE OF CONTENTS

TEXT-DX PROC-SCOPES……207
Source Records: 207
Suggestions for Text: 207
Data Item(s) to be verified/validated using the text entered in this field 207
TEXT-DX PROC-LAB TESTS……..208
Source Records 208
Suggestions for Text: 208
Data Item(s) to be verified/validated using the text entered in this field: 208
TEXT-DX PROC-OP……..209
Source Records: 209
Suggestions for Text: 209
Data Item(s) to be verified/validated using the text entered in this field 209
TEXT-DX PROC-PATH……210
Terminology..... 210
Source Records: 210
Suggestions for Text: 211
Data Item(s) to be verified/validated using the text entered in this field 211
TEXT-PRIMARY SITE TITLE……212
Source Records: 212
Suggestions for Text: 212
Data Item(s) to be verified/validated using the text entered in this field 212
LATERALITY……...
…..**ERROR! BOOKMARK NOT DEFINED.**
TEXT-HISTOLOGY TITLE……..213
Source Records: 213
Suggestions for Text: 213
Data Item(s) to be verified/validated using the text entered in this field 213
TEXT-STAGING……214
Source Records: 214
Suggestions for Text: 214
Data Item(s) to be verified/validated using the text entered in this field 214
RX TEXT-SURGERY……216
Source Records: 216
Suggestions for Text: 216
Data Item(s) to be verified/validated using the text entered in this field 216
RX TEXT-RADIATION (BEAM) ……217
Source Records: 217
Suggestions for Text: 217
Data Item(s) to be verified/validated using the text entered in this field 217
RX TEXT-RADIATION OTHER……..218
Source Records: 218
Suggestions for Text: 218
Data Item(s) to be verified/validated using the text entered in this field 218
RX TEXT-CHEMO……219
Source Records: 219
Suggestions for Text: 219
Data Item(s) to be verified/validated using the text entered in this field 219
RX SUMM--SYSTEMIC/SUR SEQ……219
RX TEXT-HORMONE ……220
Source Records: 220
Suggestions for Text: 220
Data Item(s) to be verified/validated using the text entered in this field 220

TABLE OF CONTENTS

RX TEXT-BRM……..221
Source Records: 221
Suggestions for Text: 221
Data Item(s) to be verified/validated using the text entered in this field: 221
RX TEXT-OTHER……..222
Source Records: 222
Suggestions for Text: 222
Data Item(s) to be verified/validated using the text entered in this field: 222
TEXT-REMARKS……..223
Source Records 223
Suggestions for Text: 223
Codes and Definitions..... 224
VA STATE SPECIFIC FIELD - VIETNAM VETERAN……...225
Codes and Definitions..... 225
VA STATE SPECIFIC FIELD - TOBACCO HISTORY……...226
Codes and Definitions..... 226
VA STATE SPECIFIC FIELD - NUMBER OF YEARS SMOKED……..227
Code 227
VA STATE SPECIFIC FIELD - ALCOHOL HISTORY……...228
Codes and Definitions..... 228
VA STATE SPECIFIC FIELD - FAMILY HISTORY……...229
Codes and Definitions..... 229
SYSTEM CODES……...230
Required Codes and Definitions 230

PART FOUR: QUALITY CONTROL..... 232
QUALITY CONTROL: Reporting Facilities.....235
Completeness.....235
Accuracy.....236
Timeliness.....237
QUALITY CONTROL: VCR.....238
Internal Quality Control Procedures.....238
On-Site Quality Assessment Review.....240
Trainings.....242

VIRGINIA CANCER REGISTRY
USER MANUAL

PREFACE

The rate of new cancer cases in Virginia is a public health concern. More than 30,000 Virginia residents are diagnosed with cancer each year. Without information on these new cases of cancer, it is difficult to plan prevention, education, screening, early detection, treatment, and rehabilitation programs. The Virginia Cancer Registry (VCR) records the incidence of cancer for the Commonwealth of Virginia and provides data to help public health authorities, physicians, researchers, and other health professionals plan and evaluate cancer programs. The registry also directly serves the citizens of the Commonwealth by providing and interpreting statistical information on cancer in the state.

In 1970, hospitals began voluntarily contributing cancer reports to the Virginia Tumor Registry. In 1990, the Virginia General Assembly mandated that the Virginia Cancer Registry be established in the Virginia Department of Health (see Appendix A). The legislation prescribed the purpose of the statewide cancer registry to include:

- Determining means of improving the diagnosis and treatment of cancer patients.
- Determining the need for and means of providing better long-term, follow-up care of cancer patients.
- Conducting epidemiological analyses of the incidence, prevalence, survival, and risk factors associated with the occurrence of cancer in Virginia.
- Collecting data to evaluate the possible carcinogenic effects of environmental hazards including exposure to dioxin and the defoliant, Agent Orange.
- Improving rehabilitative programs for cancer patients.
- Assisting in the training of hospital personnel.
- Determining other needs of cancer patients and health personnel.

As a population-based cancer incidence registry, the VCR collects demographic, diagnostic, and first course treatment information on all Virginia residents diagnosed with cancer. A population based incidence registry collects all reports for an entire population; for VCR, the relevant population is the population of the state. All information collected and maintained in the VCR database is strictly confidential. Only summary statistical information is published for general distribution and public knowledge. The Virginia Department of Health may permit use of in-depth information for research, subject to careful screening, strict supervision, and only to accomplish approved program objectives.

To fulfill some of the goals the state legislature set for the registry, VCR is an active partner with Virginia Department of Health programs that promote cancer prevention and control. These programs include the Virginia Comprehensive Cancer Control Program and the Virginia Breast and Cervical Cancer Early Detection Program. VCR data are used for cancer research and surveillance activities, and for epidemiologic and other special studies. Virginia incidence and mortality data are published annually in the national summary *United States Cancer Statistics* (USCS, http://apps.nccd.cdc.gov/uscs/). USCS is a joint publication that CDC and the National Cancer Institute (NCI) produce. It includes the most recent five years of data. A large variety of cancer incidence data broken out by site and demographic variables is available on the VCR website at http://www.vdh.virginia.gov/ofhs/prevention/cpc/vcr/index.htm . Virginia data are also published in *Cancer in North America* (CINA), which is an annual report the North American Association of Central Cancer Registries (NAACCR) publishes. CINA is available at the NAACCR web site, http://www.naaccr.org/.

VCR is recognized as a high quality reporting system and a valuable resource for cancer data. VCR uses current technology and national data collection standards to enhance the completeness, accuracy, and timeliness of cancer data. As the volume of VCR incidence data increases over time, the utility of these data for program planning, evaluation, and epidemiologic studies increases as well. VCR depends on all cancer reporters for support, cooperation, and accurate reporting for the ongoing operation of the statewide cancer registry. As VCR staff work together with staff of reporting facilities statewide, complete and reliable cancer incidence data will continue to be available to provide answers to our questions, to reduce the burden of cancer in Virginia, and to improve the lives of both present and future patients.

PART ONE:
REPORTING REQUIREMENTS

VCR MANUAL, AUGUST 2012 EDITION

This manual shall be used to submit reportable cases with a Date Diagnosis on or after January 1, 2012 except where noted.

WHAT IS THE VCR

The Virginia Cancer Registry (VCR) is a population-based cancer incidence registry responsible for the collection of demographic, diagnostic, and treatment information on all cancer patients diagnosed and treated at hospitals, laboratories, and other health care facilities in Virginia with reportable cancer. Population-based cancer registries collect information on cancers among the entire population for which they are responsible.

The VCR is also defined as an incidence only cancer registry rather than a multi-purpose registry. Incidence only registries gather only the information necessary to determine the incidence of cancer by geographic areas, by demographic characteristics, and by stage at diagnosis for each type of cancer. Treatment information has also been added to the information collected.

The term *central cancer registry* is also used in referring to the VCR. Although a central registry does not have to be population-based, this term is frequently used to mean a statewide cancer registry. A central registry is designed to aggregate data from various sources. The contributing sources required to report to the VCR provide statewide coverage of the population.

WHY REPORT TO THE VCR

The mission of the VCR is to collect and provide complete, accurate, and timely statewide incidence data for determination of cancer rates and trends in the population. To fulfill this mission, the VCR depends on complete ascertainment of cases and use of the data.

1. <u>The Law and Regulations</u>
   Statewide collection and dissemination of data on cancer by the Virginia Department of Health is mandated in the *Code of Virginia* and Virginia Department of Health disease reporting regulations. The state laws include Chapter 2 (§32.1-70 *et seq.)* of Title 32.1*(VCR Manual Appendix A)* According to these statutes, each hospital, clinic, and independent pathology laboratory in the Commonwealth is required to report all cases of cancer, which are diagnosed or treated at the hospital, clinic or laboratory. Physicians are required to report when they know the case has not been reported by a hospital, clinic or in-state laboratory. These cases are to be submitted in the format prescribed by the Virginia Cancer Registry. Regulations mandating reporting cancer cases by hospitals, clinics, laboratories, other health care facilities and health care practitioners appear Part VIII of the State Board of Health publication *Regulations for Disease Reporting and Control*. *(VCR Manual Appendix B)*

WHY REPORT TO THE VCR- *continued*

2. Cancer Control
   The ultimate value of the registry lies not in collection of the data but in the degree to which the data are used for cancer control. The basis for any successful cancer control program is a comprehensive registry system. Registry data provide answers to questions, the means to target limited cancer control resources, and the mechanism to evaluate cancer control activities.

HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)

HIPAA allows for the reporting of identifiable cancer data to public health entities. Because the VCR falls under the definition of a public health entity, HIPAA allows you to report data to the VCR in compliance with Virginia state laws and regulations. Written informed consent from each cancer patient reported to public health entities is not required under HIPAA.

The VCR depends on reporting facilities to submit quality data. Through the dedicated efforts of these facilities, the VCR is able to provide accurate information used to establish and enhance cancer control programs, and thus improve the lives of present and future patients with cancer.

VCR REFERENCE DATE

Reference date refers to the start date after which all eligible records must be included in the registry. The VCR reference date is January 1, 1990. This means complete statewide cancer incidence data are available from the VCR for 1990 to the present.

Note: In order to assure complete case ascertainment, reference date is not used to determine what cases are reportable to the VCR. See *VCR Manual Part One, Date of Diagnosis Reportability*.

VCR REPORTING SOURCES

The Code of Virginia mandates each designated hospital, physician and laboratory in the Commonwealth shall report all cases of cancer, which are diagnosed and/or treated at the hospital, physician office, or laboratory. In addition, the VCR has agreements with other states to exchange data.

VCR REPORTING SOURCES - *continued*

Hospitals

Registry Hospitals - The term *registry hospital* refers to hospitals with cancer registries functioning as an integral component of the hospital cancer program. They may or may not be accredited by the American College of Surgeons Commission on Cancer. Generally, the cancer registrar or cancer program manager at a registry hospital is delegated the responsibility of reporting to the VCR.

Non Registry Hospitals - The term *non registry hospital* refers to hospitals that do not have cancer registries functioning as an integral component of a hospital cancer program. Generally, personnel in the Health Information Management (HIM) Department are delegated the responsibility of reporting to the VCR.

Laboratories

The addition of these cases provides the VCR data on cases never seen in the hospital setting, thereby increasing the overall completeness of VCR data.

Hospital Laboratories - Required reporting of cases by hospital laboratories is performed by cancer registry or HIM personnel as described above.
Free-Standing Pathology Laboratories - Reporting of cases by designated free-standing laboratories is required.

Non-Hospital Sources

The Board of Health's regulations concerning the Regulations for Disease Reporting were revised in January 2002 to expand cancer reporting requirements to include additional non-hospital sources.

Part VIII, 12 VAC 5-90-170 requires hospitals, clinical laboratories, or other health care facilities providing screening, diagnostic or therapeutic services for cancer patients to report cases of cancer. Reporting by "other health care facilities" will be phased in as follows: 1) Radiation Centers, 2) Medical Oncology Centers, 3) Hematology/Oncology Practices, and 4) Ambulatory Surgery Centers.

Data Exchange

The VCR has written agreements to exchange data with other cancer registries including all contiguous states. This insures a resident of Virginia who was diagnosed and/or treated out-of-state will be included in the VCR database.

HOSPITAL REPORTING METHODS

Reporting facilities are encouraged to submit all their cases electronically. Electronic reporting is the submission of reportable cases to the VCR on media (diskette or compact disc (CD)) or via secure email or FTP site using commercial, hospital-developed or AbstractPlus software. Written approval from the VCR is required to report electronically. See *VCR Manual Appendix C, Electronic Reporting.*

1. Commercial/Hospital-Developed Software - Registry hospitals are required to electronically report cases included in the hospital cancer registry using commercial or hospital-developed software after all VCR approval criteria are met.

2. Abstract Plus - Use of Abstract Plus software for non-registry facilities has begun implementation. VCR has begun phasing in all facilities currently reporting via paper. If you are interested in utilizing this at your facility or office, please contact the VCR.

REPORTABLE CONDITIONS

VCR List of Reportable Conditions

The Virginia Board of Health defines cancer and the reportable cancers in its Regulation for Disease Reporting and Control. VCR follows this standard in the *VCR List of Reportable Conditions,* found in the *VCR Manual Appendix D.* This section identifies diagnoses that must be reported to the VCR. Conditions are to be reported if the diagnosis includes the words *malignant, cancer, carcinoma,* and *lymphoma.* Most *leukemias* and *sarcomas* are reportable except when noted as exclusions on the listing. In addition, there are other conditions, which do not include these particular terms but are reportable such as *Wilms tumor, blastoma, anemia* and *carcinoid.* It is therefore very important to refer to the *VCR List of Reportable Conditions* to make sure all reportable conditions are identified.

All primary intracranial and central nervous system (CNS) tumors are reportable. This includes benign, malignant and borderline tumors for the following sites:

- Meninges (C70.0 - C70.9)
- Brain (C71.0 - C71.9)
- Spinal Cord (C72.0)
- Cauda equina (C72.1)
- Cranial nerves (C72.2 - C72.5)
- Other CNS (C72.8, C72.9)
- Pituitary gland (C75.1)
- Craniopharyngeal duct (C75.2)
- Pineal gland (C75.3)

Ambiguous Terminology

A patient has a reportable condition if a *recognized medical practitioner* says so. In most cases, the patient's record clearly presents the diagnosis by use of specific terms, which are synonymous with the diagnosis. However, the physician may not always be certain or the recorded language definitive. VCR rules concerning the usage of ambiguous terminology are as follows:

REPORTABLE CONDITIONS – *continued*

1. Terms That Constitute a Diagnosis **-** Interpret the following terms as a reportable diagnosis:

apparent(ly)	*consistent with*	*neoplasm*	*suspicious (for)*
appears	*favor(s)*	*presumed*	*tumor*
comparable with	*malignant appearing*	*probable*	*typical (of)*
compatible with	*most likely*	*suspect(ed)*	

2. Terms That Do Not Constitute a Diagnosis - Do not interpret the following terms as a diagnosis. Do not report patients who have a final diagnosis consisting only of these terms without additional information to support reportability:

cannot be ruled out	*potentially malignant*	*suggests*
equivocal	*questionable*	*worrisome*
possible	*rule(d) out*	

3. How To Use Ambiguous Terminology For Case Ascertainment

   a. In Situ and Invasive (Behavior codes /2 and /3)

      1. If any of the reportable **ambiguous terms precede** a word that is **synonymous** with an in situ or invasive tumor (e.g., cancer, carcinoma, malignant neoplasm, etc.), the case is reportable.

         Example 1: The pathology report says: Prostate biopsy with markedly abnormal cells that are typical of adenocarcinoma. Report the case.

         Example 2: The final diagnosis on the outpatient report reads: Rule out leukemia. Do not report the case.

      2. Discrepancies: If one section of the medical record(s) uses a reportable term such as "apparently" and another section of the medical record(s) uses a non-reportable term such as "cannot be ruled out", accept the reportable term and report the case.

         Exception: Do not report a case based only on suspicious cytology. The case is reported only if proven by positive cytology or other diagnostic methods including a physician's clinical diagnosis.

REPORTABLE CONDITIONS - *continued*

3. Use these terms when **screening** diagnoses on pathology reports, operative reports, scans, mammograms, and other diagnostic testing other than tumor markers.

   Note: If the ambiguous diagnosis is **proven to be not reportable** by biopsy, cytology, or physician's statement, **do not report** the case.

   Example: Mammogram shows calcifications suspicious for intraductal carcinoma. The biopsy of the area surrounding the calcifications is negative for malignancy. Do not report the case.

b. Benign and borderline primary intracranial and CNS tumors

   1. Use the "Ambiguous Terms that are Reportable" list to identify benign and borderline primary intracranial and CNS tumors that are reportable.

   2. If any of the reportable **ambiguous terms precede** either the word "**tumor"** or the word "**neoplasm**," the case is reportable. Report the case.

      Example: The mass on the CT scan is consistent with pituitary tumor. Report the case.

   3. Discrepancies: If one section of the medical record(s) uses a reportable term such as "apparently" and another section of the medical record(s) uses a non-reportable term such as "cannot be ruled out", accept the reportable term and accession the case.

      Exception: Do not report a case based only on suspicious cytology. The case is reported only if proven by positive cytology or other diagnostic methods including a physician's clinical diagnosis.

   4. Use these terms when **screening** diagnoses on pathology reports, scans, ultrasounds, and other diagnostic testing other than tumor markers.

      Note: If the **ambiguous** diagnosis is proven to be **not reportable** by biopsy, cytology, or physician's statement, **do not report** the case.

c. Confirmation of an Ambiguous Diagnosis - Subsequent admissions for patients whose initial diagnosis contained ambiguous terminology must be reviewed. It is established practice to accept the information at the time of the latest admission, or the most complete or detailed information.

REPORTABLE CODES

ICD-9-CM Codes

Use the following ICD-9-CM codes to identify reportable conditions. Conditions in brackets [ ] are only reportable when the diagnosis date is **prior** to January 1, 2001. Conditions in parentheses ( ) and underlined are only reportable when the diagnosis date is on or after January 1, 2010.

140.0 – 208.92	Malignant Neoplasms
209.00 – 209.29	Neuroendocrine tumors
209.30	Malignant poorly differentiated neuroendocrine carcinoma, any site *Reportable inclusion terms:* *High grade neuroendocrine carcinoma, any site* *Malignant poorly differentiated neuroendocrine tumor NOS*
209.31 – 209.36	Merkel cell carcinoma
209.70 – 209.79	Secondary neuroendocrine tumors/Secondary carcinoid tumors *All neuroendocrine or carcinoid tumors specified as secondary are malignant*
225.0- 225.9	Benign neoplasm of brain, cranial nerves, cerebral meninges, spinal cord, cauda equina, spinal meninges
227.3	Benign neoplasm of pituitary, craniopharyngeal duct, craniobuccal pouch, hypophysis, Rathke's pouch, sella turcica
227.4	Benign neoplasm of pineal gland, pineal body
228.02	Hemangioma, angioma NOS, cavernous nevus, Glomus tumor of intracranial structures
228.1	Lymphangioma, any site
230.0 – 234.9	Carcinoma in situ (Exclude 233.1*), Intraepithelial neoplasia III (Exclude PIN III)
235.0 – 238.9	Neoplasms of uncertain behavior
[235.4**]**	**[**Peritoneum/Cystadenoma, Borderline Malignancy**]**
236.0	Endolymphatic Stromal Myosis/Endometrial Stromatosis/ Stromal Endometriosis/Stromal Myosis (endolymphatic)
[236.2**]**	**[**Tumor of Ovary/Cystadenoma, Borderline Malignancy of Low Malignant Potential**]**
237.0 – 237.9	Neoplasms of uncertain behavior of endocrine glands and nervous system
237.1	Neoplasm of uncertain behavior of pineal gland
237.5	Neoplasm of uncertain behavior of brain and spinal cord. Papillary Ependymoma
237.6	Neoplasm of uncertain behavior of meninges: NOS, cerebral, spinal; Papillary Meningioma
237.70	Neurofibromatosis, Unspecified von Recklinghausen's Disease
237.71**	Neurofibromatosis, Type One von Recklinghausen's Disease
237.72	Neurofibromatosis, Type Two von Recklinghausen's Disease
237.9	Neoplasm of uncertain behavior of other & unspecified parts of nervous system; cranial nerves
238.3	Phyllodes Tumor, Malignant (Cystosarcoma Phyllodes)
238.4	Polycythemia Vera (Proliferative, Primary or Rubra Vera)
238.6	Neoplasm of uncertain behavior of other and unspecified sites and tissues, Plasma cells; Plasmacytoma/Solitary Myeloma
238.7	Other lymphatic and hematopoietic tissues *Note: This code was expanded 10/2006; it is now a subcategory and is no longer valid for use for coding purposes. It should be included in extract programs for quality control purposes*
238.71	Essential thrombocythemia; essential hemorrhagic thrombocythemia; Idiopathic hemorrhagic) thrombocythemia
238.72	Low grade myelodysplastic syndrome lesions; Refractory anemia (RA); Refractory anemia with excess blasts-1 (RAEB-1); Refractory anemia with ringed sideroblasts (RARS); Refractory cytopenia with multilineage dysplasia (RCMD); Refractory cytopenia with multilineage dysplasia and ringed sideroblasts (RCMD-RS)

REPORTABLE CODES- *continued*

238.73	High grade myelodysplastic syndrome lesions; Refractory anemia with excess blasts-2 (RAEB-2)
238.74	Myelodysplastic syndrome with 5q deletion; 5q minus syndrome NOS
238.75	Myelodysplastic syndrome, unspecified
238.76	Myelofibrosis with myeloid metaplasia; Agnogenic myeloid metaplasia; Idiopathic myelofibrosis (chronic); Myelosclerosis with myeloid metaplasia
238.77	Polymorphic Post-Transplant Lymphoproliferative Disorder
238.79	Other lymphatic and hematopoietic tissues; Lymphoproliferative disease (chronic) NOS; Megakaryocytic myelosclerosis; Myeloproliferative disease (chronic) NOS; Panmyelosis (acute)
239.6	Neoplasms of unspecified nature, brain
239.7	Neoplasms of unspecified nature; endocrine glands and other parts of nervous system
239.81 – 239.89	Neoplasms of unspecified nature; other specified sites
273.2	Other paraproteinemias; Alpha Heavy Chain Disease/Franklin disease/Gamma Heavy Chain Disease/Mu-chain disease
273.3	Waldenstrom's macroglobulinemia/Waldenstrom's (macroglobulinemia) syndrome
273.9	Unspecified disorder of immune mechanism (*screen for potential 273.3 miscodes*)
277.89	Other specified disorders of metabolism – Hand-Schuller-Christian disease; Histiocytosis (acute) (chronic); Histiocytosis X (chronic)
284.9 - 285.0	Refractory Anemia
288.3	Eosinophilia *Note: Do not abstract this code unless the diagnosis is "Hypereosinophilic syndrome"*
(288.4)	(Hemaphagocytic syndromes/Histiocytic syndromes) *Note: Hemophagocytic lymphohistiocytosis (also known as hemophagocytic syndrome) can be caused by or associated with a number of conditions, one of which is EBV+ T-cell lymphoproliferative disease of childhood*
795.06	Papanicolaou smear of cervix with cytologic evidence of malignancy
795.16	Papanicolaou smear of vagina with cytologic evidence of malignancy
796.76	Papanicolaou smear of anus with cytologic evidence of malignancy
(785.6)	(Enlargement of lymph nodes (*screen for large B-cell lymphoma arising in HHV8-associated multicentric Castleman disease)*)
V10.0 – V10.89	Personal history of malignancy *Note: Screen for recurrences, subsequent primaries, and/or subsequent treatment*
V10.90	Personal history of unspecified malignant neoplasm *Note: Screen for recurrences, subsequent primaries, and /or subsequent treatment*
V10.91	Personal history of malignant neuroendocrine tumor, carcinoid tumor, Merkel cell carcinoma *Note: Screen for recurrences, subsequent primaries, and /or subsequent treatment*
V12.41	Personal history of benign neoplasm of the brain
V58.0	Admission for Radiotherapy
V58.1	Admission for Chemotherapy (*This code was discontinued as of 10/2006 but should be included in extract programs for quality control purposes)*
V58.11	Admission for antineoplastic chemotherapy
V58.12	Admission for antineoplastic immunotherapy
V58.42	Aftercare following surgery for neoplasm
V67.1	Radiation therapy follow-up
V67.2	Chemotherapy follow-up

* *Carcinoma in situ of the cervix is not reportable; quality control procedures must be in place to make sure if microinvasion is present the medical record is not coded to 233.1.*

** *Code 237.71 may not be reportable; however, this diagnosis may indicate a reportable condition and should be reviewed*

REPORTABLE CODES- *continued*

The following codes are not reportable per se, but they should alert registrars to look for the first malignant neoplasm associated with these codes.

258.02 – 258.03	Multiple endocrine neoplasia (MEN) type IIA and IIB (rare familial cancer syndrome
285.22	Anemia in neoplastic disease *Note: Assign also a code for the neoplasm causing the anemia; excludes anemia due to antineoplastic chemotherapy (new code 285.3)*
289.83	Myelofibrosis NOS *Note: Not every case of myelofibrosis is associated with a malignancy; review terms included in ICD-O-3 to determine if the case is reportable*
338.3	Neoplasm related pain (acute, chronic); cancer associated pain; pain due to malignancy (primary/secondary); tumor associated pain
511.81	Malignant pleural effusion *Note: Code first malignant neoplasm if known; if the primary site is not know, code 199.0, disseminated carcinomatosis or code 199.1, malignancy NOS*
789.51	Malignant ascites *Note: Code first malignant neoplasm if known; if the primary site is not know, code 199.0, disseminated carcinomatosis or code 199.1, malignancy NOS*

If time and resources permit, review of the following codes may assist in casefinding activities:

042	AIDS (review cases for AIDS-related malignancies)
079.4	Human papillomavirus
079.50 – 079.59	Retrovirus (HTLV, types I, II and 2)
209.40 – 229.9	Benign carcinoids; benign neoplasms (except for 225.0 – 225.9, 227.3, 227.4, 227.9, 28.02 and 228.1, which are listed in the reportable list) *Screen for incorrectly coded malignancies or reportable by agreement tumors*
235.0 – 236.6	Neoplasms of uncertain behavior (except for 236.0, which is listed in the reportable list)
238.0 – 239.9	Neoplasms of uncertain behavior (except for 238.4, 238.65, 238.71 – 238.79, 239.6, 239.7, 239.81, and 239.89, which are listed in the reportable list) *Screen for incorrectly coded malignancies or reportable by agreement tumors*
253.6	Syndrome of inappropriate secretion of antidiuretic hormone (*Part of the paraneoplastic syndrome^)*
259.2	Carcinoid syndrome
259.8	Other specified endocrine disorders
273.0	Polyclonal hypergammaglobulinemia (Waldenstrom) (r*eview for miscodes)*
273.1	Monoclonal gammopathy of undetermined significance *Screen for incorrectly coded Waldenstrom macroglobulinemia or progression*
273.9	Unspecified disorder of immune mechanism *Screen for incorrectly coded Waldenstrom macroglobulinemia*
275.42	Hypercalcemia (*Part of the paraneoplastic syndrome^)*
277.88	Tumor lysis syndrome/Tumor lysis syndrome following antineoplastic drug therapy
279.00	Hypogammaglobulinemia (*Predisposed to lymphoma or stomach cancer)*

REPORTABLE CODES – *continued*

279.02 – 279.06	Selective IgM immunodeficiency (*Associated with lymphoproliferative disorders)*
279.10	Immunodeficiency with predominant T-cell defect, NOS
279.12	Wiskott-Aldrich Syndrome
279.13	Nezelof's Syndrome
279.2 – 279.9	Combined immunity deficiency/Unspecified disorder of immune mechanism
284.81	Red cell aplasia (acquired, adult, with Thymoma)
2843.89	Other specified aplastic anemias due to drugs (chemotherapy or immunotherapy), infection, radiation
284.9	Aplastic anemia, unspecified (*screen for miscodes)*
285.0	Sideroblastic anemia
285.3	Antineoplastic chemotherapy induced anemia (anemia due to antineoplastic chemotherapy)
288.03	Drug induced neutropenia
289.89	Other specified diseases of blood & blood-forming organs (*review for miscodes)*
323.81	Encephalomyelitis; specified cause NEC (*part of the paraneoplastic syndrome^)*
379.59	Opsoclonia (*part of the paraneoplastic syndrome^)*
528.01	Mucositis due to antineoplastic therapy
630	Hydatidiform mole (*This tumor can become malignant; if malignant it should be reported as Choriocarcinoma and will have a malignancy code in the 140 – 209 range)*
686.01	Pyoderma gangrenosum (*Part of the paraneoplastic syndrome^)*
695.89	Sweet's syndrome (*Part of the paraneoplastic syndrome^)*
701.2	Acanthosis nigricans (*Part of the paraneoplastic syndrome^)*
701.3	Dermatomyositis (*Part of the paraneoplastic syndrome^)*
710.4	Polymyositis (*Part of the paraneoplastic syndrome^)*
733.10 – 733.16	Pathologic fracture (*pathologic fractures can be due to bone structure weakening by pathological processes such as osteoporosis, neoplasm and osteomalacial)*
758.0	Down's Syndrome (*screen for myeloid leukemia associated with Down's syndrome)*
790.93	Elevated prostate specific antigen [PSA]
795.8	Elevated tumor markers; elevated tumor associated antigens [TAA]; elevated tumor specific antigens [TSA] (*excludes elevated prostate specific antigen)*
795.81	Elevated carcinoembryonic antigen [CEA]
795.82	Elevated cancer antigen 125 [CA-125]
795.89	Other abnormal tumor markers
999.31	Infection due to central venous catheter (port-a-cath)
999.81	Extravasation of vesicant chemotherapy
E879.2	Adverse effect of radiation therapy
E930.7	Adverse effect of antineoplastic therapy
E933.1	Adverse effect of immunosuppressive drugs
V07.31, V07.39	Other Prophylactic Chemotherapy (*screen carefully for miscoded malignancies*)
V07.8	Other specified prophylactic measure
V12.72	Colonic polyps (history of)
V15.3	Irradiation: previous exposure to therapeutic or ionizing radiation
V42.81	Organ or tissue replaced by transplant, Bone marrow transplant
V42.82	Transplant; Peripheral stem cells
V51.0	Encounter for breast reconstruction following mastectomy
V52.4	Breast prosthesis and implant
V54.2_	Aftercare for healing pathologic fracture
V58.0	Encounter for radiation therapy

REPORTABLE CODES - *continued*

V58.1	Encounter for antineoplastic chemotherapy and immunotherapy *Note: This code was discontinued 10/2006 but should be included in extract programs for quality control purposes*
V58.11	Encounter for antineoplastic chemotherapy
V58.12	Encounter for antineoplastic immunotherapy
V58.42	Aftercare following surgery for neoplasm
V66.1	Convalescence following Radiotherapy
V66.2	Convalescence following Chemotherapy
V66.7	Encounter for palliative care
V67.01	Follow up vaginal pap smear/Vaginal pap smear, status post hysterectomy for malignant condition
V67.1	Radiation therapy follow up
V67.2	Chemotherapy follow up
V71.1	Observation for suspected malignant neoplasm
V76.0 – V76.9	Special screening for malignant neoplasm
V78.0 – V78.9	Special screening for disorders of blood and blood-forming organs
V82.71	Screening for genetic disease carrier status
V82.79	Other genetic screening
V82.89	Genetic screening for other specified conditions
V84.01 – V84.09	Genetic susceptibility to malignant neoplasm
V84.81	Genetic susceptibility to multiple endocrine neoplasia (MEN)
V86.0	Estrogen receptor positive status (ER+)
V86.1	Estrogen receptor negative status (ER-)
V87.41	Personal history of antineoplastic chemotherapy

^Note: Paraneoplastic syndrome is not cancer – it is a disease or symptom that is the consequence of cancer but it is not due to the local presence of cancer cells. A paraneoplastic syndrome may be the first sign of cancer.

A casefinding list that can be given to your Information Technology department is contained in Appendix.

REPORTABLE CODES - *continued*

ICD-O Behavior Codes

All records with a behavior code of /2 (in situ) or /3 (malignant) in the *International Classification of Diseases for Oncology, Second Edition* (ICD-O-2) or *Third Edition* (ICD-O-3) are reportable. (These references are used primarily by registry hospitals.)

***Exception 1*:** Cervical intraepithelial neoplasia, grade III, also called CIN III (code 8077/2 with primary site C53.X in ICD-O-3) is **not** reportable.

Exception 2: Prostatic intraepithelial neoplasia, grade III, also called PIN III (code 8148/2 in ICD-O-3) is **not** reportable.

Exception 3: Pilocytic/Juvenile astrocytoma (code 9421/3 in ICD-O-2 and 9421/1 in ICD-O-3) is reportable and must be coded with a behavior of /3 (malignant).

If a pathologist verifies a /0 (benign) or /1 (uncertain whether benign or malignant) behavior code term in ICD-O as /2 (in situ) or /3 (malignant), these records are reportable.

Cases diagnosed with primary intracranial and central nervous system tumors with a behavior code of **/0** or **/1** (benign and borderline or "non-malignant") are reportable regardless of histologic type for the sites listed below:

- Meninges (C70.0 - C70.9)
- Brain (C71.0 - C71.9)
- Spinal Cord (C72.0)
- Cauda equina (C72.1)
- Cranial nerves (C72.2 - C72.5)
- Other CNS (C72.8, C72.9)
- Pituitary gland (C75.1)
- Craniopharyngeal duct (C75.2)
- Pineal gland (C75.3)

MULTIPLE PRIMARY DETERMINATION

More Than One Cancer

If more than one primary is diagnosed, a separate record must be submitted on each primary.

Determining Multiple Primary Cancers

The VCR, like most registries in the United States, follows the rules of the Surveillance, Epidemiology and End Results (SEER) Program for determination of multiple primary cancers. Beginning with cases diagnosed on January 1, 2007 the SEER rules for determining solid tumor multiple primary cancers are documented in the SEER *2007 Multiple Primary and Histology Coding Rules.* For hematopoietic and lymphoid neoplasms diagnosed January 1, 2010, the *SEER 2010 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* and the *Hematopoietic Database* must be used. For cases diagnosed prior to 2007, the SEER rules for determining multiple primary cancers are documented in the *VCR Manual Appendix E, Multiple Primary Determination.*

DATE OF DIAGNOSIS REPORTABILITY

All reportable cases included on the *VCR List of Reportable Conditions* (See *VCR Manual Appendix D, Reportable Conditions*) diagnosed or treated at the facility are required to be reported to the VCR regardless of Date of Diagnosis. This includes patients with an unknown date of initial diagnosis.

Exception 1: Conditions only reportable if diagnosed on January 1, 2001 and after (the conditions with ** in *VCR Manual, Appendix D*) are not reportable if the date of diagnosis is unknown.

Example 1: If a patient is admitted on January 3, 2004 and is diagnosed with lung cancer on January 7, 2004, the case is reportable.

Example 2: If a patient is admitted on January 3, 2004 and receives palliative care for bone metastasis from a breast primary diagnosed in 1990, the case is reportable.

Example 3: If a patient is admitted on January 3, 2004 and receives palliative care for bone metastasis from a breast primary for which a diagnosis date is not stated in the medical record, the case is required to be reported with a blank for the Date of Diagnosis.

Example 4: If a patient is admitted on January 3, 2004 and receives a blood transfusion for polycythemia vera, originally diagnosed in November 1999, the case is not reportable per the *VCR List of Reportable Conditions* and *Exception 1* above.

REPORTABLE CASES

Reportable Diagnosis

A diagnosis is reportable to the VCR if it is included on the *VCR List of Reportable Conditions* (See *VCR Manual Appendix D, Reportable Conditions*). The following guidelines provide further clarification for the specified conditions:

1. Basal and Squamous Cell Carcinomas
   Basal and squamous cell carcinomas are reportable except when primary to the skin, C44.0-C44.9 (see *VCR Manual Part One, Exclusions*). Carcinomas originating in mucoepidermoid sites are reportable. These sites include: lip (C00.0-C00.9), anus (C21.0), vulva (C51.0-C51.9), vagina (C52.9), penis (C60.0-C60.9), and scrotum (C63.2). Basal and squamous cell carcinomas originating in the nasal cavity (C30.0) and middle ear (C30.1) are also reportable.

2. Class IV and Class V Cytologies
   Cytology results of Class IV or Class V are reportable to the VCR.

   Exception: If the terminology on the cytology report further defines the Class IV and Class V as *suspicious* then the record is not reportable. Report this record only if a positive biopsy or a physician's clinical impression of cancer supports the cytology findings.

   Note: See *VCR Manual Part Three, Data Item Instructions, Diagnostic Confirmation* for clarification of histology and cytology using cell block and smear preparation of specimens.

3. Low Malignant Potential/Borderline Malignancy of Ovary or Peritoneum
   Cystadenomas or tumors primary to the ovary or peritoneum qualified by the phrases *borderline malignancy* or *low malignant potential* are reportable only if diagnosed prior to January 1, 2001.

4. Intraepithelial Neoplasia
   Patients with the following diagnoses of intraepithelial neoplasia **are** reportable:
   - Vaginal intraepithelial neoplasia 3 (VAIN III)
   - Vulvar intraepithelial neoplasia 3 (VIN III)
   - Anal intraepithelial neoplasia 3 (AIN III)

   All other intraepithelial neoplasia tumors are ***NOT*** reportable to the VCR.

   See also *VCR Manual Appendix D, Reportable Conditions* and *VCR Manual Part One, Exclusions, Intraepithelial Neoplasia.*

5. Non-Malignant Intracranial and Central Nervous System Tumors
   All primary intracranial and central nervous system (CNS) tumors are reportable. This includes benign, malignant and borderline tumors for the following sites:

   - Meninges (C70.0 - C70.9)
   - Brain (C71.0 - C71.9)
   - Spinal Cord (C72.0)
   - Cauda equina (C72.1)
   - Cranial nerves (C72.2 - C72.5)
   - Other CNS (C72.8, C72.9)
   - Pituitary gland (C75.1)
   - Craniopharyngeal duct (C75.2)
   - Pineal gland (C75.3)

REPORTABLE CASES - *continued*

Reportable Situations

A case is reportable to the VCR if it is a condition included on the *VCR List of Reportable Conditions* (See *VCR Manual Appendix D, Reportable Conditions*) and meets the following criteria:

1. Patients diagnosed or treated in your inpatient or outpatient departments, emergency room, ambulatory care center, or other units included under your hospital license.

   a. Patients Diagnosed At Your Hospital – The reportable diagnosis has been made at your hospital. This diagnosis can be made on the basis of histology (including autopsy), hematology, cytology, endoscopy or other direct visualization, diagnostic radiology or clinical findings.

      1. Clinical Diagnosis Only – A "clinical diagnosis only" is a diagnosis based solely on clinical judgment; diagnostic procedures were not performed or did not confirm the diagnosis. Patients diagnosed clinically are reportable to the VCR.

   b. Patients Treated at Your Hospital - The VCR requires patients receiving treatment, cancer-directed or non cancer-directed, to be reported provided they have not been previously reported by your hospital.

      The VCR recognizes the following definitions of treatment:

      1. Cancer-Directed Treatment – Cancer-directed treatment is tumor directed, and its purpose is to modify, control, remove or destroy primary or metastatic cancer tissue. Physicians administer the therapy(ies) to remove or minimize the size of tumor or to delay the spread of disease.

2. Patients Diagnosed at Autopsy – Final autopsy reports containing reportable diagnoses or incidental findings of reportable conditions must be reported to the VCR.

3. Patients Diagnosed Elsewhere – Patients diagnosed elsewhere and newly admitted to your hospital for further diagnostic workup or treatment, cancer-directed or non-cancer-directed are to be reported. Although this may result in multiple records on one patient, it enables the VCR to assure complete statewide casefinding and to have the most comprehensive information on each patient. Because the VCR is a population-based registry, every attempt must be made to receive all cases diagnosed within Virginia to provide accurate statistical reports.

4. Recurrence - Recurrence refers to the same cancer arising in or from the same primary site where it appeared earlier. A recurrent diagnosis is reportable as instructed in the *Multiple Primary and Histology Coding Rules, January 01, 2007.*

5. Residual Tumor – The VCR requires all records in which the pathology report states "no residual tumor" to be reported. The re-excision is considered cancer-directed treatment.

   Example: Outside the hospital setting, a patient has a biopsy and is diagnosed with a malignant melanoma. The patient is seen at your hospital for a wide excision. The tissue report from the excision states no residual tumor. This record is reportable to the VCR. Even though the cancer was diagnosed elsewhere, the patient's hospital visit was for cancer related treatment.

REPORTABLE CASES - *continued*

6. Private Outpatient Specimens (POP) (Path Only) – Private outpatient specimens (POP) are specimens submitted from a physician's office to be read by the hospital pathologist as part of the Pathology Department's regular course of business. The patient is not registered as an inpatient or outpatient at the hospital. POPs are reportable to the VCR as a Class of Case 43 and a Reporting Source code of 3.

   Example: A physician performs a biopsy in the office and sends the specimen to your Pathology Department where a reportable diagnosis is made.

   a. POP reports should be held for two to three months because many of these patients may return for treatment and more information can be obtained from these records.

   b. If the patient does not return as an inpatient or hospital outpatient, abstract the record using all available information. Every effort must be made to obtain accurate information. This information can be found through hospital billing systems, clinical history, or if needed by contacting physician offices.

   c. Data items should be completed as *unknown* only after further investigation does not provide more specific information.

7. Ownership of the Medical Record – When the distinction between a hospital department and a freestanding facility cannot readily be made, such as a radiation therapy group practice versus a hospital unit, the ownership of the medical record is used to determine whether or not a record must be reported by the owner of the record. If the medical record is the property of the institution, the record must be reported. If the hospital is part of a corporation, ownership of the record refers to the facility, not the corporation.

EXCLUSIONS

Non-Reportable Diagnosis

The following diagnoses are not reportable to the VCR:

1. Skin Cancers

   a. The following site/histology combinations for skin cancers are not reportable:

8000-8005	Neoplasms malignant, NOS of the skin (C44.0-C44.9)
8010-8046	Epithelial carcinomas of the skin (C44.0-C44.9)
8050-8084	Papillary and squamous cell carcinomas of the skin (C44.0-C44.9)
8090-8110	Basal cell carcinomas of the skin (C44.0-C44.9)

   b. ICD-O codes C44.0-C44.9 include skin of the lip, eyelid, external ear, face, nose, scalp, neck, trunk, perineum, (peri) anus, umbilicus, upper and lower limbs, shoulders, hips, and skin around ostomy sites.

   Note: The above lesions are reportable when the primary tumor originates in a mucoepidermoid site (See *VCR Manual Part One, Reportable Records*).

   c. Skin of nose – Basal and squamous cell carcinomas originating in the external nose (C44.3) are not reportable; however, those primary to the nasal cavity (C30.0) such as nostril, nasal septum, and nares are reportable.

   d. Metastasis from non-reportable sites – If the primary site is not reportable but the cancer has metastasized to other sites, the record is still not reportable.

2. Carcinoma-In-Situ of the Cervix (CIS)

   The diagnosis carcinoma in situ of the cervix (CIS) is not reportable. Terms indicating in situ include: *noninvasive, preinvasive, intraepithelial,* and *FIGO Stage 0.* A diagnosis of carcinoma in situ with endocervical gland involvement is still considered in situ and is not reportable.

   Note: Diagnoses of invasive carcinoma of the cervix are reportable. A diagnosis of carcinoma in situ of the cervix with microinvasion is considered invasive and is therefore reportable.

3. Intraepithelial Neoplasia

   Patients with the following diagnoses of intraepithelial neoplasia are not reportable:

   - Cervical intraepithelial neoplasia (CIN)
   - Prostatic intraepithelial neoplasia (PIN)

See also *VCR Manual Part One, Reportable Cases, Intraepithelial Neoplasia.*

EXCLUSIONS – *continued*

4. Other Precancerous Conditions and Benign Tumors

   Patients with precancerous conditions or benign tumors are not reportable. An example of such a diagnosis includes atypical adenoma. Registry hospitals may elect to collect these cases; however, they are not reportable to the VCR.

Exception 1: Ovary and Peritoneum- Cystadenomas or tumors primary to the ovary or peritoneum qualified by the phrases *borderline malignancy* or *low malignant potential* are reportable if diagnosed prior to January 1, 2001.

Exception 2: Brain and Central Nervous System- All primary intracranial and central nervous system (CNS) tumors are reportable. This includes benign and borderline tumors for the following sites:

- Meninges (C70.0 - C70.9)
- Brain (C71.0 - C71.9)
- Spinal Cord (C72.0)
- Cauda equina (C72.1)
- Cranial nerves (C72.2 - C72.5)
- Other CNS (C72.8, C72.9)
- Pituitary gland (C75.1)
- Craniopharyngeal duct (C75.2)
- Pineal gland (C75.3)

Non-Reportable Situations

A case is ***not*** reportable to the VCR if it meets any of the following criteria:

1. Consult Only Records – Patients seen in consultation to provide a second opinion to confirm an established diagnosis or treatment plan are not reportable. Also, if the reporting institution provides services not available at the diagnosing or treatment facility, such as Computerized Tomography (CT) scans or Magnetic Resonance Imaging (MRI) scans, the case is not reportable.

2. Slide Reviews – Records in which slides are sent to your hospital's pathologist for a second opinion are encouraged to be reported, but are not required. Since the slide was already read by another pathologist, the facility requesting the slide review is required to report the final diagnosis as determined after the slide review.

3. History of – Patients with a history of a reportable condition who are clinically free of disease are not reportable. If, however, the patient has actually received treatment during this admission the record must be reported. For example: if a patient is admitted for an unrelated condition, has a history of breast cancer and the hospital administers Tamoxifen during their admission, the case is reportable.

   Exception: If a patient expires at your facility with a history of cancer, even though the patient was clinically disease free, the case **is** reportable

EXCLUSIONS - *continued*

4. Transient Care – Patients receiving transient care at the reporting institution to prevent interruption of the first course of treatment are not reportable. This only applies to patients vacationing or visiting in the area, or equipment failure at the primary treating institution which requires the patient to temporarily receive treatment elsewhere.

   ***Exception*:** Cancer patients evacuated to other states due to natural disasters may receive diagnostic/treatment services in facilities in that state. If this occurs at your facility, consider these cases reportable to the Virginia Cancer Registry (VCR). They should not be excluded as transient care or consult only cases.

   When abstracting these cases, please record the patient's usual residence when the tumor was diagnosed in the Address at Diagnosis fields. Do not enter the patient's current address if the patient was diagnosed prior to relocating permanently or temporarily to Virginia or other nearby state.

5. Recurrence – Recurrence is defined as the same cancer arising in or from the same primary site where it appeared earlier and is not considered a new primary cancer by the physician. Do not report a recurrent diagnosis when you have previously reported it.

   ***Exception*:** If an in situ tumor is followed by an invasive cancer in the same site more than two months apart, report as two primaries even if stated to be a recurrence. The invasive primary should be reported with the date of the *invasive* diagnosis. See also *VCR Manual Part One, Reportable Cases, Recurrence*.

6. Readmitted Patients – If a patient is readmitted and new or additional metastatic sites are diagnosed or documented, the record is not reportable provided it has already been reported for the original primary site. Records of readmitted patients must be reviewed to determine if a new primary site has been diagnosed. Each new primary must be reported separately.

7. Metastatic Sites – Do not report the metastatic or secondary sites of a malignant neoplasm; however, check to make sure the primary site was previously reported. A diagnosis of metastatic cancer with an unknown primary site not previously reported should be submitted with the primary site documented or coded as unknown.

8. Special Units – Patients admitted to a skilled nursing unit or other separately licensed units are encouraged to be reported but are not required. These patients are either discharged from an acute care hospital unit and readmitted to a separately licensed unit or are admitted directly to the separately licensed unit.

CONFLICTING STANDARDS

When standards of regulatory agencies differ, hospitals ***must*** implement procedures to comply with Board of Health standards as designated by the VCR.

WHEN IN DOUBT

When in doubt about submitting records to the VCR, ask the following question:

> Did your facility diagnose and/or treat the patient for a condition included on the *VCR List of Reportable Conditions? (*See *VCR Manual Appendix D, Reportable Conditions)*

If the answer is yes to this question and the record was not previously submitted by your hospital, report the record. If you are in doubt about a particular record, submit the record with a note of explanation or call your VCR Cancer Surveillance Specialist at (804) 864-7877

VCR REQUIRED DATA ITEMS

The VCR requires specific data items to be completed for each reportable case. These data items include demographic, cancer identification, treatment, hospital-specific and text information. A listing of the VCR Required Data Set is included in *VCR Manual Appendix K.* Instructions on completing each data item are provided in *VCR Manual Part Three, Data Item Instructions.*

All data items required for participation in the National Program of Cancer Registries (NPCR) are included in the VCR data set. VCR-required codes and definitions comply with national standards established by the North American Association of Central Cancer Registries (NAACCR) and American College of Surgeons Commission on Cancer (ACOS COC).

CHANGING INFORMATION

A change includes updating or correcting previously submitted information.

Importance of Change/Deletion Procedure

The change procedure insures the most accurate information is available to users of VCR data by enabling reporting facilities to provide updated or corrected information after a record has been accessioned by the VCR.

Example 1: At the time a record was reported to the VCR, the primary site was unknown. On a subsequent admission, the primary site was documented as upper lobe of left lung. A change must be submitted to update the primary site, laterality, and stage (as was known during first course of treatment). Send an encrypted email with the patient's name and social security number with a reason for change. The VCR will update this information on the patient's record on the VCR data file.

Example 2: At the time a record was reported to the VCR, the patient's initial diagnosis was *probable carcinoma*. After further review, it was determined the patient does not have cancer. Such cases must be deleted. Send an encrypted email with the patient's name and social security number with a reason for deletion.

What to Change

1. Change any required data item when incorrect or unknown information was initially reported or when more specific/correct information is later available.

2. Change Collaborative Stage data items only if additional information is available through completion of surgery(ies) in the first course of treatment or within four months of diagnosis in the absence of disease progression whichever is longer.

3. Change SEER Summary Stage 2000 only if additional information is available through completion of surgery(ies) in the first course of treatment or within four months of diagnosis in the absence of disease progression whichever is longer for cases diagnosed on or after January 1, 2001. Change SEER Summary Stage 1977 only if additional information is available within two months of diagnosis (four months for prostate primaries) for cases diagnosed prior to January 1, 2001.

4. Submit a change for name when incorrectly spelled on a record and when name is changed due to marital status or other reason. Clearly indicate previous and current name.

5. Do not submit changes to update address changes or admission/discharge dates when the patient is readmitted.

When to Submit Changes

Changes should be included with the next monthly shipment.

How to Change Information

1. As corrections are made to records previously accessioned by the VCR, document the changes in your encrypted email with the submission. If you have more than five (5) changes, submit the changes in an excel spreadsheet, encrypt it and sent to the VCR.

2. Document number of changes in your email documentation.

Note*:* Corrections ***may NOT*** be transmitted as a case electronically.

VCR SUBMISSION FORM

The VCR Submission Form must be included for each submission sent on paper. (See copy of submission form on next page.) Facility-specific submission forms with facility name; VCR four-digit identification number and ACOS COC facility identification number are available from the VCR.

Electronic submissions should be sent via encrypted, password protected emails. The first email should include your VCR facility number, the date of submission, the submission month, the number of records included in the file and the number of cases you are submitting with change along with the password for the file. The second email should include the encrypted, password protected file.

Instructions for Paper Reporting form

1. Date – Enter date shipment was sent.

2. Number of Change Records Enclosed – Enter number of change records enclosed.

3. Number of New Records Enclosed – Enter number of records enclosed (excluding change records).

4. *No Records To Report* – If a facility has no cancer records to report, a completed submission form with zero (0) entered for number of new records must be forwarded to the VCR on the 5th of the month. In addition, the reason for not submitting any records must be documented on the submission form in the space provided.

VCR Use Only

Date Received

Facility # **1**

Virginia Cancer Registry
Submission Report

_____
(Month of Submission)

Facility Information

Facility: St. Elsewhere Hospital (sample)

City: Planet Kozar

Your Name: _____

Phone: 999 999-9999

Submission Information

Date: _____

Date Last Submission: _____

Number of:

- Cases _____
- Pathology-Only Cases: _____
- Total New Cases For This Report: _____

Instructions: Complete all fields on this form and include it each month with cases submitted to the Virginia Cancer Registry **by the 5th of each month**. If during this reporting period your facility has no cancer cases to report, we request that you notify us by completing this form and indicating zero ("0") for "Total Number of New Cases for This Report".

.

Virginia Cancer Registry
109 Governor Street, 10th Floor
Richmond, VA 23219
Phone (804) 864-7866
Fax (804) 864-7870

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

HOW TO REPORT

Records containing all required data items must be submitted to the VCR electronically. Detailed instructions for completing the required data items can be found in the *VCR Manual Part Three, Data Item Instructions*.

Use the following instructions to prepare shipments:

1. Create e-mail file - Create a file containing all records to be reported to the VCR since your last shipment. The file for email transmission must be encrypted and password protected. These must be sent in separate emails.

2. Prepare Backup - Prepare and verify a backup of all records transmitted. Maintain this backup at your facility until you receive confirmation the records were accepted by the VCR.

WHEN TO REPORT

Transmission Date

Reporting facilities must transmit files by the 5th of every month. If the 5th falls on a weekend or holiday, shipments must be transmitted on the last working day before the 5th.

Timeliness of Reporting

1. 180 Days - The VCR requires 90% of abstracts submitted by reporting facilities to be received by the VCR within 180 days from *Date of Diagnosis*.

2. Year End Deadline - The first working day in July is the deadline for submitting all reportable cases from the previous year. The months of May and June should be used to perform quality assurance procedures to ensure all cases have been identified and reported. These cases may fall into the 10% over 180 days. This is expected and acceptable. The timeliness requirement was established at 90% to provide a cushion of 10% to encourage late reporting of missed cases to assure reporting completeness.

Long-Term Hospitalizations

When patients are hospitalized for a period of six (6) months or longer, records should be submitted 180 days from Date of Admission/1st Contact. Enter the current date in the Date of Discharge field. Date of Discharge may not be left blank and the exact Date of Discharge should be submitted later as a change. See *VCR Manual Part One, Changing Information*.

WHERE TO REPORT

E-Mail Instructions

Be sure all files are encrypted and password protected. Passwords should be sent in a different file from the transmission email. Include in one of the emails the number of cases and changes included in the file.

DOCUMENT RETENTION

There is no statute governing how long copies of the yearly Accession Lists must be kept. Retention for at least five years is strongly recommended by the VCR; however, if space is limited, maintaining copies until your facility has had a VCR Quality Assessment Review for that year would be an acceptable alternative.

FACILITY CONTACT PERSON FOR VCR

One person at each reporting facility is designated as the VCR contact person. This person is the primary contact for all correspondence and routine communication with the facility. Each facility designates the VCR contact person such as the cancer registrar, supervisor, or director.

To maintain proper communication, inform the VCR of any changes in the contact person at your facility by sending a letter to the address listed in *VCR Manual Part One, Where to Report* or calling (804) 764-7860.

TRAININGS

The VCR conducts trainings throughout the year to provide specific information on VCR reporting requirements and data collection. Trainings are free of charge. See *VCR Manual Part Four, Quality Control: VCR, Trainings.*

Announcements listing dates and locations of trainings are mailed to VCR contacts periodically. If interested in attending training, refer to the announcement or call the VCR.

VCR PHONE NUMBERS

If you have any questions regarding the VCR, contact us at the central number: 804-864-7866 or:

Michael Peyton, CTR…….. 804-864-7856
Sally Siddon, CTR…….. 804-864-7859
Tina Hall, CTR…… 804-864-7187
John LaDouceur..... 804-864-7857
Chioke Murray…… 804-864-7196
Danielle Quinn, CTR …… 804-864-7856
Cheryl Walker-Smith.....804-864-7866
Laurel Gray, CTR, Quality Assurance Coordinator…… 804-864-7860
Jayne Holubowsky, CTR, Training Coordinator…… 804-864-7873
Jim Martin, PhD, Director…….. 804-864-7865

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PART TWO:
CASEFINDING

CASEFINDING

Casefinding Procedures

Casefinding is a system for identifying patients with a reportable diagnosis. Because cancer incidence can be most accurately reflected only when every reportable diagnosis is identified and submitted to the central registry, effective casefinding procedures are essential.

Although casefinding procedures will vary among reporting facilities, the key to effective casefinding is the identification of reportable conditions in all areas where patients are diagnosed or treated in a routine and systematic manner. The following concepts should be considered when developing procedures to insure complete identification of cases reportable to Virginia Cancer Registry (VCR).

Reportable Conditions

The first step in establishing effective casefinding procedures is to know what conditions are reportable. These conditions are defined in the following references:

1. List of Reportable Conditions - *VCR Manual Appendix D* provides documentation of all conditions reportable to the VCR. It is structured alphabetically by the main histologic term.

2. ICD-9-CM Codes - *VCR Manual Part One, Reportable Codes* provides a list of ICD-9-CM codes used to identify reportable diagnoses. The appendix also includes a list you can provide to your Information Technology department to program a disease index you need to review for possible cases.

3. ICD-10-CM Codes – *VCR Manual, Appendix ##,* provides a list of ICD-10-CM codes used to identify reportable diagnoses. The appendix also includes a list you can provide to your Information Technology department to program a disease index you need to review for possible cases.

Casefinding Sources

The second step in establishing effective casefinding procedures is to identify all areas in the facility where these reportable conditions are either diagnosed or treated and the sources for casefinding in each area. The Health Information Management (HIM) Department and Pathology Department must be included as casefinding sources by all facilities; the remaining sources listed below should be included as applicable. Copies of reports forwarded for review to the person responsible for reporting to the VCR serve as a pending or tickler file to cross-reference with medical records flagged in the HIM Department.

The term “records” as used in the descriptions below refers to all patient records, i.e., inpatient, outpatient, Emergency Room, ambulatory care, short stay procedures, radiation therapy, chemotherapy. For each source, review all of the following reports and records.

CASEFINDING – *continued*

1. Health Information Management Department (HIM)

   a. Chart Assembler/Coder/Analyst - All records with a diagnosis included in *VCR Manual Appendix D* or *ICD-9-CM Codes* listed in *VCR Manual Part One, Reportable Codes (or ICD-10-CM Codes, listed in Appendix ##)* should be flagged for the person responsible for VCR reporting.

   b. Disease Index - Records assigned an ICD-9-CM code included on the list provided in *VCR Manual Part One, Reportable Codes (or ICD-10-CM codes)* should be reviewed to identify reportable cases. In addition to casefinding, the disease index should also be used as a quality control measure to make sure all reportable diagnoses have been submitted. See also *VCR Manual Part Four, Quality Control: Reporting Facilities.*

   c. Transcription - All discharge summaries with a reportable condition in the final diagnosis and operative reports bearing a post-operative reportable diagnosis should be copied and forwarded to the person responsible for reporting to VCR.

2. Pathology Department/Laboratory Medicine - Casefinding from Pathology Department/Laboratory Medicine must include identification of reportable diagnoses made on inpatient, outpatient, and private outpatient (POP) specimens.

   a. Histology - Surgical pathology reports should be reviewed for a reportable diagnosis. If your Pathology Department screens the reports and forwards copies of those reports to the person responsible for VCR reporting, they must be provided with a copy of *VCR Manual Appendix D.* Surgical pathology reports showing "no residual malignancy (or tumor)" and reports resulting from orchiectomy or oophorectomy performed for prostate or breast malignancies or wide re-excisions for melanomas should be included in what is copied and forwarded to the person responsible for VCR reporting.

   b. Cytology - All cytology reports should be reviewed for a malignant diagnosis and, when identified, a copy forwarded to the person responsible for VCR reporting. An alternative would be to review a log of positive or abnormal cytologies.

   c. Hematology - Peripheral blood reports should be reviewed for a diagnosis of malignancy and, when identified, a copy forwarded to the person responsible for VCR reporting. Bone Marrow - All bone marrow reports should be reviewed for a diagnosis of malignancy and, when identified, a copy forwarded to the person responsible for VCR reporting.

   d. Autopsy - All final autopsy reports should be reviewed for reportable diagnoses including incidental findings and, when identified, a copy forwarded to the person responsible for VCR reporting. Reportable diagnoses on autopsy reports from coroner's cases should also be identified. See *VCR Manual Part One, Patients Diagnosed at Autopsy.*

3. Outpatient Departments

   a. Short Procedure/Same Day Surgery/Ambulatory Care Unit - A system must be implemented to routinely review all outpatient records maintained within or separate from the HIM Department for diagnoses. If reporting criteria are met, cases must be submitted to the VCR.

   b. Emergency Room (ER) - Pathology and cytology reports from procedures performed in the ER should be screened and reported if a reportable diagnosis is made or if the patient expires with a history of a reportable disease.

CASEFINDING – *continued*

4. Oncology Services

    a. Radiation Therapy - Radiation therapy records, appointment logs, or patient rosters must be reviewed. If reporting criteria are met, cases must be submitted to the VCR. Patients diagnosed elsewhere but treated at your facility must be reported.

    b. Medical Oncology/Chemotherapy - Chemotherapy records, appointment logs, or patient rosters must be reviewed. If reporting criteria are met, cases must be submitted to the VCR. Patients diagnosed elsewhere but treated at your facility must be reported.

5. Other Areas- Records from other areas of the hospital where reportable conditions are either diagnosed or treated must be reviewed and submitted if a reportable diagnosis is made.

Completeness of Casefinding

After all reportable diagnoses have been identified through routine casefinding procedures, the final step to effective casefinding is quality control. Procedures should be in place to verify all cases were identified and reported to the VCR. *VCR Manual Part Four, Quality Control* describes various quality control strategies to assure complete casefinding and reporting.

Most Effective Casefinding Procedure

The most effective approach to identifying all reportable diagnoses for reporting to the VCR should include the following:

1. Flag all inpatient and outpatient medical records with an ICD-9-CM diagnosis code (or ICD-10-CM diagnosis code as listed in *Appendix ##)* as listed in *VCR Manual Part One, Reportable Codes.*
2. Review reports from all inpatient, outpatient, and private outpatient (POP) pathology, cytology, bone marrow, hematology, and autopsy specimens analyzed at your facility.
3. Review records, appointment logs, or rosters of patients seen in the chemotherapy, radiation therapy, and any other area where reportable conditions are diagnosed or treated.
4. Review the ICD-9-CM (or IDC-10-CM) disease index monthly to identify reportable diagnoses.
5. Perform quality control procedures to assure all reportable cases were identified and reported to the VCR.

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PART THREE:
DATA ITEM INSTRUCTIONS

GENERAL INFORMATION

Data Item Completion

Each case reported to the VCR must include all data items identified in *VCR Manual Appendix K, Required Data Set for Reporting Facilities.* These data items must be completed according to codes, definitions, and instructions specified for each item in this section. The codes and definitions for each required data item conform to national cancer registration standards as defined by NAACCR (North American Association of Central Cancer Registries), NPCR (National Program of Cancer Registries), and ACOS COC (American College of Surgeons Commission on Cancer).

Every effort *must* be made to obtain specific, complete, and accurate information for each required data item. Inpatient and outpatient health records, clinical history on pathology reports, hospital billing records, and contact with physician offices should be used as sources of information in completing data items.

Recording Unknown or Not Applicable Information

Data items should be recorded as *unknown* only after *all* efforts to obtain specific information prove unsuccessful.

1. Unknown, Text- When specific information is not available for any data item requiring an alphabetic entry, record the word *unknown* in the field as specified in the data item instructions in this section.

2. Unknown, Code 9- When specific information is not available for any data item requiring a numeric entry, record the code for unknown, *9,* in the field as specified in the data item instructions in this section.

3. Unknown/Not Applicable, Blank- Since information for the following required data items may be unknown or not applicable, they are the only data items that may be left blank as specified in the data item instructions in this section:

    - *Name - Suffix*
    - *Name - Middle*
    - *Name - Maiden*
    - *Name - Alias*
    - *Text - Usual Occupation for age < 14 (should be recorded as "child")*
    - *Text - Usual Industry for age < 14(should be recorded as "child")*
    - *Place of Diagnosis when patient is diagnosed at reporting facility*
    - *Accession Number for Non-registry hospitals*

GENERAL INFORMATION – *continued*

Beginning in 2010, the way dates are transmitted between facility registries and central registries was changed to improve the interoperability or communication of cancer registry data with other electronic record systems. Registry software may display dates in the traditional manner or in the interoperable format. Traditional dates are displayed in MMDDCCYY form, with 99 representing unknown day or month portions, and 99999999 representing a completely unknown date. In the traditional form, some dates also permit 88888888 or 00000000 for special meaning. Interoperable dates are displayed in CCYYMMDD form, with the unknown portions of the date filled with blank spaces. If a date is entirely blank, an associated date flag is used to explain the missing date. The following table illustrates the relationship among these items for Date of Most Definitive Surgical Resection of the Primary Site, where each lower case 'b' represents a blank space. Flags are not used for software-generated dates.

Description	**Traditional Date of Most Definitive Surgical Resection of the Primary Site** *Date entered in MMDDCCY sequence; unknown portions represented by 99 or 9999*	**Interoperable Date of Most Definitive Surgical Resection of the Primary Site** *Date entered in CCYYMMDD sequence, leaving unknown portions blank (spaces); omit the date if the date is completely unknown or not applicable.*	**Rx Date Mst Defn Srg Flag**
Full date known	MMDDCCYY (example: 02182007)	CCYYMMDD (example: 20070218)	bb
Month and year known	MM99CCYY (example: 02992007)	CCYYMMbb (example: 200702bb)	bb
Year only known	9999CCYY (example: 99992007)	CCYYbbbb (example: 2007bbbb))	bb
Unknown if any surgery performed	99999999 (example: 99999999)	bbbbbbbb (example: bbbbbbbb)	10
No surgery performed	00000000 (example: 00000000)	bbbbbbbb (example: bbbbbbbb)	11
Date is unknown, surgery performed	99999999 (example: 99999999)	bbbbbbbb (example: bbbbbbbb)	12

1. <u>Allowable Values</u>

Month		**Day**	**Year**
01 January	08 August	01	Use four-digit year
02 February	09 September	02	
03 March	10 October	03	
04 April	11 November	…	
05 May	12 December	…	
06 June		31	
07 July			

Unknown (blank) is not valid for certain date fields; see "*Unknown Dates, Exceptions,*" below.

GENERAL INFORMATION – *continued*

2. Actual Dates- The following fields must contain the actual month, day, century, and year. They may not be blank in any part of the date field.
    1. *Date of 1st Contact*
    2. *Date of Inpatient Adm*
    3. *Date of Inpatient Disch*
    4. *Date of Last Contact*
    5. *Date Case Completed**
    6. *Date Case Last Changed**
    7. *Date Case Report Exported**

    * These dates are usually entered automatically by the cancer registry software programs.

3. Approximating Dates- If the exact date is unknown, use guidelines below to estimate dates from descriptive terms for the following fields:

    - *Birth Date*
    - *Date of Diagnosis*
    - *RX Date--Surgery*
    - *RX Date--Radiation*
    - *RX Date--Systemic*
    - *RX Date--Other*
    - *Date of 1st Crs RX—COC*

    a. Approximating Month**:** Use the following guidelines to estimate month from descriptive terms:

    1. Code 'spring of' to April (04)
    2. Code 'summer' or 'middle of year' to July (07)
    3. Code 'fall' or 'autumn' to October (10)
    4. For 'winter of', try to determine whether the physician means the first of the year or the end of the year and code January (01) or December (12) as appropriate.
    5. Code 'early in year' to January (01)
    6. Code 'late in year' to December (12)
    7. Use whatever information is available to calculate the month, such as '7 months ago'
    8. If a descriptive term is not included in this guideline or if there are no descriptive terms available, code as unknown (blank). Do not enter fictitious dates or default values.

    b. Approximating Year**:** Use the following guidelines to estimate year from descriptive terms:

    1. Code 'a couple of years' to two years earlier.
    2. Code 'a few years' to three years earlier.
    3. Use whatever information is available to calculate the year, such as '7 years ago'.
    4. If a descriptive term is not included in this guideline or if there are no descriptive terms available, code as unknown (blank). Do not enter fictitious dates or default values.

c. Approximating Day**:** No approximation of day is acceptable. If day is unknown, leave blanks in the appropriate position in the date field for dates where this is acceptable. Do not enter fictitious days or default values.

GENERAL INFORMATION – *continued*

5. Unknown Dates- If the month, day, century, or year is unknown with no information to calculate, blank spaces should be left in the appropriate position in the date field. See list of date fields that cannot be blank under *Exact (or actual) Dates*.

6. Fictitious Dates - If any part of a date is unknown and there is no description or guideline to approximate a date for fields where this is acceptable, leave blank. *Do not enter fictitious dates or default values* such as 15 for unknown day or 0101 followed by a known year when month and day are unknown. Because fictitious dates or default values cannot be differentiated from exact dates when comparing dates reported by different facilities, incorrect dates may be chosen over exact dates during the record consolidation process. Fictitious dates also harm the scientific integrity of the data.

7. Summary of Acceptable Entries for Date Fields**:**

Date Fields	**Approximation or Blank Acceptable**	**Actual Date Only**
Birth Date	X	
Date of 1st Contact		X
Date of Inpatient Adm		X
Date of Inpatient Disch		X
Date of Diagnosis	X	
RX Date – Surgery	X	
RX Date – Radiation	X	
RX Date – Systemic	X	
RX Date – Other	X	
Date of 1st Crs RX – CoC	X	
Date of Last Contact		X
Date Case Completed		X
Date Case Last Changed		X
Date Case Report Exported		X

Ill-defined Sites

Throughout the VCR Manual, "ill-defined sites" is referenced and often has special rules. Below is a listing of what is considered an ill-defined site.

C76.0	Head, face and neck, NOS
C76.1	Thorax, NOS
C76.2	Abdomen, NOS
C76.3	Pelvis, NOS
C76.4	Upper Limb, NOS
C76.5	Lower Limb, NOS
C76.7	Other ill-defined sites
C76.8	Overlapping ill-defined sites

GENERAL INFORMATION – *continued*

If any of the following histologies appears only with an ill-defined site description (e.g., "abdominal" or arm"), code it to the tissue in which such tumors arise rather than the ill-defined region (C76._) of the body, which contains multiple tissues. Use the alphabetic index in ICD-O-3 to assign the most specific site if only a general location is specified in the record.

HISTOLOGY	DESCRIPTION	CODE TO THIS SITE
8720–8790	Melanoma	C44._, Skin
8800–8811, 8813–8830, 8840–8921, 9040–9044	Sarcoma except periosteal fibrosarcoma and dermatofibrosarcoma	C49._, Connective, Subcutaneous and Other Soft Tissues
8990–8991	Mesenchymoma	C49._, Connective, Subcutaneous and Other Soft Tissues
9120–9170	Blood vessel tumors, lymphatic vessel tumors	C49._, Connective, Subcutaneous and Other Soft Tissues
9580–9582	Granular cell tumor and alveolar soft part sarcoma	C49._, Connective, Subcutaneous and Other Soft Tissues
9240–9252	Mesenchymal chondrosarcoma and giant cell tumors	C40._, C41._ for Bone and Cartilage C49._, Connective, Subq & Oth Soft Ti
8940–8941	Mixed tumor, salivary gland type	C07._ for Parotid Gland C08._ for Oth & Unspec Major Salivary Gland

Hematopoietic, lymphoid, reticuloendothelial, immunoproliferative, and myeloproliferative diseases

Throughout the VCR Manual, "hematopoietic, lymphoid, reticuloendothelial, immunoproliferative, and myeloproliferative diseases" are referenced and often have special rules. Beginning with cases diagnosed in 2010, the **Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual and Database** is to be used for coding primary site, histology, and grade of hematopoietic and lymphoid tumors (M-9590-9992) and to determine whether multiple conditions represent one or more tumors to be abstracted. For tumors diagnosed prior to January 1, 2010, use the rules applicable when the cancer was diagnosed.

QUESTIONS

If you have any questions regarding completion of VCR required data items:

1. Refer to the appropriate section of the VCR Manual for detailed instructional information regarding completion of the data item in question.

2. Call your VCR Cancer Quality Assurance Analyst at the following numbers:

   i. Michael Peyton, CTR (804) 864-7885
   ii. Tina Hall, CTR (804) 864-7187
   iii. Sally Siddon, CTR (804) 864-7859
   iv. John LaDouceur (804) 864-7857
   v. Chioke Murray (804) 864-7196
   vi. Laurel Gray, CTR (804) 864-7860
   vii. Jayne Holubowsky, CTR (804) 864-7873

3. Make a copy of the pertinent parts of the medical record; attach a note to the record in question, mail or fax it to the VCR office. The fax number is (804) 864-7870.

NAME - LAST

Record the patient's full last name. Do not leave blank.

Recording Name – Last

1. Spaces - The rules have now allowed us to enter spaces, hyphens and/or apostrophies

   Examples: *Mc Donald* was recorded as McDonald; now may leave the space.
   O'Hara was recorded as OHara; it may now be recorded as is

2. Characters- If the last name is more than 100 characters, enter only the first 100.

3. Hyphenated Names are allowed. No other special characters are allowed.

   Example: The last name is Green-Moss. Record as Green-Moss.

4. Change To Name- This data item should be updated on the hospital abstract if the last name changes and the change must be submitted to the VCR. See *VCR Manual Part One, Changing Information*.

   Example: Janet White marries and becomes Janet Black. Change the last name to Black and record White in the maiden name field; forward the change to the VCR.

5. Suffixes and Prefixes- Name suffixes when available must be entered in the field *Name - Suffix* and not included in the *Name - Last* field. Do not include name prefixes (e.g., Sister, Reverend, Brother, Dr) as part of the patient last name. Name prefixes are not collected by the VCR and must not be included in any of the required name fields.

NAME - SUFFIX

Record the patient's name suffix.

Name suffix is a title that follows a patient's last name. The suffix can identify the generation order in families and provide credential status.

Recording Name-Suffix

1. Punctuation- Do not use any punctuation.

2. No Suffix- Leave this data item blank if the patient does not have a name suffix.

3. Suggested Abbreviation –

Title	Abbreviation
Doctor	MD, PhD
Junior	Jr
Senior	Sr
Third	III
Fourth	IV

4. Multiple Suffixes- If multiple suffixes are used, the generation specific suffix is to be recorded.

   Example: The patient's name is John C. Smith III, MD. Record the III.

5. Prefixes- Do not include name prefixes (e.g., Sister, Reverend, Brother, Dr) as part of the patient name suffix. Name prefixes are not collected by the VCR and must not be included in any of the required name fields.

NAME - FIRST

Record the patient's full first name. Do not leave blank.

Recording Name-First

1. Spaces – You may now enter spaces in names.

   Example: Mary Jane is entered as Mary Jane.

2. 100 characters- If the first name is more than 100 characters, enter only the first 100.

3. Punctuation- Do not use any punctuation.

4. First Initial Only- If the patient uses the initial of their first name and their full middle name, enter the patient's first initial in the *Name - First* field. Record the middle name in the *Name - Middle* field.

   Example: Patient's name is M. Jane
   (*Name - First)* = M
   (*Name - Middle)* = Jane

5. Prefixes- Do not include name prefixes (e.g., Sister, Reverend, Brother, Dr) as part of the patient first name. Name prefixes are not collected by the VCR and must not be included in any of the required name fields.

NAME - MIDDLE

Record the patient's middle name.

Recording Name-Middle

1. Middle Initial- Record the middle initial if full name is unknown.

2. No Middle Name Or Unknown- Leave this item blank if the patient does not have a middle name or initial, or if the middle name or initial is unknown. Do not record *not applicable*, *n/a* or *unknown*.

3. 40 characters- If the middle name is more than 40 characters, enter only the first 40.

4. Punctuation- Do not use any punctuation.

NAME - MAIDEN

Record the maiden name of female patients who are or have been married. This item is useful for matching multiple records on the same patient.

Recording Name-Maiden

1. Hyphens are allowed.

   Example: The last name is Green-Moss. Record as Green-Moss.

2. 100 characters- If the maiden name is more than 100 characters, enter only the first 100.

3. Unknown Or Not Applicable- Leave this data item blank if the patient does not have a maiden name, information is not available, or it is not applicable to the patient as in the case of a male. Do not record *not applicable*, *n/a* or *unknown*.

NAME - ALIAS

Record any alternate name or "AKA" (also known as) used by the patient, if known. This item is useful for matching multiple records on the same patient.

Recording Name-Alias

1. Unknown or Not Applicable- Leave this data item blank if the patient does not have an alias or if the information is not available. Do not record *not applicable*, *n/a* or *unknown*.

2. Maiden Name- Do not record maiden name in this field. It should be recorded in the *Name-Maiden* field.

3. 100 characters- If the first name is more than 40 characters, enter only the first 100.

GUIDELINES FOR RECORDING PATIENT ADDRESS

The address is the home or residence named by the patient at the time he/she was diagnosed. Legal status and citizenship are not factors in residency decisions. Rules of residency are identical to, or comparable with, the rules of the United States Census Bureau whenever possible. Resolve residency questions by using the Census Bureau's definition "the place where he or she lives and sleeps most of the time or the place the person considers to be his or her usual home." Vital Statistic rules may differ from census rules. Do not record residence from the death certificate. Review each record carefully to determine correct residence. If address at diagnosis is unavailable, use current address.

Rules for Persons Without Apparent Residences:

1. Persons With More Than One Residence (summer and winter homes): Use the address the patient specifies if a usual residence is not apparent.

2. Persons With No Usual Residence (transients, homeless): Use the address of the place they were staying when the cancer was diagnosed. This could be a shelter or the diagnosing institution.

3. Persons Away at School: College students are residents of the school area. Boarding school children below college level are residents of their parents' home.

4. Persons in Institutions: The Census Bureau states "Persons under formally authorized, supervised care or custody" are residents of the institution. This includes the following:

    1. Incarcerated persons

    2. Persons in nursing, convalescent, and rest homes

    3. Persons in homes, schools, hospitals, or wards for the physically disabled, mentally retarded, or mentally ill

    4. Long-term residents of other hospitals, such as Veterans Administration (VA) hospitals

5. Persons in the Armed Forces and on Maritime Ships: Members of the armed forces are residents of the installation area. Use the stated address for military personnel and their family. Military personnel may use the installation address or the surrounding community's address. The Census Bureau has detailed residency rules for Naval personnel, Coast Guard, and maritime ships. Refer to the Census Bureau publications for these detailed rules.

ADDR AT DX - NO & STREET

Record the number and street address of the patient's usual residence at the time the tumor was initially diagnosed. Patient address is used to provide census tract and other geocodes for incidence statistics and epidemiologic research. The VCR uses geocoding software for automated assignment of geocodes. To increase the rate of automated geocoding, improve the quality of residence data, and enhance the specificity of residence information available for research, addresses must conform to the following format rules.

Recording Addr At Dx - No & Street

1. Blanks- Leave a blank between numbers and words if space permits.

2. Capital Letters- The use of capital letters is **preferred**.

   Example: 103 First Avenue should be recorded as 103 FIRST AVENUE

3. Multiple Tumors- If the patient has multiple tumors, the address may be different for each primary.

4. No Address at Diagnosis- If no information is available on address at diagnosis, assume the current address was also address at time of original diagnosis.

5. Unknown- If the patient's current address is not known, record UNKNOWN only after all efforts to obtain this information prove unsuccessful.

6. Do Not Update this data item if the patient's address changes over time. See *VCR Manual Part Three, Guidelines For Recording Patient Address* for detailed residency rules.

7. Punctuation: Punctuation marks should be avoided, except when punctuation is necessary to convey the meaning.

   a. Punctuation normally is limited to periods when the period carries meaning (e.g., 39.2 RD), slashes for fractional addresses (e.g., 101 ½ MAIN ST) and hyphens when the hyphen carries meaning (e.g., 289-01 MONTGOMERY AVE).

   b. Pound signs- The use of pound signs (#) to designate address units should be avoided whenever possible. The preferred notation is as follows:

      Example: Address: 1234 Main St., Apartment #12
      Record as: 1234 MAIN ST APT 12

   If a pound sign is used, there must be a space between the pound sign and secondary number (e.g., 425 FLOWER BLVD # 72).

   c. Do not use commas, semicolons, colons, dashes, question marks, exclamation points, apostrophes, parentheses, brackets, braces, quotation marks or asterisks (*) when recording address.

ADDR AT DX - NO & STREET– *continued*

8. Abbreviations: Enter complete street names without abbreviation. Abbreviate only directional prefixes, directional suffixes and street type suffixes as included on the following VCR list, *Standardized Abbreviations for Street Address.* Use of abbreviations for these terms will enable the entire street address to be recorded.

   Examples: 101 W PINE ST RICHMOND 23234 is in Chesterfield County
   101 W PINE WAY RICHMOND 23234 is in Richmond City

9. PO Box: Avoid using PO Box numbers in place of street address. Use of street address is necessary for more accurate geocoding.

   Example: Address: P.O. Box 20, 221 Springfield Rd
   Record as: 221 SPRINGFIELD RD

10. Postal Route Numbers: Avoid using postal route numbers in place of street address. Confirm the house number is not part of the postal route. Use of street address is necessary for more accurate geocoding.

    Example: Address: RD2 35 Sycamore St
    Record as: 35 SYCAMORE ST when it is known that 35 is the street number

11. Apartment Numbers or Letters: Enter apartment numbers or letters in *Address at DX- Supplemental* field.

    Example: Address: Apartment F at 321 Knollwood Dr.
    Record *Addr at DX-No and Street* as: 321 KNOLLWOOD DR
    Record *Address at DX- Supplemental* as: APT F

12. Intersections: Use one of the following formats when an intersection is used in place of a street number:

    SMITH AND JONES ST (not Sts or Streets)
    SMITH ST AND JONES ST
    SMITH AT JONES

13. Nursing Home or Other Institution: If residence is a nursing home or other institution, enter the street address given in this field. The name of the institution should be entered in the *Address at DX Supplemental* field.

    Example: Address: Oak Nursing Home, 1530 Elm Ave
    Record *Addr at DX-No and Street* as: 1530 ELM AVE
    Record *Address at DX- Supplemental* as: OAK NURSING HOME

VCR STANDARD ABBREVIATIONS FOR STREET ADDRESS

Directional Prefix or Suffix Abbreviations

Prefix/Suffix	Abb	Prefix/Suffix	Abb	Prefix/Suffix	Abb	Prefix/Suffix	Abb
North	N	East	E	Northeast	NE	Southeast	SE
South	S	West	W	Northwest	NW	Southwest	SW

Street Prefix Abbreviations

Prefix	Abb	Prefix	Abb	Prefix	Abb	Prefix	Abb
Avenue	AV,AVE	Camino	CMN	Paseo	PAS	Via	VIA
Boulevard	BLVD	Circulo	CIR	Place/Placita	PL	Vista	VISTA
Calle	CLL	Corte	CT	Plaza	PLZ		
Caminito	CMT	Drive	DR	Rue	RUE		

Street Suffix Abbreviations

Suffix	Abb	Suffix	Abb	Suffix	Abb	Suffix	Abb
Alley	AL	Crossing	CRSG	Overpass	OVPS	Square	SQ
Alley	ALY	Drive	DR	Park	PARK	Street	ST
Arcade	ARC	Expressway	EXWY	Parkway	PKWY	Terrace	TER
Avenue	AV,AVE	Expressway	EXY	Parkway	PKY	Trafficway	FWY
Boulevard	BLVD	Freeway	FRWY	Pass	PASS	Throughway	THWY
Bypass	BYP	Freeway	FWY	Path	PATH	Trail	TRL
Calle	CLL	Gardens	GDNS	Pike	PKE	Turnpike	TPKE
Causeway	CSWY	Highway	HWY	Place	PL	Underpass	UNP
Center	CTR	Lane	LA	Plaza	PLZ	Walk	WALK
Circle	CIR	Loop	LOOP	Road	RD	Way	WY
Concourse	CONC	Mews	MEWS	Row	ROW		
Court	CT	Motorway	MTWY	Rue	RUE		
Crescent	CRES	Oval	OVAL	Skyway	SKWY		

ADDR AT DX - SUPPLEMENTL
(address at diagnosis - supplemental)

Record additional address information such as the name of a place or facility (e.g., a nursing home or name of an apartment complex) at the time of diagnosis.

Recording Addr at Dx – Supplemental

1. Not Applicable- If additional address space is not needed, leave blank.

2. Do Not Update this data item if the patient's address changes over time. See *VCR Manual Part Three, Guidelines For Recording Patient Address* for detailed residency rules.

ADDR AT DX - CITY
(Address At Diagnosis – City/Town)

Record the city or town of the patient's usual residence when the tumor was initially diagnosed. The address is a part of the patient's demographic data and has multiple uses. It will provide a referral pattern report and allow analysis of cancer clusters or environmental studies.

Recording Addr at DX-City

1. Do Not Update this data item if the patient's address changes over time. Changing this data item would destroy its usefulness. See *VCR Manual Part Three, Guidelines For Recording Patient Address* for detailed residency rules.

2. Rural area- If the patient resides in a rural area, record the name of the city or town used in his or her mailing address.

3. Punctuation- Do not use punctuation, special characters, or abbreviations.

4. Capital Letters- The use of capital letters is preferred.

5. Multiple Tumors- If the patient has multiple tumors, the address may be different for each primary.

6. Unknown- If the city is not known, record UNKNOWN only after all efforts to obtain this information prove unsuccessful.

7. No Information- If no information is available on address at time of diagnosis, use current address.

ADDR AT DX - STATE

Record the US postal service abbreviation for the state or Canadian province of the patient's usual residence when the tumor was diagnosed.

Recording Addr at DX-State

1. Multiple Tumors- If the patient has multiple tumors, the address may be different for each primary.

2. Do Not Update this data item if the patient's address changes over time. Changing this data item would destroy its usefulness. See *VCR Manual Part Three, Guidelines for Recording Patient Address* for detailed residency rules.

3. Abbreviations- Only abbreviations on the following three tables are acceptable.

Abbreviations - US States & Possessions

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

ADDR AT DX – STATE – *continued*

Abbreviations – Other US Possessions

US Possession		US Possession	
American Samoa	AS	Marshall Islands	MH
Guam	GU	Outlying Islands	UM
Puerto Rico	PR	APO/FPO Armed Services America	AA
Virgin Islands	VI	APO/FPO Armed Services Europe	AE
Palau	PW	APO/FPO Armed Services Pacific	AP
Micronesia	FM		

Abbreviations – Canadian Provinces

Province		Province	
Alberta	AB	Nunavut	NU
British Columbia	BC	Ontario	ON
Manitoba	MB	Prince Edward Island	PE
New Brunswick	NB	Quebec	QC
Newfoundland/Labrador	NL	Saskatchewan	SK
Northwest Territories	NT	Yukon	YT
Nova Scotia	NS		

Abbreviations – Other

Other Country or Unknown	
Resident of a country other than the US (including its territories, commonwealths, or possessions) or Canada and the country is known	XX
Resident of a country other than the US (including its territories, commonwealths, or possessions) or Canada and the country is unknown	YY
Resident of US, NOS (including its territories, commonwealths, or possessions); Canada, NOS; residence unknown	ZZ

The address is part of the patient's demographic data and has multiple uses. It will provide a referral pattern report and allow analysis of cancer clusters or environmental studies. Do not update this data item if the patient's address changes over time – changing this data item would destroy its usefulness. See *VCR Manual Part Three, Guidelines for Recording Patient Address* for detailed residency rules.

ADDR AT DX - POSTAL CODE

For US residents, record the patient's nine-digit extended postal (ZIP) code when the tumor was diagnosed. The address is a part of the patient's demographic data and has multiple uses. It will provide a referral pattern report and allow analysis of cancer clusters or environmental studies.

Example: The extended postal code 60611-2797 is recorded as 606112797.

Recording Addr At DX- Postal Code

1. Only Five-Digits Available- When the nine-digit extended code is unavailable, record the five-digit postal code.

   Example: When only five digits, 60611, are available, record 60611_ _ _ _.

2. Canadian Residents- For Canadian residents, record the six-character postal code.

3. Hyphens- Do not record hyphens.

4. Do Not Update this data item if patient's address changes over time. Changing this data item would destroy its usefulness. See *VCR Manual Part Three, Guidelines for Recording Patient Address* for detailed residency rules.

5. Multiple Tumors- If the patient has multiple tumors, the postal code may be different for each primary.

6. Other countries- When available, record the postal code for other countries.

7. Unknown Postal Code- If the street address, city and state are known, but the postal code is unknown, the following US Postal Service's Web site may be used to determine the correct postal code:
   http://www.usps.com/

8. Unknown Address- If street address, city, state and postal code are unknown and the information cannot be obtained from any other sources, use the following codes:

Codes and Definitions

Code	Definition
888888888	Permanent address in a country other than Canada, United States or US possessions **and** postal code is unknown
999999999	Permanent address in Canada, United States, or US possession **and** postal code is unknown. Permanent address (street, city and state) is totally unknown

Special Instructions

Registry Hospitals- If less than 9 digits are available left justify and follow by blanks.

COUNTY AT DX
(Residence At Diagnosis – County)

Record the county of the patient's usual residence when the tumor was diagnosed.

Recording County At Dx

1. Multiple Tumors- If the patient has multiple tumors, the county may be different for each primary.

2. Do Not Leave Blank- This data item must contain the specific county at diagnosis. If the city and state are known, but the county is unknown, the following web site may be used to determine the correct county: http://www.melissadata.com/Lookups/addressverify.asp.

3. Virginia Resident- If the patient is a Virginia resident, the specific county *must* be recorded.
   FIPS Codes- Record the county at diagnosis using county codes issued by the Bureau of Standards in the Federal Information Processing Standards (FIPS). The FIPS codes for Virginia counties are listed in *VCR Manual Appendix F, Federal Information Processing Standards (FIPS)* and are generally incorporated into abstracting software.

4. Outside of Virginia- If the patient resides in a state other than Virginia, in Canada, or in a US possession, the specific county is not required and should be coded to 998.

5. Other Countries- If the patient resides outside the US, Canada, or a US possession (XX or YY entered for *Addr at Dx - State)*, the country of residence at diagnosis is recorded in this data item.

   1. SEER Geo-Codes- Record the three digit country code in which the patient resided at diagnosis using *VCR Manual Appendix G, SEER Geo-Codes*. These codes are generally incorporated into abstracting software.

   2. Country unknown- Record 999 when the country of residence is unknown.

Additional Codes and Definitions

In addition to the FIPS and Geo-codes, the following codes are acceptable:

Code	Definition
998	Patient resides outside of Virginia
999	Unknown county/country

AGE AT DX

Record the patient's age at his/her last birthday before diagnosis.

000	Less than one year old
001	One year old, but less than two years old
002	Two years old
...	(Actual age in years)
101	One hundred one years old
999	Unknown age

Recording Age At Diagnosis

1. Calculating Age- If age at diagnosis is unavailable, but the year of diagnosis and year of birth are known, calculate approximate age at diagnosis.

2. Date of Birth Unknown- Use 999 if the date of birth is unknown.

3. Date of Diagnosis Unknown- Use 999 if the date of diagnosis is unknown.

Special Instructions

Age must be documented in the PE Text field.

BIRTH DATE

Record the patient's date of birth

Recording Birth Date

1. Date Format- Record date in year, month, day format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual, Part Three, General Instructions* for allowable values.

   Example: Record June 30, 1906 as 19060630.

2. Date Unavailable, but Age Known- When age is known, estimate year of birth when further information is not available. It is better to estimate than to record as an unknown year.

   Example 1: The patient is 60 years old when diagnosed on June 15, 1996. The medical record does not have a birth date. Record unknown month (blank) and day (blank). Estimate the year as 1936 (----1936).

   Example 2: Record the patient's date of birth as ----1927 when the medical record contains only the year of birth (1927).

3. Calculating Date of Birth- If date of birth is unavailable, but the year of diagnosis and age are known, calculate approximate date of birth. Leave the date of birth blank only if the age at diagnosis is also unknown.

4. Unknown Month, Day and/or Year- If date is not known, leave the field blank. If only part of the date is known, record what is known and enter approximations for month and/or year if descriptions are available or blank for what is unknown. No approximation of day is acceptable. Refer to *VCR Manual, Part Three: Data Item Instructions, General Information, Dates* for instructions regarding Approximating Dates and Unknown Dates. *Fictitious dates or default values are not acceptable to be entered for month, day, or year*.

BIRTH PLACE

Record the patient's place of birth.

Recording Birth Place

Born in the United States

1. State of Birth- If the patient was born in the United States, record the state of birth.

2. SEER Geo-codes- Record the patient's place of birth using the *VCR Manual Appendix G, SEER Geo-Codes*. These codes include states of the United States as well as foreign countries.

   a. Specific Code- Use the most specific code possible.

   b. Software- These codes are generally incorporated in abstracting software.

   c. Original Codes- At the time SEER assigned geo-codes in the 1970's, the United States owned or controlled islands in the Pacific. Many of these islands are now independent. Some are controlled by countries other than the United States. The original codes are used for these islands to preserve historic information. The names have been annotated to show the new political designation. The alphabetic list displays the correct code.

3. Unknown State- If the state is unknown and patient known to be born in the US, record 000.

Born Outside the United States

1. Country of Birth- If patient was born outside the United States, enter the country of birth.

2. SEER Geo-codes- Record the three digit country code using *VCR Manual Appendix G, SEER Geo-Codes*.

3. Unknown Country- If the country is unknown, record *998*.

Birth Place Unavailable

Information unavailable - Record *999* when place of birth is unavailable.

Additional Codes and Definitions

In addition to the SEER Geo-codes, the following codes are acceptable:

Code	Definition
998	Place of birth outside of the United States, country unknown
999	Place of birth unknown

SOCIAL SECURITY NUMBER

Record the patient's Social Security Number (SSN) without dashes.

Recording Social Security Number

1. No Social Security Number- When a patient does not have a Social Security Number, or the information is not available, record 999999999.

2. Correct Social Security Number- It is important to enter the correct Social Security Number since this data item is used for record linkage to match patients at the VCR as well as to match VCR information with the Social Security Number on the hospital's Disease Index. Verify entries for missing values and transpositions. Do not record Social Security Numbers that end with B or D. These are the spouse's Social Security Number.

3. Invalid Entry- According to how a Social Security Number is assigned by the Social Security Administration, the following are invalid entries:

   a. First three digits cannot = 000 or 666

   b. Fourth and Fifth digits cannot = 00

   c. Last four digits cannot = 0000

   d. First digit cannot = 8 or 9 unless entire SSN is unknown (999999999)

4. Correction- If a correction is made to the Social Security Number, a change sheet must be submitted to the VCR. See *VCR Manual Part One, Changing Information*.

SEX

Record the patient's sex.

Codes and Definitions

Code	Definition
1	Male
2	Female
3	Other (Hermaphrodite)
4	Transsexual, NOS
5	Transsexual, natal male
6	Transsexual, natal female
9	Not stated/Unknown

Special Instructions

1. Sex **must** be documented in the PE Text field
2. Codes of 3 through 6 requires documentation in the PE Text field
3. These codes may be used in cases prior to 2015
4. Transsexual, NOS may be sued for new cases if natal sex is unknown

SPANISH/HISPANIC ORIGIN

Record the Spanish/Hispanic origin. This item identifies persons of Spanish or Hispanic ethnicity.

Codes and Definitions

Code	Definition
0	Non-Spanish, Non-Hispanic
1	Mexican (includes Chicano)
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; (There is evidence other than surname or maiden name that the person is Hispanic, but he/she cannot be assigned to any category of 1 – 5)
7	Spanish surname only (the only evidence of the person's Hispanic origin is surname or maiden name and there is no contrary evidence that the person is not Hispanic
8	Dominican Republic
9	Unknown whether Spanish or not

Recording Spanish/Hispanic Origin

1. Any race- A person of Spanish/Hispanic origin may be any race, but these categories are generally not used for Native Americans, Filipinos, or others who may have Spanish names.

2. Portuguese and Brazilian- Code 0 (Non-Spanish; non-Hispanic) for Portuguese and Brazilian persons.

3. Multiple Tumors- If a patient has multiple tumors, all records should have the same code.

4. Information Not Available- If this information is not available, reference ***"A Toolkit for Collecting Race, Ethnicity, and Primary Language Information From Patients"*** which was developed by the Health Research Educational Trust providing guidance on how to collect this information during patient registration. This resource is available at the following link and should be shared with personnel responsible for patient registration throughout your facilities:

   www.hretdisparities.org/hretdisparities/index.jsp.

RACE

RACE 1, RACE 2, RACE 3, RACE 4, RACE 5

Record the appropriate codes for the patient's race(s) in Race 1, Race 2, Race 3, Race 4, and Race 5. Race is coded separately from Spanish/Hispanic Origin.

Codes and Definitions

Code	Definition	Code	Definition
01	White	17	Pakistani
02	Black	20	Micronesian
03	American Indian, Aleutian, or Eskimo (*includes all indigenous populations of the Western hemisphere*)	21	Chamorran
04	Chinese	22	Guamanian, NOS
05	Japanese	25	Polynesian, NOS
06	Filipino	26	Tahitian
07	Hawaiian	27	Samoan
08	Korean	28	Tongan
09	Retired – DO NOT USE	30	Melanesian, NOS
10	Vietnamese	31	Fiji Islander
11	Laotian	32	New Guinean
12	Hmong	88	No further race documented (*Do **Not** use in Race 1)*
13	Kampuchean, includes Khmer & Cambodian	96	Other Asian, includes Asian NOS, & Oriental NOS
14	Thai	97	Pacific Islander, NOS
15	Asian Indian or Pakistani, NOS (*formerly code 09)*	98	Other
16	Asian Indian	99	Unknown

Recording Race

Single Race

1. <u>One Race</u>- If only one race is reported for the patient, in Race 1 enter the race code and in Race 2 through Race 5, enter 88.

2. <u>A specific race code</u> (other than 88 or 99) must not occur more than once.

   Example 1: If the patient's race is listed as white, in Race 1 enter 01 and in Race 2 through Race 5 enter 88. Do not code 01 in Race 1 signifying one parent and 01 again in Race 2 for other parent.

   Example 2: A patient was born in Mexico of Mexican parentage. Code Race 1 as 01 and Race 2 through Race 5 as 88.

RACE– *continued*
RACE 1, RACE 2, RACE 3, RACE 4, RACE 5

Multiple Races

1. Primary Race(s)- Code primary race(s) of the patient in fields Race 1, Race 2, Race 3, Race 4, and Race 5. The five race fields allow for the coding of multiple races consistent with the Census 2000. Rules 2-6 further specify how to code Race 1 through Race 5.

2. Less Than Five Specific Races- If less than five specific race codes apply for a patient, code 88 in the remaining race fields.

   Example: A patient has a Hawaiian father, black mother, Japanese grandfather, and Korean grandmother. Code Race 1 as 07 Hawaiian, Race 2 as 02 Black, Race 3 as 05 Japanese, Race 4 as 08 Korean, and Race 5 as 88.

3. White and Other Races- 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.

4. Hawaiian and Other Races- 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.

5. Combination Without Hawaiian- 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.

6. Based on Race of Relatives- 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, NOS. Code Race 2 through 5 as 88.

No Race Stated

1. Race Category- If no race is stated in the medical record, or if the stated race cannot be coded, review the documentation for a statement of race category.

   Example 1: Patient described as a black female in the physical exam, consultation or nursing notes, Code Race 1 as 02 Black and Race 2 through Race 5 as 88.

   Example 2: Patient describes herself as multi-racial (nothing more specific) and nursing notes say 'African-American.' Code Race 1 as 02 Black and Race 2 through Race 5 as 88.

   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.

RACE– *continued*
RACE 1, RACE 2, RACE 3, RACE 4, RACE 5

2. If race is unknown, not stated in the medical record, or not stated specifically, refer to the race-specific guidelines below. If none apply, code Race 1 through Race 5 as unknown (99). Do not use patient name in determining race.

Race-Specific Guidelines

1. White (01) includes Mexican, Puerto Rican, Cuban, and all other Caucasians.

2. Black (02) includes the designations Negro or African-American.

3. Native American (03) should be used for any person stated to be Native American or [western hemisphere] Indian, whether from North, Central, South, or Latin America.

4. Birthplace Information- Race is based on birthplace information when place of birth is given as China, Japan, or the Philippines and race is reported only as Asian, Oriental, or Mongolian.

   Example: If the patient's race is recorded as Asian and the place of birth is recorded as Japan, code Race 1 as 05 Japanese and Race 2 through Race 5 as 88.

5. Asian- Do not code Asian in a subsequent race field if a specific Asian race has already been coded.

Use of Code 88 (No further race documented)

1. Race 1- Code 88 is valid for Race 2 through Race 5; it is not valid for Race 1.

2. Race 2-5- If Race 2 is coded to 88, then Race 3 through Race 5 must be coded to 88.

Use of Code 99 (Unknown)

1. If the patient's race is unknown, enter 99 in Race 1 through Race 5.

2. If any race equals 99 then all race codes (Race 1, 2, 3, 4, and 5) must equal 99.

Special Instructions

Race must be recorded in the PE Text field. If race is unknown, it should be recorded as such in the text field.

Reference

"A Toolkit for Collecting Race, Ethnicity, and Primary Language Information from Patients" is a reference developed by the Health Research Educational Trust providing guidance on how to collect this information during patient registration. This resource is available at the following link and should be shared with personnel responsible for patient registration throughout your facilities:

http://www.hretdisparities.org/

PRIMARY PAYER AT DIAGNOSIS

Record the patient's primary payer/insurance carrier at the time of initial diagnosis and/or treatment.

This item is used in financial analysis and as an indicator for quality and outcome analyses. Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires the patient admission page to document the type of insurance or payment structure that will cover the patient while being cared for at the facility.

Codes and Definitions

Code	Definition
01	*Not Insured*- Patient has no insurance and is declared a charity write-off.
02	*Not Insured, Self Pay*- Patient has no insurance and is declared responsible for charges.
10	*Insurance, NOS*- Type of insurance is unknown or other than types listed in codes 20, 21, 31, 35, 60-68.
20	*Private Insurance*: *Managed Care, HMO, or PPO*- An organized system of prepaid care for a group of enrollees usually within a defined geographic area. Generally formed as one of four types: a group model, an independent physician association (IPA), a network, or a staff model. "Gatekeeper- model" is another term for describing this type of insurance.
21	*Private Insurance: Fee-for-Service*- An insurance plan that does not have a negotiated fee structure with the participating facility. Type of insurance plan not coded as 20
31	*Medicaid*- State government administered insurance for persons who are uninsured, below poverty level, or covered under entitlement programs. Medicaid other than described in code 35.
35	*Medicaid-Administered through a Managed Care plan*- Patient is enrolled in Medicaid through a Managed Care program (e.g. HMO or PPO). The managed care plan pays for incurred costs.
60	*Medicare without supplement, Medicare, NOS*- Federal government funded insurance for persons who are 62 years of age and older, or are chronically disabled (SOCIAL SECURITY insurance eligible). Not described in codes 61, 62, or 63.
61	*Medicare with supplement, NOS* – Patient has Medicare and another type of unspecified insurance to pay costs not covered by Medicare.
62	*Medicare-Administered through a Managed Care Plan*- Patient is enrolled in Medicare through a Managed Care plan (e.g. HMO or PPO). The Managed Care plan pays for all incurred costs.
63	*Medicare with private supplement*- Patient has Medicare and private insurance to pay costs not covered by Medicare.

PRIMARY PAYER AT DIAGNOSIS– *continued*

Code	Definition
64	*Medicare with Medicaid eligibility*- Federal government Medicare with State Medicaid administered supplement.
65	*TRICARE*- Department of Defense program providing supplementary civilian-sector hospital and medical services beyond a military treatment facility to military dependents, retirees, and their dependents Formerly CHAMPUS (Civilian Health and Medical Program of the Uniformed Services)
66	*Military*- Military personnel or their dependents who are treated at a military facility.
67	*Veterans Affairs*- Veterans who are treated in Veterans Affairs facilities.
68	*Indian/Public Health Service*- Patient who receives care at an Indian Health Service facility or another facility, and the costs are reimbursed by the Indian Health Service. Patient receives care at a Public Health Service facility or at another facility, and medical costs are reimbursed by the Public Health Service.
99	*Insurance Status Unknown*- It is unknown from the patient's medical record whether or not the patient is insured.

Recording Primary Payer at Diagnosis

1. Type of Insurance- Record the type of insurance reported on the patient's admission page.

2. More than one Payer- If more than one payer or insurance carrier is listed on the patient's admission page, record the first.

3. Changes in Payer- If the patient's payer or insurance carrier changes, do not change the initially recorded code.

TEXT - USUAL OCCUPATION

Record the patient's usual occupation, the kind of work performed during most of the patient's working life before diagnosis of this tumor.

This data item is used to identify new work-related health hazards, serves as an additional measure of socioeconomic status, and identifies occupational groups in which cancer screening or prevention activities may be beneficial.

Usual occupation is defined identically as on death certificates and conforms to the 1989 revision of the US Standard Certificate of Death.

Recording Text-Usual Occupation

1. Retired- **Do not record retired.**

2. If Not Available Or Unknown- If *usual* occupation is not available or is unknown, record the patient's current or most recent occupation or any known occupation.

3. Update this data item if better information is obtained as to the usual occupation of the patient. However, it is not the responsibility of facility abstractors to update abstracts with information provided on death certificates. Comparison with death certificate information is the function of the VCR.

4. Housewife/househusband- If the patient was a housewife/househusband and also worked outside the home most of her/his adult life, record the usual occupation outside the home. If the patient was a housewife/ househusband and did not work outside the home for most of her/his adult life, record *housewife* or *househusband*.

5. Never Worked- If the patient was not a student or housewife and never worked, record *never worked* as the usual occupation.

6. No Information- If no information is available, record *unknown*.

7. This data item cannot be blank unless the patient is under 14 years old. It applies only to patients who are 14 years or older at the time of diagnosis. For patients under the age of 14, leave blank.

8. Finding the Information- The patient's occupation may be found on the face sheet, nursing assessment, history and physical or consult reports in the medical record.

TEXT - USUAL INDUSTRY

Record the primary type of activity carried on by the business/industry where the patient was employed for the most number of years before diagnosis of this tumor.

Both occupation and business/industry are required to accurately describe an individual's occupation. These data items are used to identify new work-related health hazards, serve as an additional measure of socioeconomic status, and identify occupational groups in which cancer screening or prevention activities may be beneficial.

Usual industry (also known as "kind of business/industry") is defined identically as on death certificates and conforms to the 1989 revision of the US Standard Certificate of Death.

Recording Text-Usual Industry

1. Distinguish the Component- Be sure to distinguish among *manufacturing*, *wholesale*, *retail*, and *service* components of an industry that performs more than one of these components.

2. Primary Activity Unknown- If the primary activity carried on at the location where the patient worked is unknown, it may be sufficient to record the name of the company (with city or town) for which the patient performed his/her usual occupation. In these situations, if resources permit, the VCR may be able to use the employer name and city/town to determine the type of activity conducted at that location.

3. If Most Recent Occupation was Recorded- If current or most recent occupation, rather than usual occupation was recorded, record the patient's current or most recent business/industry.

4. Update this data item if better information is obtained as to the usual industry of the patient. However, it is not the responsibility of facility abstractors to update abstracts with industry information provided on death certificates. Comparison with death certificate information is the function of the VCR.

5. No Information Available- There must be an entry for usual industry when any occupation is reported. If no information is available regarding the industry in which the reported occupation was carried out or the occupation is unknown, record *unknown*.

6. This data item cannot be blank unless the patient is under 14 years old. It applies only to patients who are 14 years or older at the time of diagnosis. For patients under the age of 14, leave blank.

MEDICAL RECORD NUMBER

Record the patient's medical record number. The medical record number is a patient identification number usually assigned by the reporting facility.

Recording Medical Record Number

1. Match to Disease Index- This item is used to locate the medical record. It may also be used to link records and should be recorded exactly as it is recorded on your Disease Index.

2. Fewer Than Eleven Characters- If the medical record number is fewer than 11 characters, right justify the characters and allow leading blanks.

   Example: Medical record number 811234 would be recorded

					8	1	1	2	3	4

3. Departments Without Medical Record Numbers- Record standard abbreviations for departments that do not use medical record numbers.

   Examples: Radiation Therapy

									R	T

   One-day surgery clinic

									S	U

4. Unknown- If the medical record number is unknown, record

								U	N	K

SEQUENCE NUMBER - HOSPITAL

Record the sequence number representing the order of this primary. Sequence number counts the occurrence of *independent, malignant and non-malignant neoplasms* except basal and squamous cell cancer of the skin during the patient's lifetime. Each neoplasm is assigned a different number. This number may change over the lifetime of the patient.

Codes 00-35 and 99 indicate neoplasms of in situ or malignant behavior (2 or 3). Codes 60-88 indicate neoplasms of non-malignant behavior (0, benign or 1, borderline).

Sequence Numbers for Malignant or In Situ Primaries

00 One malignant or in situ primary only in the patient's lifetime
01 First of two or more independent malignant or in situ primaries
02 Second of two or more independent malignant or in situ primaries
... (Actual sequence of this malignant or in situ primary)
35 Thirty-fifth of thirty-five independent malignant or in-situ primaries.
99 Unspecified malignant or in situ sequence number or unknown

Sequence Numbers for Non-Malignant Tumors

60 Only one non-malignant primary in the patient's lifetime
61 First of two or more independent non-malignant primaries
62 Second of two or more independent non-malignant primaries
... (Actual number of this primary)
87 Twenty-seventh of twenty-seven independent non-malignant primaries
88 Unspecified number of neoplasms in this category

Recording Sequence Number

1. Single Malignant Primary Tumor- Code 00 only if the patient has a single malignant primary.

2. Subsequent Malignant or In Situ Primary Tumor- If the patient develops a subsequent malignant primary or in situ primary tumor, change the sequence number for the first tumor from 00 to 01, and number subsequent tumors sequentially.

   Example: In January 2001, the registry assigns sequence number 00 to a patient with malignant melanoma. The patient develops a second primary cancer of the lung in July 2002. Assign sequence number 02 to the second cancer (lung). Change the sequence number of the first cancer (malignant melanoma) to 01.

   Note: Reporting institutions are not required to forward a change sheet to the VCR when changing sequence number from 00 to 01.

1. Single Non-Malignant Primary Tumor- Code 60 only if the patient has a single non-malignant primary.

SEQUENCE NUMBER – HOSPITAL – *continued*

2. Subsequent Non-Malignant Primary Tumor- If the patient develops a subsequent non-malignant primary, change the sequence number of the first tumor from 60 to 61, and number subsequent non-malignant tumors sequentially.

   Note: Reporting institutions are not required to forward a change sheet to the VCR when changing sequence number from 60 to 61.

3. Two or More Malignant Neoplasms Diagnosed at the Same Time- If two or more malignant or in situ neoplasms are diagnosed at the same time, assign the lowest sequence number to the diagnosis with the worst prognosis. If no difference in prognosis is evident, the decision is arbitrary.

   Example 1: A patient enters the reporting institution with simultaneous carcinoma in situ of the breast and invasive adenocarcinoma of the colon. Assign sequence number 01 to the colon primary and sequence number 02 to the breast primary.

   Example 2: A patient has simultaneous adenocarcinoma in situ in a colon polyp and squamous cell carcinoma in situ in a vocal cord polyp. Assign sequence numbers in any order, since both primaries have similar prognoses.

4. Two or More Non-Malignant Neoplasms Diagnosed at the Same Time- If two or more non-malignant neoplasms are diagnosed at the same time, assign the lowest sequence number to the diagnosis with the worst prognosis. If no difference in prognosis is evident, the decision is arbitrary.

5. In Situ Tumor Followed by an Invasive Cancer- If an in situ tumor is followed by an invasive cancer in the same site more than two months apart, report as two primaries even if stated to be a recurrence. The invasive primary should be reported with the date of the invasive diagnosis. Assign sequence numbers to both primaries with the in situ cancer being the first of the two. Refer to the *Multiple Primary and Histology Coding Rules* for more specific information by site.

6. Location and date of diagnosis- The sequence number counts the patient's independent, primary tumors regardless of the location(s) or institution(s) where those primaries were diagnosed and treated or the date of diagnosis.

   Example: The reporting institution diagnosed colon cancer. The patient has a history of kidney cancer diagnosed in 1980. The colon cancer is the second of this patient's primary cancers. Assign a sequence number 02 to colon cancer.

7. Newly reportable conditions- If the patient has a condition that was diagnosed prior to the condition being reportable do not count that condition when assigning sequence number.

   Example: A patient was diagnosed with refractory anemia on June 25, 1999 (not reportable until 2001) and then was later diagnosed with acute myelogenous leukemia on March 21, 2003 at your facility. Abstract only the acute myelogenous leukemia and assign a Sequence Number of 00.

SEQUENCE NUMBER – HOSPITAL – *continued*

8. Unaccessioned tumor- Sequence numbers should be reassigned if the facility learns later of an unaccessioned tumor that affects the sequence.

9. Considered Recurrence- The following sites/histologies are single primaries. Any reappearance of the original disease is documented as a recurrence. Assign a sequence number to the first disease occurrence. Do not assign another sequence number to any subsequent occurrences.

   - Invasive transitional and papillary transitional cell carcinomas (8120-8130) of the bladder
   - Invasive adenocarcinoma (8140) of the prostate
   - Kaposi sarcoma (9140/3) regardless of primary site
   - Non-malignant brain and CNS tumors of the same histology, same site, and same laterality.

10. Unknown- Use the sequence number 99 when it is impossible to estimate whether the patient has been diagnosed with an earlier malignancy (primary). If more information becomes available, change the sequence number(s).

    Example: A patient is diagnosed in the reporting facility with cancer of the colon. The medical record contains the statement "The patient recently had a salivary gland tumor removed. The patient does not know if the lesion was malignant." Assign a 99 sequence number to the colon primary. The patient returns to the reporting facility a year later for treatment of prostate cancer. The medical record says "The patient has a history of a malignant salivary gland tumor." Change the sequence number of the colon cancer from 99 to 02. Assign the sequence number 03 to the prostate cancer.

13. Fictitious Sequence Numbers - Do not enter fictitious sequence numbers. Fictitious sequence numbers harm the scientific integrity of the data.

CLASS OF CASE

Class of Case reflects the facility's role in managing the cancer, whether the cancer is required to be reported to VCR, and whether the case was diagnosed after the program's Reference Date. Record class of case based on reference date. For hospitals with hospital based cancer registries, use your registry's reference date. For non-registry hospitals, use January 1, 1990 as the reference date. (See *VCR Manual Part One, Reference Date*)

Note: The code structure for this item was revised in 2010.

Codes and Definitions

Analytic Classes of Case	
	Initial diagnosis at reporting facility
00	Initial diagnosis at the reporting facility AND all treatment or a decision not to treat was done elsewhere
10	Initial diagnosis at the reporting facility OR in staff physician office and part/all of 1st course of treatment or decision not to treat at the reporting facility, NOS
11	Initial diagnosis in staff physician's office AND part of first course treatment was done at the reporting facility
12	Initial diagnosis in staff physician's office AND all first course treatment or a decision not to treat was done at the reporting facility
13	Initial diagnosis at the reporting facility AND part of first course treatment was done at the reporting facility
14	Initial diagnosis at the reporting facility AND all first course treatment or a decision not to treat was done at the reporting facility
	Initial diagnosis elsewhere
20	Initial diagnosis elsewhere AND all or part of first course treatment was done at the reporting facility, NOS
21	Initial diagnosis elsewhere AND part of first course treatment was done at the reporting facility
22	Initial diagnosis elsewhere AND all first course treatment or a decision not to treat was done at the reporting facility
Classes of Case Required to be abstracted by the state	
	Patient appears in person at reporting facility
30	Initial diagnosis and all first course treatment elsewhere AND reporting facility participated in diagnostic workup (for example, consult only, staging workup after initial diagnosis elsewhere)
31	Initial diagnosis and all first course treatment elsewhere AND reporting facility provided in-transit care
32	Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility with disease recurrence or persistence
33	Diagnosis AND all first course treatment provided elsewhere AND patient presents at reporting facility with disease history only
34	Type of case not required by CoC to be accessioned (for example, a benign colon tumor) AND initial diagnosis AND part or all of first course treatment by reporting facility
35	Case diagnosed before VCR reference date AND initial diagnosis AND all or part of first course treatment by reporting facility - **NOT REPORTABLE TO VCR**
36	Type of case not required by VCR to be accessioned (for example, a benign colon tumor) AND initial diagnosis elsewhere AND all or part of first course treatment by reporting facility - **NOT REPORTABLE TO VCR**
37	Case diagnosed before VCR reference date AND initial diagnosis elsewhere AND all or part of first course treatment by facility - **NOT REPORTABLE TO VCR**
38	Initial diagnosis established by autopsy at the reporting facility, cancer not suspected prior to death

CLASS OF CASE – *continued*

	Patient does not appear in person at reporting facility
40	Diagnosis AND all first course treatment given at the same staff physician's office
41	Diagnosis and all first course treatment given in two or more different staff physician offices
42	Non-staff physician or non-CoC accredited clinic or other facility, not part of reporting facility, accessioned by reporting facility for diagnosis and/or treatment by that entity (for example, hospital abstracts cases from an independent radiation facility)
43	Pathology or other lab specimens only
49	Death certificate only - FOR CENTRAL REGISTRY USE ONLY
99	Nonanalytic case of unknown relationship to facility (not for use by CoC accredited cancer programs for analytic cases).

Analytic and Non-analytic Cases

Class of Case shows the role the reporting institution played in the patient's diagnosis or treatment. Class of case codes are further categorized into analytic and non-analytic categories to reflect where the initial diagnosis or treatment occurred. Both analytic and non-analytic cases are reportable to the VCR.

1. Analytic Cases (Class of Case 00 - 22) - Analytic cases include those that were first diagnosed and/or received all or part of their first course of treatment at the reporting institution.

2. Non-analytic Cases (Class of Case 30 - 99) – Non-analytic cases include those referred to the reporting institution for recurrence or subsequent therapy. They were first diagnosed and received all of their first course of treatment at another institution or if the patient expires with a history of cancer. Non-analytic cases also include cases diagnosed at autopsy and pathology report only cases.

CASEFINDING SOURCE

Record the earliest source of identifying information. For cases identified by a source other than reporting facilities (such as through death clearance or as a result of an audit), this variable codes the type of source through which the tumor was first identified. This data item cannot be used by itself as a data quality indicator. The timing of the casefinding processes (e.g., death linkage) varies from registry to registry, and the coded value of this variable is a function of that timing.

This data item will help facilities in prioritizing their casefinding activities. It provides more detail than "Type of Reporting Source."

Codes and Definitions

Case first identified at a reporting facility:

Code	Definition
10	Reporting Hospital, NOS
20	Pathology Department Review (surgical pathology reports, autopsies, or cytology reports)
21	Daily Discharge Review (daily screening of charts of discharged patients in the medical records department)
22	Disease Index Review (review of disease index in the medical records department)
23	Radiation Therapy Department/Center
24	Laboratory Reports (other than pathology reports, code 20)
25	Outpatient Chemotherapy
26	Diagnostic Imaging/Radiology (other than radiation therapy, code 23; includes nuclear medicine)
27	Tumor Board
28	Hospital Rehabilitation Service or Clinic
29	Other Hospital Source (including clinic, NOS or outpatient department, NOS)

CASEFINDING SOURCE– *continued*

Case first identified by source other than a reporting facility covered in codes 10-29:

Code	Definition
30	Physician-Initiated Case
40	Consultation-only or Pathology-only Report (not abstracted by reporting hospital)
50	Independent (non-hospital) Pathology-Laboratory Report
60	Nursing Home-Initiated Case
70	Coroner's Office Records Review
75	Managed Care Organization (MCO) or Insurance Records
80	Death Certificate (case identified through death clearance)
85	Out-of-State Case Sharing
90	Other Non-Reporting Hospital Source
95	Quality Control Review (case initially identified through quality control activities such as casefinding audit of a regional or central registry) *Note:* This includes cases reported as a result of reconciliation and quality assessments reviews (audits)
99	Unknown

Recording Casefinding Source

1. Cases First Identified at the Reporting Facility- Record the source where the tumor was first identified during routine casefinding procedures using the codes under 'Case first identified at a reporting facility'. Code the earliest source (based on patient or specimen contact at the facility) of identifying information.

   Example: A reportable case is identified while reviewing pathology reports during routine casefinding. Code *Casefinding Source* to 20 Pathology Department Review.

2. Cases Identified by Source Other Than a Reporting Facility Covered in the Codes Above- If the tumor was first identified by a source other than the reporting facility, select the most appropriate code to identify the source from the list of codes under 'Case First Identified by Source Other Than a Reporting Facility Covered in the Codes Above'. One specific use of these codes will be to indicate previously unreported tumors identified as a result of quality control procedures conducted by the VCR (e.g. reconciliation, audit, death clearance).

   Example: During VCR reconciliation, a tumor on the list of cases to be reconciled is determined to be reportable. The facility abstracts the case and enters code 95.

TYPE OF REPORTING SOURCE

This data item is intended to indicate the source of documents available to the abstractor. Record the code identifying the source documents used to abstract the majority of information on the condition being reported. This may be different than the source used for the original casefinding.

Codes and Definitions

Code	Definition
1	Hospital inpatient; Managed health plans with comprehensive, unified medical records
2	Radiation Treatment Centers or Medical Oncology Centers (hospital-affiliated or independent)
3	Laboratory only (hospital-affiliated or independent)
4	Physician‘s office/private medical practitioner
5	Nursing/convalescent home/hospice
6	Autopsy Only
7	Death certificate only **(VCR use only)**
8	Other hospital outpatient units/surgery centers (independent)

Recording Type of Reporting Source

Code in the following priority order: 1, 2, 8, 4, 3, 5, 6, 7. This is a change to reflect the addition of codes 2 and 8 and to prioritize laboratory reports over nursing home reports. The source facilities included in the previous code 1 (hospital inpatient and outpatient) are split between codes 1, 2, and 8.

This data item is intended to indicate the completeness of information available to the abstractor. Reports from health plans (e.g., Kaiser, Veterans Administration, military facilities) in which all diagnostic and treatment information is maintained centrally and is available to the abstractor are expected to be at least as complete as reports for hospital inpatients, which is why these sources are grouped with inpatients and given the code with the highest priority.

Sources coded to 2 usually have complete information on the cancer diagnosis, staging, and treatment.

Sources coded to 8 would include, but would not be limited to, outpatient surgery and nuclear medicine services. A physician‘s office that calls itself a surgery center should be coded as a physician‘s office. Surgery centers are equipped and staffed to perform surgical procedures under general anesthesia. If a physician‘s office calls itself a surgery center, but cannot perform surgical procedures under general anesthesia, code as a physician office.

Example: The patient was first found through your pathology department as a private outpatient specimen (Code 3). The patient was admitted as an inpatient to your hospital a month later for surgery. The inpatient record is used for abstracting (Code 1). Code this data item to ***1***.

DATE OF 1ST CONTACT

Record the date of the first contact with your facility for diagnosis and/or treatment of this reportable condition.

Recording Date of 1st Contact

1. Date Format- Record date in year, month, day format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual, Part Three, General Instructions* for allowable values.

   Example: Record June 30, 2010 as 20100630.

2. Outpatient Visit- Date of 1st Contact may be an outpatient visit for a biopsy, x-ray or laboratory test or the date of a pathology specimen was collected at the facility.

3. Autopsy Only- If an autopsy-only case, use date of death.

4. Never Leave Blank- This data item can never be blank and can never be zero filled.

5. **Report actual date only. Unknown or approximation of month, day, century, or year is not acceptable when reporting to the VCR. Fictitious dates or default values are also not acceptable.**

6. Readmission for a Newly Reportable Condition- When a patient is readmitted on or after January 1, 2001 for a condition not previously required to be reported, the Date of 1st Contact is the earliest date on or after January 1, 2001 the patient was seen at the reporting institution. (Registry hospitals see also *Special Instructions*.)

   Example: The patient was diagnosed with a colon primary in 1980. The patient came to the reporting facility in 1999 for treatment. The case was not reportable in 1999 due to the date of diagnosis being prior to January 1, 1990. The patient returns to the reporting facility for cancer treatment on March 23, 2007. The case is now reportable with a Date of 1st Contact of 20070323.

7. Earlier than Date of Inpatient Discharge- The Date of 1st Contact must be earlier than the date of inpatient discharge.

   Example 1: The patient is seen as an outpatient for a colonoscopy with a positive biopsy on October 6, 2007. He is admitted to the hospital from October 10, 2007 to October 15, 2007 for surgery. The Date of 1st Contact is 20071006.

   Example 2: The patient is admitted from August 23, 2007 to August 27, 2007 for shortness of breath. On August 25, 2007 the patient has a lung biopsy, which is diagnostic of cancer. The Date of 1st Contact is 20070823.

DATE OF 1ST CONTACT– *continued*

8. Admission Unrelated to Cancer- If a patient is admitted for other reasons not related to cancer, use the diagnosis date as the date of first contact.

   Example: Patient is admitted for a reason unrelated to cancer on 1/15/2007 and 1/17/2007 is incidentally diagnosed with cancer, the *Date of 1st Contact* is 20070117.

9. For Private Outpatient (POP) cases record the date the specimen was taken. If a patient was first identified as a POP and comes to your facility as an inpatient or outpatient during the three month holding period (See *VCR Manual, Part One, Private Outpatient Specimens*) for further diagnosis or treatment, the Date of First Contact is the date of the patient's first in-person contact with your facility.

   Example: Patient undergoes a biopsy in a physician's office on September 8, 2007. The pathology specimen was sent to your facility and was read as malignant melanoma. The patient enters your facility on September 14, 2007 for a wide excision. The Date of 1st Contact is 20070914.

10. Positive Imaging Study- Hospitals are not expected to report cases on the basis of a positive imaging study only. However, if the patient meets reporting requirements at a later time, the case must be reported using the date of the positive imaging study as the Date of 1st Contact.

    Example: The patient has an outpatient mammogram on April 10, 2003 that is suspicious for cancer. The patient returns for a biopsy that is diagnostic of cancer on April 17, 2003. This case would be reportable at the time of the biopsy with a Date of 1st Contact of 20030410.

DATE OF DIAGNOSIS

Record the date this reportable condition was first diagnosed by a recognized medical practitioner.

Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems.

Recording Date of Diagnosis

1. Date Format- Record the date in month, day, year format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual, Part Three, General Instructions* for allowable values.

   Example: Record June 30, 2007 as 20070630

2. Date Reportable- Use the earliest Date of Diagnosis whether clinically or histologically confirmed.

   Example 1: The patient was diagnosed with stromal endometriosis August 24, 2001. The patient presents to the reporting institution for treatment of the stromal endometriosis on November 5, 2001. This case would be reportable with a Date of Diagnosis of 20010824.

   Example 2: The patient has a history of breast cancer diagnosed September 10, 1988. The patient now presents to the reporting institution with metastasis from the breast. This case would be reportable with a Date of Diagnosis of 19880910.

3. Unknown Month, Day and/or Year of Diagnosis- If the original Date of Diagnosis is not known, leave blank. If only part of the date is known, record what is known and enter approximation for month and/or year if descriptions are available or blank for what is unknown. Approximation of day is acceptable. Refer to *VCR Manual, Part Three: Data Item Instructions, General Information, Dates* for instructions regarding Approximating Dates and Unknown Dates. Fictitious dates or default values are not acceptable to be entered for month, day, or year.

   Note for registry hospitals: According to reporting requirements of the ACOS Commission on Cancer, when a patient is diagnosed elsewhere prior to entering the reporting facility and the Date of Diagnosis is unknown, the hospital should record the date the patient was first seen at the reporting facility as the Date of Diagnosis. This is not the practice of the VCR; these cases must be reported to the VCR with an unknown Date of Diagnosis (blank).

   Example 1: The patient has a history of breast cancer. The patient presents to the reporting facility July 5, 2007 and receives Tamoxifen for breast cancer. The original Date of Diagnosis is unknown. The correct Date of Diagnosis is blank.

   Example 2: Patient receives palliative treatment for breast cancer diagnosed in June 2007. The correct Date of Diagnosis is 200706-- (where "-" equals a blank space). Do not record 20070615 where 15 is a default value for day.

   Example 3: Documentation in the patient's record from a June 2007 admission indicates the patient was diagnosed 'last year'. The correct Date of Diagnosis is 2006------. Do not record 20060101 where 0101 are default values for month and day.

   Example 4: Patient is admitted on January 15, 2007 with severe flank pain with history of lung cancer diagnosed five years ago. The correct Date of Diagnosis is 2007----. Do not record un known when descriptive information can be used to approximate the year.

DATE OF DIAGNOSIS– *continued*

4. Clinical Diagnosis- Use the Date of Diagnosis whether clinically or histologically confirmed. A clinical diagnosis often includes ambiguous terminology. See *VCR Manual Part One, Reportable Conditions* for a list of terms that constitute a diagnosis. Do not change the Date of Diagnosis when a later biopsy or cytology provides confirmation of a clinical diagnosis.

   Example 1: A March 12, 2002 mammogram reveals a mass in the upper-outer quadrant of a patient's right breast compatible with carcinoma. On March 20, 2002, the patient has an excisional breast biopsy that confirms infiltrating ductal carcinoma. Date of Diagnosis is 20020312.

   Example 2: A physician notes a prostate nodule possible for cancer during a May 12, 2003 physical exam. On June 15, 2003 a needle biopsy of the prostate histologically confirms adenocarcinoma. Date of Diagnosis is 02003615 because "possible for cancer" does not constitute a reportable diagnosis.

5. Earlier date- If the physician states, in retrospect, the patient had a reportable condition at an earlier date, use the earlier date as the Date of Diagnosis.

   Example: A patient has a total abdominal hysterectomy for endometriosis in January 2000. The patient is admitted to the hospital with abdominal pain in November 2002. An omental biopsy shows metastatic cystadenocarcinoma. Pathologists re-review the 2000 hysterectomy specimen. They identify an area of cystadenocarcinoma in the left ovary. Date of Diagnosis is 200001--.

6. Non-reportable conditions, that transforms into a reportable condition- If a patient is diagnosed with a non-reportable condition that later transforms into a reportable condition, record the date the patient was diagnosed with the reportable condition.

   Example: The patient was diagnosed with myelodysplastic syndrome on May 1, 2000 (not reportable until 2001) and it transforms into acute myelogenous leukemia on June 15, 2002. Abstract as acute myelogenous leukemia with a Date of Diagnosis of 20020615.

7. Diagnosed at Autopsy- The date of death is the Date of Diagnosis for a case diagnosed at autopsy.

8. Treatment Before a Definitive Diagnosis- Use the date therapy was started as the Date of Diagnosis if the patient receives cancer-directed treatment before a definitive diagnosis.

PRIMARY SITE

This data item records the topography code for the primary site of the cancer/tumor condition being reported using ICD-O-3 or ICD-O-2 (*International Classification of Diseases for Oncology, Third or Second Edition* published by the World Health Organization).

1. Cases Diagnosed on or after January 1, 2001 **-** Code according to ICD-O-3.

2. Cases Diagnosed prior to January 1, 2001 **-** Code according to ICD-O-2.

3. Cases with Unknown *Date of Diagnosis*- If the *Date of Diagnosis* is unknown and cannot be estimated, the *Date of 1st Contact* should be used to determine the correct coding manual to use. Code according to ICD-O-3 when the *Date of 1st Contact* is on or after January 1, 2001. Code according to ICD-O-2 when the *Date of 1st Contact* is prior to January 1, 2001. Newly reportable conditions for 2001 and 2004 are not reportable when Date of Diagnosis is unknown.

Coding Primary Site

1. Registry Hospitals- Registry hospitals must provide ICD-O topography codes for primary site on each case submitted to the VCR. Refer to the *FORDS Manual, Revised for 2015* at the following link for guidelines:

   https://www.facs.org/quality-programs/cancer/ncdb/registrymanuals/cocmanuals/fordsmanual

2. Non-registry Hospitals- Non-registry hospitals provide general ICD-O topography codes for cases submitted to the VCR as defined in Appendix M.

Determining Primary Site

1. Use all information available
   Use all information available in the medical record for determining primary site. Operative reports, oncology consults and pathology reports will help in determining the correct primary site. If you cannot make this determination, consult a physician. You may also submit the abstract to the VCR with appropriate documentation in text fields, copies of health record documentation if necessary and a note on the submission form requesting assistance. Your VCR Cancer Surveillance Specialist will review the case and respond to you.

2. Be Specific (CoC facilities only)
   When determining the primary site, be as specific as possible. Many organs can be divided into specific segments or tissue types. It is important to specify the exact segment or tissue involved.

   Example 1: The wrist contains several tissue types; skin, bone, soft tissue

   Example 2: The large intestine is divided as follows:

cecum	splenic flexure of colon
ascending colon	descending colon
hepatic flexure of colon	sigmoid colon
transverse colon	rectosigmoid colon

PRIMARY SITE – *continued*

3. Hematopoietic and Lymphoid Neoplasms
   Primary site for hematopoietic neoplasms diagnosed January 1, 2010 and later should be determined through use of the *SEER 2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual/Database*. Cases diagnosed prior to January 1, 2010 should use the following guidelines:
   Primary site is bone marrow (C42.1) for the following hematopoietic diseases:
   - Leukemia, with exceptions
   - Multiple myeloma
   - Polycythemia vera
   - Refractory anemia
   - Chronic myeloproliferative disease
   - Myelosclerosis with myeloid metaplasia
   - Essential/idiopathic thrombocythemia
   - Myelodysplastic syndromes

   ***Exception*:** Myeloid sarcoma is a leukemic deposit in an organ or tissue and the primary site should be the site of origin.

   Lymphomas may arise in lymph nodes, lymphatic tissue such as tonsils, spleen, Waldeyers ring, or thymus, and extranodal sites. Distinguishing between nodal and extranodal origin is important because extranodal lymphomas may have a better prognosis. Do not record the biopsy site as the primary site unless it has been confirmed as the primary site; do not record a metastatic site as the primary site.

   Lymphomas may be present in both an extralymphatic organ and at least one lymph node chain. Carefully identify the origin of the tumor. Record the primary site as the extranodal organ or the lymph nodes as directed by the managing physician.

   Primary site for lymphomas diagnosed January 1, 2010 and later should be determined through use of the *SEER 2012 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual/Database*. Cases diagnosed prior to January 1, 2010 should use the following guidelines as found in the following:
   http://seer.cancer.gov/tools/heme/update.html

   a. Single Lymph Node Chain- The primary site is the specific lymph node chain (C77._).

      Example: The primary site for a lymphoma involving only the inguinal lymph nodes is inguinal lymph nodes (C77.4).

   b. Multiple Lymph Node Chains- The primary site for a lymphoma involving multiple lymph node regions should list the nodal regions involved in the *Text-Primary Site Title* field and be coded to C77.8.

      Example: The primary site for a lymphoma involving cervical, axillary, and inguinal lymph nodes is lymph nodes of multiple regions (C77.8).

   c. Lymphatic tissue- The primary site for lymphomas arising in lymphatic tissue is the site of origin (tonsil C09._, spleen C42.2, Waldeyers ring C14.2, or thymus C37.9).

   d. Extranodal lymphomas- Extranodal lymphomas arise from lymphatic cells in organs such as intestine or stomach. The primary site for extranodal lymphomas is the organ of origin.

      Example 1: The primary site for lymphoma of the stomach is stomach (C16._).

      Example 2: The primary site for **mycosis fungoides** and **cutaneous lymphoma** is skin (C44._).

PRIMARY SITE – *continued*

e. Region- The primary site for a lymphoma in a mass identified as *retroperitoneal*, *inguinal*, or *mesenteric* with no specific information to indicate what tissue is involved should be recorded as lymph nodes, NOS.

Example: The primary site for a retroperitoneal lymphoma, NOS is lymph nodes, NOS (C77.9).

f. Unknown Primary, No Indication of Extranodal Origin- The primary site is lymph nodes NOS (C77.9) when:

1) The primary site cannot be determined and there is no indication of extranodal origin.

2) A patient has disseminated lymphoma and a primary site is unknown or not specified.

3) Bone marrow metastases are present and the primary site is unknown or not specified.

g. Unknown Primary, Extranodal Origin Suspected- The primary site is *Unknown* (C80.9) when no site is indicated for a lymphoma and **it is suspected to be of extranodal origin.**

Example: The primary site for a lymphoma involving the brain and lung with no lymph node involvement is *Unknown* (C80.9).

h. B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma

a.) Diagnosis Only in Tissue- The primary site is the tissue involved, usually the lymph node, if the diagnosis is made only in tissue other than bone marrow or blood.

b.) Diagnosis in Both Blood or Bone Marrow and Other Tissue- The primary site is the tissue involved, usually the lymph node, if diagnosed in both blood or bone marrow and other tissue.

c.) Diagnosis Only in Blood or Bone Marrow- The primary site is bone marrow if diagnosed in only the blood or bone marrow.

d.) Basis of Diagnosis is Unknown- The primary site is bone marrow if the basis of the diagnosis is unknown.

4. Melanoma

If a patient is diagnosed with metastatic melanoma and the primary site is not identified, the primary site is *skin NOS* (C44.9).

5. Kaposi Sarcoma

The primary site for Kaposi Sarcoma is the site in which it arises. The primary site is *skin NOS* (C44.9) if the Kaposi Sarcoma arises simultaneously in the skin and another site and the primary site is not identified.

6. Waldenstrom Macroglobulinemia

The primary site is *blood* (C42.0).

PRIMARY SITE – *continued*

7. Unknown
   When the primary site is not known, record as described below. Do not record a metastatic site when the primary is not known.

   a. Melanoma with unknown primary, record primary site as *skin NOS* (C44.9).

   b. Lymphoma with unknown primary, refer to Lymphomas described on previous page.

   c. Osteosarcoma with unknown primary, record primary site as *bone NOS* (C41.9)

   d. Sarcoma with unknown primary, record primary site as *soft tissue NOS* (C49.9)

   e. Other histologies with unknown primary, record primary site as *Unknown* (C80.9)

Text

Text to support this data item must be recorded in the specific text field. See *VCR Manual Part Three, Data Item Instructions, Text-Primary Site Title*. For registry hospitals, this text field is used by the VCR to validate ICD-O topography and laterality codes reported; for non-registry hospitals, this text field is used to assign the ICD-O topography codes and validate laterality.

LATERALITY

Record appropriate laterality code. Laterality refers to a side of the body. It applies to the primary site only.

NOTE: Although FORDS allows you to code laterality for a non-paired organ ("Non-paired sites may be coded right or left, if appropriate. Otherwise, code non-paired sites 0"), the VCR will ***NOT*** accept non-paired organ laterality.

Codes and Definitions

Code	Definition
0	Not a paired organ
1	Right: origin of primary
2	Left: origin of primary
3	Only one side involved, right or left origin unspecified
4	Bilateral involvement, side of origin unknown, stated to be a single primary. *Including:* Both ovaries simultaneously involved with a single histology Bilateral retinoblastomas Bilateral Wilms tumors
9	Paired site, but lateral origin unknown; midline tumor

Recording Laterality

1. Unknown Primary Site- Record laterality for unknown primary site (C80.9) as 0 (not a paired site)

2. Metastatic Sites- Do not code laterality of metastatic sites.

3. Listing of Paired Sites

   a. Use codes 1-9 for the sites listed on the following page, except as noted.

   b. Major categories- The listing includes major categories. Code laterality for all subheadings included in *ICD-O* under these headings, unless specifically excluded.

   c. Exclusions should be coded to "0."

LATERALITY – *continued*

PAIRED SITE	ICD-O CODE
Acoustic nerve (excluding diagnoses prior to 2004)*	C72.4
Adrenal gland	C74.0-C74.9
Breast	C50.0-C50.9
Carotid body	C75.4
Cerebral Meninges, NOS (excluding diagnoses prior to 2004)*	C70.0
Cerebrum (excluding diagnoses prior to 2004)*	C71.0
Connective, subcutaneous, and other soft tissues of lower limb and hip	C49.2
Connective, subcutaneous, and other soft tissues of upper limb and shoulder	C49.1
Cranial nerve, NOS (excluding diagnoses prior to 2004)*	C72.5
Epididymis	C63.0
Eye and lacrimal gland	C69.0-C69.9
Fallopian tube	C57.0
Frontal lobe (excluding diagnoses prior to 2004)*	C71.1
Frontal sinus	C31.2
Kidney, NOS	C64.9
Long bones of lower limb	C40.2
Long bones of upper limb and scapula	C40.0
Lung	C34.1-C34.9
Main bronchus (excluding carina, code to “0”)	C34.0
Maxillary sinus	C31.0
Middle Ear	C30.1
Nasal cavity (excluding nasal cartilage and nasal septum, code to “0”)	C30.0
Occipital lobe (excluding diagnoses prior to 2004)*	C71.4
Olfactory nerve (excluding diagnoses prior to 2004)*	C72.2
Optic nerve (excluding diagnoses prior to 2004)*	C72.3
Ovary	C56.9
Parietal lobe (excluding diagnoses prior to 2004)*	C71.3
Parotid gland	C07.9
Pelvic bones (excluding sacrum, coccyx, and symphysis, code to “0”)	C41.4
Peripheral nerves and autonomic nervous system of lower limb and hip	C47.2
Peripheral nerves and autonomic nervous system of upper limb and shoulder	C47.1
Pleura	C38.4

LATERALITY – *continued*

PAIRED SITE	ICD-O CODE
Renal Pelvis	C65.9
Rib and clavicle (excluding sternum, code to “0”)	C41.3
Short bones of lower limb	C40.3
Short bones of upper limb	C40.1
Skin of eyelid	C44.1
Skin of external ear	C44.2
Skin of lower limb and hip	C44.7
Skin of other and unspecified parts of face (midline, code to “9”)	C44.3
Skin of trunk (midline, code to “9”)	C44.5
Skin of upper limb and shoulder	C44.6
Spermatic cord	C63.1
Sublingual gland	C08.1
Submandibular gland	C08.0
Temporal lobe (excluding diagnoses prior to 2004)*	C71.2
Testis	C62.0-C62.9
Tonsillar fossa	C09.0
Tonsillar pillar	C09.1
Tonsil, NOS	C09.9
Tonsil, Overlapping	C09.8
Ureter	C66.9

* For cases diagnosed prior to January 1, 2004 these sites are considered non-paired and should be coded to 0.

Text

Text to support this data item must be recorded in the specific text field. See *VCR Manual Part Three, Data Item Instructions, Text-Primary Site Title.*

HISTOLOGY

This data item records the code for histologic type of the cancer/tumor being reported using ICD-O-3 or ICD-O-2 (*International Classification of Diseases for Oncology, Third* or *Second Edition* published by the World Health Organization).

1. Cases Diagnosed on or after January 1, 2001- Code according to ICD-O-3.

2. Cases Diagnosed prior to January 1, 2001- Code according to ICD-O-2.

3. Cases With Unknown *Date of Diagnosis*- If the *Date of Diagnosis* is unknown and cannot be estimated, the *Date of 1st Contact* should be used to determine the correct coding manual to use. Code according to ICD-O-3 when the *Date of 1st Contact* is on or after January 1, 2001. Code according to ICD-O-2 when the *Date of 1st Contact* is prior to January 1, 2001. Newly reportable conditions for 2001 and 2004 are not reportable when Date of Diagnosis is unknown.

Coding Histology

1. Registry Hospitals- Registry hospitals must provide ICD-O codes for histologic type for each case submitted to the VCR. Refer to the *FORDS Manual, Revised for 2015* at the following link for guidelines:

   http://www.facs.org/cancer/coc/fordsmanual.html

2. Non-Registry Hospitals- Non-registry hospitals do provide general ICD-O histology codes as noted in Appendix M for cases submitted to the VCR.

Determining Histology

1. Best description of the diagnosis- Always use the final diagnosis. Morphology can be based on histologic or clinical findings. Histology refers to identifying the types of cells involved. Identifying cell types is important because various histologic types have different growth rates and different prognoses.

2. Review all pathology reports. Determine the histology by using the complete final pathologic diagnosis including all comments and addenda. Use the SEER 2007 Multiple Primary and Histology Coding Rules when coding histology for all reportable solid malignant tumors.

   Example 1: Final pathologic diagnosis is *non-small cell carcinoma, most likely adenocarcinoma.* The phrase *most likely adenocarcinoma* is an important component of the complete histologic diagnosis and impacts the proper ICD-O code assignment. Code to adenocarcinoma, 8140

   Example 2: Final pathologic diagnosis is *B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma in cervical lymph nodes.* The complete histologic diagnosis is *B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma in cervical lymph nodes.* All terms associated with both the leukemia and lymphoma diagnoses as well as the tissue and clinical information used for diagnosis are needed to determine whether the diagnosis should be coded as a leukemia or lymphoma, either 9823 or 9670.

   Example 3: Final pathologic diagnosis is *adenocarcinoma of the lung vs. mesothelioma*. The diagnosis on the discharge summary was *mesothelioma.* The complete histologic diagnosis is *mesothelioma,* code 9050.

Example 4: Final pathologic diagnosis is *meningioma of the temporal dura*. The histologic diagnosis is *meningioma*, code 9530/0.

HISTOLOGY – *continued*

***Exception*:** At times the final diagnosis is *Not Otherwise Specified* (carcinoma, NOS; melanoma, NOS; sarcoma, NOS; lymphoma, NOS; or malignant tumor, NOS). Use the histology from the addenda or comment if it identifies a more specific histologic type such as adenocarcinoma, amelanotic melanoma or spindle cell sarcoma.

Example: Final pathologic diagnosis is *ductal carcinoma, NOS* of the breast. Comment states the histology is *ductal carcinoma, mucinous type* of the breast. The histologic type is *ductal carcinoma, mucinous type,* code 8523.

3. Specimens from definitive cancer-directed surgery- Reports based on specimens from definitive cancer directed surgery are usually the most explicit

Exception: When the biopsy removes the entire tumor. *Example*: The pathology report from a skin biopsy identifies *superficial spreading malignant melanoma*. At wide excision, no residual tumor was found. The histologic type is *superficial spreading malignant melanoma*.

4. Absence of pathologic confirmation- In the absence of pathologic confirmation, use the final diagnosis

Note: Cancer, NOS (8000/3) and carcinoma, NOS (8010/3) are not interchangeable. If the physician says the patient has carcinoma, record carcinoma, NOS (8010/3). If the physician only says cancer, do not assume it is carcinoma, but record as cancer, NOS (8000/3).

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-DX Proc-Path* and *Text-Histology Title.* For registry hospitals, these text fields are used by the VCR to validate ICD-O histology codes reported; for non-registry hospitals, these text fields are used to assign the ICD-O histology codes.

BEHAVIOR

This data item records the code for the behavior of the cancer/tumor being reported using ICD-O-3 or ICD-O-2 (*International Classification of Diseases for Oncology, Third or Second Edition* published by the World Health Organization).

1. Cases Diagnosed on or after January 1, 2001- Code according to ICD-O-3.

2. Cases Diagnosed prior to January 1, 2001- Coded according to ICD-O-2.

3. Cases With Unknown *Date of Diagnosis*- If the *Date of Diagnosis* is unknown and cannot be estimated, the *Date of 1st Contact* should be used to determine the correct coding manual to use. Code according to ICD-O-3 when the *Date of 1st Contact* is on or after January 1, 2001. Code according to ICD-O-2 when the *Date of 1st Contact* is prior to January 1, 2001.

Coding Behavior

1. Registry Hospitals- Registry hospitals must provide ICD-O codes for behavior on each case submitted to the VCR. Refer to the *FORDS Manual* at the following link for guidelines:

   http://www.facs.org/cancer/coc/fordsmanual.html

2. Non-registry Hospitals- Non-registry hospitals provide ICD-O behavior codes for cases submitted to the VCR.

Determining Behavior

Behavior is part of the diagnosis. The behavior indicates whether a tumor is malignant, benign, in situ, or uncertain whether malignant or benign.

1. Reportable In Situ and Malignant Behaviors
   The VCR requires the reporting of /2 (in situ) and /3 (malignant) tumors.

2. Behavior from Metastatic Site
   If the only specimen is from a metastatic site, the behavior is malignant.

3. Reportable Benign and Borderline Behaviors
   Primary intracranial and central nervous system tumors with a behavior code of /0 or /1 (benign and borderline or "non-malignant") are reportable regardless of histologic type for the sites listed below.

- Meninges (C70.0 - C70.9)
- Brain (C71.0 - C71.9)
- Spinal Cord (C72.0)
- Cauda equina (C72.1)
- Cranial nerves (C72.2 - C72.5)
- Other CNS (C72.8, C72.9)
- Pituitary gland (C75.1)
- Craniopharyngeal duct (C75.2)
- Pineal gland (C75.3)

BEHAVIOR – *continued*

4. <u>In Situ Terminology</u>
   The following terms are synonymous with in situ (behavior code 2):

   - *Adenocarcinoma in an adenomatous polyp with no invasion of stalk*
   - *Bowen's disease*
   - *Clark's level 1 for melanoma (limited to epithelium)*
   - *Comedocarcinoma, noninfiltrating*
   - *Confined to epithelium*
   - *Hutchinson's melanotic freckle, NOS*
   - *Intracystic, noninfiltrating*
   - *Intraductal*
   - *Intraepidermal, NOS*
   - *Intraepithelial, NOS*
   - *Involvement up to but not including the basement membrane*
   - *Lentigo maligna*
   - *Lobular neoplasia, grade III (LN3)*
   - *Lobular, noninfiltrating*
   - *Noninfiltrating*
   - *Noninvasive*
   - *No stromal involvement*
   - *Papillary, noninfiltrating or intraductal*
   - *Precancerous melanosis*
   - *Pre-invasive*
   - *Queyrat's erythroplasia*
   - *Stage 0*
   - *Vaginal epithelial neoplasia, grade 3 (VAIN III)*
   - *Vulvar epithelial neoplasia, grade 3 (VIN III)*

5. <u>Areas of Invasion</u>
   Record behavior as /3 (malignant) if any invasion is present, no matter how limited.

   Example: The pathology report reads *intraductal carcinoma* (8500/2) *with focal areas of invasion*. The phrase *with focal areas of invasion* is an important component in determining behavior and impacts the proper ICD-O code assignment. The histologic type must include the invasive component, *intraductal carcinoma with focal areas of invasion* (8500/3).

BEHAVIOR – *continued*

6. Severe/High Grade Dysplasia of the Colon
   If your facility considers the terminology of severe dysplasia or high grade dysplasia of the colon as synonymous with carcinoma in-situ, use the following guidelines for reporting colon cases to the VCR:
   a. Obtain a statement from your pathologists that outlines the terminology policy of their department.
   b. Submit the statement to the appropriate medical staff committee for approval. Registry hospitals would normally submit the statement to the Cancer Committee.
   c. Document a policy that states colon sites diagnosed with severe dysplasia and/or high grade dysplasia will be abstracted as carcinoma in-situ.
   d. Add the policy to your Policy and Procedure Manual attaching the approved statement from your pathologists.
   e. Forward a copy of the policy and statement to the VCR to keep on permanent file.
   f. Abstract all colon cases diagnosed with severe dysplasia and/or high grade dysplasia as carcinoma in-situ. In the text for each case, document the final pathologic diagnosis along with the statement "in-situ per pathologist".

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-DX Proc-Path* and *Text-Histology Title.* For registry hospitals, these text fields are used by the VCR to validate ICD-O behavior codes reported; for non-registry hospitals, these text fields are used to assign the ICD-O behavior codes.

GRADE/DIFFERENTIATION

This data item records the code for grade or differentiation of the cancer/tumor being reported using ICD-O-3 or ICD-O-2 (*International Classification of Diseases for Oncology, Third* or *Second Edition* published by the World Health Organization).

1. Cases Diagnosed on or after January 1, 2001- Coded according to ICD-O-3.

2. Cases Diagnosed prior to January 1, 2001- Coded according to ICD-O-2.

3. Cases With Unknown Date of Diagnosis- If *Date of Diagnosis* is unknown and cannot be estimated, *Date of 1st Contact* should be used to determine correct coding manual to use. Code according to ICD-O-3 when *Date of 1st Contact* is on or after January 1, 2001. Code according to ICD-O-2 when *Date of 1st Contact* is prior to January 1, 2001.

Coding Grade

1. Registry Hospitals-
   Registry hospitals must provide ICD-O grade codes for each case submitted to the VCR. Refer to the *FORDS Manual, Revised for 2011* at the following link for guidelines:

   http://www.facs.org/cancer/coc/fordsmanual.html

2. Non-registry Hospitals
   Non-registry hospitals do not provide ICD-O grade codes for cases submitted to the VCR. VCR staff will assign ICD-O grade codes using the information recorded in the data item *Text-DX Proc-Path* and *Text-Histology Title* (See *VCR Manual Part Three, Data Item Instructions, Text-DX Proc -Path* and *Text-Histology Title*).

Codes and Definitions

Code	Definition
1	*Grade I* - Well differentiated, differentiated NOS
2	*Grade II* - Moderately differentiated, moderately well differentiated, intermediate differentiation
3	*Grade III* - Poorly differentiated, dedifferentiated
4	*Grade IV* - Undifferentiated, anaplastic
5	*T Cell* - For lymphomas and leukemias only, T cell, T precursor
6	*B Cell* - For lymphomas and leukemias only, B cell, Pre B, B precursor
7	*Null Cell* - For lymphomas and leukemias only, null cell, non T, non B
8	*N K Cell* - For lymphomas and leukemias only, Natural killer cell
9	*Grade Unknown* - Grade/cell type not determined, not stated, not applicable

GRADE/DIFFERENTIATION – *continued*

Determining Grade/Differentiation

The grade or differentiation of the tumor describes the resemblance to normal tissue. Well differentiated (Grade I) is the most like normal tissue. As the grade gets higher, the tumor is progressively less like normal tissue.

1. Final Pathologic Diagnosis
   Use the grade or differentiation stated in the final pathologic diagnosis. If the grade or differentiation is not stated in the final pathologic diagnosis, use the information from the microscopic description or comments.

   Example: Microscopic description is *moderately differentiated squamous cell carcinoma with poorly differentiated areas*. Final pathologic diagnosis is *moderately differentiated squamous cell carcinoma*. The grade is *moderately differentiated* (2).

2. Two Different Grades
   If a diagnosis indicates two different grades or degrees of differentiation, use the numerically higher grade or differentiation. Always use the higher grade/differentiation, even if it does not represent the majority of the lesion.

   Example: Final pathologic diagnosis is m*oderately to poorly differentiated carcinoma.* The grade is *poorly differentiated* (3).

3. Biopsy vs. Resection

   b. If a needle biopsy or incisional biopsy of a primary site has a differentiation given and the excision or resection does not, use the information from the needle/incisional biopsy.

   b. 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.

4. Grade from Primary Tumor
   Use the grade or differentiation from the pathologic examination of the primary tumor, not from metastatic sites. If the primary site is unknown, the grade/differentiation is unknown (9).

5. In Situ vs. Invasive
   Record the grade for in situ lesions if the information is available. If a tumor contains both in situ and invasive components, the grade of the invasive tumor takes precedence over any reported grade of the non invasive tumor.

6. Central Nervous System Tumors
   The WHO (World Health Organization) grading system is used to estimate prognosis and for the purpose of AJCC (American Joint Committee on Cancer) staging if the pathologist does not state the grade of the tumor. This grading is not the same as the differentiation or grade code and should not be used as such. Use terms such as low grade or anaplastic rather than using the reported WHO grade. In many cases there will be no verbal description of the grade or differentiation and these cases must be given an unknown grade.

   a. Astrocytomas- If no grade is given for astrocytomas, then code 9 (unknown).

   b. Glioblastoma multiforme- If no grade is given for glioblastoma multiforme, then code 9 (unknown).

GRADE/DIFFERENTIATION – *continued*

7. Lymphomas and Leukemias, Designation of T-cell, B-cell, Null Cell, or NK Cell
   Codes 5-8 define T cell or B cell origin for leukemias and lymphomas only.
   a. Do not use "high grade," "low grade," or "intermediate grade" descriptions for lymphomas as a basis for differentiation. These terms are categories in the Working Formulation of lymphoma diagnoses and do not relate to the grade.
   b. T cell, B cell, null cell, or NK cell classification should be determined through use of the *2010 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual.*

8. Grading of Non-Histologically Proven Malignancies
   It may be possible to establish the grade of a tumor through Magnetic Resonance Imaging (MRI) or Positron Emission Tomography (PET) when there is no tissue diagnosis. Brain tumors, which are one of the few sites you can grade without histologic confirmation, can be graded using these methods.

9. Variation in Usual Terms
   When there is variation in the usual terms for degree of differentiation, use the following conversions:

CODE	GRADE	TERMINOLOGY
2	I-II	Low grade, partially well differentiated
3	II-III	Medium grade, intermediate grade
	III	Moderately undifferentiated, relatively undifferentiated
4	III-IV	High grade

10. Three-grade System
    Usually tumor grade is described as I/IV or 1/4 which means grade one in a four grade system. Occasionally a three-grade system is used. If the grade is written II/III or 2/3, this is a Grade 2 of a three-grade system. Use following conversions:

CODE	DOCUMENTED AS
2	I/III or 1/3
3	II/III or 2/3
4	III/III or 3/3

11. Different Descriptions for Grade
    If the grade of a specimen is described using more than one grading system, report the tumor grade using the following priority order:
    a. Terminology (differentiation: well, moderately, poorly, moderately-well, etc.)
    b. Histologic Grade (Grade I, Grade II, Grade III, Grade IV)
    c. Nuclear Grade

    Exceptions: Prostate, Breast, and Kidney have different priority orders because of additional schemes used to describe grade. Use the site-specific priority lists for each of these sites.

GRADE/DIFFERENTIATION – *continued*

12. Prostate
Prostate cancers are usually 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 (the pattern occupying greater than 50% of the cancer) is indicated by the first number of the Gleason's grade and the secondary pattern is indicated by the second number. These two numbers are added together to create a score, ranging from 2 to 10.

a. Only one number- If the pathologist gives only one number less than 5 without indication if a score or a pattern, assume it describes the pattern. If only one number is given and it is greater than 5, assume it is the score. If there are two numbers, assume they refer to two patterns and add them to get score.

b. Conversion Table- Use following conversion when the reports give only the Gleason's score (2-10) or Gleason's pattern (1-5):

CODE	SCORE (sum of primary & secondary patterns)	PATTERN	GRADING
1	2,3,4	1,2	I Well differentiated
2	5,6	3	II Moderately differentiated
3	7,8,9,10	4,5	III Poorly differentiated

c. Priority Order- For prostate cancers, report the tumor grade using the following priority order:

1) Gleason Grade (the sum of the patterns)
2) Terminology (differentiation: well, moderately, poorly, moderately-well, etc.)
3) Histologic Grade (Grade I, Grade II, Grade III, Grade IV)
4) Nuclear Grade

13. Breast
The differentiation of a breast tumor may be described using Bloom-Richardson (BR) grading system (aka Scarff-Bloom-Richardson, modified Bloom-Richardson (BR), SBR Grading, Elston-Ellis modification of Bloom-Richardson grading system, Nottingham grade, Nottingham modifications of Bloom-Richardson grading system).

a. Morphologic features- The Bloom-Richardson grading scheme is based on three morphologic features of invasive breast cancers. The features are:

1) degree of tumor tubule formation
2) tumor mitotic activity
3) nuclear pleomorphism of tumor cells (nuclear grade)

b. Bloom-Richardson score- 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).

c. Conversion Table- Use the following conversion table when the reports give only the Bloom- Richardson score.

CODE	BR SCORE	BR GRADE	NUCLEAR GRADE	TERMINOLOGY	HISTOLOGIC GRADE
1	3-5	Low	1/3; 1/2	Well differentiated	I/III; 1/3
2	6, 7	Intermediate	2/3	Moderately differentiated	II/III; 2/3
3	8, 9	High	2/2; 3/3	Poorly differentiated	III/III; 3/3

GRADE/DIFFERENTIATION – *continued*

d. Priority Order- Use grade or differentiation information from the breast pathology report in the following priority order:

1) Bloom-Richardson scores (ranges 3-9 convert to grade)
2) Bloom-Richardson grade (low, intermediate, high)
3) Nuclear Grade only
4) Terminology (differentiation: well, moderately, poorly, moderately-well, etc.)
5) Histologic Grade (Grade I, Grade II, Grade III, Grade IV)

14. Kidney
For kidney cancers, report the tumor grade in the following priority order:

a. Fuhrman Grade
b. Nuclear Grade
c. Terminology (differentiation: well, moderately)
d. Histologic Grade (Grade I, Grade II)

Note: These prioritization rules do not apply to Wilms tumor (8960). Use the general rules for coding grade for Wilms tumor.

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-DX Proc-Path* and *Text-Histology Title.* For registry hospitals, these text fields are used by the VCR to validate ICD-O grade codes reported; for non-registry hospitals, these text fields are used to assign the ICD-O grade codes.

DIAGNOSTIC CONFIRMATION

Record the diagnostic confirmation that specifies whether a diagnosis was confirmed microscopically at any time during the disease course.

Codes and Definitions - solid tumors

Code	Definition
Microscopically Confirmed	
1	*Positive histology.* Microscopic diagnosis based on tissue specimens from biopsy, frozen section, surgery, autopsy, or dilatation and curettage. Bone marrow biopsy and bone marrow aspiration. Hematologic confirmation of leukemia (peripheral blood smear).
2	*Positive cytology, no positive histology.* Cytologic diagnosis based on microscopic examination of cells as contrasted with tissues. Fine-needle aspiration (FNA) is frequently used to obtain a cytologic specimen. Cells may be removed from exudate, secretions, or washings from tissue. (e.g., Sputum smears, bronchial brushings, bronchial washings, tracheal washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical and vaginal smears.) Cytology also includes paraffin-block specimens from concentrated spinal, pleural, or peritoneal fluid.
4	*Positive microscopic confirmation, method not specified.* The record is reported as microscopically confirmed but no information is provided about the method (histology or cytology).
Not Microscopically Confirmed	
5	*Positive laboratory test/marker study.* A clinical diagnosis of cancer is based on laboratory tests/marker studies which are clinically diagnostic for cancer. This includes alpha-fetoprotein for liver cancer and abnormal electrophoretic spike for multiple myeloma. Elevated PSA is nondiagnostic of cancer. If the physician uses the PSA as a basis for diagnosing prostate cancer with no other workup, record as code 5.
6	*Direct visualization without microscopic confirmation.* Use this code only in the absence of positive histology or cytology. Diagnosis made at surgical exploration or by endoscopy (colposcope, mediastinoscope, laparoscope). Autopsy only record (only information is from gross autopsy report).
7	*Radiography and other imaging techniques without microscopic confirmation.* Use this code only in the absence of positive histology or cytology. Diagnosed by radiology, including ultrasound, computerized (axial) tomography (CT or CAT scans) and magnetic resonance imaging (MRI).
8	*Clinical diagnosis only (other than 5, 6, or 7).* Use this code only in the absence of positive histology or cytology. Records diagnosed by clinical methods not mentioned previously.
Confirmation Unknown	
9	*Unknown whether or not microscopically confirmed.* Death-certificate-only records (VCR use only). Method of confirmation is unknown.

DIAGNOSTIC CONFIRMATION– *continued*

Recording Diagnostic Confirmation - solid tumors

1. Priority- This is an hierarchical coding scheme with code 1 taking precedence. **A lower number takes priority over all higher numbers**.
2. Changing information- This data item is dynamic and must be changed to the lower code if a more definitive method confirms the diagnosis at any time during the course of the disease. See *VCR Manual Part One, Changing Information* for instructions on how to submit a change.

   Example: A patient is admitted on 11/28/2003. A chest x-ray dated 12/1/2003 diagnoses a probable lung cancer. The patient refuses a diagnostic workup. The registry codes the diagnostic confirmation to radiography (7). The patient consents to a lymph node biopsy on 2/3/2004. The biopsy confirms small cell carcinoma. Change the diagnostic confirmation code to positive histology (1).
3. Assign **code 1** when the microscopic diagnosis is based on:
   a. Tissue specimens from biopsy, frozen section, surgery, autopsy or D&C
   b. Bone marrow specimens (aspiration and biopsy)
   c. For leukemia only, positive hematologic findings including peripheral blood smears, CBCs and WBCs
4. Assign **code 2** when the microscopic diagnosis is based on:
   a. Examination of cells (rather than tissue) including but not limited to: sputum smears, bronchial brushings, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears.
   b. Paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid
5. Assign **code 4** when there is information that the diagnosis of cancer was microscopically confirmed, but the type of confirmation is unknown.
6. Assign **code 5** when the diagnosis of cancer is based on laboratory tests or marker studies that are clinically diagnostic for that specific cancer.

   Example 1: The presence of alpha-fetoprotein for liver cancer

   Example 2: An abnormal electrophoretic spike for multiple myeloma or Waldenstrom macroglobulinemia.

   Example 3: If the workup for a prostate cancer patient is limited to a highly elevated PSA and the physician diagnoses and/or treats the patient based only on that PSA, code the diagnostic confirmation to 5.
7. Assign **code 6** when the diagnosis is based only on:
   a. The surgeon's operative report from a surgical exploration or endoscopy such as colonoscopy, mediastinoscopy, or peritoneoscopy and no tissue was examined.
   b. Gross autopsy findings (no tissue or cytologic confirmation).
8. Assign **code 7** when the only confirmation of malignancy was diagnostic imaging such as computerized axial tomography (CT scans), magnetic resonance imaging (MRI scans), or ultrasounds/ sonography.

DIAGNOSTIC CONFIRMATION - *continued*

9. Assign **code 8** when the case was diagnosed by any clinical method not mentioned in preceding codes. The diagnostic confirmation is coded 8 when the only confirmation of disease is a physician's clinical diagnosis.
10. Assign **code 9** if it is unknown if the diagnosis was confirmed microscopically and for Death certificate only cases.

Codes and Definitions - Hematopoietic or Lymphoid Tumors (9590-9992)

There is no priority hierarchy for coding *Diagnostic Confirmation* for hematopoietic and lymphoid tumors. Most commonly, the specific histologic type is diagnosed by immunophenotyping or genetic testing See the *Hematopoietic Database (DB)* for information on the definitive diagnostic confirmation for specific types of tumors.

CODE	LABEL	DEFINITION
1	Positive histology	Histologic confirmation (tissue microscopically examined).
2	Positive cytology	Cytologic confirmation (no tissue microscopically examined; fluid cells microscopically examined).
3	Positive histology PLUS • Positive immunophenotyping AND/OR • Positive genetic studies	Histology is positive for cancer, and there are also positive immunophenotyping and/or genetic test results. For example, bone marrow examination is positive for acute myeloid leukemia. (9861/3). Genetic testing shows AML with inv(16)(p13.1q22) (9871/3).
4	Positive microscopic confirmation, method not specified	Microscopic confirmation is all that is known. It is unknown if the cells were from histology or cytology.
5	Positive lab test/marker study	A clinical diagnosis of cancer is based on laboratory tests/marker studies which are clinically diagnostic for cancer.
6	Direct visualization without microscopic confirmation	The tumor was visualized during a surgical or endoscopic procedure only with no tissue resected for microscopic examination.
7	Radiography & other imaging techniques w/o microscopic confirmation	The malignancy was reported by the physician from an imaging technique report only.
8	Clinical dx only, other than 5, 6 or 7	The malignancy was reported by the physician in the medical record.
9	Unknown whether or not microscopically confirmed	A statement of malignancy was reported in the medical record, but there is no statement of how the cancer was diagnosed (usually nonanalytic).

Recording Diagnostic Confirmation - Hematopoietic and Lymphoid Neoplasms

1. Assign Code **1** when the microscopic diagnosis is based on tissue specimens from biopsy, frozen section, surgery, or autopsy or bone marrow specimens from aspiration or biopsy.
   a. *For leukemia only*, code **1** when the diagnosis is based only on the complete blood count (CBC), white blood count (WBC) or peripheral blood smear. Do not use code 1 if the diagnosis was based on immunophenotyping or genetic testing using tissue, bone marrow, or blood.

DIAGNOSTIC CONFIRMATION – *continued*

2. Assign code **2** when the microscopic diagnosis is based on cytologic examination of *cells* (rather than tissue) including but not limited to spinal fluid, peritoneal fluid, pleural fluid, urinary sediment, cervical smears and vaginal smears, or from paraffin block specimens from concentrated spinal, pleural, or peritoneal fluid. These methods are rarely used for hematopoietic or lymphoid tumors.
3. Assign code **3** when there is a histology positive for cancer AND positive immunophenotyping and/or positive genetic testing results. Do not use code 3 for neoplasms diagnosed prior to January 1, 2010.
4. Assign code **5** when the diagnosis of cancer is based on laboratory tests or marker studies which are clinically diagnostic for that specific cancer, but no positive histologic confirmation.
5. Assign code **6** when the diagnosis is based only on the surgeon's report from a surgical exploration or endoscopy or from gross autopsy findings without tissue or cytological findings.
6. Assign code **8** when the case was diagnosed by any clinical method that can not be coded as 6 or 7. A number of hematopoietic and lymphoid neoplasms are diagnosed by tests of exclusion where the tests for the disease are equivocal and the physician makes a clinical diagnosis based on the information from the equivocal tests and the patient's clinical presentation.

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-DX Proc-Path.* For registry hospitals, these text fields are used by the VCR to validate ICD-O grade codes reported; for non-registry hospitals, these text fields are used to assign the ICD-O grade codes.

GUIDELINES FOR COLLECTING COLLABORATIVE STAGE

The Collaborative Staging (CS) System

CS provides for the collection of a common set of data items from which the three major staging systems, SEER Summary Stage, American Joint Committee on Cancer (AJCC), and SEER 10-digit EOD, can be derived by computer algorithm. The CS data items capture the facts regarding the extent and spread of the disease in a consistent manner with the details regarding the extension saved in the data set then used to assign the stage to a group or category. The manual is available at the following website:

https://cancerstaging.org/cstage/schema/Pages/version0205.aspx

Collaborative Stage has a new name in Version 2: the Collaborative Stage Data Collection System, which is still abbreviated as CS. The new name is intended to show that this is a coding and data collection system, not a new staging system. CS has been revised to correspond to the seventh edition of the *AJCC Cancer Staging Manual*.
CS version 2 is effective for cancer and other reportable cases diagnosed on and after January 1, 2010.

Effective Date

CS must be used for cases diagnosed on or after January 1, 2004. It is not to be used for cases diagnosed prior to that date; cases diagnosed prior to January 1, 2004 should be coded to the system in effect at the time of diagnosis as indicated below. CS Version 2 must be used for cases diagnosed during 2010 and later and should also be applied to cases diagnosed prior to 2010 that are abstracted after Version 2 is implemented because Version 2 is also designed to map to TNM6.

1. Date of Diagnosis 2001 to 2003- Stage cases diagnosed between January 1, 2001 and December 31, 2003 according to SEER Summary Stage 2000 and leave CS items and SEER Summary Stage 1977 blank.
2. Date of Diagnosis prior to 2001- Stage cases diagnosed prior to January 1, 2001 according to SEER Summary Stage 1977 and leave CS Items and SEER Summary 2000 blank.
3. Unknown Date of Diagnosis- Stage cases with unknown Date of Diagnosis (99999999) according to Date of 1st Contact. If the Date of 1st Contact is on or after January 1, 2004, code the CS data items. If Date of 1st Contact is prior to January 1, 2004, stage according to the appropriate SEER Summary Stage 77 or 2000 guidelines.

Obsolete Codes

From time to time, it is necessary to revise CS coding tables by reassigning concepts from one code to another to maintain the underlying structure and rules for code assignment. This can occur when a single code needs to be split into more than one code, or when a structure needs to be moved from one table to another (for example, a lymph node moved from CS Lymph Nodes to CS Mets at Dx). Codes in CS tables are not deleted while users have data coded with those codes. Instead, the codes are marked as OBSOLETE in their descriptions, and instructions are provided for handling previously coded data. Some vendors may provide users the ability to turn off display of obsolete codes.

In some cases, it is possible to perform global changes to prior data without manual review. In other cases, such as when a code is being split, it may necessary for the registrar to manually review abstracts and recode them. Guidance for handling each instance of OBSOLETE is provided in the form of an implementation guide when the change is published.

The designation of OBSOLETE is an official part of the description of the code, and it should be displayed to users, for example, in pick lists or drop-down menus for coding new data so that the codes are not used into the future, and in translation of codes in displays or printouts of abstracts.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

All codes from CS Version 1 have been carried forward, since the coding instructions serve as a reference for data analysts and researchers as well as abstractors. However, as a result of the changes, additions, and revisions in the seventh edition of the AJCC *Cancer Staging Manual*, some codes had to be made obsolete. Be assured that any changes that affect the registry data base, especially those requiring manual review and recoding have been very carefully considered by the Mapping Team and this process is used only when absolutely necessary.

"Flavors of Obsolete"

There are a number of reasons a code might become obsolete, and the action resulting from making the code obsolete is provided with the obsolete code and its original description. These phrases are affectionately referred to as "flavors" of obsolete. The 'flavors' terminology is shown in the schema tables, so it is important to understand what the phrases mean.

OBSOLETE DATA RETAINED (with version number)

This is the most basic. It means that the code is used to derive sixth edition values but is not sufficient to derive seventh edition values. Another use of this category is when a new, specific CSv2 schema is based on a previous, more generic schema, such as adrenal gland that is now split from the rest of the endocrine sites, and some of the codes from the old schema have to be carried forward but are not used. The data for the code are retained in the data base, but no review or conversion is necessary and the code will not be used for 2010 cases and forward. The mapping in the TNM7 Map column will show "ERROR," as a signal that the code should not be used for coding cases diagnosed 2010 and forward.

OBSOLETE DATA CONVERTED

This means that the code is obsolete because the description associated with the code had to be given a different code to accommodate new codes in CSv2 while preserving a natural ordering of rows within the table. All data must be re-coded to the new codes during the migration to CSv2. The table should indicate for each OBSOLETE DATA CONVERTED code which new code should be associated with its description. After the computer conversion (no manual case review necessary),the obsolete code should not appear in the data. All mapping columns will show "ERROR," indicating that the code should not be used for any case currently being abstracted.

OBSOLETE DATA CONVERTED AND RETAINED

Indicates special handling of codes that were undefined in Version 1. For example, there is a global change of the code for "Not applicable" from 888 to 988, because 888 is needed in some SSFs to express a numeric value such as tumor size. In addition, some SSFs in the 1 to 6 range in version 1 that were previously coded as 888 are now used for data items. So, for example, colon SSF3 is now pre-operative CEA value. In version 1, the code was 888, and this was globally converted to 988 in version 2, but 988 (Not applicable) no longer applies because this field records a specific lab value. So 988 is marked Obsolete Data Converted and Retained to indicate that for pre-2010 cases, 988 was a valid code.

OBSOLETE DATA REVIEWED AND CHANGED

This is used for a very limited number of codes that must be changed but must be manually reviewed and recoded. This phrase is used when a category is not sufficient for deriving TNM7 values and new data need more fine-grained or different categories as well as to correct some mapping errors in CSv1 and only small numbers of cases are involved.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE - *continued*

How Collaborative Staging Works

CS is a site-specific coding system. CS codes are defined for every site and histology combination. Depending on the site or histology, the coding schema and instructions will vary. For each reportable case, the CS data items specific to that cancer are extracted from the medical record and coded in the Collaborative Staging System fields. What happens after data collection is complete differs for registry and non-registry hospitals:

1. Registry Hospitals- When CS data collection is complete, the registrar activates the computer algorithms to derive the values for the items in the TNM system and Summary Stage (both 1977 and 2000). The derived data items, assigned to specific "derived" fields, will be incorporated into the hospital registry database.

2. Non-Registry Hospitals- Non-registry hospitals are required to supply supporting documentation for the coding of Collaborative Staging.

Understanding TNM and AJCC Definitions

Instructions for completing CS data items quite often refer to AJCC (TNM) staging principles. The following AJCC definitions are included to assist in interpreting these instructions.

1. Clinical and Pathologic Staging- AJCC TNM staging is based on clinical, operative, and pathologic assessment of the extent of disease. The staging basis is determined by the point of evaluation.

    a. Clinical staging is based on evidence acquired after the staging workup is completed but before any definitive treatment has begun. Evaluation is based on information from the physical exam, imaging, endoscopy evaluations, biopsy and surgical exploration. Clinical stage is assigned prior to any cancer-directed treatment and is not changed on the basis of subsequent information. Clinical staging ends if a decision is made not to treat the patient. The clinical stage is essential to selecting and evaluating primary therapy. When applicable guidelines are provided on the site-specific schema pages in the *CS Manual*.

    b. Pathologic staging is assigned after the resection of the primary tumor and analysis of the surgical specimen. It uses evidence acquired before treatment, supplemented or modified by the additional evidence acquired during and from surgery, particularly from pathologic examination. The pathologic stage provides additional precise data used for estimating prognosis and calculating end results. Most sites also require the removal and examination of regional lymph nodes. When applicable guidelines are provided on the site-specific schema pages in the *CS Manual*.

2. T, N, M- The AJCC staging scheme is based on the evaluation of the **T, N,** and **M** components.

    a. The **T** element designates the size and invasiveness of the primary tumor. The numerical value increases with tumor size and extent of invasiveness. A small lesion confined to the organ of origin would be coded as T1; larger tumor size or deeper extension into adjacent structures, tissues, capsules, or ligaments as T2; larger tumor size or extension beyond the organ of origin but confined to the region, T3; and a massive lesion or one that directly invades another organ or viscera, major nerves, arteries, or bone, T4.

    b. The **N** component designates the presence or absence of tumor in the regional nodes. In some sites there is an increasing numerical valued based on size, fixation, or capsular invasion. In other sites, numerical value is based on multiple node involvement or number of locations and the regional lymph nodes.

    c. The **M** component identifies the presence or absence of distant metastases, including lymph nodes that are not regional.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

Collaborative Staging Manual and Coding Instructions (*CS Manual*)

The complete instructions and site-specific defined codes are documented in the *Collaborative Staging and Coding Instructions (CS Manual)* in three parts:

1. Part I, Section 1- provides general instructions
2. Part I, Section 2- provides general information on lab tests, tumor markers, and information on site-specific factors by site.
3. Part II - contains site-specific schema

General CS Guidelines

Site-specific codes and instructions are referred to as schema. While some schemas are based on primary site and some on histologic type (such as melanoma and lymphoma), the schemas are referred to as site-specific for the sake of brevity. These schemas are documented in the *Collaborative Staging Manual and Coding Instructions (CS Manual), Part II.*

The following points, taken from the *CS Manual*, provide overall guidelines to consider when completing CS data items.

1. Timing of CS Data Collection
   CS collects a combined clinical-pathologic or mixed stage. The data collected in the Collaborative Stage Data Collection System are limited to:
   - information gathered through completion of surgery(ies) in first course of treatment, OR
   - all information available within four months of the date of diagnosis in the absence of disease progression (metastasis known to have developed after the diagnosis was established should be excluded)
   - whichever is ***longer***.

   As a result, the CS data collection rules are not identical to TNM7.
2. Microscopic Confirmation
   CS is collected on all cases regardless of whether they are microscopically confirmed. Cases not microscopically confirmed should be coded from the schema for the site/histology the physician considers most likely to be the primary.
3. All Sites/Histologies
   At the start of a cancer case, the abstractor codes the site of origin and general histology for the cancer from the medical record and enters them into the cancer abstracting software. A schema selection algorithm determines which schema is appropriate to each combination of primary site and histology, perhaps taking into account an additional schema discriminator variable, as well. For instance, if the primary site is a segment of the colon, the schema selection algorithm looks at the histology to determine whether the regular (in other words, carcinoma) Colon, GIST Colon, NET (carcinoid) Colon, or Lymphoma schema should be presented to the data collector. Every site and histology combination plus, in some circumstances, the schema discriminator will go to one and only one schema. For some primary sites, it may be necessary for the abstractor to select a specific subsite of a topography code in one of the site-specific factors using a "schema discrimination factor". The primary sites where the schema discriminator is needed include esophagus, gastroesophageal junction, and stomach; extrahepatic bile ducts; nasopharynx and pharyngeal tonsil; female peritoneum; lacrimal gland and lacrimal sac; and the iris and ciliary body of the eye.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

Example: All of the extrahepatic bile ducts have an ICD-O-3 topography code of C24.0. However, within this code, the right, left and common hepatic ducts use the perihilar duct schema, the cystic duct uses a separate cystic duct schema, and the common bile duct and Sphincter of Oddi use the distal bile duct schema. In this situation, in order for the schema selection algorithm to select the correct schema, the abstractor must indicate which of the extrahepatic bile ducts is involved. Using this information, the algorithm will select the correct schema to present on the screen to the abstractor. The abstractor should rely on the schema selection algorithm to select the correct schema based on the facts about the case and not try to force the software to present a particular schema.

4. Highest Code
   For each field, code the highest applicable number. The codes are ordered in a hierarchy so increasing numbers generally indicate increasing degrees of tumor involvement. There will be a few situations where it is necessary to review the mapped values (the right-most columns in a table) to determine which code to record.

   Exception: Codes for Unknown, Not Applicable, and NOS categories such as Localized, NOS do not take priority over more specific codes with lower numbers.

5. Clinical and Operative/Pathological Assessment
   For the fields CS Tumor Size, CS Extension, CS Lymph Nodes, and CS Mets at DX, CS records the greatest extent of disease based on combined clinical and operative/pathological assessment.

   b. Gross observations- Gross observations are particularly important when all malignant tissue is not removed. In the event of a discrepancy between pathology and operative reports concerning excised tissue, priority is given to the pathology report.

   c. Clinical Information- Clinical information, such as a description of skin involvement for breast cancer and size of the primary lesion and distant lymph nodes for any site, can change the stage. Clinical information should be reviewed carefully to assure accurate recording of the CS data items

6. Operative/Pathology Information vs. Clinical Information
   When a patient does not receive preoperative treatment and the operative/pathology information disproves the clinical information, use the operative/pathology information.

7. Preoperative Treatment
   When a patient receives preoperative treatment, the greatest extent of disease prior to the beginning of treatment should be recorded.

   a. Preoperative (or neoadjuvant) treatment is defined as systemic (chemotherapy, hormone therapy, or immunotherapy) treatment or radiation therapy that is administered as an attempt to shrink the tumor, improve resectability, or control symptoms before the patient undergoes surgery.

   b. Refer to CS data item-specific descriptions for instructions when post-operative disease is more extensive despite neoadjuvant treatment.

8. Disease Progression
   Metastasis known to have developed after the initial extent of disease was established (disease progression) should be excluded when determining the farthest extent of disease at the time of diagnosis.

9. Autopsy Reports
   Autopsy reports are used in coding CS in the same way as pathology reports, applying the same rules for inclusion and exclusion.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

10. None vs. Unknown

a. Inaccessible lymph node rules - Regional lymph nodes of certain primary sites are not easily examined by palpation, observation, physical examination, or other clinical methods. These are lymph nodes within body cavities that in most situations cannot be palpated. These are 'inaccessible' lymph nodes. Examples include, but are not limited to, bladder, kidney, prostate, esophagus, stomach, lung, liver, corpus uteri and ovary.

The Collaborative Stage Data Collection System allows data collectors to record regional lymph nodes as code 00 negative (based on clinical evaluation) rather than 99 unknown when three conditions are met:

i) There is no mention of regional lymph node involvement in the physical examination, pre-treatment diagnostic testing or surgical exploration.
ii) The patient has clinically low stage (T1, T2, or localized) disease.
iii) The patient receives what would be usual treatment to the primary site (treatment appropriate to the stage of disease as determined by the physician) (or patient is offered usual treatment but refuses it).

These guidelines apply primarily to localized or early (T1, T2) stage in the TNM system for inaccessible lymph nodes. When there is reasonable doubt that the tumor is no longer localized, the code(s) for unknown information can and should be used.

b. Codes for Unknown- The codes for unknown information can and should be used when there is reasonable doubt the tumor is no longer localized.

Example: When there is clinical evidence a prostate cancer has penetrated through the capsule into the surrounding tissues (regional direct extension) and regional lymph node involvement is not mentioned, it would be correct to code lymph node involvement at diagnosis as unknown in the absence of any specific information regarding nodes.

c. No distant metastasis- This new coding guideline also permits data collectors to record distant metastasis clinically as none rather than unknown (again, based on clinical evaluation) when the clinician proceeds with usual treatment of the primary site, since this action presumes there are no distant metastasis that would otherwise change the treatment approach. Because there is no longer an MX category in the TNM system, any case where CS Mets at Dx is coded 99 (unknown) will map to clinical M0 in seventh edition, MX in sixth edition, and unknown in Summary Stage 1977 and Summary Stage 2000.

d. Accessible primary sites- For accessible primary sites that can be observed, palpated or examined without instruments, such as breast, oral cavity, skin, salivary gland, thyroid, and other organs, there should be some description of the regional lymph node status. A statement such as "remainder of examination negative" is sufficient to code regional lymph nodes as clinically negative.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE - *continued*

11. Use of Physician TNM Staging
    The extent of disease may be described by the clinician only in terms of T (tumor), N (node), and M (metastasis) categories. In CSv2, many codes have been added to allow coding of T, N, or M information when there is no additional information available in the medical record. Examples include "Stated as T1, NOS," "Stated as T1a, NOS." or "Stated as N2b, NOS."
    a. When there is no information available to use a more specific code, assign the code in the appropriate field that corresponds to the TNM information. For example, if the clinician reports that the tumor is T3 with no more specific information, use the code for "Stated as T3, NOS." If there is a discrepancy between documentation in the medical record and the physician's assignment of TNM, the documentation takes precedence. Cases of this type should be discussed with the physician who assigned the TNM.
    b. There will be occasions where there is no information in the medical record to code a specific subcategory of T, N, or M. In such cases, the registrar may use the "Stated as T1, NOS" code if there is not enough information to code T1a or T1b.

12. Definitions of Adjacent Tissues, Structures, and Organs

    a. Adjacent connective tissue- Some Collaborative Staging System schemas for ill-defined or nonspecific sites in the *CS Manual* contain a code for adjacent connective tissue, which is defined here as unnamed tissues that immediately surround an organ or structure containing a primary cancer. Use this code when a tumor has invaded past the outer border (capsule, serosa, or other edge) of the primary organ into the organ's surrounding supportive structures but has not invaded into larger structures or adjacent organs.

    The structures identified in ICD-O-3 as connective tissue include the following**:**

adipose tissue	fatty tissue	skeletal muscle
aponeuroses	fibrous tissue	subcutaneous tissue
arteries	ganglia	synovia
blood vessels	ligaments	tendons
bursa	lymphatic channels (not nodes)	tendon sheaths
connective tissue, NOS	muscle	veins
fascia	nerves	vessels, NOS

    In general, these tissues do not have specific names. These tissues form the framework of many organs, provide support to hold organs in place, bind tissues and organs together, and serve as storage sites for nutrients. Blood, cartilage and bone are sometimes considered connective tissues, but in the *CS Manual* they are listed separately.

    b. Adjacent organs- Organs are anatomic structures with specific physiologic functions other than (or in addition to) support and storage. Continuous tumor growth from one organ into an organ anatomically next to the primary would be coded to the appropriate code for "adjacent organs/structures" in the Collaborative Staging schemas for ill-defined and non-specific sites.

    c. Adjacent structures- Connective tissues large enough to be given a specific name would be considered adjacent structures. For example, the brachial artery has a name, as does the broad ligament. Continuous tumor growth from one organ into an adjacent named structure would be coded to the appropriate code for "adjacent organs/structures" in the Collaborative Staging for ill-defined or non-specific sites.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

Recording CS Data Items

Use the following steps to assist in properly coding CS data items:

1. Identify Primary Site and Histology
   Read the medical record carefully to identify the primary site and histology. While reviewing the record, make mental notes about the tissues and lymph nodes that are involved by the tumor.
2. Choose the Correct Coding Schema
   Most CS schemas apply to cases defined by their primary site. A few of the schemas apply to cases defined by their histologic type. Schemas by histologic type take precedence over the schema by site.
   a. Histology-Specific Coding Schemas - Use Histology-Specific coding schemas if histology is any one of the following:
      - GIST (8935 – 8936)#
      - NET (8153, 8240 – 8242, 8246, 8249)##
      - Melanoma (8720-8790)*
      - Liver (8000 – 8157, 8162 – 8175, 8190 – 9136, 9141 – 9582, 9700 – 9701)
      - Intrahepatic bile duct (8160, 9161, 8180)
      - Merkel cell carcinoma (8247)**
      - Adenosarcoma of corpus uteri, endometrium (8247)
      - Sarcoma of corpus uteri, endometrium, leiomyosarcomas, endometrial stromal sarcoma (ESS) (8800 – 8932, 8934 – 8941, 8959 – 8974, 8982 – 9136, 9141 – 9582)
      - Kaposi's sarcoma (9140)
      - Retinoblastoma (9510-9514)
      - Lymphoma (9590-9699, 9702-9729, 9735, 9737, 9738 [EXCEPT C44.1, C69.0, C69.5-C69.6], 9711 – 9818, 9823, 9827, 9837 [EXCEPT C42.1, C42.4, C44.1, C69.0, C69.5-C69.6])
      - Ocular adnexal lymphoma (9590 – 9969, 9702 – 9738, 9811 – 9818, 9820 – 9837)
      - Mycosis Fungoides, Sezary Disease (9700-9701)
      - Hematopoietic and reticuloendothelial, myeloproliferative, immunoproliferative, leukemia, Langerhans cell, Waldenstrom macroglobulinemia, heavy chain disease, dendritic cell sarcoma, immunoglobulin deposition disease, mast cell sarcoma, mastocytosis, histiocytosis, panmyelosis with myelofibrosis, polycythemia vera, myelosclerosis, essential thrombocythemia, chronic neutrophilic leukemia, hypereosinophilic syndrome, refractory anemia, myelodysplastic syndrome, polymorphic PTLD, refractory neutropenia, refractory thrombocytopenia (9733, 9740-9742, 9750-9758, 9760-9762, 9764-9769, 9800-9801, 9805-9809, 9811-9818, 9820, 9823 [C42.0, C42.1 or C42.4 ONLY], 9826, 9827 [C42.0, C42.1 or C42.4 ONLY], 9831-9837, 9840, 9860-9861, 9863, 9865-9867, 9869-9876, 9891, 9895-9898, 9910, 9920, 9930-9931, 9940, 9945-9946, 9948, 9950, 9960-9967, 9970, 9971, 9975, 9980, 9982-9987, 9989, 9991-9992)
      - Myeloma and other plasma cell disorders, plasmacytoma, multiple myeloma, extramedullary plasmacytoma (9731[except C44.1, C69.0, C69.5-C69.6], 9732[except C44.1, C69.0, C69.5-C69.6], 9734[except C44.1, C69.0, C69.5-C69.6]

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

#GIST Tumors are further broken down by primary site code, as follows:

1. GIST Esophagus
2. GIST Stomach
3. GIST Small intestine
4. GIST Appendix
5. GIST Colon
6. GIST Rectum, rectosigmoid
7. GIST Peritoneum

##NET Tumors are further broken down by primary site code, as follows:

1. NET Stomach
2. NET Small intestine
3. NET Colon
4. NET Rectum, rectosigmoid
5. NET Ampulla

*Melanomas are further broken down by primary site code, as follows:

1. Malignant melanoma of the following head and neck sites:
    a. Upper lip
    b. Lower lip
    c. Other lip
    d. Base of tongue, lingual tonsil
    e. Anterior 2/3 of tongue, mobile tongue
    f. Upper gum (upper gingiva, upper alveolar ridge)
    g. Lower gum (lower gingiva, lower alveolar ridge)
    h. Other gum (other gingiva, other alveolar ridge)
    i. Floor of mouth
    j. Hard palate
    k. Soft palate, uvula
    l. Other mouth
    m. Buccal mucosa, cheek, vestibule,
    n. Oropharynx, tonsil, vallecula, branchial cleft
    o. Anterior surface of epiglottis
    p. Nasopharynx
    q. Hypopharynx, pyriform sinus, postcricoid, aryepiglottic fold
    r. Other pharynx, Waldeyer ring
    s. Nasal cavity
    t. Maxillary sinus
    u. Ethmoid sinus
    v. Other sinus, frontal sinus, sphenoid sinus, accessory sinus
    w. Glottic larynx, vocal cord
    x. Supraglottic larynx, epiglottis
    y. Subglottic larynx
    z. Other larynx, laryngeal cartilage, larynx, NOS
2. Malignant melanoma of the skin, vulva, penis and scrotum
3. Malignant melanoma of conjunctiva
4. Malignant melanoma of iris and ciliary body
5. Malignant melanoma of choroid
6. Malignant melanoma of other eye

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

** Merkel cell carcinomas are broken down by primary site as follows:

1. Merkel cell carcinoma of skin
2. Merkel cell carcinoma of vulva, labium majus, labium minus, clitoris
3. Merkel cell carcinoma of penis
4. Merkel cell carcinoma of scrotum

b. Primary Site Coding Schemas - If the histology is not listed above, use the schema for the primary site.

3. Verify Schema
Each schema clearly states the applicable primary sites and histologies at the beginning of the schema. Verify you are in the correct chapter by confirming the site/histology is in the list at the beginning of the schema.

Note: The appropriate site or histology schema to use for coding surgical treatment(s) may be different from the site or histology schema used for coding the CS data items. *Example*: An extra-lymphatic lymphoma of the stomach treated surgically would use the lymphoma schema for CS but surgery would be coded using the stomach codes for surgery to primary site.

4. Assign CS Codes
Once you have confirmed you are in the proper schema, begin assigning codes for the CS data items as described in the data item-specific pages. Be sure to read the notes and follow the site/histology-specific instructions at the beginning of each item.

5. Text
Record text in the appropriate text fields to justify all coded CS data items.

GUIDELINES FOR RECORDING COLLABORATIVE STAGE – *continued*

CS Data Items

The following table lists the CS data items required to be reported to the VCR.

Data Item	Description
CS Tumor Size*	Code to describe tumor size
CS Extension*	Code to describe how far the tumor has spread directly
CS Tumor Size/Ext Eval	Code to describe how the farthest tumor spread was determined
CS Lymph Nodes*	Code to describe whether regional lymph nodes are involved
CS Reg Lymph Nodes Eval	Code to describe how the farthest lymph node spread was determined
Regional Lymph Nodes Positive	Number of positive regional lymph nodes from the pathology report
Regional Lymph Nodes Examined	Number of regional lymph nodes examined by the pathologist
CS Mets at DX*	Code to describe the farthest distant metastasis (including distant lymph nodes)
CS Mets Eval	Code to describe how the distant metastasis was determined
CS Site-Specific Factors (SSF) 1-25**	Codes to describe site-specific prognostic information. See details in the following table.

* Indicates items that have site-specific variations for some codes.

** VCR follows the SSF's described as **required** NPCR. Those SSF's documented as required must be sent to the VCR (*See Appendix M*).

CS Data Item Descriptions, Instructions, and Schemas

A description and instructions for completing each of the required CS data items have been compiled on the following *VCR Manual* data item pages. Additional information may be obtained in *FORDS Manual, Revised for 2011 used* by Registry Hospitals and the *Collaborative Stage Data Collection System Coding Instruction Manual*.

CS TUMOR SIZE

Record the largest dimension or diameter of the **primary tumor**.

Recording CS Tumor Size

1. Site/Histology-Specific Instructions
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 2* (*CS Manual*) for additional information.

2. Record In Millimeters
   Tumor size must be recorded in millimeters.

   a. To convert centimeters to millimeters, multiply the dimension by 10.

      Example: Mammogram shows 2.5 cm breast tumor. Code as 025 (2.5 cm x 10 = 25 mm)

   b. Tenths of millimeters - Round the tumor size only if it is described in fractions of millimeters. If tumor size is given in tenths of millimeters, record size as 001 if largest dimension of tumor is between 0.1 and 0.9 mm. If tumor size is greater than 1 millimeter, round tenths of millimeters in the 1-4 range down to the nearest whole millimeter, and round tenths of millimeters in the 5-9 range up to the nearest whole millimeter.

      Example: Prostate needle biopsy shows 0.6 mm carcinoma. Round up six-tenths of mm to 1.0 mm and code as 001

3. Priority Order
   Record tumor size information in the following order:

   a. Pathology Report- Record tumor size from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.

      Example: Thyroidectomy specimen yields 8 mm carcinoma. Code 008.

   b. Preoperative treatment- If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, code the largest size of tumor prior to treatment.

      Example: Patient has a 2.2 cm mass in oropharynx; needle aspiration of mass confirms squamous cell carcinoma. Patient receives chemotherapy. Pathologic size of tumor after total resection is 0.8 cm. Code 022

   c. No response to neoadjuvant treatment- In the infrequent event the tumor does not respond to neoadjuvant treatment and is larger after preoperative treatment as determined by the operative or pathology report, code the largest size.

   d. Imaging/radiographic techniques - Information on size from imaging/radiographic techniques can be used to code size when there is no more specific size information from a pathology or operative report, but it should be taken as low priority, just above a physical exam.

      Example: CT of chest shows 4 cm mass in RUL. Code 040

      i) Difference in reported tumor size- If there is a difference in reported tumor size among imaging and radiographic techniques, record the *largest* size of tumor reported in the record.

4. No Size Given
   Record the exact size of the primary tumor for all sites/histologies except those for which it is stated to be not applicable. Code 999 if no size is given.

CS TUMOR SIZE – *continued*

5. Primary Tumor
   Always code the size of the primary tumor, not the size of the polyp, ulcer, cyst, or distant metastasis. However, if the tumor is described as a "cystic mass," and only the size of the entire mass is given, code the size of the entire mass, since the cysts are part of the tumor itself.

6. Largest Dimension
   Record the largest dimension or diameter of tumor, whether it is from an excisional biopsy specimen or the complete resection of the primary tumor.

   Example: Tumor is described as 2.4 x 5.1 x 1.8 cm in size. Code 051.

7. Multi-focal
   If a malignancy is multi-focal and you have a tumor size for more than one focus, record the size of the largest tumor if the pathologist does not add the tumor sizes together.

8. Invasive/in situ
   a. Invasive component- Record the size of the invasive component, if given. If both an 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. Code 014.

   b. Breast primary- 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.

      Example: Duct carcinoma in situ covering a 1.9 cm area with focal areas of invasive ductal carcinoma. Code 019.

   c. Entirely in situ- For purely in situ lesions, code the size as stated.

9. Microscopic Residual Tumor
   Disregard microscopic residual or positive surgical margins when coding tumor size. Microscopic residual does not affect the size of the primary tumor.

10. Pieces and Chips
    Do not add pieces or chips together to create a whole. However, if the pathologist states an aggregate or composite size (determined by fitting the tumor pieces together and measuring the total size), record that size.

11. Residual Tumor
    If an excisional biopsy is performed and residual tumor at the time of the resection of the primary is found to be larger than the excisional biopsy, code the size of the residual tumor.

12. Incisional Biopsy
    Code tumor size 999 for an incisional needle biopsy. An incisional needle biopsy may remove an entire tumor. In this event, the tumor size may be recorded.

13. Melanoma
    Record tumor size (lateral dimension) for malignant melanoma. Depth of invasion is coded in a site-specific factor

14. Size stated as T_
    If both a T category and exact tumor size are given, code the exact size. If the only information about tumor size given in the medical record is a physician statement of a T category, determine whether the T category is based on tumor size or extension.

CS TUMOR SIZE – *continued*

15. Special codes
    Tumor dimension is to be recorded for all schemas, except as follows:

    a. Code 998- The descriptions in code 998 take precedence over any mention of size. Code 998 is used only for the following sites:

    - Esophagus (C15.0-C15.5, C15.8-C15.9): Circumferential
    - Esophagus GE Junction (C16.0-C16.2): Diffuse; widespread: 3/4 or more; linitis plastica
    - Stomach (C16.0-C16.6, C16.8-C16.9): Diffuse; widespread; 3/4 or more; linitis plastica
    - Appendix (C18.1): Familial/multiple polyposis
    - Carcinoid of appendix (C18.1): Familial/multiple polyposis
    - Colon (C18.0, C18.2-C18.9): Familial/multiple polyposis
    - Rectosigmoid and rectum (C19.9, C20.9): Familial/multiple polyposis
    - Lung and main stem bronchus (C34.0-C34.3, C34.8-C34.9): Diffuse, entire lung or NOS
    - Breast (C50.0-C50.6, C50.8-C50.9): Diffuse

    b. Code 990- should be used when no gross tumor is seen and tumor is only identified microscopically.

    Example: Diagnosis of severe dysplasia with focal areas of microinvasion of the cervix. Code 990.

    Note: The terms microscopic focus, microfocus, and microinvasion are **not** the same as [macroscopic] foci or focus. A macroscopic focus or foci indicates a very small or isolated area, pinpoint, or spot of tumor that may be visible grossly. Only tumor identified microscopically should be coded 990. It also pertains to in situ tumors.

    c. Codes 991 through 995 are non-specific sizes. If a specific size is given, code the more precise size in the range 001–989.

    d. Code 988- For the following diagnoses and/or primary sites, size is not applicable. Record as code 988.

    - Disseminated Langerhans cell histiocytosis (Letterer-Siwe disease)
    - Hematopoietic neoplasms
    - Immunoproliferative diseases
    - Kaposi sarcoma
    - Leukemia
    - Malignant lymphoma (Hodgkin lymphoma and non-Hodgkin lymphoma) other than ocular adnexal lymphoma
    - Mast cell tumors
    - Multiple myeloma and other plasma cell tumors
    - Myelodysplastic syndromes
    - Myeloproliferative diseases
    - Polycythemia vera
    - Polymorphic Post-Transplant Lymphoproliferative Disorder (PTLD)
    - Refractory anemia's
    - Other Hematopoietic, Reticuloendothelial, Immunoproliferative, and Myeloproliferative Neoplasms (*see CSv2 HemeRetic schema for a complete list of codes and diagnoses)*
    - Melanoma Choroid
    - Melanoma Ciliary Body
    - Melanoma Iris

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-Path, Text-DX Proc-X-ray/Scans, Text-DX Proc-OP, and Text-DX Proc-Scopes*.

CS EXTENSION

Record any contiguous growth (extension) of the primary tumor within the organ of origin or its direct extension into neighboring organs. For certain sites such as ovary, discontinuous metastasis ***is*** coded in *CS Extension*.

Recording CS Extension

1. Site/Histology-Specific Instructions
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 2* (*CS Manual*) for additional information.

2. Farthest Extension
   Code the farthest documented extension of the primary tumor.

3. Discontinuous Metastases
   Do not include discontinuous metastases to distant sites which are coded in *CS Mets at Dx* except for ovary and corpus uteri.

4. Priority Order
   Record extension information in the following order:

   a. Pathology report- Record extension from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery.

   b. Preoperative treatment- If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, code the farthest extension, prior to treatment (clinically).

      Example: Patient has rectal mass firmly attached to pelvic wall (extension code 610). Patient undergoes preoperative radiation therapy. The pathology report from the low anterior resection shows residual tumor outside the rectum in perimuscular tissue (extension code 400). Code extension as 610, because the preoperative treatment apparently "shrank" the tumor away from the pelvic wall.

   c. No response to neoadjuvant treatment- In the infrequent event the tumor does not respond to neoadjuvant treatment and is more extensive after preoperative treatment as determined by the operative or pathology report, code the farthest extension.

      Example 1: Patient found to have an obstructing central lung tumor very close to the main stem bronchus (extension code 210). Patient undergoes six weeks of intensive chemotherapy. At thoracotomy, tumor was observed directly extending into trachea (extension code 700). Code extension as 700, because the tumor was noted to be more extensive after the preoperative treatment.

      Example 2: Patient has a 5.5 cm hard, moveable mass in the right breast (extension code 100) and receives preoperative chemotherapy. The pathology report from the modified radical mastectomy shows residual 2.8 cm mass with infiltration of the deep subcutaneous tissues over the mass (extension code 200). Code extension as 200, because although the chemotherapy "shrank" the tumor, the residual tumor was found to be more extensive than the clinical presentation.

CS EXTENSION - *continued*

d. Imaging/radiographic techniques- Information on extent of disease from imaging/radiographic techniques can be used to code extension when there is no more specific extension information from a pathology or operative report.

e. Organ not included in schema- If an involved organ or tissue is not mentioned in the schema, approximate the location and code by comparing it with listed organs or tissues in the same anatomic area.

f. Contiguous extension- With the exception of corpus uteri and ovary, all codes represent contiguous (direct) extension of tumor from the site of origin to the organ/structure/tissue represented in the code.

Example: Carcinoma of the prostate with extension to pubic bone would be coded 600. Carcinoma of the prostate with metastases to thoracic spine would be coded in CS Extension to the appropriate code for tumor extension and the metastases to the thoracic spine would be coded in the CS Mets at Dx field.

5. Ambiguous Terminology

Determination of the cancer stage is both a subjective and objective assessment of how far the cancer has spread. Sometimes the clinician is hesitant to commit to a definite statement that a particular organ or tissue is involved by the cancer and uses what data collectors refer to as "ambiguous terminology." Refer to the following lists for terms that do and do not constitute tumor involvement or extension:

a. Terms that constitute tumor involvement:

- Adherent
- Apparent(ly)
- Appears to
- Comparable with
- Compatible with
- Consistent with
- Contiguous with
- Continuous with
- Encroaching upon*
- Extension to, into, onto, out onto
- Features of
- Fixation to another structure**
- Fixed**
- Impending perforation of
- Impinging upon
- Impose/imposing upon
- Incipient invasion
- Induration
- Infringe/infringing
- Into*
- Intrude
- Invasion to, into, onto, out onto
- Most likely
- Onto*
- Overstep
- Presumed
- Probable
- Protruding into (unless encapsulated)
- Suspected
- Suspicious
- To*
- Up to

* interpreted as involvement whether the description is clinical or pathological
** interpreted as involvement of other organ or tissue

b. Terms that do not constitute involvement:

- Abuts
- Approaching
- Approximates
- Attached
- Cannot be excluded
- Cannot be ruled out
- Efface/effacing/ effacement
- Encased/encasing
- Encompass(ed)
- Entrapped
- Equivocal
- Extension to without invasion/involvement of
- Kiss/kissing
- Matted(except for lymph nodes)
- Possible
- Questionable
- Reaching
- Rule out
- Suggests
- Very close to
- Worrisome

CS EXTENSION - *continued*

c. Terms not listed- These lists can generally be used to interpret the intent of the physician; however, if individual clinicians use these terms differently, the physician's definitions and choice of therapy should be recognized. If a term used in a diagnostic statement is not listed below, consult the physician to determine the intent of the statement.

6. TNM Information

   a. Incomplete information- If the information in the medical record is ambiguous or incomplete regarding the extent to which the tumor has spread, the extent of disease may be inferred from the T category or alternative staging system stated by the physician.

   b. Physician's statement- If the *only* indication of extension in the record is the physician's statement of a T category from the TNM staging system or a stage from a site-specific staging system, such as Dukes' C, record the extension code for that T category.

7. Distant Metastases
   Distant mets must be coded in *CS Mets at Dx.*

8. Nodal or Metastatic Involvement
   Do not code *CS Extension* as in situ if there is any evidence of nodal or metastatic involvement; use the code for 'Localized, NOS' if there is no better information.

9. Residual Disease/Positive Margins
   The presence of microscopic residual disease or positive tumor margins does not increase the extension code.

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-Path, Text-DX Proc-PE, Text-DX Proc-X-ray/Scans, Text-DX Proc-OP,* and *Text-DX Proc-Scopes.*

CS TUMOR SIZE/EXT EVAL

Record how the codes for *CS Tumor Size* and *CS Extension* were determined, based on the diagnostic methods employed.

Example: Patient has a chest x-ray showing an isolated 4 cm tumor in the right upper lobe. Patient opts for radiation therapy. Use code 0.

Recording CS Tumor Size/Ext Eval

1. Site/Histology-Specific Instructions
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 02.04.05* (*CS Manual*) for additional information.

2. Farthest Extension or Size of Tumor
   Select the code that documents the report or procedure from which the information about the farthest extension or size of the primary tumor was obtained. This may not be the numerically highest Eval code.

   Example: Fine needle aspiration biopsy (Eval code 1) confirms adenocarcinoma of prostate. CT scan of pelvis (Eval code 0) shows tumor extension through the prostatic capsule into adjacent connective tissues. Code CS Tumor Size/Ext Eval as 0 because the CT scan showed more extensive tumor than the biopsy.

3. Basis of *CS Extension*
   For primary sites/histologies where tumor size is not a factor in determining the T category of the TNM, code CS TS/Ext Eval on the basis of the CS extension field only.

4. When Tumor Size is the Primary Factor
   For tumor sites where tumor size is the primary factor in determining the T category in TNM, code the CS TS/Ext Eval on the basis of how the tumor size was determined

5. Basis of *CS Tumor Size* and *CS Extension*
   For primary sites listed on Table 4 in the General Instructions of the *CS Manual*, *Part One* select the code that best explains how the information in both *CS Tumor Size* **and** *CS Extension* data items were determined.

   a. Difference in evaluation codes- If there is a difference between how the tumor size and the extension were determined, select the evaluation code that reflects what method diagnosed the furthest involvement.

      Example: Tumor size for a breast cancer biopsy is 020. There is ulceration of the skin noted during the physical exam. Use code 0; the evaluation is based on physical examination, since the ulceration information from the physical examination indicates further involvement.

   b. No surgery- If the patient had no surgery, code 0, 1, or 9.

      Example 1: Colon cancer with colonoscopy and biopsy confirming cancer. Code as 1.

      Example 2: Endoscopies for cervix or bladder would be coded as 1 in this field.

      ***Exception*:** Lung cancer with mediastinoscopy showing direct extension into mediastinum. Use code 1.

   c. Surgery, followed by other treatments- If the patient had surgery followed by other treatment(s) use code 3 or 9.

      i) When the only procedure is a polypectomy - If there is no tumor at the margin after the polypectomy, code TS/Ext Eval as 3 (pathological). If there is tumor at the margin of resection after the polypectomy and there is no further surgery, code the TS/Ext Eval as 1(endoscopic/diagnostic biopsy). If the patient has further surgery and there is no primary tumor in the resection, use the extension from the polypectomy and code the TS/Ext Eval as 3 (pathological). If more tumor is found in the resection, code the extension from the resection and the TS/Ext Eval as 3 (pathological).

CS TUMOR SIZE/EXT EVAL - *continued*

d. Size or extension greater after treatment- If the size or extension of the tumor was greater after presurgical treatment than before treatment, use code 6.

e. Basis for neoadjuvant therapy- If the size or extension of the tumor determined prior to treatment was the basis for neoadjuvant therapy, use code 5.

f. Autopsy/diagnosis known before death- If the patient had an autopsy and the diagnosis was known or suspected prior to death, use code 2.

g. Autopsy/diagnosis not known before death- If the patient had an autopsy and the malignancy was not known or suspected prior to death, use code 8.

6. Not Applicable
For sites/histologies listed on Table 6 in General Instructions of the *CS Manual, Part One* this field is coded to 9, "Not applicable."

7. Code 0
Use of includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), ultrasonography, magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.

8. Observation at Surgery
Code 1 also includes observations at surgery, such as an exploratory laparotomy in which cancer is identified, where further tumor extension is not biopsied.

9. Code 3
Use code 3 for a biopsy of tumor extension that meets the requirements for pathologic staging basis. Pathologic staging requirements vary by site. Refer to the *CS Manual, Part I, Section 2* for more detailed instructions by site.

Example: Colon cancer with colonoscopy and biopsy confirming cancer. Use code 1. The biopsy does not meet the criteria for pathologic staging.

CS LYMPH NODES

Record the code to identify the regional lymph nodes involved with cancer at the time of diagnosis.

Recording CS Lymph Nodes

1. Site/Histology Specific Instructions
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 02.04.05* (*CS Manual*) for additional information.

2. Farthest From the Primary Site
   Record the specific regional lymph node chain farthest from the primary site that is involved by tumor either clinically or pathologically.

   a. Record highest applicable code- Regional lymph nodes are listed for each site/histology. In general, the regional lymph nodes in the chain closest to the primary site have the lower codes. Nodes farther away from the primary or in farther lymph node chains have higher codes. Record the highest applicable code.

      Example: Peribronchial lymph nodes are positive on fine needle aspiration biopsy. Contralateral mediastinal mass noted on CT scan but not biopsied. Patient chooses radiation therapy as primary treatment. Use the code for contralateral mediastinal lymph node involvement as it is higher than the code for peribronchial lymph nodes.

      ***Exception*:** The higher codes for 'Regional lymph nodes, NOS'; 'Lymph nodes, NOS'; 'Stated as N1, no other information'; 'Stated as N2a, no other information', and so forth, should only be used when there is no available information as to the name(s) of the regional nodes involved. A lower, more specific code would take precedence.

   b. Pathology report- Record involved regional lymph nodes from the pathology report, if it is available, when the patient receives no radiation or systemic treatment prior to surgery or if the treatment has no effect on the lymph nodes.

   c. Clinical vs. Pathological- If there is a discrepancy between clinical information and pathologic information about the same lymph nodes, the pathologic information takes precedence, if no preoperative treatment was administered.

      Example: Axillary lymphadenopathy stated as "suspicious for involvement" noted on physical exam. After axillary dissection, all lymph nodes are negative. Code CS Lymph Nodes as 0, no regional lymph node involvement.

   d. Inaccessible lymph node rule for regional lymph nodes - Record regional lymph nodes as negative (000) rather than unknown (999) when the following three (3) conditions are met:
      i) There is no mention of regional lymph node involvement in the physical examination, pre-treatment diagnostic testing or surgical exploration.
      ii) The patient has clinically low stage (T1, T2, or localized) disease.
      iii) The patient receives what would be usual treatment to the primary site (treatment appropriate to the stage of disease as determined by the physician) or is offered usual treatment but refuses it, since this presumes that there are no involved regional lymph nodes that would otherwise alter the treatment approach.

      See the *VCR Manual, Part Three, Collaborative Stage, General CS Guidelines* for further discussion.

   e. Direct extension- If there is direct extension of the primary tumor into a regional lymph node, record the involved node in this data item.

CS LYMPH NODES – *continued*

f. Preoperative treatment- If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, the clinical status of the lymph nodes takes precedence.

Example: Patient has a hard matted mass in the axilla (code 50) and a needle biopsy of the breast that confirms ductal carcinoma. Patient receives three months of chemotherapy. The pathology report from the modified radical mastectomy shows only scar tissue in the axilla with no involvement of axillary lymph nodes (Negative, code 00). Use code 50 because the chemotherapy apparently "sterilized" the lymph nodes.

g. No response to neoadjuvant treatment- In the infrequent event clinically involved regional lymph nodes do not respond to neoadjuvant treatment and are more extensively involved after preoperative treatment as determined by the operative or pathology report, code the farthest extension and code CS Reg Nodes Eval as 6, based on pathology/operative report after treatment.

Example: Patient has needle biopsy-proven prostate cancer with no mention of involved lymph nodes on physical examination (Negative, code 00). He receives Lupron while deciding whether to undergo a radical prostatectomy. At the time of surgery, a laparoscopic pelvic node biopsy is reported to show metastases (Regional nodes involved, code 10) to lymph nodes and the prostatectomy is canceled. Code CS Lymph Nodes as 10 because the preoperative treatment (Lupron) had no effect on the lymph nodes.

3. Lymphomas
Any positive mention of lymph nodes indicates involvement of those lymph nodes.

4. Solid Tumors
   a. Terms
      1) The terms "fixed" or "matted" and "mass in the hilum, mediastinum, retroperitoneum, and/or mesentery" (with no specific information as to tissue involved) are considered involvement of lymph nodes.
      2) Any other terms such as "palpable," "enlarged," "visible swelling," "shotty," or "lymphadenopathy" should be ignored unless there is a statement of involvement by the physician.

      Exception: The terms "adenopathy", "enlargement", and "mass in the hilum or mediastinum" should be coded as involvement for lung primaries

      3) The terms "homolateral," "ipsilateral," and "same side" are used interchangeably.

   b. Unidentified nodes- Any unidentified nodes included with the resected primary site specimen are to be coded as "Regional lymph nodes, NOS".

   c. Lymph Nodes, NOS- Where more specific categories are provided, the codes for "Regional lymph nodes, NOS" and "Lymph nodes, NOS" should be used *only* after an exhaustive search for more specific information.

CS LYMPH NODES – *continued*

5. Size of Regional Lymph Nodes
   a. Pathology report- When size of involved regional lymph nodes is required, code from pathology report, if available.
   b. Size of metastasis- Code the size of the metastasis, not the entire node, unless otherwise stated in site-specific schemas. The size of the metastasis within the lymph node can be inferred if the size for the entire node falls within one of the codes.

      Example: A single involved node 1.5 cm in size can be coded to 'Single lymph node < 2 cm' because the metastasis cannot be larger than 1.5 cm.

6. TNM information
   a. Physician's statement- If the only indication of lymph node involvement in the record is the physician's statement of an N category from the TNM staging system or a stage from a site-specific staging system, such as Dukes' C, record the *CS Lymph Nodes* code for the N or specific coding.
   b. Discrepancy between information- If there is a discrepancy between documentation in the medical record and the physician's assignment of TNM, the documentation takes precedence. Cases of this type should be discussed with the physician who assigned the TNM.
   c. Incomplete information- If the information in the medical record is ambiguous or incomplete regarding the extent to which the tumor has spread, lymph node involvement may be inferred from the N category stated by the physician.

7. Use of code 800
   The CS Lymph Nodes table for nearly every schema contains a code 800, defined as Lymph nodes, NOS. This code is to be used only when it is not possible to determine whether the involved lymph nodes are regional or distant. Each schema also includes a separate code for "Regional lymph nodes, NOS". In general, lymph nodes removed during a resection of the primary site are regional and should be coded as such. Occasionally a distant lymph node will be removed separately from the primary site. In the infrequent situation where the involved lymph node is not identified as either regional or distant, use code 800, which will map to the N category using the TNM downstaging rule

8. Isolated tumor cells (ITCs) in lymph nodes
   Several chapters in the TNM seventh edition refer to isolated tumor cells or ITCs. ITCs are single cells or small clusters of epithelial cells in regional lymph nodes whose metastatic potential is unknown. ITCs are coded according to site-specific guidelines.
   a. For breast, ITCs are coded as negative lymph nodes (CS Lymph Nodes code 000 or 050, which maps to pN0(i+) or pN0(mol+).
   b. For cutaneous melanoma, ITCs are coded as positive lymph nodes.
   c. For Merkel cell carcinoma, ITCs are coded as positive lymph nodes.

9. When CS Extension is coded as insitu/noninvasive
   Use code 000 for lymph node involvement when the CS Extension is coded in situ, even if no lymph nodes are removed, since "in situ" by definition means noninvasive. If there is evidence of nodal involvement associated with a tumor described as in situ, it would indicate that an area of invasion was missed and the primary tumor is not an in situ lesion, so involved lymph nodes can be coded as appropriate for the case. Code the CS Extension field and the behavior code to reflect that the tumor is invasive.

CS LYMPH NODES – *continued*

10. Discontinuous (satellite) tumor deposits (peritumoral nodules) for colon, appendix, rectosigmoid, and rectum

    Tumor nodules in pericolic or perirectal fat without evidence of residual lymph node structures can be one of several aspects of the primary cancer: discontinuous spread, venous invasion with extravascular spread, or a totally replaced lymph node. These various aspects are handled in different ways in CS. Furthermore, there are different definitions in the sixth and seventh editions of the *AJCC Cancer Staging Manual* for discontinuous tumor nodules found near the primary site.

    a. In the seventh edition and CSv2, if the primary tumor is localized or maps to T1 or T2, code CS Lymph Nodes as 050 if the only information available is the presence of tumor nodules in pericolic fat. In addition, code the total number of tumor deposits in the appropriate Site-specific Factor for Tumor Deposits. If there are tumor deposits and involved regional lymph nodes, code the information on regional lymph nodes in CS Lymph Nodes, the number of positive nodes in Lymph Nodes Positive, and the number of tumor deposits in the appropriate Site-specific Factor for Tumor Deposits.

    b. In the sixth edition of TNM and CS Version 1, tumor nodule(s) present in pericolic or perirectal fat should be coded using the following guidelines:
       i. Code as regional lymph node involvement if the nodule has a smooth contour.
       ii. Code as tumor extension if the nodule has an irregular contour.

11. Not applicable

    For the following primary sites, CS Lymph Nodes is always coded 988, Not applicable:
    - Placenta
    - Brain and Cerebral Meninges
    - Other Parts of Central Nervous System
    - Hodgkin and Non-Hodgkin Lymphoma
    - Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms
    - Other and Ill-Defined Primary Sites
    - Unknown Primary Site

CS LYMPH NODES – *continued*

Coding Regional Lymph Nodes for Head and Neck Sites

For head and neck sites, regional lymph node information is coded in several fields. The following is a list of regional lymph node data fields specific to head and neck cancers:

FIELD	DESCRIPTION
CS Lymph Nodes	Regional lymph nodes: number, laterality
CS Reg Nodes Eval	Clinical or pathologic evaluation
CS LN Pos	Number of lymph nodes microscopically positive
CS LN Exam	Number of lymph nodes microscopically examined
SSF1	Size of lymph node
SSF2	OBSOLETE
SSF3	Node Levels I – III
SSF4	Node Levels IV – V, Retropharyngeal
SSF5	Node Levels VI – VII, Facial
SSF6	Other regional nodes: parapharyngeal, parotid, suboccipital
SSF7	Upper/Lower Neck
SSF8	Extracapsular Extension – Clinical
SSF9	Extracapsular Extension – Pathologic

The CS Lymph Nodes field contains information about the nodes involved, their number and laterality. Site-Specific Factor (SSF) 1 is used to code the size of involved lymph nodes. Site-Specific Factor 2 was used in version 1 to code the presence of extracapsular extension. SSF2 is marked as obsolete in version 2; clinical and pathologic extracapsular extensions have been split out as SSFs 8 and 9. Site-Specific Factors 3 through 6 are used to code the presence or absence of lymph node involvement in each of 7 different lymph node levels and other nodal groups defined by AJCC. The definitions of the levels are the same for all applicable head and neck sites (see Figure I-2-1). Site-Specific Factor 7 is a prognostic indicator that further defines the involved lymph nodes as upper or lower cervical.

In each of the three-digit site-specific factors 3 – 6, an individual digit represents lymph nodes of a single level. For example, the three digits of Site-Specific Factor 3 represent lymph nodes of Levels I, II and III, respectively. The digits of Site-Specific Factor 4 represent lymph nodes of Levels IV and V and the retropharyngeal nodes. The digits of Site-Specific Factor 5 represent lymph nodes of Levels VI and VII and the facial nodes. The digits of Site-Specific Factor 6 representing the remaining other groups as defined by AJCC. In each digit, code *1* means *Yes*, the nodes are involved or code *0* means *No*, the lymph nodes are not involved.

Unknown

In Site-Specific Factors 3-6 for lymph node levels, use code 9 only when it is unknown if lymph nodes are involved. Within each of the Site-Specific Factors 3-6, do not code 9 in some positions and 0 or 1 in other positions. If specific information is available about the positive or negative status of some but not all nodes in any one level or group, assume that the rest of the nodes in the same Site-Specific Factor are negative and code accordingly.

Example: Laryngeal biopsy with squamous cell carcinoma, no other information available. CS Lymph Nodes is coded 99. Site-Specific factors 1-6 are each coded 999, since no information is available regarding lymph node involvement.

CS LYMPH NODES – *continued*

NOS

When the only information available is "Regional nodes, NOS" or "Cervical nodes, NOS" or "Internal jugular lymph nodes, NOS" or "Lymph nodes, NOS," code 0 in all digits of Site-Specific Factors 3-6.

Example: Patient diagnosed elsewhere with carcinoma of oropharynx with cervical lymph node involvement. No other information available. CS Lymph Nodes is coded 50 (regional nodes, NOS, not stated if ipsilateral, bilateral, or contralateral, or if single or multiple). Site-specific Factors 1 and 2 are each coded 999. Site-Specific Factors 3-6 are each coded 000.

Definitions of Levels for Head and Neck Sites

The definitions of the levels and the lymph node chains included in each level are as follows:

Level I (First digit of SSF 3) contains the submental and submandibular triangles bounded by the anterior and posterior bellies of the digastric muscle, and the hyoid bone inferiorly, and the body of the mandible superiorly.

Submandibular	Submaxillary	Submental

Level II (Middle digit of SSF 3) contains the upper jugular lymph nodes and extends from the level of the skull base superiorly to the hyoid bone inferiorly.

Jugulodigastric (subdigastric)	Upper deep cervical	Upper jugular

Level III (Last digit of SSF 3) contains the middle jugular lymph nodes from the hyoid bone superiorly to the level of the lower border of the cricoid cartilage inferiorly.

Middle deep cervical	Mid-jugular

Level IV (First digit of SSF 4) contains the lower jugular lymph nodes from the level of the cricoid cartilage superiorly to the clavicle inferiorly.

Jugulo-omohyoid (supraomohyoid)	Lower deep cervical	Lower jugular

Level V (Middle digit of SSF 4) contains the lymph nodes in the posterior triangle bounded by the anterior border of the trapezius muscle posteriorly, the posterior border of the sternocleidomastoid muscle anteriorly, and the clavicle inferiorly. For descriptive purposes, Level V may be further subdivided into upper, middle, and lower levels corresponding to the superior and inferior planes that define Levels II, III, and IV.

Posterior cervical
Posterior triangle (spinal accessory and transverse cervical) (upper, middle, and lower, corresponding to the levels that define upper, middle, and lower jugular nodes)

Level VI (First digit of SSF 5) contains the lymph nodes of the anterior central compartment from the hyoid bone superiorly to the suprasternal notch inferiorly. On each side, the lateral boundary is formed by the medial border of the carotid sheath.

Anterior deep cervical	Paratracheal	Pretracheal
Laterotracheal	Prelaryngeal (Delphian)	Recurrent laryngeal
Paralaryngeal		

CS LYMPH NODES – *continued*

Level VII (Middle digit of SSF 5) contains the lymph nodes inferior to the suprasternal notch in the superior mediastinum.

Upper mediastinal

Other groups and their positions in SSFs

Buccinator (facial)	Last digit of SSF 5
Nasolabial	Last digit of SSF 5
Parapharyngeal	First digit of SSF 6
Periparotid and Intraparotid	Middle digit of SSF 6
Preauricular	Middle digit of SSF 6
Retropharyngeal	Middle digit of SSF 6
Sub-occipital	Last digit of SSF 6

SSF7: Upper and Lower Cervical Lymph Nodes

Site-Specific Factor 7 describes whether the involved lymph nodes are in the upper or lower part of the neck. Where SSFs 3 – 6 are more surgically oriented, SSF 7 is prognostic: for most sites in the head, the lower the involved nodes are in the neck, the worse the patient's prognosis. The boundary between upper cervical and lower cervical is defined as the lower border of the cricoid cartilage, which is just below the larynx at the top of the trachea. (Refer to CSv2 Manual, Part I, section 2, pages I-2-24 and I-2-25 for a table that shows lymph node levels and their corresponding SSF).

LYMPH NODE EXTRACAPSULAR EXTENSION
Site-Specific Factor 8. Clinical Extracapsular Extension
Site-Specific Factor 9. Pathologic Extracapsular Extension

Extracapsular extension is tumor involvement of the lymph node that spills beyond the wall of the node into the surrounding fat. Extracapsular extension can be identified both clinically and pathologically. Clinical extracapsular extension is coded in Site-Specific Factor 8. Clinical assessment of lymph nodes includes physical examination and imaging. Clinical evidence of extracapsular extension would include physical examination descriptions of "fixed" or "matted" nodes, such as nodes adherent to each other or to adjacent soft tissue or overlying skin. Extracapsular extension may be described radiographically as amorphous or spiculated margins on the node or the appearance of stranding from the node into perinodal soft tissues.

Pathologic extracapsular extension is coded in Site-Specific Factor 9. Pathologic assessment includes both gross dissection (macroscopic) and microscopic examination. Macroscopic takes priority over microscopic. If extracapsular extension is not described in the final diagnosis, code as microscopic if mentioned only in the microscopic description of the pathology report or code as macroscopic if described in the gross description only or both the gross and microscopic descriptions.

Both SSFs pertain only to involved regional lymph nodes at any level in the head and neck as coded in CS Lymph Nodes, but not to nodes defined or listed in Mets at Dx.

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-Path, Text-DX Proc-PE, Text-DX Proc-X-ray/Scans, Text-DX Proc-OP,* and *Text-DX Proc-Scopes.*

CS REG NODES EVAL

Record how the code for *CS Lymph Nodes* was determined, based on the diagnostic methods employed.

A major change reflecting current medical practice occurred in the rules for clinical and pathologic classification of regional lymph nodes effective with the seventh edition of the *AJCC Cancer Staging Manual*. In CSv2, CS Lymph Nodes Eval is coded as clinical or pathologic based on the intent of the procedure and matching the assessment of the T classification (coded in CS TS/Ext Eval). The intent can be either clinical/diagnostic or therapeutic.

When the lymph node procedure is part of the workup, the staging basis is clinical (CS Lymph Nodes Eval codes 0, 1, 5, 9). If the microscopic assessment (workup) of lymph nodes, such as a regional node biopsy or sentinel lymph node procedure, is intended to help choose the treatment plan, the information obtained is part of clinical staging. In these circumstances, the tumor size and/or extension (T-category) information is also clinical and any resection of the primary site does not meet the criteria for pathologic T classification.

When the intent of the lymph node procedure is therapeutic (treatment), the staging basis is pathologic (CS Reg Nodes Eval codes 2, 3, 6). In these circumstances, there is also a resection of the primary site that meets the criteria for pathologic T classification (also part of the treatment) or there is microscopic confirmation of the highest T category without a surgical resection of the primary site.

Example 1: Breast cancer patient diagnosed by mammography and core needle biopsy; axilla clinically negative. Patient opts for lumpectomy and sentinel node biopsy, which is negative for lymph node metastases. *Code CS Lymph Nodes Eval as 3 because the sentinel node biopsy was part of the treatment.*

Example 2: Large breast mass found to be cancerous on core needle biopsy. Fullness in axilla on physical examination. Sentinel node biopsy shows micrometastasis in one of three nodes. Patient received neoadjuvant chemotherapy followed by modified radical mastectomy. On the mastectomy pathology report, no positive lymph nodes were found. *Code CS Lymph Nodes Eval as 5 because the sentinel node biopsy was performed as part of the workup and the patient received surgical treatment to primary site following neoadjuvant treatment.*

Example 3: Patient has hard lump in low neck and an endoscopic paratracheal node biopsy confirms metastatic lung cancer. Patient treated with chemoradiation. *Code CS Lymph Nodes Eval as 1 because the endoscopic biopsy was part of the workup and patient did not have resection of the primary site.*

Example 4: Sigmoid colon cancer diagnosed by colonoscopy. At the time of resection, 3/15 pericolic lymph nodes were found to contain metastatic cancer. *Code CS Lymph Nodes Eval as 3 because positive nodes were found as part of surgical resection of primary site.*

Example 5: Patient diagnosed with medullary thyroid carcinoma, and undergoes total thyroidectomy and anterior compartment node dissection. Node dissection finds 2 of 12 lymph nodes contain metastatic carcinoma. *Code CS Lymph Nodes Eval as 3 because the lymph nodes were part of the therapeutic resection of the primary site.*

Example 6: Patient has malignant melanoma on the forearm confirmed by shave biopsy. Patient has an FNA of an enlarged axillary lymph node that shows no involvement of the axillary lymph node by melanoma. Patient's treatment consists of wide excision of primary site. *Code CS Lymph Nodes Eval as 1 because the sentinel node biopsy was done to determine what type of treatment the patient should have.*

CS REG NODES EVAL – *continued*

Recording CS Reg Nodes Eval

1. Site/Histology-Specific Instruction
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 1.0* (*CS Manual*) for additional information.

2. Farthest Involvement
   Select the code that documents the report or procedure from which the information about the farthest involved regional lymph nodes was obtained; this may not be the numerically highest eval code.

   Example: Modified radical neck dissection for hypopharyngeal cancer shows one lower jugular node involved (CS LN code 100, Eval code 3). Physical exam shows hard, matted scalene (transverse cervical) node presumed to contain metastasis (CS LN code 320, Eval code 0). *Code CS Lymph Nodes Eval as 0 because the scalene node involvement was determined clinically rather than by examination of tissue.*

3. Sites/Histologies On Table 6
   Code 9 may be used for this data item for sites/histologies listed on Table 6 in the General Instructions of the *CS Manual, Part One*.

4. Best Code
   Select the code that best explains how the information for *CS Lymph Nodes* was determined.

   a. No removal of lymph nodes- If the patient had no removal of lymph node(s) use code 0, 1, or 9.

   Example 1: Prostate cancer with laparoscopic lymph node biopsy showing involved nodes; radical prostatectomy canceled. Code CS Reg Node Eval as 3.

   Example 2: Lung cancer with CT scan or MRI showing involved contralateral mediastinal nodes. Code CS Reg Node Eval as 0.

   b. Removal followed by other treatment - If the patient had removal of lymph node(s) surgery followed by other treatment(s) use code 3 or 9.

   c. Preoperative treatment- If the patient receives preoperative (neoadjuvant) systemic therapy (chemotherapy, hormone therapy, immunotherapy) or radiation therapy, the clinical status of lymph nodes takes precedence (code 5).

   d. Basis of neoadjuvant therapy- If the size, number or extension of regional lymph node involvement determined prior to treatment was the basis for neoadjuvant therapy, use code 5. However, if more extensive tumor is determined during lymph node examination after neoadjuvant therapy, use code 6.

   e. Involvement greater after surgery- If the size, number, or extension of regional lymph node involvement was greater after treatment than before treatment, use code 3 or 6.

   f. Autopsy/diagnosis known before death- If the patient had an autopsy and the diagnosis was known or suspected prior to death, use code 2.

   g. Autopsy/diagnosis not known before death- If the patient had an autopsy and the malignancy was not known or suspected prior to death, use code 8.

5. Imaging Studies
   Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), ultrasonography, magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.

CS REG NODES EVAL – *continued*

6. Pathologic Stage
   If the lymph node procedure meets the requirements for the pathologic staging basis of regional lymph nodes use code 3. Pathologic staging requirements vary by site. Refer to the *Collaborative Staging Manual and Coding Instructions Part II*, for more detailed instructions by site.

   Example: Prostate cancer with laparoscopic lymph node biopsy showing involved nodes; radical prostatectomy canceled. Code this data item 3. Staging algorithm would identify information as pathologic (p). A positive biopsy of one or more regional lymph nodes is sufficient to meet the pathologic staging basis for prostate cancer.

7. Observation at Surgery
   Code 1 also includes observations at surgery, such as an exploratory laparotomy in which cancer is identified, where regional lymph nodes are not biopsied.

REGIONAL NODES POSITIVE
(EODNodPos)

Record the exact number of regional lymph nodes examined by the pathologist and found to contain metastases.

Recording Regional Nodes Positive

1. Site/Histology-Specific Instructions
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 1.03.00* (*CS Manual*) for additional information.

2. In situ and Invasive
   Rules for coding Regional Nodes Positive are the same for both in situ and invasive cases.

3. Distant Lymph Nodes
   Only record information about regional lymph nodes in this data item. Involved distant lymph nodes should be coded in *CS Mets at Dx*

4. Pathology Information Only
   This data item is based on pathology information only.

5. Total Number Positive
   Record the total number of regional lymph nodes removed and found to be positive by pathologic examination.

   a. Count is cumulative- The number of regional lymph nodes positive is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment.

   b. Preoperative treatment- This item is to be recorded regardless of whether the patient received preoperative treatment

6. Priority of lymph node counts
   If there is a discrepancy regarding the number of positive lymph nodes, use information in the following priority: final diagnosis, synoptic report (also known as CAP protocol or pathology report checklist), microscopic, gross

7. Definition of Code 95
   Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue).
   a. Use code 95 when a positive lymph node is aspirated and there are no surgically resected lymph nodes.
      Example: Patient with esophageal cancer. Enlarged mid-esophageal node found on CT scan, which is aspirated and found to be positive. Patient undergoes radiation therapy and no surgery. *Code Regional Nodes Positive as 95 and Regional Nodes Examined as 95.*

   b. Use code 95 when a positive lymph node is aspirated and any surgically resected lymph nodes are negative.
      Example: Lung cancer patient has aspiration of suspicious hilar mass, which shows metastatic squamous carcinoma in lymph node tissue. Patient undergoes preoperative radiation therapy followed by lobectomy showing 6 negative hilar lymph nodes. *Code Regional Nodes Positive as 95 and Regional Nodes Examined as the number of nodes surgically resected. (Code Reg Nodes Eval as 5.)*

REGIONAL NODES POSITIVE – *continued*

8. Definition of Code 97
   Use code 97 for any combination of positive aspirated, biopsied, sampled or dissected lymph nodes if the number of involved nodes cannot be determined on the basis of cytology or histology. Code 97 includes positive lymph nodes diagnosed by either cytology or histology.

   Example: Patient with carcinoma of the pyriform sinus has a mass in the mid neck. Fine needle aspiration (FNA) of one node is positive. The patient has neoadjuvant chemotherapy, then resection of the primary tumor and a radical neck dissection. In the radical neck dissection "several" of 10 nodes are positive; the remainder of the nodes show chemotherapy effect. *Code Regional Nodes Positive as 97 because the total number of positive nodes biopsied and removed is unknown, and code Regional Nodes Examined as 10.*

   Note: For primary sites where the number of involved nodes must be known in order to map to N1, N2, etc., code 97 maps to N1 and therefore should be avoided.

   Note: If the aspirated node is the only one that is microscopically positive, use code 95.

   Note: Avoid using Regional Nodes Positive code 97 if possible, even if this means slightly undercounting the number of nodes positive.

9. Use of Code 98
   Code 98 may be used in several situations.
   - When the assessment of lymph nodes is clinical only.
   - When no lymph nodes are removed and examined.
   - When a "dissection" of a lymph node drainage area is found to contain no lymph nodes at the time of pathologic examination.
   - If Regional Nodes Positive is coded as 98, Regional Nodes Examined is usually coded 00.

10. Isolated Tumor Cells (ITCs) in lymph nodes
    For all primary sites except cutaneous melanoma and Merkel cell carcinoma of skin, count only lymph nodes that contain micrometastases or larger (metastases greater than 0.2 millimeters in size). Do not include in the count of lymph nodes positive any nodes that are identified as containing isolated tumor cells (ITCs). If the path report indicates that nodes are positive but the size of metastasis is not stated, assume the metastases are larger than 0.2 mm and count the lymph node(s) as positive.

    a. **For cutaneous melanoma and Merkel cell carcinoma**, count nodes with ITCs as positive lymph nodes.

11. For the following primary sites and histologies
    Regional Nodes Positive, is always coded 99:
    - Brain and Cerebral Meninges (C70.0, C71.0-C71.9)
    - Hematopoietic, Reticuloendothelial, Immunoproliferative & Myeloproliferative Neoplasms (see *VCR Manual, Part Three, General Information* for a list of these conditions)
    - Hodgkin and non-Hodgkin Lymphoma
    - Other Parts of Central Nervous System (C70.1, C70.9, C72.0-C72.5, C72.8-C72.9)
    - Other & Ill-Defined Primary Sites (see *VCR Manual, Part Three, General Information* for a list of these sites)
    - Placenta (C58.9)
    - Unknown Primary (C80.9)

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-Path.*

REGIONAL NODES EXAMINED
(EODNodExam)

Record the total number of regional lymph nodes removed and examined by the pathologist.

Recording Regional Nodes Examined

1. Site/Histology-Specific Instructions
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 1.0* (*CS Manual*) for additional information.
2. In situ and Invasive
   Rules for coding Regional Nodes Examined are the same for both in situ and invasive cases.
3. Distant Lymph Nodes
   Only record information about *regional* lymph nodes in this data item. Involved distant lymph nodes should be coded in *CS Mets at Dx.*
4. Pathology Information Only
   This data item is based on pathology information only.
5. Unknown if Lymph Nodes Examined
   If it is unknown whether nodes were examined, code as 99.
6. Total Number
   Record the total number of regional lymph nodes removed and examined by the pathologist.
   a. Count is cumulative- The number of regional lymph nodes examined is cumulative from all procedures that removed lymph nodes through the completion of surgeries in the first course of treatment.
   b. Aspiration and removal
      i) Aspiration and core biopsies should be coded to 95
      ii) Do not count a positive aspiration or core biopsy of a lymph node in the same lymph node chain removed at surgery as an additional node in Regional Nodes Examined.
      iii) If the positive aspiration or core biopsy is from a node in a different node region, include the node in the count of Regional Nodes Examined.
      iv) If the location of the lymph node that is aspirated or core-biopsied is not known, assume it is part of the lymph node chain surgically removed, and do not include it in the count of Regional Nodes Examined.
   c. Preoperative treatment- This data item is to be recorded regardless of whether the patient received preoperative treatment.
   d. Priority of lymph node counts - If there is a discrepancy regarding the number of lymph nodes examined, use information in the following priority: final diagnosis, synoptic report (also known as CAP protocol or pathology report checklist), microscopic, gross.
7. Definition of Code 95
   Use code 95 when the only procedure for regional lymph nodes is a needle aspiration (cytology) or core biopsy (tissue).
8. Definition of “sampling” (code 96)
   A lymph node “sampling” is removal of a limited number of lymph nodes. Other terms for removal of a limited number of nodes include lymph node biopsy, berry picking, sentinel lymph node procedure, sentinel node biopsy, selective dissection. Use code 96 when a limited number of nodes are removed but the number is unknown.

REGIONAL NODES EXAMINED– continued

9. Definition of "dissection" (code 97)
   A lymph node "dissection" is removal of most or all of the nodes in the lymph node chain(s) that drain the area around the primary tumor. Other terms include lymphadenectomy, radical node dissection, lymph node stripping. Use code 97 when more than a limited number of lymph nodes are removed and the number is unknown.

10. Multiple Lymph Node procedures
    If both a lymph node sampling and a lymph node dissection are performed and the total number of lymph nodes examined is unknown, use code 97.

11. For the following primary sites and histologies
    Regional Nodes Examined, is always coded 99:

    - Brain and Cerebral Meninges (C70.0, C71.0-C71.9)
    - Hematopoietic, Reticuloendothelial, Immunoproliferative & Myeloproliferative Neoplasms (see *VCR Manual, Part Three, General Information* for a list of these conditions)
    - Hodgkin and non-Hodgkin Lymphoma (except 9700/3 and 9701/3)
    - Other Parts of Central Nervous System (C70.1, C70.9, C72.0-C72.5, C72.8-C72.9)
    - Other & Ill-Defined Primary Sites (see *VCR Manual, Part Three, General Information* for a list of these sites)
    - Placenta (C58.9)
    - Unknown Primary (C80.9)

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-Path.*

CS METS AT DX

Record the code that identifies the distant site(s) of metastatic involvement at time of diagnosis.

Recording CS Mets at DX

1. Discontinuous or hematogenous metastasis
   This field represents distant metastases (the TNM M component or distant stage in Summary Staging) that are known at the time of diagnosis. In other words, when the patient was diagnosed, tumor had already spread indirectly (through vascular or lymph channels) to lymph nodes beyond those defined as regional or to a site remote from the primary tumor.

   Note: The structure of the CS Mets at Dx field is based on the M category of TNM. In some schemas, there may be additional items in CS Extension or CS Lymph Nodes that map to distant stage in Summary Staging (1977 and/or 2000) and there may be some items in CS Mets at Dx that map to regional stage in Summary Staging. Regardless of where such items are recorded, the staging algorithms will properly account for the information.

2. Highest Code
   Assign the highest applicable code for metastasis at diagnosis, whether the determination was clinical or pathological and whether or not the patient had any preoperative systemic therapy. Code 40 includes statements of metastases to specific named structures or "carcinomatosis." Code 60 is nonspecific distant metastases or a statement of M1 with no further information about metastases; code 60 does not take priority over lower codes.

3. Progression of Disease
   Metastasis known to have developed after the extent of disease was established (also referred to as progression of disease) should not be recorded in the CS Mets at Dx field.

4. None vs. Unknown
   a. Record CS Mets at Dx as Code 00 (None) if there is no clinical or pathologic evidence of distant metastases and the patient is not treated as if metastases are present or suspected. This presumes that there are no distant metastasis that would otherwise alter the treatment approach.
   b. Code 99 may be used in situations where there is reasonable doubt that the tumor is no longer localized and there is no documentation of distant metastases. Note that code 99 maps to MX in sixth edition and cM0 in seventh edition.
   c. Based on the *AJCC Cancer Staging Manual*, seventh edition, determination of the clinical M classification (CS Mets at Dx code 00) only requires history and physical examination. Imaging of distant organ sites is not required to assign cM0 or CS Mets at Dx code 00. In other words, the data collector can infer that there are no distant metastases and code CS Mets at Dx as 00 (cM0) unless distant metastases are identified and classified as cM1 or pM1 (or its equivalents in CS Mets at Dx).

5. TNM Information
   If the only indication of extension in the record is the physician's statement of an M category from the TNM staging system or a stage from a site-specific staging system, such as Dukes' D, record the extension code for that M category

6. Circulating Tumor Cells (CTCs) and Disseminated Tumor Cells (DTCs)
   CTCs and DTCs are small clusters of tumor cells found in distant sites such as bone, circulating blood, or bone marrow having uncertain prognostic significance.
   a. For breast, code CS Mets at Dx as 05 when a biopsy of a possible metastatic site shows isolated tumor cells or bone marrow micrometastases detected by IHC or molecular techniques. CS Mets at Dx code 05 maps to cM0(i+).
   b. For other sites, CTCs and DTCs are coded in CS Mets at Dx as 00 and map to cM0.

CS METS AT DIAGNOSIS – *continued*

7. Primary Sites Always Coded 98
   For the following primary sites and histologies, CS Mets at Dx is always coded as 98.
   - Hematopoietic, Reticuloendothelial, Immunoproliferative and Myeloproliferative Neoplasms
   - Hodgkin and non-Hodgkin Lymphoma
   - Kaposi sarcoma
   - Other and Ill-Defined Primary Sites
   - Unknown Primary Site

Text

Text to support this data item must be recorded in the specific text fields. See *VCR Manual Part Three, Data Item Instructions, Text-Path, Text-DX Proc-X-ray/Scans, Text-DX Proc-OP,* and *Text-DX Proc-Scopes*.

CS METS EVAL

Record how the code for *CS Mets at Dx* was determined based on the diagnostic methods employed.

Recording CS Mets Eval

1. Site/Histology-Specific Instructions
   Refer to site/histology-specific instructions in the *Collaborative Staging Manual and Coding Instructions, Version 2* (*CS Manual*) for additional information.

2. Farthest Involvement
   Select the CS Mets Eval code that documents the report or procedure from which the information about metastatic involvement farthest from the primary site was obtained; this may not be the numerically highest eval code.

3. Circulating Tumor Cells (CTCs) and Disseminated Tumor Cells (DTCs) in metastatic sites.
   CTCs and DTCs, including bone marrow micrometastases, are clinical findings if detected by immunohistochemistry or molecular methods. The significance of these small clusters of tumor cells in distant sites is indeterminate. When identified, CTCs and DTCs are coded in CS Mets at Dx as 00 and CS Mets Eval should be assigned a code that maps to "c" staging basis. In general, such cases will map to cM0 or cM0(i+).

4. Select the best code
   Use the code that best explains how the information in *CS Mets at Dx* was determined.
   a. No examination of metastatic tissue - If the patient had no exam of metastatic tissue use code 0, 1, or 9.

   Example: Lung cancer with endoscopy of contralateral lung showing involvement of contralateral mainstem bronchus. Code this data item 1.

   b. Negative pathology report - If the patient had removal of presumed metastatic tissue (even though the pathology report was negative), use code 3.

   c. Farthest from primary - Code the method of evaluation for the site(s) farthest from the primary.

   Example: Colon cancer patient has CT scan showing normal lungs. During the resection, the surgeon palpates the liver and finds it to be normal. Code this field as 0, since the CT scan shows that potential metastatic sites outside the surgical field are negative.

   e. Autopsy/diagnosis known before death - Code 2 if the patient had an autopsy and the diagnosis was known or suspected prior to death.

   f. Autopsy/diagnosed not known before death - Code 8 if the patient had an autopsy and the malignancy was not known or suspected prior to death.

5. Preoperative Treatment
   If biopsies taken after pre-operative treatment are negative for metastasis and clinical evidence of metastasis remains, use code 5.

6. Clinical Evidence of Metastasis
   If the patient has biopsies of some metastases while others are visible only on imaging, use code 6 to indicate if, after preoperative treatment, the biopsy is negative for metastasis but there is still evidence of clinical metastasis.

CS METS EVAL – *continued*

7. Imaging Studies
   Code 0 includes imaging studies such as standard radiography, special radiographic projections, tomography, computerized tomography (CT), ultrasonography, lymphography, angiography, scintigraphy (nuclear scans), ultrasonography, magnetic resonance imaging (MRI), positron emission tomography (PET) scans, spiral scanning (CT or MRI) and other non-invasive methods of examining tissues.

   Example: Patient has diagnosis of colon cancer by biopsy. CT scan shows liver metastasis. Code this data item 0.

8. Pathologic Staging
   Any positive biopsy or resection of distant metastasis meets the requirement for pathologic staging basis and should be coded to CS Mets Eval code 3. Pathologic staging requirements vary by site. Refer to the *CS Manual, Part II*, for more detailed instructions by site.

   Example: Prostate cancer with enlarged scalene node confirmed as cancer on needle biopsy. Code this data item 3, since there was biopsy of the metastatic site.

9. Observations at Surgery
   Code 1 also includes observations at surgery, such as exploration at the time of resection, where distant metastasis is not biopsied.

CS SITE SPECIFIC FACTORS 1 - 25

Identifies additional information needed to generate stage or prognostic/predictive factors that have an effect on stage or survival.

Purpose of SSFs

Site-specific factors (SSFs) serve a variety of purposes in CS.

Required to support TNM mapping

Some SSFs provide additional information beyond the 9 core CS fields and are necessary for mapping to T, N, M, or stage group. Examples are the number of positive axillary lymph nodes for breast, extracapsular extension for head and neck sites, and the thickness of a malignant melanoma of the skin or mucous membrane. In general, these will be required by COC facilities and SEER.

Tumor Markers and Lab Values

Some SSFs are tumor markers or lab values of prognostic significance for various sites, such as CA-125 for ovary, CA 19-9 for GI sites, alpha fetoprotein and hCG for testis, KRAS for colon and rectum, and Ki-67 for CNS and various eye sites.

Prognostic/Predictive Items

A number of SSFs are included because of their prognostic or predictive value, such as the Gleason tertiary pattern for prostate, and the various international prognostic indices for lymphoma, such as the IPI for aggressive lymphomas, FLIPI for follicular lymphomas, and the IPS for Hodgkin lymphoma.

Special Interest/Future Research

As part of the effort to be clinically relevant, the seventh edition chapter authors included items of special interest for future research, such as the presence of microsatellite instability for GI cancers and tumor infiltrating lymphocytes (TIL) for Merkel cell carcinoma of the skin.

Other Clinically Significant Information

Some data items pertain to the patient's history of other diseases, such as Sjogren's syndrome for ocular lymphoma, a history of asbestos exposure for pleural mesothelioma, and a particular gene mutation present in many retinoblastoma cases.

Note: North American Standards Setters have determined which site-specific factors are required to be reported by their participating registries. Appendix 8 lists the site-specific factors. Refer to the CSv2 Implementation Guidelines posted on the CSv2 website for the lists of which site-specific factors are required by each standards setter.

Because so many types of information are collected, there are a variety of templates used in CSv2. These different templates use different codes to represent negative values, test not performed, and so forth. However, to the greatest extent possible, similar types of information (such as lab values) in different site-specific schemas use the same template.

CS SSFs 1 – 25 – *continued*

The following table shows the general format and codes used for different types of information collected. The specifics of individual site-specific factors are found in the *Collaborative Staging and Coding Manual, Part II, Version 02.04.05.*

EXAMPLES OF TEMPLATE FORMATS FOR CSV2 SITE-SPECIFIC FACTORS

Code	Lab values or measure-ments (except size)	Positive/ Negative	Ranges	Sizes	Grades	Things that are counted	Conditions of Involve-ment
000	000 value			No [mass/ tumor, nodes, whatever is measured] found		None counted	Condition not present
001	1 or less per unit of measure			Codes 001-980 for specific size (cm, mm or other)		1 unit	
002	Codes 002-979 for specific values per unit of measure					2 units	
003						3 units	
004						4 units	
010		Positive/ elevated			Grade 1		Condition present (use codes in 010, 020, 030 series)
020		Negative/ normal; WNL	Negative/ normal; WNL		Grade 2		
030		Borderline, undetermined if pos or neg			Grade 3		
040			Positive Range 1		Grade 4		
050			Positive Range 2				
060			Positive Range 3				
…							
888	*See Note 1.*	Obsolete (if overlying an SSF 1-6 only)	Obsolete (if overlying an SSF 1-6 only)				
980	Highest available code (980 units or greater)			980 upper limit of size			
985				Diffuse			
988	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
989							
990				Microscopic focus or foci only [or related terms as needed for specific sites]			

Code	Lab values or measure-ments (except size)	Positive/ Negative	Ranges	Sizes	Grades	Things that are counted	Conditions of Involve-ment
991	991-996, Special codes if needed			Described as < 1 [unit]			
992				Described as < 2 [unit], > 1 [unit], or between 1 and 2 [unit]			
993				Described as < 3 [unit], > 2 [unit], or between 2 and 3 [unit]			
994				Described as < 4 [unit], > 3 [unit], or between 3 and 4 [unit]			
995				Described as < 5 [unit], > 4 [unit], or between 4 and 5 [unit]			
996				Described as < 6 [unit], > 5[unit], or between 5 and 6 [unit]			
997	See Note 2 (if code needed)	See Note 2	See Note 2	Described as > 6 [unit]			
998	See Note 3	See Note 3	See Note 3				No histologic examination of prim site.
999	See Note 4	See Note 4	See Note 4	Unknown; size not stated; Not documented in patient record	Clinically diagnosed/ grade unknown Not docu-mented in patient record; Grade unknown, NOS	Unknown; Insufficient information; Not docu-mented in patient record	

Note 1: Not Applicable (for new unused SSFs 7-24), or Obsolete (if overlaying an SSF 1-6 only), or Value of 888 for new SSFs 7-24 with actual lab values
Note 2: Test ordered, results not in chart
Note 3: Test not done (test was not ordered and was not performed)
Note 4: Unknown or no information; Not documented in patient record

For schemas that do not use this site-specific factor:

Code	Description
988	Not applicable for this site

In addition to varying codes and definitions, the sequencing of SSFs within a site-specific schema varies. This was also done to maintain consistency of SSFs among sites. For most site-specific schemas, the SSFs are presented sequentially, starting with SSF1. For other schemas, particularly those where a CSv2 schema was created from a schema in CS version 1, new SSFs start in the first position available after any items used in the original schema, so as to avoid having a site-specific factor with two different meanings over time. For example, when GIST of stomach was created from the previous stomach schema (now used only for carcinomas), SSF 1 (Clinical assessment of regional nodes) was made obsolete because it is not pertinent to GIST, and the five new GIST SSFs begin at SSF6.

CS SSFs 1-25 – *continued*

Recording SSFs

1. Select the best code that applies to the case
   The code structure is the same for each site-specific factor (SSF), although the meaning of the codes for each SSF varies on the type of test or measurement being collected.

2. Number of SSFs used
   The number of SSFs used varies by schema. See *Appendix 8* in the *Collaborative Stage Data Collection System Coding Instructions, Part 1, Section 1* for the names of each site-specific factor used in each schema, and refer to the SSF tables in each site/histology schema for the list of codes. For detailed coding instructions on specific SSFs, refer to *Collaborative Staging and Coding Manual, Part II, version 02.02.00.*

3. Use of Code for Not Applicable
   If the site-specific factor is not defined for a schema, code as 988,not applicable. Site-specific factors are coded 988 when they are not defined, i.e., not set up to collect a specific data item. Defined site-specific factors may be coded 988 when they are not required by a standard setter and the registry has established a policy of not collecting the site-specific factor information for any case. The definitions for site-specific factors vary by CS Version Input Original, and standard setter requirements vary by CS Version Original and year of diagnosis. Code 988 may be a valid code choice for a site-specific factor when the case was originally coded in CSv1 (CS Version Input Original = 01XXXX) and diagnosed in a year before CSv2 was required. Code 988 may not be a valid code choice for that same site-specific factor when the case was originally coded using CSv2 (CS Version Input Original = 020200) and diagnosed in 2010. Code 988 in defined site specific factors includes the notation, "If this information is required by your standard setter, use of code 988 may result in an edit error."

   Example 1 SSF 1 for Lung was undefined in CSv1, but was defined for separate tumor nodules in CSv2 and required by standard setters for CS V0202 and all 2010 diagnoses. For all lung cases with a CS Version Input Original code of 01XXXX, diagnosed 2004- 2009, 988 is a valid code. For all lung cases with a CS Version Input Original code of 02XXXX or diagnosis year 2010 or later, where the registry reports to a standard setter that requires SSF 1 for lung, 988 is not an accepted code choice and will generate an edit error if used.

   Example 2 SSF 15 for Breast was undefined in CSv1, but was defined in CSv2 for a summary of HER2 testing results. However, SSF 15 was not required by a standard setter for CS V0202, but was required for CS V0203 and all 2011 diagnoses. For all breast cases with a CS Version Input Original code of 01XXXX or 020202, diagnosed 2004-2010, 988 is a valid code choice. For all breast cases with a CS Version Input Original code of 020302 or higher or diagnosis year 2011 or later, where the registry reports to a standard setter that requires SSF 15 for breast, 988 is not an accepted code choice and will generate an edit error if used.

   For some schemas there may be undefined site-specific factors between defined site-specific factors to align items for consistency across schemas to make it easier for data analysis. For example, there are three schemas for colon: Colon, GISTColon, and NETColon. SSF1 is defined for Colon but not for GISTColon or NETColon. SSF2 is the same for Colon and NETColon but is no longer used for GISTColon. SSFs 3-10 are defined only for Colon. SSF11 is defined for GISTColon and NETColon but not Colon. SSFs 12-15 are defined for GISTColon only, and SSFs 16-17 for NETColon only. Any site-specific factor not defined for a schema, such as SSFs 3-10 for GISTColon and SSFs 18-25 for all three schemas, is coded 988.

CS SSFs 1-25 – *continued*

4. Test Not Done
   Depending on the format of the site-specific factor template, code 000 or some other code may be used when there is a statement in the record that a test was not performed, when the SSF instructions say to code "Not done" when there is nothing in the record, or when the test is negative or normal. The SSF may also provide coding guidelines for situations where the information is not available in the medical record. Follow the instructions provided for the site-specific factor.

   Example: For malignant melanoma of skin SSF2, note 2 says "If there is no documentation or no mention of ulceration in the pathology report, assume ulceration is not present and code 000."

5. Coding Lab Tests
   Each site-specific factor includes instructions how it is to be coded.

   a. Follow the instructions for the SSF to record the correct lab value, such as highest, lowest, pre-treatment, immediately post-operative, closest to diagnosis, and so forth.

   b. If there is an indication that the lab test was completed but the results are not in the record, code as Ordered, results not in chart. For most types of SSFs, this is code 997.

   c. Rounding - Follow the instructions for the SSF in coding the lab value, as units of measurements vary. If there is an implied decimal point, round values of 1-4 down to the nearest number and round values of 5-9 up to the next number.

      Example: Prostate SSF 1 PSA Value. Physician reports PSA of 4.35. *Round the .35 up to .4 and code as 044.*

6. Use of 999
   Use code 999 if the tumor marker, prognostic score, predictive value or other SSF is not in the medical record, Use code 999 in the following circumstances, unless different instructions are provided in the SSF:

   a. The facility does not offer the test.
      Note: The data collector should determine whether the facility offers the test, perhaps under a different name. For example, not every hospital will test for chromosome 18q loss of heterozygosity for appendiceal carcinoma.

   b. The facility does not offer the test but sends it out and there is no report in the patient record.

   c. The facility does offer the test and there is no information in the medical record.

   d. There is no report of the lab test in the patient record. **It is not the responsibility of the data collector to track down test results if they are not in the patient record.**

   e. For Kaposi sarcoma SSF1, if AIDS status is not documented, code as 999 rather than 002, Not Present.

   f. For lymphoma SSF3, if the IPI score is not stated in the record, it is not necessary to calculate the IPI score from other information in the record

LYMPH-VASCULAR INVASION

This field records the absence or presence of tumor cells in lymphatic channels (not lymph nodes) or blood vessels within the primary tumor as noted microscopically by the pathologist. This field is *required* for mapping of T in some sites, such as testis and penis.

Lymph-vascular invasion is defined as the presence of tumor cells found inside small blood vessels or lymphatic channels within the tumor and surrounding tissues in the primary site. The tumor cells have broken free of the primary tumor and now have the capability to float throughout the body. Other names for lymph-vascular invasion are LVI, lymphovascular invasion, vascular invasion, blood vessel invasion, and lymphatic invasion. Vascular invasion is not the same as direct tumor extension from the primary tumor into adjacent blood vessels; LVI cells are not attached to or growing into the wall of the blood vessel. Lymphatic invasion is not the same as involvement of regional lymph nodes. Lymph-vascular invasion does not include perineural invasion.

Codes and Descriptions

Code	Description
0	Lymph-vascular invasion not present (absent)/Not identified
1	Lymph-vascular invasion present/Identified
8	Not applicable
9	Unknown if lymph-vascular invasion present Indeterminate

Recording Lymph-Vascular Invasion

1. Code from the pathology report(s)
   Code the absence or presence of lymph-vascular invasion as described in the medical record.
   a. The primary sources of information about lymph-vascular invasion are the pathology check lists (synoptic reports) developed by the College of American Pathologists. If the case does not have a checklist or synoptic report, code from the pathology report or a physician's statement, in that order.
   b. Do not code perineural invasion in this field.
   c. Information to code this field can be taken from any specimen from the primary tumor.
   d. If lymph-vascular invasion is identified anywhere in the resected specimen, it should be coded as present/identified.
2. Use of Codes
   a. Use code 0 when the pathology report indicates that there is no lymph-vascular invasion.
   b. Use code 1 when the pathology report or a physician's statement indicates that lymph-vascular invasion (or one of its synonyms) is present in the specimen.
   c. Use code 8 for cases that have no microscopic examination of a primary specimen and for the following primary sites.
      - Hodgkin and Non-Hodgkin lymphoma
      - Leukemias
      - Hematopoietic and reticuloendothelial disorders
      - Myelodysplastic syndromes including refractory anemias and refractory cytopenias
      - Myeloproliferative disorders
   d. Use code 9 when it is not possible to determine whether lymph-vascular invasion is present

GRADE PATH VALUE – variable discontinued with cases dx'd 1/1/2015

This field documents the numerator or first number of a tumor grade reported in a 2, 3, or 4 grade system. It supplements but does not replace the field Grade/Differentiation, which is part of the ICD-O-3 morphology code structure and may be converted from another grading system or coded by a different set of rules. Grade Path Value is paired with Grade Path System to describe the original grade of the tumor.

Codes and Descriptions

Code	Description
1	Recorded as Grade I or 1
2	Recorded as Grade II or 2
3	Recorded as Grade III or 3
4	Recorded as Grade IV or 4
blank	No 2, 3, or 4 grade system available Unknown

Recording Grade Path Value

1. Record from the documentation in the medical record; do not convert the grade described in the pathology report.
   a. Code this field from the same tissue used to code the sixth digit of the ICD-O-3 morphology code (Grade/Differentiation). This field identifies how the original grade of the tumor was described.
   b. Do not convert the terms *well*, *moderately*, or *poorly differentiated*, *low*/*high*, or *anaplastic* into codes in this field.
   c. Code the histologic grade/differentiation in priority over a nuclear or architectural grade.
   d. If grade is described in the medical record as a fraction (x/y), this data field is the numerator. In other words, this field is the first or upper number of a grade expressed in two parts.

      Examples: Synoptic report states grade ii of iii. *Code Grade Path Value as 2.*
      Final pathologic diagnosis listed as grade 1/4. *Code Grade Path Value as 1.*
      Microscopic description reports high grade III of III. *Code Grade Path Value as 3.*
   e. Do not report grading systems such as Bloom-Richardson for breast or Fuhrman for kidney or Gleason for prostate or WHO grade as coded values in this field. These grading systems are coded in a site-specific factor in their respective schemas.
   f. The code in this field cannot be greater than the corresponding code in Grade Path System.
   g. For lymphomas and hematopoietic malignancies, this field is blank.

GRADE PATH SYSTEM - variable discontinued with cases dx'd 1/1/2015

This field documents the denominator or second number of a tumor grade reported in a 2, 3, or 4 grade system. It supplements but does not replace the field Grade/Differentiation, which is part of the ICD-O-3 morphology code structure and may be converted from another grading system or coded by a different set of rules. Grade Path System is paired with Grade Path Value to describe the original grade of the tumor.

Codes and Descriptions

Code	Description
2	Recorded as Grade II or 2
3	Recorded as Grade III or 3
4	Recorded as Grade IV or 4
blank	No 2, 3, or 4 grade system available Unknown

Recording Grade Path System

1. **Code the grading system** reported in the medical record. Do not convert the grade described in the pathology report.
   a. Code this field from the same tissue used to code the sixth digit of the ICD-O-3 morphology code (Grade/Differentiation). This field identifies how the original grade of the tumor was described.

   b. If grade is described in the medical record as a fraction (x/y), this data field is the denominator. In other words, this field is the second or lower number of a grade expressed in two parts.

      Examples: Synoptic report states grade ii of iii. *Code Grade Path System as 3.*
      Final pathologic diagnosis listed as grade 1/4. *Code Grade Path System as 4.*
      Microscopic description reports high grade III of III. *Code Grade Path System as 3.*

   c. Leave this field blank if another grading system is used in the pathology report. For example, do not report grading systems such as Bloom-Richardson for breast or Fuhrman for kidney or Gleason for prostate or WHO grade as coded values in this field. These grading systems are coded in a site-specific factor in their respective schemas.

   d. For lymphomas and hematopoietic malignancies, this field is blank.

GUIDELINES FOR RECORDING FIRST COURSE OF TREATMENT

First course of treatment includes all methods of cancer-directed therapy recorded in the treatment plan and administered to the patient before disease progression or recurrence. Never code treatment unless you know it has actually been administered at your facility or any other facility; record as None, 00 or 0.

No therapy is a treatment option (the patient refused therapy, the family/guardian refused therapy, the patient expired before therapy started, or the physician recommended no therapy). Therefore, first course of treatment may be no treatment. Use the date the decision was made not to treat as *Date of 1st Crs Rx*.

All modalities of treatment are included regardless of sequence or degree of completion of any component method.

Treatment Plan

A treatment plan describes the cancer-directed treatment intended to modify, control, remove or destroy proliferating cancer cells. The documentation confirming a treatment plan may be fragmented. It is frequently found in several different sources, e.g., medical or clinic records, consultation reports, and outpatient records. All cancer-directed therapies specified in the physician(s) treatment plan are a part of the first course of treatment. When a treatment plan is not available or unclear, consult a physician.

A discharge plan may contain part or all of the treatment plan.

A treatment plan may specify one or more modalities of therapy (surgery, radiation, chemotherapy, hormone therapy, immunotherapy, or other therapy). A treatment "regimen" may include combinations of concurrent or adjuvant therapies.

Example: A patient had a transurethral resection diagnostic of bladder cancer. Resection was followed by Cobalt-60 radiation, ileal loop diversion, and a complete cystectomy with node dissection. Code as follows:

Data Item	Treatment Code
Cancer-directed surgery	50 - Complete cystectomy
Radiation Regional RX Modality	22- Cobalt-60 radiation
Chemotherapy	00 - None
Hormone Therapy	00 - None
Immunotherapy	00 - None
Other treatment	0 - No other cancer-directed therapy

GUIDELINES FOR RECORDING FIRST COURSE OF TREATMENT – *continued*

Guidelines for Determining *First Course of Treatment*

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

Time Period Rules for First Course of Treatment for Malignancies except Leukemias (in order of precedence).

1. If there is a documented, planned first course of treatment, first course ends at the completion of this treatment plan, regardless of the duration of the treatment plan.
2. If the patient is treated according to a facility's standards of practice (established protocol), first course ends at the completion of the treatment.
3. If there is no documented treatment plan, established protocol, or management guidelines, and consultation with a physician is not possible, use the principle: "initial treatment must begin within four months of the date of initial diagnosis."
4. If the patient refuses all treatment modalities, then changes his/her mind and the treatment is initiated, consult a physician to determine if this is part of first course of treatment.

Special Rules for Leukemias

The first course of definitive treatment is related to the first *remission* as follows:

1. If a remission, complete or partial, is achieved during the first course of therapy for the leukemic process, include:
   - All definitive therapy considered as *remission-inducing* for the first remission.
   - All definitive therapy considered as *remission-maintaining* for the first remission (maintenance chemotherapy or irradiation to the central nervous system).
   - Disregard all treatment administered to the patient after the relapse of the first remission.
2. If no remission is attained during the first course of therapy, record all treatment attempted to induce the remission. Disregard all treatment administered to the patient as a subsequent attempt to induce remission.

Watchful Waiting

If a treatment plan is given for symptoms/disease progression after period of *watchful waiting*, this treatment is not considered part of first course. For example, if physician and patient choose a *wait and watch* approach to prostate cancer and the patient becomes symptomatic, consider the symptoms to be an indication the disease has progressed and any further treatment is not part of first course.

Treatment Failure

Treatment failure or disease progression may prompt the physician to stop therapy before the full course has been completed. Any therapy administered after the discontinuation of first course must be considered as secondary or subsequent treatment.

GUIDELINES FOR RECORDING FIRST COURSE OF TREATMENT – *continued*

Treatment for Recurrence or Progression

Treatment for recurrence or progression of disease includes all cancer-directed therapies administered after the first course of treatment is complete.

If the patient does not respond or if the disease progresses, a physician may stop the first course of treatment before it is complete. Therapy administered after the first course ends is not recorded as first course of treatment.

Non Cancer-Directed Treatment

Non cancer-directed treatments prolong the patient's life, alleviate pain, make the patient comfortable, or prepare the patient for cancer-directed therapy. They are not meant to destroy or control the tumor or delay the spread of disease. Non cancer-directed procedures include diagnostic tests and supportive care (treatments designed to relieve symptoms and minimize the effects of the cancer). Surgical procedures performed to diagnose/stage disease (exploratory) or for relief of symptoms (palliative) are non cancer-directed surgery. **Non cancer-directed therapies should not be coded as treatment.**

Examples of non cancer-directed therapies include:

Diagnostic procedures:

- Incisional biopsies
- Exploratory procedures/surgery with or without biopsies, such as celiotomy, laparotomy, cystotomy, nephrotomy, gastrotomy, thoracotomy
- Brushings, washings, aspiration of cells, and hematologic findings (peripheral blood smears) are not surgical procedures.

Palliative procedures:

- Colostomy
- Nephrostomy
- Esophagostomy
- Tracheostomy
- Gastrostomy

Supportive care/relieving symptoms:

- Pain medication
- Oxygen
- Antibiotics administered for an associated infection
- Intravenous therapy to maintain fluid or nutritional balance
- Laser therapy directed at relieving symptoms

Exception: Treatment for hematopoietic diseases can be supportive care, observation, or any treatment that does not meet the usual definition in which treatment "modifies, controls, removes, or destroys proliferating cancer tissue". See *VCR Manual, Part Three, RX Summ-Other).*

GUIDELINES FOR RECORDING FIRST COURSE OF TREATMENT – *continued*

Cancer-Directed Treatment

Cancer-directed treatment is tumor directed, and its purpose is to modify, control, remove, or destroy primary or metastatic cancer tissue. Physicians administer the therapy(ies) to remove or minimize the size of tumor or to delay the spread of disease. Record all cancer-directed therapy administered to the patient. For complete treatment information, record therapies given in other institutions and failed treatments (the patient did not respond).

Example 1: A patient is diagnosed with stage IV small cell carcinoma of the lung. The treatment plan recommends radiation to shrink the metastatic tumor and alleviate the pain caused by rib metastases. The reporting institution delivers beam radiation. The data item *Rad--Reg RX Modality* is coded 22, beam radiation, NOS.

Example 2: A patient with breast cancer enters the reporting institution for a lumpectomy. The physician's treatment plan specifies radiation therapy to the breast following surgery. It is unknown if the patient had radiation. Code the data item *RX Summ - Surg Prim Site* to a partial or less than total mastectomy (22). Record the data item *Rad--Regional RX Modality* as (00), none. If additional follow-up information reveals the patient did receive radiation, change to the appropriate radiation code.

DATE 1ST COURSE OF TREATMENT

Records the date on which treatment (surgery, radiation, systemic, or other therapy) of the patient began at any facility. It is important to be able to measure the delay between diagnosis and the onset of treatment. A secondary use for this date is as a starting point for survival statistics (rather than using the diagnosis date). This date cannot be calculated from the respective first course treatment modality dates if no treatment was given. Therefore, providing the date on which active surveillance is chosen, a physician decides not to treat a patient, or a patient's family or guardian declines treatment is important.

Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems.

Recording Date 1st Course of Treatment

1. Record the earliest of the following dates: *Date of First Surgical Procedure*, *Date Radiation Started*, *Date Systemic Therapy Started*, or *Date Other Treatment Started*.

2. If active surveillance or watchful waiting is selected as the first course of treatment (*RX Summ–Treatment Status* = 2) record the date this decision is made.

3. In cases of no treatment (*RX Summ–Treatment Status* = 0), in which a physician decides not to treat a patient or a patient's family or guardian declines all treatment, the date of first course of treatment is the date this decision was made.

4. Leave this item blank if the cancer was diagnosed at autopsy and not suspected prior to that.

5. <u>Unknown Month, Day, and/or Year</u> - If only part of the date is known record what is known and leave blank what is unknown. Approximation is acceptable; refer to *VCR Manual, Part Three: Data Item Instructions, General Information, Dates* for instructions regarding approximating dates and unknown dates. Fictitious dates or default dates are not acceptable.

DATE 1ST CRS RX FLAG

This flag explains why there is no appropriate value in the corresponding date field, *Date of First Course of Treatment.*

As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Codes and Definitions

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any treatment was given).
11	No proper value is applicable in this context. (for example, autopsy only).
12	A proper value is applicable but is not known. This event occurred but the date is unknown (for example, treatment was given but the date is unknown).
(blank)	A valid date value is provided in the item *Date of 1st Course of Treatment.*

Recording Date 1st Crs Rx Flag

1. Leave this item blank if *Date of 1st Course of Treatment* has a full or partial date recorded.

2. Code 11 if no proper value is applicable in this context (e.g., autopsy only case)

3. Code 12 if *Date of 1st Course of Treatment* cannot be determined, but the patient did receive first course treatment.

4. Code 10 if it is unknown whether any treatment was administered.

RX SUMM – TREATMENT STATUS

This item documents active surveillance (watchful waiting) and eliminates searching each treatment modality to determine whether treatment was given. It is used in conjunction with *Date of First Course of Treatment* to document whether treatment was or was not given, it is unknown if treatment was given, or treatment was given on an unknown date.

Codes and Descriptions

Code	Description
0	No treatment given
1	Treatment given
2	Active surveillance (watchful waiting)
9	Unknown if treatment was given

Instructions for Coding

1. This item may be left blank for cases diagnosed prior to 2010.
2. Treatment given after a period of active surveillance is considered subsequent treatment and it not coded in this item.

RX SUMM - SURG PRIM SITE
(Most Definitive Surgical Resection of the Primary Site)

Record the most invasive, definitive cancer-directed procedure performed to the primary site as part of the first course of treatment at the reporting institution and other institutions.

Cancer-directed surgery modifies, controls, removes, or destroys proliferating cancer tissue.

Recording Surgery to Primary Site

1. An excisional biopsy is cancer-directed surgery.

   Example: The surgeon states the procedure is an excisional biopsy, but the pathology report shows microscopic involvement of the margins. Record the code for an excisional biopsy as *Rx Summ - Surg Prim Site*.

   Note: Biopsies that remove all gross tumor or leave only microscopic margins should be coded to surgery of the primary site.

2. If no cancer-directed surgery was performed, code to 00.

3. If it is unknown if cancer-directed surgery was performed, code to 99.

4. Best Information- Use the best information in the operative/pathology reports to determine the operative procedure. Do not depend on the name of the procedure since it may be incomplete. If the operative report is unclear as to what was excised or if there is a discrepancy between the operative and pathology reports, use the pathology report, unless there is reason to doubt its accuracy.

5. Site-Specific Surgery Codes- Refer to *VCR Manual Appendix I* for surgical codes.

   a. Hierarchy-For codes 00 through 79, the descriptions of the surgical procedures are hierarchical. Last-listed responses take precedence over earlier-listed responses. (regardless of code or numeric value). Code 98 takes precedence over all other codes values.

      - Codes 10 through 18 are site-specific descriptions of tumor-destruction procedures that do not produce a pathologic specimen.

      - Codes 20 through 80 are site-specific descriptions of resection procedures.

   b. Numeric Code Sequence- To the extent possible, codes and their definitions are the same as those assigned in *Fords Manual 2004*. As a result of added and modified codes however, the numeric code sequence may deviate from the order in which descriptions of the surgical procedures are listed.

RX SUMM - SURG PRIM SITE – *continued*
(Most Definitive Surgical Resection of the Primary Site)

Example: A rectosigmoid primary surgically treated by polypectomy with electrocautery, which is listed after polypectomy alone, is coded 22.

20 Local tumor excision, NOS
26 Polypectomy
27 Excisional biopsy
Combination of 20 or 26-27 WITH
21 Photodynamic therapy (PDT)
22 Electrocautery
23 Cryosurgery
24 Laser ablation

c. Special Code 98 applies to specific tumors that cannot be clearly defined in terms of primary or nonprimary site. Surgical Procedure of Primary Site should be coded 98 for *Unknown and Ill-defined Primary Sites and Hematopoietic/ Reticuloendothelial/ Immunoproliferative/Myeloproliferative Disease (*See *VCR Manual, Part Three, General Information* for a list of these sites and conditions). The item *RX Summ--Surg Oth Reg/Dis Site* is used to indicate whether surgery was performed for these tumors.

6. Total Resection- If a surgical procedure removes the remaining portion of an organ which had been partially resected previously for any condition, code as total removal of the organ. If none of the primary organ remains, the code should indicate this is the case.

Example 1: Resection of a stomach which had been partially excised previously is coded as total removal of stomach.

Example 2: Removal of a cervical stump is coded as total removal of uterus.

Example 3: Lobectomy of a lung with a previous wedge resection is coded as total removal of lobe.

7. Biopsies that remove all of the tumor and/or leave only microscopic margins are to be coded in this item.

8. Extranodal Lymphomas- Surgery for extranodal lymphomas should be recorded using the scheme for the extranodal site.

Example: Use the scheme for the stomach to record a gastrectomy for a primary lymphoma of the stomach.

9. Surgery for Multiple Primaries- If multiple primaries are treated by a single surgical event, code the appropriate surgical items for each primary.

Example 1: If a total abdominal hysterectomy was done for a patient with two primaries, one of the cervix and one of the endometrium, code each as having had a total abdominal hysterectomy.

Example 2: If a total colectomy was done for a patient with multiple primaries in several segments of the colon, code total colectomy for each of the primary segments.

10. Regional tissue or organs- Surgery to remove regional tissue or organs is coded in this item only if the tissue/organs are removed in continuity with the primary site, except where noted in the *VCR Manual, Appendix I.*

RX SUMM - SURG PRIM SITE – *continued*
(Most Definitive Surgical Resection of the Primary Site)

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery*.

Special Instructions

1. Registry Hospitals - If you can record multiple surgical procedures in your registry software, make sure the data item transmitted to the VCR as *RX Summ - Surg Prim Site* reflects the most extensive code.

RX DATE - SURGERY
(Date Of First Surgical Procedure)

Record the earliest date on which the patient had cancer-directed surgery for this primary or metastatic site. This includes *RX Summ-Surg Prim Site, RX Summ-Scope Reg LN Surg, and RX Summ-Surg Oth Reg/Dis*. This item is used to measure the lag time between diagnosis and the most definitive surgery of the primary site. Formerly called "Date of Cancer-Directed Surgery."

Beginning in 2010, the way dates are transmitted has changed. In order that registry data can be interoperable with other data sources, dates are transmitted in a format widely accepted outside of the registry setting. However, this does not necessarily mean that the way dates are entered in any particular registry software product has changed. Software providers can provide the best information about data entry in their own systems.

Recording RX Date-Surgery

1. Date Format- Record the date of cancer-directed surgery in month, day, year format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual Part Three, General Instructions* for allowable values.

2. No Surgery of Primary Site- This data item may contain a date even when surgery to the primary site equals 00 (none).

   Example: Patient has excision of a brain lesion on January 15, 2003; final pathology diagnosis is metastatic lung carcinoma. Patient refuses further work-up.

   RX Summ - Surg Prim Site code = 00
   RX Date - Surgery = 01152003
   RX Summ - Surg Oth Reg/Dis = 4

3. Collecting the dates for each treatment modality allows sequencing of multiple treatments and aids evaluation of time intervals (from diagnosis to treatment and from treatment to recurrence). The date in this data item may be the same as that in *Date of Most Definitive Surgical Resection of the Primary Site.*

4. Unknown dates -

   a. Blank- Blank spaces are used for unknown trailing portions of the date or where a date is not applicable.

   b. Exact Date Unavailable- If the exact date of cancer-directed surgery is not available, record an approximate date. Refer to *VCR Manual Part Three, General Information*.

Special Instructions

1. Registry Hospitals- If you can record multiple surgery dates, make sure the data item transmitted to the VCR *as RX Date-Surgery* reflects the earliest date of cancer-directed surgery.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery*.

RX DATE - SURGERY FLAG

This flag explains why there is no appropriate value in the corresponding date field, *RX Summ-Surg Prim Site.*

As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Codes and Definitions

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any surgery was performed).
11	No proper value is applicable in this context. (for example, no surgery performed).
12	A proper value is applicable but is not known. This event occurred but the date is unknown (for example, surgery was performed but the date is unknown).
(blank)	A valid date value is provided in the item *RX Summ-Surg Prim Site.*

Recording Date 1st Crs Rx Flag

1. Leave this item blank if *RX Summ-Surg Prim Site* has a full or partial date recorded.

2. Code 12 if *RX Summ-Surg Prim Site* cannot be determined, but the patient did receive first course surgery.

3. Code 10 if it is unknown whether any surgery was performed

4. Code 11 if no surgical procedure was performed.

RX SUMM - SCOPE REG LN SURG
(Scope of Regional Lymph Node Surgery)

Record the removal, biopsy, or aspiration of regional lymph node(s) at the time of surgery of the primary site or during a separate surgical event. This data item can be used to compare and evaluate the extent of surgical treatment.

Use the operative report as the primary source document to determine whether the operative procedure was a sentinel lymph node biopsy (SLNBx) or a more extensive dissection of regional lymph nodes, or a combination of both sentinel lymph node biopsy and regional lymph node dissection (LND). The pathology report may be used to complement the information appearing in the operative report, but the operative report takes precedence when attempting to distinguish between SLNBx and LND or a combination of the two procedures.

Codes and Definitions

Code	Definition	Additional Notes Specific to Breast (C50.x)
0	*None*- No regional lymph node surgery. No lymph nodes found in pathologic specimen. Diagnosed at autopsy.	
1	*Biopsy or aspiration of regional lymph node, NOS* - Biopsy or aspiration of regional lymph node(s) regardless of the extent of involvement of disease. • Review the operative report to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed. If additional procedures were performed on the lymph nodes, use the appropriate code 2 – 7.	Excisional biopsy or aspiration of regional lymph nodes for breast cancer is uncommon. Review the operative report to confirm whether an excisional biopsy or aspiration of regional lymph nodes was actually performed; it is highly possible that the procedure is a SLNBx (code 2) instead. If additional procedures were performed on the lymph nodes, such as axillary LND, use the appropriate code 2 – 7.

Code	Definition	Additional Notes Specific to Breast (C50.x)
2	*Sentinel lymph node biopsy*- Biopsy of the first lymph node or nodes that drain a defined area of tissue within the body. Sentinel node(s) are identified by the injection of a dye or radio label at the site of the primary tumor. • The operative report states that a SLNBx was performed. • Code 2 SLNBx when the operative report describes a procedure using injection of a dye, radio label, or combination to identify a lymph node(s) for removal/examination. • When a SLNBx is performed, additional non-sentinel nodes can be taken during the same operative procedure. These additional non-sentinel nodes may be discovered by the pathologist tor selectively removed (or harvested) as part of the SLNBx procedure by the surgeon. If review of the operative report confirms that a LND followed the SLNBx, code these cases as 6.	• If a relatively large number of lymph nodes – generally more than 5 – are pathologically examined, review the operative report to confirm the procedure was limited to a SLNBx and did not include an axillary lymph node dissection (ALND) • Infrequently, a SLNBx is attempted and the patient fails to map(i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection) and no sentinel nodes are removed. Review the operative report to confirm that an axillary incision was made and a node exploration was conducted. Patients undergoing SLNBx who fail to map will often undergo ALND. Code these cases as 2 if no ALND was performed, or 6 when the ALND was performed during the same operative event.
3	The operative report states that a LND was performed (a SLNBx was not done during this procedure or in a prior procedure). *Number of regional nodes removed unknown or not stated; regional lymph nodes removed, NOS*- Sampling or dissection of regional lymph node(s) and the number of nodes removed is unknown or not stated. The procedure is not specified as sentinel node biopsy. • Check the operative report to ensure this procedure is not a SLNBx only (code 2), or a SLNBx with LND (code 6 or 7).	Generally, ALND removes at least 7 – 9 nodes. However, it is possible for these procedures to remove or harvest fewer nodes. Review the operative report to confirm that there was not a SLNBx in addition to a more extensive LND during the same procedure (code 6 or 7).
4	*1–3 regional lymph nodes removed*- Sampling or dissection of regional lymph node(s) with fewer than four lymph nodes found in the specimen. The procedure is not specified as sentinel node biopsy. • This should be used infrequently. Review the operative report to ensure the procedure was not a SLNBx only.	

Code	Definition	Additional Notes Specific to Breast (C50.x)
5	*4 or more regional lymph nodes removed-* Sampling or dissection of regional lymph nodes with at least four lymph nodes found in the specimen. The procedure is not specified as sentinel node biopsy. • If a relatively small number of lymph nodes was examined pathologically, review the operative report to confirm the procedure was not a SLNBx only (code 2). If a relatively large number of nodes was examined pathologically, review the operative report to confirm that there was not a SLNBx in addition to a more extensive LND during the same, or separate, procedure (code 6 or 7). • Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection). When mapping fails, the surgeon usually performs a more extensive dissection of regional lymph nodes. Codes these cases as 2 if no further dissection of regional nodes was undertaken, or 6 when regional lymph nodes were dissected during the same operative event.	
6	*Sentinel node biopsy and code 3, 4,or 5 at same time, or timing not stated-* Code 2 was performed in a single surgical event with code 3, 4, or 5. Or, code 2 and 3, 4, or 5 were performed, but timing was not stated in patient record. • SLNBx and LND (code 3, 4, or 5) during the same surgical event, or timing is not known. • Generally, SLNBx followed by a LND sill yield a relatively large number of nodes. However, it is possible for these procedure to harvest only a few nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only. • Infrequently, a SLNBx is attempted and the patient fails to map (i.e. no sentinel lymph nodes are identified by the dye and/or radio label injection). When mapping fails, the surgeon usually performs a more extensive dissection of regional lymph nodes. Code these cases as 6	• Generally, SLNBx followed by ALND will yield a minimum of 7 – 9 nodes. However, it is possible for these procedures to harvest fewer (or more) nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx, or whether a SLNBx plus an ALND was performed.

Code	Definition	Additional Notes Specific to Breast (C50.x)
7	*Sentinel node biopsy and code 3, 4, or 5 at different times*- Code 2 was followed in a subsequent surgical event by procedures coded as 3, 4, or 5. • SLNBx and LND (codes 3, 4, or5) in separate surgical events. • Generally, SLNBx followed by a regional LND will yield a relatively large number of nodes. However, it is possible for these procedure to harvest only a few nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx only	• Generally, SLNBx followed by ALND will yield a minimum of 7 – 9 nodes. However, it is possible for these procedures to harvest fewer (or more) nodes. • If relatively few nodes are pathologically examined, review the operative report to confirm whether the procedure was limited to a SLNBx, or whether a SLNBx plus an ALND was performed.
9	*Unknown or not applicable*- It is unknown whether regional lymph node surgery was performed; death certificate-only; for lymphomas with a lymph node primary site; an unknown or ill-defined primary; or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease.	

RX SUMM - SCOPE REG LN SURG – *continued*
(Scope of Regional Lymph Node Surgery)

Recording Scope of Regional Lymph Node Surgery

1. Regional Lymph Node List - Refer to *VCR Manual Appendix I* for site-specific regional lymph node listings. All other nodes not listed are considered distant sites and must be coded in the data item *RX Summ - Other Regional Site(s), Distant Site(s) or Distant Lymph Node(s).*

2. Aspiration, biopsy or removal of lymph nodes- Record surgical procedures which aspirate, biopsy, or remove regional lymph nodes in an effort to diagnose or stage disease in this data item.

3. Minimum number- There is no minimum number of nodes that must be removed; code to the farthest regional lymph nodes removed regardless of involvement with disease (e.g., the biopsy of contralateral lung lymph nodes).

4. Hierarchy- Codes 0-7 are hierarchical. Code the procedure that is numerically higher

5. Meninges, brain, spinal cord, cranial nerves and other parts of the central nervous system- For primaries of the meninges, brain, spinal cord, cranial nerves and other parts of the central nervous system (C70.0- C70.9, C71.0-C71.9, C72.0-C72.9), code to 9.

6. Lymphoma- For lymphomas with a lymph node primary site, code 9. For extranodal lymphomas, refer to the site-specific codes for the primary site.

7. Unknown or ill defined primary site or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease, code to 9. See *VCR Manual, Part Three, General Information* for a list of these sites and conditions.

8. No regional lymph nodes- This data item may not be blank. If no regional lymph nodes were removed or no surgery was performed, record 0.

   Example 1: Aspiration of regional lymph node of a pharynx primary to confirm histology of widely metastatic disease is coded to 1.

   Example 2: A patient with a breast primary has a sentinel lymph node biopsy of the right axilla, followed by right axillary lymph node dissection during the same surgical event, code to 6.

Special Instructions

1. Registry Hospitals - If you can record multiple surgical procedures in your registry software, make sure the data item transmitted to the VCR as *RX Summ - Scope Reg LN Surg* reflects most extensive code.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery.*

RX SUMM - SURG OTH REG/DIS
(Surgery Procedure/Other Site

Record the surgical removal of *distant lymph nodes* or other tissue(s) or organ(s) removed beyond the primary site. The removal of nonprimary tissue documents the extent of surgical treatment and is useful in evaluating the extent of metastatic involvement.

Codes and Definitions

Code	Definition
0	*None,* No surgical procedure of nonprimary site was performed. Diagnosed at autopsy.
1	*Nonprimary surgical procedure performed*- Nonprimary surgical resection to other site(s), unknown if the site(s) is regional or distant.
2	*Nonprimary surgical procedure to other regional sites*- Resection of regional site.
3	*Nonprimary surgical procedure to distant lymph node(s)*-Resection of distant lymph node(s).
4	*Nonprimary surgical procedure to distant site*- Resection of distant site.
5	*Combination of codes*- Any combination of surgical procedures 2, 3, or 4.
9	*Unknown*- It is unknown whether any surgical procedure of a nonprimary site was performed. Death certificate only.

Recording Surgery to Other Sites

1. If other tissue or organs are removed during primary site surgery that are not specifically defined by the site specific *Surgical Procedure of the Primary Site* code, assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code.

2. Assign the highest numbered code that describes the surgical resection of other tissue or organs beyond the primary site surgical code.

3. Use highest number - Assign the highest numbered code that describes the surgical resection of *distant lymph node(s).*

4. Incidental removal of tissue or organs is not a "Surgical Procedure/Other Site."

5. *Surgical Procedure/Other Site* is collected for each surgical event even if surgery of the primary site was not performed.

6. Unknown/ill-defined primaries - Code 1 if any surgery is performed to treat tumors of unknown or ill-defined primary sites (C76.0–76.8, C80.9) or for hematopoietic, reticuloendothelial, immunoproliferative, or myeloproliferative disease (C42.0, C42.1, C42.3, C42.4 or M-9727, 9733, 9741-9742, 9764-9809, 9832, 9840-9931, 9945-9946, 9950-9967, and 9975- 9992).

RX SUMM - SURG OTH REG/DIS – *continued*
(Surgery Procedure/Other Site

7. Palliative Care - If the procedure coded in this item was provided to prolong a patient's life by controlling symptoms, to alleviate pain, or to make the patient more comfortable, then also record this surgery in the item *Palliative Care.*

Special Instructions

1. Registry Hospitals - If you can record multiple surgical procedures in your registry software, make sure the data item transmitted to the VCR as *RX Summ - Surg Oth Reg/Dis* reflects the most extensive (numerically highest) code.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery.*

REASON FOR NO SURGERY
(Reason No Surgery of the Primary Site)

Record the reason for no Surgery of Primary Site. Codes 1-9 are valid only when *RX Summ - Surg Prim Site* is coded 00. This data item provides information related to the quality of care and describes why primary site surgery was not performed.

Codes and Definitions

Code	Definition
0	Surgery of the primary site was performed.
1	Surgery of the primary site was not performed because it was not part of the planned first course treatment.
2	Surgery of the primary site was not recommended/performed because it was contraindicated due to patient risk factors (comorbid conditions, advanced age, etc.)
5	Surgery of the primary site was not performed because the patient died prior to planned or recommended surgery.
6	Surgery of the primary site was not performed; it was recommended by the patient's physician, but was not performed as part of the first course of therapy. No reason was noted in patient record.
7	Surgery of the primary site was not performed; it was recommended by the patient's physician, but this treatment was refused by the patient, the patient's family member, or the patient's guardian. The refusal was noted in patient record.
8	Surgery of the primary site was recommended, but it is unknown if it was performed. Further follow-up is recommended.
9	It is unknown whether surgery of the primary site was recommended or performed. Diagnosed at autopsy or death certificate only.

Recording Reason for No Surgery

1. No surgery in plan- Code 1 if the treatment plan offered multiple options and the patient selected treatment that did not include surgery of the primary site, or if the option of "no treatment" was accepted by the patient.

2. If *Surgical Procedure of Primary Site* is coded 98, code *Reason for No Surgery* to 1.

3. Patient refused- If the patient refused recommended surgical treatment, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended, code to 7.

4. Unknown treatment- If the treatment plan offered multiple choices, but it is unknown which treatment, if any, was provided, code to 9.

   Example 1: A patient with a primary tumor of the liver is not recommended for surgery due to advanced cirrhosis, code to 2.

   Example 2: A patient is referred to another facility for recommended surgical resection of a gastric carcinoma, but further information from the facility to which the patient was referred is not available, code to 8.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery*.

RAD- REGIONAL RX MODALITY
(Radiation Regional Treatment Modality)

Record the dominant modality of radiation therapy used to deliver the most clinically significant regional dose to the primary volume of interest during the first course of treatment.

Codes and Definitions

Code	Label	Definition
00	No radiation treatment	Radiation therapy was not administered to the patient. Diagnosis at autopsy
20	External beam, NOS	The treatment is known to be by external beam, but there is insufficient information to determine the specific modality.
21	Orthovoltage	External beam therapy administered using equipment with a maximum energy of less than one (1) million volts (MV). Orthovoltage energies are typically expressed in units of kilovolts (kV).
22	Cobalt-60, Cesium-137	External beam therapy using a machine containing either a Cobalt- 60 or Cesium-137 source. Intracavitary use of these sources is coded either 50 or 51.
23	Photons (2–5 MV)	External beam therapy using a photon producing machine with a beam energy in the range of 2–5 MV.
24	Photons (6–10 MV)	External beam therapy using a photon producing machine with a beam energy in the range of 6–10 MV.
25	Photons (11–19 MV-	External beam therapy using a photon producing machine with a beam energy in the range of 11–19 MV.
26	Photons (>19 MV)	External beam therapy using a photon producing machine with a beam energy of more than 19 MV.
27	Photons (mixed energies)	External beam therapy using more than one energy over the course of treatment.
28	Electrons	Treatment delivered by electron beam.
29	Photons & electrons mixed	Treatment delivered using a combination of photon and electron beams.
30	Neutrons, w/ or w/o photons/electrons	Treatment delivered using neutron beam.
31	IMRT	Intensity modulated radiation therapy, an external beam technique that should be clearly stated in patient record.
32	Conformal or 3-D therapy	An external beam technique using multiple, fixed portals shaped to conform to a defined target volume. Should be clearly described as conformal or 3-D therapy in patient record.
40	Protons	Treatment delivered using proton therapy.
41	Stereotactic radiosurgery, NOS	Treatment delivered using stereotactic radiosurgery, type not specified in patient record.
42	Linac radiosurgery	Treatment categorized as using stereotactic technique delivered with a linear accelerator.
43	Gamma Knife	Treatment categorized as using stereotactic technique delivered using a Gamma Knife machine.

RAD- REGIONAL RX MODALITY – *continued*
(Radiation Regional Treatment Modality)

Code	Label	Definition
50	Brachytherapy, NOS	Brachytherapy, interstitial implants, molds, seeds, needles, radioembolization, or intracavitary applicators of radioactive materials not otherwise specified.
51	Brachytherapy, Intracavitary, LDR	Intracavitary (no direct insertion into tissues) radio-isotope treatment using low dose rate applicators and isotopes (Cesium-137, Fletcher applicator).
52	Brachytherapy, Intracavitary, HDR	Intracavitary (no direct insertion into tissues) radioisotope treatment using high dose rate after-loading applicators and isotopes.
53	Brachytherapy, Interstitial, LDR	Interstitial (direct insertion into tissues) radioisotope treatment using low dose rate sources.
54	Brachytherapy, Interstitial, HDR	Interstitial (direct insertion into tissues) radioisotope treatment using high dose rate sources.
55	Radium	Infrequently used for low dose rate (LDR) interstitial and intracavitary therapy.
60	Radioisotopes, NOS	Iodine-131, Phosphorus-32, etc.
61	Strontium-89	Treatment primarily by intravenous routes for bone metastases.
62	Strontium-90	
80*	Combination modality, specified*	Combination of external beam radiation and either radioactive implants or radioisotopes* **This is a converted code and should not be coded for cases diagnosed on or after 1/1/2003.**
85*	Combination modality, NOS*	Combination of radiation treatment modalities not specified in code 80.* **This is a converted code and should not be coded for cases diagnosed on or after 1/1/2003.**
98	Other, NOS	Radiation therapy administered, but the treatment modality is not specified or is unknown.
99	Unknown	It is unknown whether radiation therapy was administered. Death certificate only

.

* For cases diagnosed prior to January 1, 2003, the codes reported in this data item describe any radiation administered to the patient as part or all of the first course of therapy. Codes 80 and 85 describe specific converted descriptions of radiation therapy and should not be used to record regional radiation for cases diagnosed on or after January 1, 2003.

RAD- REGIONAL RX MODALITY – *continued*
(Radiation Regional Treatment Modality)

Recording Radiation Regional Treatment Modality

1. Finding radiation information- Radiation treatment modality will typically be found in the radiation oncologist's summary letter for the first course of treatment. Segregation of treatment components into regional and boost and determination of the respective treatment modality may require assistance from the radiation oncologist to ensure consistent coding.

2. Regional vs. Boost- Radiation treatment is frequently delivered in two or more phases which can be summarized as "regional" and "boost" treatments.

   a. Regional Radiation is directed at the cancer site and a larger area of surrounding tissue.

   b. Boost Radiation is a supplemental radiation dose targeted directly to the tumor site (or site of the original tumor). It is provided to a smaller area within the same volume as regional, in order to enhance the effect of the regional treatment.

   The VCR only requires Regional Radiation to be reported.

3. Only one modality delivered- If only one radiation treatment modality is delivered to a patient and it is not specified as either regional or boost treatment, assume it is regional treatment and code accordingly.

4. Multiple radiation modalities- In the event multiple radiation therapy modalities were employed in the treatment of the patient, record only the dominant modality.

5. Boost Treatment- In some circumstances, the boost treatment may precede the regional treatment.

6. Terms- For purposes of this data item, photons and x-rays are equivalent.

   Example 1: Patient receives 15 MV external pelvic treatment to 4,500 cGy for cervical carcinoma, and then receives two Fletcher intracavitary implants is coded to 25.

   Example 2: A patient with carcinoma of the parotid receives daily treatments of which 60% are delivered by 15 MV photons and 40% of the dose is delivered by 16 MV electrons is coded to 29.

7. Code IMRT or conformal 3D whenever either is explicitly mentioned.

8. Code radioembolization as brachytherapy.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Radiation (Beam) or RX Text - Radiation Other.*

RX DATE - RADIATION
(Date Radiation Started)

Record the date radiation started. It is important to be able to sequence the use of multiple treatment modalities and to evaluate the time intervals between the treatments. For some diseases, the sequence of radiation and surgical therapy is important when determining the analytic utility of pathologic stage information.

Recording RX Date- Radiation

1. Date Format- Record the date in year , month, day format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual Part Three, General Instructions* for allowable values.

   Example: Record December 15, 2006 as 12152006.

2. Multiple treatments- Collecting dates for each treatment modality allows sequencing of multiple treatments and evaluation of time intervals (from diagnosis to treatment and from treatment to recurrence).

3. Exact date unavailable- If the exact date radiation started is not available, record an approximate date; refer to *VCR Manual Part Three, General Instructions*

4. Unknown date - If the date radiation started is unknown, leave blank. If any part of the date is unknown, leave that part blank in the field.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Radiation (Beam)* or *RX Text - Radiation Other.*

RX DATE - RADIATION FLAG

This flag explains why there is no appropriate value in the corresponding date field, *RX Date - Radiation.*

As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Codes and Definitions

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any radiation was given).
11	No proper value is applicable in this context. (for example, no radiation given).
12	A proper value is applicable but is not known. This event occurred but the date is unknown (that is, radiation was given but the date is unknown).
15	Information is not available at this time, but it is expected that it will be available later (for example, radiation therapy is planned as part of the first course of therapy, but had not been started at the time of the most recent follow-up)
(blank)	A valid date value is provided in the item *RX Date - Radiation.*

Recording Rx Date - Radiation Flag

1. Leave this item blank if *RX Date - Radiation* has a full or partial date recorded.

2. Code 12 if *RX Date - Radiation* cannot be determined, but the patient did receive first course radiation.

3. Code 10 if it is unknown whether any radiation was given

4. Code 11 if no radiation is planned or given.

5. Code 15 if radiation is planned, but has not yet started and the start date is not yet available. Follow this patient for radiation treatment and update this item, *Date Radiation Started*, and all other radiation items.

RX SUMM- SURG/RAD SEQ
(Radiation/Surgery Sequence)

Record the sequencing of radiation and surgical procedures given as part of first course of treatment.

The sequence of radiation and surgical procedures given as part of first course of treatment cannot always be determined using the date on which each modality was started or performed. This data item can be used to more precisely evaluate the timing of delivery of treatment to the patient.

Codes and Definitions

Code	Definition
0	*No radiation therapy and/or surgical procedures*- No radiation therapy given; and/or no surgery of the primary site; no scope of regional lymph node surgery; no surgery to other regional site(s), distant site(s), or distant lymph node (s). Diagnosed at autopsy. *Example*: Due to other medical conditions surgery was not performed.
2	*Radiation therapy before surgery*- Radiation therapy given before surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: A patient has a large lung lesion and received radiation therapy prior to resection.
3	*Radiation therapy after surgery*- Radiation therapy given after surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: A patient received a wedge resection of a right breast mass with axillary lymph node dissection followed by radiation to the right breast.
4	*Radiation therapy both before and after surgery*- Radiation therapy given before and after surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: Preoperative radiation was given to a large, bulky vulvar lesion and was followed by lymph node dissection. This was then followed by radiation therapy to treat positive lymph nodes.
5	*Intraoperative radiation therapy*- Intraoperative therapy given during surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: A cone biopsy of the cervix is followed by intracavitary implant for IIIB cervical carcinoma.

RX SUMM- SURG/RAD SEQ – *continued*
(Radiation/Surgery Sequence)

Code	Definition
6	*Intraoperative radiation therapy with other therapy administered before or after surgery*- Intraoperative radiation therapy given during surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node (s) with other radiation administered before or after surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: Stage IV vaginal carcinoma was treated with 5,000 cGy to the pelvis followed by a lymph node dissection and 2,500 cGy of intracavitary brachytherapy.
9	*Sequence unknown*- Administration of radiation therapy and surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) were performed and the sequence of the treatment is not stated in the patient record. It is unknown if radiation therapy was administered and/or it is unknown if surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) were performed. Death Certificate only. *Example:* An unknown primary of the head and neck was treated with surgery and radiation prior to admission, but the sequence is unknown.

Recording RX Summ-Surg/Rad Seq

1. Surgical procedures include: *RX Summ- Surg Prim Site* (surgery of the primary site); *RX Summ- Scope LN Surg* (scope of regional lymph node surgery); *RX Summ- Surg Oth Reg/Dis* (surgery to other regional site, distant site, or distant lymph node)
2. No surgery- If all surgery procedures listed above are coded to 0, then this item should be coded to 0.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery, RX Text - Radiation (Beam) and RX Text - Radiation Other.*

RX SUMM - CHEMO
(Chemotherapy)

Record the type of chemotherapy administered as first course of treatment at your institution and at all other institutions. If chemotherapy was not administered, then this item records the reason it was not administered to the patient. Chemotherapy consists of a group of anticancer drugs that inhibit the reproduction of cancer cells by interfering with DNA synthesis and mitosis.

Codes and Definitions

Code	Definition
00	None- chemotherapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Chemotherapy NOS- 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	Multiagent chemotherapy administered as first course therapy.
82	Chemotherapy was not recommended/administered because it was contraindicated due to 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 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

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RX SUMM – CHEMO – *continued*
(Chemotherapy)

Recording Chemotherapy

1. Chemotherapy not usually given for this condition- If chemotherapy was not administered to the patient, and it is known it is not usually administered for this stage of cancer or type of condition, code to 00.

2. Patient did not select chemotherapy- If the treatment plan offered multiple options, and the patient selected treatment that did not include chemotherapy, code to 00.

3. Chemotherapy usually given for this condition- If it is known chemotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

4. Patient refused- If the patient refused recommended chemotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended, code to 87.

5. Unknown- If it is not known whether chemotherapy is usually administered for this type and stage of cancer and there is no mention in the patient record whether it was recommended or administered, code to 99.

6. Change to regimen- If the managing physician changes one of the agents in a combination regimen, and the replacement agent belongs to a different group (See *VCR Manual, Part Three, Chemotherapy Group Classifications*) than the original agent, the new regimen represents the start of subsequent therapy, and *only the original agent or regimen is recorded as first course therapy*.

   Example: The physician documents a multimodality treatment plan that includes a combination regimen of chemotherapy. Velban is one of the drugs in the chemotherapy regimen. After two cycles of chemotherapy, the physician says the Velban will be replaced with Oncovin and the chemotherapy will continue as planned. This is a continuation of the planned first course of therapy since they are in the same group.

9. List of chemotherapeutic agents- Use *SEER RX* to determine if a drug is a chemotherapy agent. *SEER RX* is an interactive antineoplastic drug data base and it can be downloaded from this website:

   http://seer.cancer.gov/seertools/seerrx

   Note: According to the standard set by *SEER RX* **Interleukin** are considered chemotherapy drugs, ***not*** immunotherapy.

RX SUMM – CHEMO – *continued*
(Chemotherapy)

Methods of Administration

Method	Definition
Intravenous (IV) Infusion	A small plastic needle is inserted into a vein. Chemotherapy flows from the IV bag/bottle, through the needle and catheter into the bloodstream.
Orally	Medication taken in the form of either a pill or liquid taken by mouth.
Intrathecal	Administered directly into the cerebrospinal fluid through a lumbar puncture needle into an implanted access device (e.g., Ommaya reservoir).
Pleural/pericardial	Injected directly into pleural or pericardial space to control malignant effusions.
Intraperitoneal	Injected into the peritoneal cavity.
Hepatic artery	Injected into a catheter inserted into artery that supplies blood to liver.

Clarification of Terms

Term	Definition
Adjuvant chemotherapy	Chemotherapy given after other methods have destroyed the clinically detectable cancer cells. Chemotherapy given to destroy micrometastases (undetectable cancer cells). The intent is to prevent or delay a recurrence. *Example:* The patient has breast cancer with positive nodes. The patient is clinically free of disease after a modified radical mastectomy. The patient is treated with adjuvant chemotherapy to prevent or delay disease recurrence.
Multimodality therapy Combined modality therapy Concurrent therapy	Chemotherapy given before, during, or after other treatment modalities (surgery, radiation) as a part of the treatment plan.
Neo-adjuvant therapy	Given prior to surgical resection or radiation therapy to reduce the bulk of a locally advanced primary cancer. *Example*: A patient with locally advanced breast cancer receives chemotherapy to reduce tumor size. Chemotherapy is followed by a modified radical mastectomy.
Treatment cycles	Chemotherapy agents are administered in treatment cycles, either singly or in a combination regimen of two or more chemotherapy drugs. The interval of a treatment cycle varies and chemotherapy may be administered for several weeks or several years.

RX SUMM – CHEMO – *continued*
(Chemotherapy)

Chemotherapy Group Classifications

Group	Subgroup	Example
Alkylating agents	Nitrogen mustard	Mechlorethamine (Mutagens), phenylalanine mustard (Memphians), chlorambucil (leukeran), cyclophosphamide (Cytoxan)
	Ethylenimine derivatives	Triethylene-thiophosphoramide (Thio-TEPA)
	Alkyl sulfonates	Busulfan (Myleran)
	Nitrosoureas	Carmustine (Lomustine)
	Triazines	DTIC (Dacarbazine)
Antimetabolites	Folic acid analogues	Methotrexate (Amethopterin, MTX)
	Pyrimidine analogues	5-fluorouracil (5-FU)
	Purine analogues	6-mercaptopurine (6-MP)
Natural products	Anti-tumor	Dactinomycin (Actinomycin D), doxorubicin (Adriamycin), daunorubicin (Daunomycin), bleomycin (Blenoxane), mitomycin C (Mutamycin)
	Plant alkaloids	Vinblastine (Velban, VBL), vincristine (Oncovin, VCR)
	Enzymes	l-asparaginase (Elspar)
Miscellaneous		Cis-diammine dichloroplatinum II (Cisplatin), hydroxyurea (Hydrea), procarbazine (Matulane)

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Chemo.*

RX SUMM - HORMONE
(Hormone Therapy)

Record the type of hormone therapy the patient received as a part of first course of treatment at your institution and all other institutions. If hormone therapy was not administered, then this item records the reason it was not administered to the patient. Hormone therapy consists of a group of drugs that may affect the long-term control of a cancer's growth. It is not usually used as a curative measure.

Hormone therapy achieves its effect on cancer tissue through change of the hormone balance. Included are the administration of hormones, agents acting via hormonal mechanisms, antihormones, and steroids.

Codes and Definitions

Code	Definition
00	None, hormone therapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Hormone therapy administered as first course therapy.
82	Hormone therapy was not recommended/administered because it was contraindicated due to patient risk factors (i.e., comorbid conditions, advanced age).
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 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

RX SUMM – HORMONE – *continued*
(Hormone Therapy)

Recording Hormone Therapy

1. All sites (primary and metastatic)- Hormones, agents acting via hormonal mechanisms, and antihormones (cancer-directed only) are to be coded for all sites (primary and metastatic).
2. Prednisone
   a. Record prednisone as hormonal therapy when administered in combination with chemotherapy, such as MOPP (mechlorethamine, vincristine, procarbazine, prednisone) or COPP (cyclophosphamide, vincristine, procarbazine, prednisone).
   b. Do not code prednisone as hormone therapy when it is administered for reasons other than cancer treatment.

   Example 1: A patient has advanced lung cancer with metastases to the brain. The physician orders Decadron to reduce the edema in the brain and relieve the neurological symptoms. Decadron is not coded as hormone therapy.

   Example 2: A patient with advanced disease is given prednisone to stimulate the appetite and improve nutritional status. Do not code the prednisone as hormone therapy.
3. Hormone replacement therapy- Tumor involvement or treatment may destroy hormone-producing tissue. Hormone replacement therapy will be given if the hormone is necessary to maintain normal metabolism and body function. Do not code hormone replacement therapy as part of first course therapy.

   Example: Patients with breast cancer may be treated with aminoglutethimide (Cytadren, Elipten), which suppresses the production of glucocorticoids and mineralocorticoids. These patients must take glucocorticoid (hydrocortisone) and may also need a mineralocorticoid (Florinef) as a replacement therapy. Code Rx Summ- Hormone to 00, None.
4. Hormone therapy not usually given for this condition- If hormone therapy was not administered to the patient, and it is known it is not usually administered for this type and stage of cancer, code to 00.
5. Patient selected treatment option without hormone therapy- If the treatment plan offered multiple options, and the patient selected treatment that did not include hormone therapy, code to 00.
6. Thyroid replacement therapy- Code 01 for thyroid replacement therapy which inhibits TSH (thyroid stimulating hormone). TSH is a product of the pituitary gland that can stimulate tumor growth.
7. Hormone therapy usually given for this condition- If it is known hormone therapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.
8. Patient refused- If the patient refused recommended hormone therapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended, code to 87.
9. Unknown- If it is not known whether hormone therapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered, code to 99.
10. List of hormonal agents- Use *SEER RX* to determine if a drug is a hormonal agent. *SEER RX* is an interactive antineoplastic drug data base and it can be downloaded from this website:
    http://seer.cancer.gov/seertools/seerrx/

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Hormone.*

RX SUMM - BRM
(Immunotherapy)

Record the immunotherapy (biological response modifier, BRM) the patient received as a part of first course of treatment at the reporting institution and all other institutions. If immunotherapy was not administered, then this item records the reason it was not administered to the patient. Immunotherapy consists of biological or chemical agents that alter the immune system or change the host's response to the tumor cells.

Codes and Definitions

Code	Definition
00	None, immunotherapy was not part of the planned first course of therapy. Diagnosed at autopsy.
01	Immunotherapy administered as first course therapy.
82	Immunotherapy was not recommended/administered because it was contra-indicated due to patient risk factors (i.e., comorbid conditions, advanced age).
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 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.

Recording Immunotherapy

1. Immunotherapy not usually given for this condition- If immunotherapy was not administered to the patient, and it is known that it is not usually administered for this type and stage of cancer, code to 00.

2. Patient selected treatment option without immunotherapy- If the treatment plan offered multiple options, and the patient selected treatment that did not include immunotherapy, code to 00.

3. Immunotherapy usually given for this condition- If it is known immunotherapy is usually administered for this type and stage of cancer, but was not administered to the patient, use code 82, 85, 86, or 87 to record the reason why it was not administered.

4. Patient refused- If the patient refused recommended immunotherapy, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended, code to 87.

RX SUMM – BRM – *continued*
(Immunotherapy)

5. Unknown- If it is not known whether immunotherapy is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered, code to 99.

6. List of Immunotherapy agents- Use *SEER RX* to determine if a drug is an immunotherapy agent. *SEER RX* is an interactive antineoplastic drug data base and it can be downloaded from this website:

   http://seer.cancer.gov/tools/seerrx/

7. Immunotherapy includes:

Allogeneic cells	**Herceptin (trastuzumab)***	**Perjeta (pertuzumab)***
Avastin (bevacizumab)*	Interferon	Pyran copolymer
BCG	LAK cells	**Rituximab***
Campath (alemtuzumab)*	Levamisole	Thymosin
Erbitux (cetuximab)*	MVE - 2	Vaccine therapy
		Virus therapy

**** changed for cases diagnosed 1/1/2013 and forward from chemotherapy***

Note: According to the standard set by *SEER RX* **Interleukin** is considered chemotherapy drugs, not immunotherapy.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - BRM.*

RX SUMM- TRANSPLNT/ENDROCR
(Hematologic Transplant and Endocrine Procedures)

Record the systemic therapeutic *procedures* administered as part of the first course of treatment at this and all other facilities. If none of these *procedures* were administered, then this item records the reason they were not performed. These include bone marrow transplants, stem cell harvests, surgical and/or radiation endocrine therapy.

Codes and Definitions

Code	Definition
00	No transplant procedure or endocrine therapy was administered as part of first course therapy. Diagnosed at autopsy.
10	A bone marrow transplant procedure was administered, but the type was not specified.
11	Bone marrow transplant- autologous.
12	Bone marrow transplant- allogeneic.
20	Stem cell harvest and infusion.
30	Endocrine surgery and/or endocrine radiation therapy.
40	Combination of endocrine surgery and/or radiation with a transplant procedure. (Combination of codes 30 and 10, 11, 12, or 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.

RX SUMM- TRANSPLNT/ENDROCR – *continued*
(Hematologic Transplant and Endocrine Procedures)

Recording Hematologic Transplant and Endocrine Procedures

1. Bone marrow transplants should be coded as either autologous (bone marrow originally taken from the patient) or allogeneic (bone marrow donated by a person other than the patient). For cases in which the bone marrow transplant was syngeneic (transplanted marrow from an identical twin), the item is coded as allogeneic.

2. Stem cell harvests involve the collection of immature blood cells from the patient and the reintroduction by transfusion of the harvested cells following chemotherapy or radiation.

3. Endocrine irradiation and/or endocrine surgery

    1. Procedures that suppress the naturally occurring hormonal activity of the patient and thus alter or effect the long-term control of the cancer's growth.

    2. These procedures must be bilateral to qualify as endocrine surgery or endocrine radiation. If only one gland is intact at the start of treatment, surgery and/or radiation to that remaining gland qualifies as endocrine surgery or endocrine radiation.

4. These procedures are not usually administered for this condition- Code 00 if a transplant or endocrine procedure was not administered to the patient, and it is known these procedures are not usually administered for this type and stage of cancer.

5. Patient selected treatment option that did not include one of these procedures- Code 00 if the treatment plan offered multiple options, and the patient selected treatment that did not include a transplant or endocrine procedure.

6. These procedures are usually administered for this condition- If it is known a transplant or endocrine procedure is usually administered for this type and stage of cancer, but was not administered to patient, use code 82, 85, 86, or 87 to record reason why it was not.

7. Patient refused- If the patient refused a recommended transplant or endocrine procedure, made a blanket refusal of all recommended treatment, or refused all treatment before any was recommended, code to 87.

8. Unknown- If it is not known whether a transplant or endocrine procedure is usually administered for this type and stage of cancer, and there is no mention in the patient record whether it was recommended or administered, code to 99.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery*.

RX DATE - SYSTEMIC
(Date Systemic Therapy Started)

Record the date of initiation for systemic therapy that is part of the first course of treatment.

Recording Rx Date – Systemic

1. Date Format- Record the date in year, month, day format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual Part Three, General Instructions* for allowable values

2. Systemic therapy includes the administration of chemotherapy agents, hormonal agents, biological response modifiers, bone marrow transplants, stem cell harvests, and surgical and/or radiation endocrine therapy.

3. First or Earliest Date- Record the first or earliest date on which systemic therapy was administered. Systemic therapy includes *Chemotherapy*, *Hormone Therapy*, *Immunotherapy*, and *Hematologic Transplant and Endocrine Procedures.*

   Example: Record December 15, 2006 as 20061215.

4. Collecting dates for each treatment modality allows sequencing of multiple treatments and evaluation of time intervals (from diagnosis to treatment and from treatment to recurrence).

5. Special Codes

   a. Blank- When it is unknown if any systemic therapy was administered, the date is unknown, or if the record was identified only from death certificate information.

   b. Exact Date Unavailable- If the exact date the systemic therapy started is not available, record an approximate date. Refer to *VCR Manual Part Three, General Information.*

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text- Chemotherapy, Hormone or BRM.*

RX DATE - SYSTEMIC FLAG

This flag explains why there is no appropriate value in the corresponding date field, *RX Date - Systemic*.

As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Codes and Definitions

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any systemic therapy was given).
11	No proper value is applicable in this context. (for example, no systemic therapy given).
12	A proper value is applicable but is not known. This event occurred but the date is unknown (that is, systemic therapy was given but the date is unknown).
15	Information is not available at this time, but it is expected that it will be available later (for example, systemic therapy is planned as part of the first course of therapy, but had not been started at the time of the most recent follow-up)
(blank)	A valid date value is provided in the item *RX Date - Systemic*

Recording Rx Date - Systemic Flag

1. Leave this item blank if *RX Date - Systemic* has a full or partial date recorded.

2. Code 12 if *RX Date - Systemic* cannot be determined, but the patient did receive first course radiation.

3. Code 10 if it is unknown whether any systemic therapy was given

4. Code 11 if no systemic therapy is planned or given.

5. Code 15 if systemic therapy is planned, but has not yet started and the start date is not yet available. Follow this patient for systemic therapy and update this item, *Date Systemic Therapy Started*, and all relevant systemic therapy items.

RX SUMM – SYSTEMIC/SUR SEQ
(Systemic/Surgery Sequence)

Record the sequencing of systemic therapy and surgical procedures given as part of first course of treatment. The sequence of systemic therapy and surgical procedures given as part of first course of treatment cannot always be determined using the date on which each modality was started or performed. This data item can be used to more precisely evaluate the timing of delivery of treatment to the patient.

Codes and Definitions

Code	Definition
0	*No systemic therapy and/or surgical procedures*- No systemic therapy given; and/or no surgery of the primary site; no scope of regional lymph node surgery; no surgery to other regional site(s), distant site(s), or distant lymph node(s). Diagnosed at autopsy. *Example*: Due to other medical conditions surgery was not performed.
2	*Systemic therapy before surgery*- Systemic therapy given before surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: A patient with prostate cancer received hormone therapy prior to radical prostatectomy.
3	*Systemic therapy after surgery*- Systemic therapy given after surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: A patient underwent a colon resection followed by a 5-FU based chemotherapy regimen.
4	*Systemic therapy both before and after surgery*- Systemic therapy given before and after surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: A patient with breast cancer receives pre-operative chemotherapy followed by postoperative Tamoxifen.
5	*Intraoperative systemic therapy*- Intraoperative systemic therapy given during surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: Patient with an intracranial primary undergoes surgery at which time a glial wafer is implanted into the resected cavity

RX SUMM - SYSTEMIC SUR SEQ – *continued*
(Systemic/Surgery Sequence)

Code	Definition
6	*Intraoperative systemic therapy with other therapy administered before or after surgery*- Intraoperative systemic therapy given during surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node (s) with other systemic therapy administered before or after surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s). *Example*: Patient with metastatic colon cancer receives intraoperative chemotherapy to the liver and postoperative 5-FU and leucovorin with irinotecan.
9	*Sequence unknown*- Administration of systemic therapy and surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) were performed and the sequence of the treatment is not stated in the patient record. It is unknown if systemic therapy was administered and/or it is unknown if surgery of the primary site; scope of regional lymph node surgery; surgery to other regional site(s), distant site(s), or distant lymph node(s) were performed. Death Certificate only. *Example:* An unknown primary of the head and neck was treated with surgery and chemotherapy prior to admission, but the sequence is unknown.

Recording RX Summ-Systemic Sur Seq

1. Surgical procedures include RX Summ- Surg Prim Site (surgery of the primary site); RX Summ- Scope LN Surg (scope of regional lymph node surgery); RX Summ- Surg Oth Reg/Dis (surgery to other regional site, distant site, or distant lymph node)

2. No surgery- If all surgery procedures listed above are coded to 0, then this item should be coded to 0.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Surgery, RX Text -Chemo, RX Text - BRM, and RX Text -Hormone.*

RX SUMM - OTHER
(Other Cancer-Directed Therapy)

Record other cancer-directed therapy received by the patient as part of the first course of treatment at the reporting institution and all other institutions. Other treatment includes therapies designed to modify or control the cancer cells that are not defined in *Surgery, Radiation,* or *Systemic Therapy* fields.

Codes and Definitions

Code	Label	Definition
0	None	All cancer treatment was coded in other treatment fields (surgery, radiation, systemic therapy). Patient received no cancer treatment. Diagnosed at autopsy.
1	Other	Cancer treatment that cannot be appropriately assigned to specified treatment data items (surgery, radiation, systemic). Use this code for treatment unique to hematopoietic diseases (see next page).
2	Other-Experimental	This code is not defined. It may be used to record participation in institution based clinical trials.
3	Other-Double Blind	A patient is involved in a double-blind clinical trial. Code the treatment actually administered when the double-blind trial code is broken.
6	Other-Unproven	Cancer treatments administered by nonmedical personnel.
7	Refusal	Other treatment was not administered. It was recommended by the patient's physician, but this treatment (which would have been coded 1, 2, or 3) was refused by the patient, a patient's family member, or the patient's guardian. The refusal was noted in the patient record.
8	Recommended; unknown if administered	Other treatment was recommended, but it is unknown whether it was administered.
9	Unknown	It is unknown whether other treatment was recommended or administered, and there is no information in the medical record to confirm the recommendation or administration of other treatment. Death certificate only.

RX SUMM – OTHER – *continued*
(Other Cancer-Directed Therapy)

Recording Other Treatment

1. Hematopoietic diseases- Treatment for reportable hematopoietic diseases can be supportive care, observation, or any treatment that does not meet the usual definition in which treatment "modifies, controls, removes, or destroys proliferating cancer tissue." Such treatments include phlebotomy, transfusions, and aspirin, and should be coded 1.

   a. Phlebotomy may be called blood removal, bloodletting, or venisection.

   b. Transfusions may include whole blood, RBCs, platelets, plateletpheresis, fresh frozen plasma (FFP), plasmapheresis, and cryoprecipitate.

   c. Aspirin (also known as ASA, acetylsalicylic acid, or by a brand name) is used as a treatment for essential thrombocythemia. Record ONLY aspirin therapy to thin the blood for symptomatic control of thrombocythemia.

   To determine whether aspirin is administered for pain, cardiovascular protection, or thinning of platelets in the blood, use the following general guideline:

   - Pain control is approximately 325–1000 mg every 3–4 hours.
   - Cardiovascular protection starts at about 160 mg/day.
   - Aspirin treatment for essential thrombocythemia is low dose, approximately 70-100 mg/day.

2. Embolization - Do not code presurgical embolization that given for a purpose to shrink the tumor.

   a. Code 1 for embolization using alcohol as an embolizing agent.
   b. Code 1 for embolization to a site other than the liver where the embolizing agent is unknown.

3. Ancillary Drugs- Do not code ancillary drugs in this field. There is no coding scheme for ancillary drugs.

   Examples: Aredia, Allopurinol, G-CSF (growth stimulating factors), Epogen, Nupogen/Neupogen, Leucovorin

   Note: This is a partial list. See *SEER RX* to determine if a drug is an ancillary drug. *SEER RX* is an interactive antineoplastic drug data base and it can be downloaded from this website:

   http://seer.cancer.gov/seertools/seerrx/

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Other*.

RX DATE - OTHER
(Date Other Treatment)

Record the date other treatment started.

Recording RX Date- Other

1. Date Format- Record date in year, month, day format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual Part Three, General Instructions* for allowable values.

   Example: Record December 15, 2006 as 20061215.

2. Collecting dates for each treatment modality allows sequencing of multiple treatments and evaluation of time intervals (from diagnosis to treatment and from treatment to recurrence).

3. Special Codes

   a. Blank- When it is unknown if any other treatment was administered, the date is unknown, or if the record was identified only from death certificate information.

   b. Exact date unavailable- If the exact date other treatment started is not available, record an approximate date. Refer to *VCR Manual Part Three, General Information*.

Text

Text to support this data item must be recorded in specific text fields. See *VCR Manual Part Three, Data Item Instructions, RX Text - Other*.

RX DATE - OTHER FLAG

This flag explains why there is no appropriate value in the corresponding date field, *RX Date - Other*.

As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Codes and Definitions

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any other therapy was given).
11	No proper value is applicable in this context. (for example, no other therapy given).
12	A proper value is applicable but is not known. This event occurred but the date is unknown (that is, other therapy was given but the date is unknown).
15	Other treatment planned but not administered as of last follow up date*
(blank)	A valid date value is provided in the item *RX Date - Other*.

Recording Rx Date - Other Flag

1. Leave this item blank if *RX Date - Other* has a full or partial date recorded.

2. Code 12 if *RX Date - Other* cannot be determined, but the patient did receive first course other treatment.

3. Code 10 if it is unknown whether any other treatment was given

4. Code 11 if no other treatment is planned or given.
5.
6. *Code 15 was added for cases diagnosed 1/1/15 and forward; however, it may be used for cases diagnosed prior to 2015*

DATE OF 1ST CRS RX - COC
(Date of First Course of Treatment)

Record the date of first course treatment. This is the date of initiation of the first cancer-directed therapy for the cancer being reported

Recording Date of 1st CRS RX- COC

1. Date Format- Record date in month, day, year format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual Part Three, General Instructions* for allowable values.

   Example: Record December 15, 2006 as 20061215.

2. Earliest Date- Record the earliest of the following dates: *RX Date- Surgery*, *RX Date- Radiation*, *RX Date- Systemic*, or RX *Date- Other*.

3. Physician Decides Not to Treat- If the physician decides not to treat the patient, record the date of this decision as the Date of 1st Crs Rx. The physician may decide not to treat the patient because of comorbid conditions, advanced disease, or because the accepted management of the cancer is to observe until the disease progresses or until the patient becomes symptomatic.

   Example: On February 12, 2006 the physician says a low-stage prostate cancer patient will be observed until the Prostatic Specific Antigen (PSA) level starts to rise. Enter 20060212 as the date of first course treatment.

4. Patient Refuses Treatment- If the patient refuses treatment, record the date of this decision as the *Date of 1st Crs Rx*. If the patient is diagnosed at the reporting facility and no further information is available record the date the patient was last seen at the reporting institution.

5. Incisional Biopsy- Do not record the date of incisional, core or fine needle biopsy as the *Date of 1st CRS RX-COC.*

6. Special Codes

   a. Blank - If unknown if any cancer-directed treatment was administered, date is unknown, or if record was identified only by death certificate (VCR use only).

      Example: A patient was diagnosed at your facility by an incisional biopsy on March 17, 2005 and did not return to the your facility and the physician lost contact. Leave blank.

   b. Exact date unavailable- If the exact date treatment started is not available, record an approximate date. Refer to *VCR Manual Part Three, General Information.*

DATE OF 1st CRS RX - COC FLAG

This flag explains why there is no appropriate value in the corresponding date field, *Date of 1st Crs Rx*.

As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Codes and Definitions

Code	Description
10	No information whatsoever can be inferred from this exceptional value (that is, unknown if any treatment was given).
11	No proper value is applicable in this context. (for example, autopsy only).
12	A proper value is applicable but is not known. This event occurred but the date is unknown (that is, treatment was given but the date is unknown).
(blank)	A valid date value is provided in the item *Date of 1st Crs Rx*.

Recording Date of 1st Crs Rx - CoC Flag

1. Leave this item blank if *Date of 1st Crs Rx* has a full or partial date recorded.
2. Code 12 if *Date of 1st Crs Rx* cannot be determined, but the patient did receive first course treatment.
3. Code 10 if it is unknown whether any treatment was administered
4. Code 11 if the initial diagnosis was at autopsy.

DATE OF LAST CONTACT

Record the date of last contact or the date of death.

Recording Date of Last Contact

1. Date Format- Record date in month, day and year format (CCYYMMDD). Record the year in the first four spaces, the month in the fifth and sixth spaces, and the day in the last two spaces. A zero must precede single-digit months and days. See *VCR Manual Part Three, General Instructions* for allowable values.

2. Report actual date only- Unknown (99) or approximation of month, day, century, or year is not acceptable when reporting to the VCR. Fictitious dates or default values are also not acceptable.

   Exception: If a patient is known to have expired after discharge from your facility, the month and/or day may be reported as blank if the exact month and/or day is not known.

3. Inpatient Admission- If the last contact with a patient is an inpatient admission, record the date of discharge.

4. Outpatient Visit- If the last contact with the patient was an outpatient visit, record the outpatient date.

5. Treatment After Discharge- If the patient receives treatment after discharge record the date of the treatment.

   Example: The patient is admitted on November 1, 2006 and is discharged on November 3, 2003 and then starts his radiation treatment on December 1, 2006. The date of last contact is 20061201.

6. Multiple Primaries - If a patient has multiple primaries, all records should have the same date of last contact.

7. Patient Deceased- If the patient is deceased, record the date of death.

   Note: *Date of Last Contact* does not have to be submitted as a change or update if the patient is readmitted or expires after the initial record was submitted.

DATE OF LAST CONTACT FLAG

This flag explains why there is no appropriate value in the corresponding date field, *Date of 1st Crs Rx*.

As part of an initiative to standardize date fields, date flag fields were introduced to accommodate non-date information that had previously been transmitted in date fields.

Codes and Definitions

Code	Description
12	A proper value is applicable but is not known. This event occurred but the date is unknown (that is, the date of last contact is unknown).
(blank)	A valid date value is provided in the item *Date of Last Contact.*

Recording Date of Last Contact Flag

1. Leave this item blank if *Date of Last Contact* has a full or partial date recorded.

2. Code 12 if *Date of Last Contact* cannot be determined.

VITAL STATUS

Record the appropriate code for the patient's vital status as of the date recorded in data item *Date of Last Contact*. Use the most accurate information available.

Codes and Definitions

Code	Definition
0	Dead
1	Alive

Note: Vital Status does not have to be submitted as a change or update if the patient expires after the initial record was submitted. The VCR periodically matches records on the VCR database against Virginia death certificate files. As a result of this match, the VCR will send to each hospital a list of its reported patients who have expired.

REPORTING HOSPITAL

Record the reporting facility identification (ID) number as described under special instructions below.

Special Instructions

1. Registry Hospitals - Record the ID number assigned to your facility by the American College of Surgeons, Commission on Cancer.

ABSTRACTED BY

Record the initials of the individual completing the abstract.

Special Instructions

1. Registry Hospitals - Record the initials or assigned code of the individual who abstracted this record. Do not code the data entry person unless that person is also the abstractor.

GUIDELINES FOR REPORTING TEXT

Text Requirements

The VCR requires all records to include text information to support specified fields. The purpose of text is quality control. Text is used to validate data items, verify potential errors identified through standard edits, document clarifications, determine multiple primaries, and reconcile data item discrepancies when the same patient is submitted by several facilities. Defensive abstracting, as this documentation is often called, is an absolute necessity for quality data.

Cancer abstracting software must include specific fields designed to document text as defined by NAACCR fields. These fields must be transmitted to the VCR in addition to the other required data items when electronic shipments are prepared.

Completion of Text Fields

Text should be complete but concise. The text fields must summarize all cancer information recorded in the medical record. Text must be completed for primary site, laterality, histology, grade, and collaborative stage or summary stage on every record. Text should be completed for pathology and other diagnostic and treatment text fields as appropriate for studies performed and treatment provided. If information is missing from the record, state that it is missing. The text fields should be used to document information that will support the accuracy of data so anyone reviewing the abstract will be able to justify the coded information.

Amount of Text

Quality of text is more important than amount or quantity of text. The most useful text is brief, concise, and addresses pertinent issues. Often it is necessary to use abbreviations to provide adequate descriptions within the limited size of the text fields. Use standard medical abbreviations whenever possible. Refer to *VCR Manual Appendix J* for a list of VCR acceptable abbreviations. Include dates (month, day, and year) when appropriate.

Note the maximum field lengths for each text field. These lengths indicate how many characters will be transmitted to the VCR. Since your abstracting software may provide you with more characters in each of these fields, make sure the most **important information is documented at the beginning** of the text field. Additional comments can be continued in empty text fields, including Remarks. For text documentation that is continued from one text field to another, use asterisks or other symbols to indicate the connection with preceding text. Do not include irrelevant information. *Do not repeat information from other text fields*.

TEXT-DX PROC-PE
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. Record text information from the history/physical examination that supports the diagnosis and history of the tumor as applicable. If information is missing from the record, state that it is missing. **Do not include irrelevant information.**

Source Records*:*

The history/physical examination findings may be found in, but are not limited to, the following source records:

- History and Physical Report
- Consultation Reports
- Progress Notes

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date of physical exam.
- **Age, sex, race/ethnicity.**
- History that relates to cancer diagnosis.
- Primary site.
- Histology (if diagnosis prior to this admission).
- Tumor location.
- Tumor size.
- Palpable lymph nodes.
- Record positive and negative clinical findings. Record positive results first.
- Impression (when stated and pertains to cancer diagnosis).
- Treatment plan.

Data Item(s) to be verified/validated using the text entered in this field:

- Date of 1st Contact
- Date of Diagnosis
- Age at Diagnosis
- Race 1 - 5
- Spanish Hispanic Origin
- Sex

TEXT-DX PROC-X-RAY/SCAN
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. Record text information from diagnostic imaging reports as applicable. Document both positive and negative findings and the date(s) of the imaging result(s). If information is missing from the record, state that it is missing. Do not include irrelevant information.

Source Records:

The diagnostic imaging findings may be found in, but are not limited to, the following source records:

- All Diagnostic X-ray reports including mammograms and CT scans
- History and Physical Report
- Consultation Reports
- Discharge Summary

Suggestions for Text

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date(s) of X-ray/Scan(s).
- Age, sex, race/ethnicity (when given).
- Primary site.
- Histology (if given).
- Tumor location.
- Tumor size.
- Lymph nodes.
- Record positive and negative clinical findings. Record positive results first.
- Distant disease or metastasis.

Data Item(s) to be verified/validated using the text entered in this field

- Date of Diagnosis
- Primary Site
- Laterality
- Collaborative Stage variables
- SEER Summary Stage 1977

SEER Summary Stage 2000

TEXT-DX PROC-SCOPES
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. Record text information from endoscopic examinations as applicable. Document both positive and negative findings and the date(s) of the scope(s). If information is missing from the record, state that it is missing. Do not include irrelevant information.

Source Records:

The endoscopic examination findings may be found in, but are not limited to, the following source records:

- Endoscopy Reports (i.e. Bronchoscopy, Colonoscopy, Laryngoscopy, Esophagoscopy)
- History and Physical Report
- Discharge Summary
- Consultation Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date(s) of endoscopic exam(s).
- Primary site.
- Histology (if given).
- Tumor location.
- Tumor size.
- Lymph nodes.
- Record positive and negative clinical findings. Record positive results first.

Data Item(s) to be verified/validated using the text entered in this field

- Date of Diagnosis
- Primary Site
- Laterality
- Histology
- Collaborative Stage variables
- SEER Summary Stage 1977
- SEER Summary Stage 2000
- Surg Prim Site

TEXT-DX PROC-LAB TESTS
Maximum Field Length 1000 characters

Information documenting the disease process should be entered manually from the medical record. Record information from laboratory tests or marker studies other than cytology/histopathology that are clinically diagnostic of cancer as applicable. Document pertinent positive and negative findings and the result(s) and date(s) of these test(s). If information is missing from the record, state that it is missing. Do not include irrelevant information.

Source Records*:*

The laboratory examination findings may be found in, but are not limited to, the following source records:

- Laboratory Reports
- History and Physical Reports
- Consultation Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Type of laboratory test/tissue specimen(s).
- Record both positive and negative findings. Record positive test results first.
- Information can include tumor markers, serum and urine electrophoresis, special studies, etc.
- Date(s) of laboratory test(s).
- Tumor markers included, but are not limited to:
    - Breast Cancer: Estrogen Receptor Assay (ERA), Progesterone Receptor Assay (PRA), Her2/neu.
    - Prostate Cancer: Prostatic Specific Antigen (PSA).
    - Testicular Cancer: Human Chorionic Gonadotropin (hCG), Alpha Fetoprotein (AFP), Lactate Dehydrogenase (LDH).

Data Item(s) to be verified/validated using the text entered in this field:

- Primary Site
- Grade
- Diagnostic Confirmation
- Collaborative Stage variables
- Date of Diagnosis

TEXT-DX PROC-OP
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. *Record text information from all surgical procedures that provide information for staging*. Document both positive and negative findings and the date(s) of the procedure(s). If information is missing from the record, state that it is missing. Do not include irrelevant information.

Source Records:

The operative findings may be found in, but are not limited to, the following source records:

- Operative Reports
- Consultation Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Dates and descriptions of biopsies and all other surgical procedures from which staging information was derived.
- Information gained from "exploration" of tumor area, especially observations that indicate metastases but are not biopsied
- Tissue removed
- Size of tumor removed.
- Documentation of residual tumor.
- Number of lymph nodes removed.
- Evidence of invasion of surrounding areas.
- Evidence of invasion of surrounding areas
- Evidence of metastases
- Reason primary site surgery could not be completed

Data Item(s) to be verified/validated using the text entered in this field:

- Date of Diagnosis
- RX Summ--Dx/Stg Proc
- Diagnostic Confirmation
- Primary Site
- RX Summ--Surg Prim Site
- Collaborative Stage variables
- SEER Summary Stage 1977
- SEER Summary Stage 2000
- Reason for No Surgery

TEXT-DX PROC-PATH
Maximum Field Length - 1000 characters

Record text from cytology and histopathology reports to support the final pathologic diagnosis. Include all descriptive terms from the histology or cytology report to describe the specific diagnosis including nouns, adjectives, and phrases. Also include differential diagnoses, documentation to support unusual site/histology combinations, notes, comments, addenda, and results of consults and second opinions. Record the final diagnosis from slide reviews if applicable.

Either *Text-Histology Title* or *Text-Dx Proc-Path* must be completed on each record. Information to support the exact diagnosis has to appear in one of these two fields. *Text-Histology Title* is a 100 character field generally used to record clinical or other non pathologic diagnoses; *Text-Dx Proc-Path* is a 1000 character field generally used to record histologically and cytologically confirmed diagnoses from pathology reports.

This field should also include text to support multiple primaries diagnosed simultaneously and discrepancies between pathology reports. For example, if a definitive surgery pathology report has a more specific or differing diagnosis than the biopsy report, document the physician's final diagnosis. Include text to clarify site and/or histology information for cases discussed at Cancer Conference, especially if the site was unknown.

Terminology

If the reporting facility considers the terminology of severe dysplasia or high grade dysplasia of the colon as synonymous with carcinoma in-situ, follow the procedure described in *VCR Manual Part Three, Behavior*. Include text in this field to support the final pathologic diagnosis along with the statement "in-situ per pathologist". If any colon cases diagnosed with severe dysplasia and/or high grade dysplasia are submitted to the VCR without the text documentation "in-situ per pathologist", the cases will either not be entered in the VCR database or they will be deleted since the terminology alone is not reportable.

Mixed or multiple histologies may have documentation of various phrases describing the tumor. When documenting the description of the tissue, include the terminology type in the description. These terms are important because they impact the ICD-O code assignment.

- **Principal Tumor Type** - Phrases such as "predominantly" and "with features of" are often used to identify the principal tumor type. Use this information when recording text to support the histologic diagnosis.
- **Non-Principal Tumor Type** - The phrases "with foci of", "areas of" or "elements of" do not describe the majority of the tumor. These terms should be included in text even though they are not used to code the histologic type.

Source Records*:*

The pathology findings may be found in, but are not limited to, the following source records:

- Pathology and Cytology Reports
- Slide Consultation Reports
- Autopsy Reports

TEXT-DX PROC-PATH – *continued*

Suggestions for Text:
VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date(s) of procedure(s).
- Anatomic source of specimen.
- Type of tissue specimen(s).
- Tumor type and grade (include all modifying adjectives (i.e., predominantly, with features of, with foci of, elements of, etc.).
- Gross tumor size.
- Extent of tumor spread.
- Involvement of resection margins.
- Number of lymph nodes involved and examined.
- Record both positive and negative findings. Record positive test results first.
- Note if pathology report is a slide review or a second opinion from an outside source (i.e., AFIP, Mayo, etc.).
- Record any additional comments from the pathologist, including differential diagnoses considered and any ruled out or favored.

Data Item(s) to be verified/validated using the text entered in this field:

- Date of Diagnosis
- Primary Site
- Laterality
- Histologic Type ICD-O-3
- Grade
- Collaborative Stage variables
- Diagnostic confirmation
- Surg Prim Site
- Scope Reg LN Sur
- Surg Oth Rg/Dis
- SEER Summary Stage 2000
- SEER Summary Stage 1977
- Regional Nodes Positive
- Regional Nodes Examined
- RX Date--Surgery
- Reason for No Surgery
- Surg/Rad Seq
- Systemic/Sur Seq

TEXT-PRIMARY SITE TITLE
Maximum Field Length - 100 characters

Record text describing the primary site including subsite information. Always document laterality when the site is paired. Refer to the listing of Paired Sites in *VCR Manual Part Three, Laterality. Text-Primary Site Title* must be completed on each record. Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information.

Source Records:

The primary site and laterality may be found in, but are not limited to, the following source records:

- Pathology Report
- Operative Report
- Xrays/Scans
- Discharge Summary
- Consultation Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Include information on the location of the primary site of the tumor.
- Include available information on tumor laterality.

Data Item(s) to be verified/validated using the text entered in this field:

- Primary site
- Laterality

TEXT-HISTOLOGY TITLE
Maximum Field Length - 100 characters

Information documenting the disease process should be entered manually from the medical record. Record text to support the patient's final diagnosis: clinical, other non pathologic diagnosis, or histologic diagnosis including cell type, behavior, and grade (differentiation). If information is missing from the record, state that it is missing. Do not include irrelevant information.

Either *Text-Histology Title* or *Text-Dx Proc-Path* must be completed on each record. Information to support the exact diagnosis has to appear in one of these two fields. *Text-Histology Title* is a 100 character field generally used to record clinical or other non pathologic diagnoses; *Text-Dx Proc-Path* is a 1000 character field generally used to record histologically and cytologically confirmed diagnoses from pathology reports.

Source Records*:*

The histologic diagnosis may be found in, but is not limited to, the following source records:

- Pathology and Cytology Reports
- History and Physical Report
- Discharge Summary
- Consultation Reports
- Slide Consultation Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Information on histologic type and behavior.
- Information on differentiation from scoring systems such as Gleason's Score, Bloom-Richardson, Grade, etc.

Data Item(s) to be verified/validated using the text entered in this field:

- Histologic Type ICD-O-3
- Behavior Code ICD-O-3
- Grade

TEXT-STAGING
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. Record text to support any Collaborative Stage data items not already supported in other text fields (see *VCR Manual Part Three, Data Item Instructions, Collaborative Stage*). This field can also be used to continue Collaborative Stage text from another field.

Example: The only information available is the TNM stage, record *Physician stated this case is a T1N1MO*.

Record text information to support the Summary Stage code assigned according to SEER Summary Stage 2000 (SS2000) or SEER Summary Stage 1977 (SS77) when applicable (see VCR Manual Part Three, Data Item Instructions, SEER Summary Stage). Document the extension of the disease that justifies the Summary Stage based on imaging studies, lab tests, scopes, and operative procedures performed. Also include both positive and negative findings and appropriate dates not already recorded in other *Text-DX* fields. If information is not sufficient to support a specific Summary Stage code, record *unknown* in this field.

Source Records:

Information to determine Collaborative Stage data items and Summary Stage may be found in, but is not limited to, the following reports:

- Pathology Reports
- Operative procedures
- X-Rays/Scans
- Scopes
- Lab Tests
- Discharge Summary
- Consultations

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date(s) of procedure(s), including clinical procedures that provided information for assigning stage.
- Organs involved by direct extension.
- Size of tumor.
- Status of margins.
- Number and sites of positive lymph nodes.
- Site(s) of distant metastasis.
- Physician's specialty and comments.

Data Item(s) to be verified/validated using the text entered in this field:

- RX Date--DX/Stg Proc
- Collaborative Stage variables
- SEER Summary Stage 1977
- SEER Summary Stage 2000
- Regional Nodes Positive
- Regional Nodes Examined
- Surg Prim Site
- Scope Reg LN Sur
- Surg Oth Reg/Dis
- Mult Tum Rpt as One Prim
- Laterality

TEXT-STAGING – *continued*

Examples:

1. Work up and initial treatment for prostate primary included lung scan, bone scan, and CT/Pelvis. Based on these procedures, the Summary Stage is determined to be *Distant*, code 7. Document the following in the appropriate text fields:

   Text-Dx Proc-X-ray/Scan: Bone Scan 1/15/07-mets to pelvis; Lung scan 1/20/07 no evidence of metastatic disease; CT/Pelvis-1/15/07-positive iliac adenopathy

   Text-Staging: Pelvic bone mets

2. Diagnosis of lymphoma and workup included CT scans and a bone marrow biopsy. Based on these procedures, the Summary Stage is determined to be *Regional NOS*, code Document the following in the appropriate text fields:

   Text-Dx Proc-X-ray/Scan: CT scans 1/15/74-mediastinal and axillary LN suspicious for lymphoma, no pelvic or retroperitoneal adenopathy

   Text-Dx Proc-Path: Bone marrow 2/01/07 negative

   Text-Staging: Multiple LN regions above diaphragm

3. If the only documentation is that the patient was diagnosed two years ago and now is admitted in January 2007 for treatment of recently discovered bone metastases, record:

   Text-Staging: unknown at initial dx, bone mets 1/07

RX TEXT-SURGERY
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. *Record all surgical procedures, including dates, performed as first course of treatment as applicable. Surgical procedures used to treat regional lymph nodes and other regional and/or distant sites as first course of treatment should be documented*. If applicable, text should also be included to describe the number of regional lymph nodes examined as part of the first course of treatment.

Source Records:

The surgical procedure information may be found in, but is not limited to, the following source records:

- Operative Reports
- Discharge Summary
- Consultation Reports
- History and Physical Report

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date of each procedure
- Facility where each procedure was performed
- Type(s) of surgical procedure(s), including excisional biopsies and surgery to other and distant sites
- Regional tissues removed

Data Item(s) to be verified/validated using the text entered in this field:

- Date of 1st Crs RX
- RX Date Surgery
- Surg Prim Site
- Scope Reg LN Sur
- Surg Oth Reg/Dis
- Reason for No Surgery
- Surgical Margins
- Palliative Proc
- Text-Place of Diagnosis
- Surg/Rad Seq
- Systemic/Sur Seq

RX TEXT-RADIATION (BEAM)
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. Record all beam radiation, including dates, given as first course of treatment as applicable.

Source Records:

The radiation information may be found in, but is not limited to, the following source records:

- Radiation Records or treatment letters
- Discharge Summary
- Consultation Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date when radiation treatment began
- Where treatment was given (e.g., at this facility, at another facility)
- Type(s) of beam radiation (e.g., Orthovoltage, Cobalt 60, MV X-rays, Electrons, Mixed modalities)
- Other treatment information (e.g., patient discontinued after five treatments; unknown if radiation was given)

Data Item(s) to be verified/validated using the text entered in this field:

- Date of 1st Crs RX
- Radiation
- Surg/Rad Seq
- RX Date-Radiation
- Rad Regional RX Modality
- RX Date Radiation Ended
- Rad Treatment Volume
- Rad Location of RX

RX TEXT-RADIATION OTHER
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. Record all other radiation, including dates, given as first course of treatment as applicable.

Source Records*:*

The other radiation treatment may be found in, but is not limited to, the following source records:

- Radiation logbooks or treatment letters
- Discharge Summary
- Consultation Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date treatment was started
- Where treatment was given (e.g., at this facility, at another facility)
- Type(s) of non-beam radiation (e.g., High Dose rate brachytherapy, seed implant, Radioisotopes [I-131])
- Other treatment information (e.g., unknown if radiation was given)

Data Item(s) to be verified/validated using the text entered in this field:

- Date of 1st Crs RX
- Radiation
- Surg/Rad Seq
- RX Date-Radiation
- Rad Regional RX Modality
- RX Date Radiation Ended
- Rad Treatment Volume
- Rad Location of RX
- Rad Boost RX Modality

RX TEXT-CHEMO
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. Record all chemotherapy, including dates, administered as first course of treatment as applicable.

Source Records*:*

The chemotherapy treatment information may be found in, but is not limited to, the following source records:

- Chemotherapy logbooks or treatment letters
- Discharge Summary
- Consultation Reports
- History and Physical Report

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date when chemotherapy began
- Where treatment was given (e.g., at this facility, at another facility)
- Type of chemotherapy (e.g., name of agent(s) or protocol)
- Other treatment information (e.g., treatment cycle incomplete, unknown if chemotherapy was given)

Data Item(s) to be verified/validated using the text entered in this field:

- Date of 1st Crs RX--CoC
- RX Chemo
- RX Date--Systemic
- RX Date--Chemo

RX Summ--Systemic/Sur Seq

RX TEXT-HORMONE
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. Record all hormone therapy, including dates, administered as first course of treatment as applicable.

Source Records:

The hormone therapy information may be found in, but is not limited to, the following source records:

- Discharge Summary
- Consultation Reports
- History and Physical Report

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date treatment was started
- Where treatment was given (e.g., at this facility, at another facility)
- Type of hormone or antihormone (e.g., Tamoxifen)
- Type of endocrine surgery or radiation (e.g., orchiectomy)
- Other treatment information (e.g., treatment cycle incomplete; unknown if hormones were given)

Data Item(s) to be verified/validated using the text entered in this field:

- Date of 1st Crs RX--CoC
- RX --Hormone
- RX Date--Systemic
- RX Date--Hormone
- RX Summ--Systemic/Sur Seq

RX TEXT-BRM
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. Record biological-response modifier treatment, including dates, administered as first course of therapy for cancer as applicable. This is also referred to as immunotherapy.

Source Records:

The biological-response modifier treatment information may be found in, but is not limited to, the following source records:

- Discharge Summary
- Consultation Reports
- History and Physical Report

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date treatment began
- When treatment was given (e.g., at this facility; at another facility)
- Type of BRM agent (e.g., Interferon, BCG)
- BRM procedures (e.g., bone marrow transplant, stem cell transplant)
- Other treatment information (e.g., treatment cycle incomplete; unknown if BRM was given)

Data Item(s) to be verified/validated using the text entered in this field:

Date of 1st Crs RX
RX --BRM
RX Date Systemic
RX --Tranplnt/Endocr
RX --BRM
RX Date--BRM
RX Summ--Systemic/Sur Seq

RX TEXT-OTHER
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information. Record all other treatment, including dates, performed as first course of treatment as applicable.

Source Records:

Other treatment may be found in, but is not limited to, the following source records:

- Discharge Summary
- Consultation Reports
- History and Physical Reports

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Date treatment was started
- Where treatment was given (e.g., at this facility, at another facility)
- Type of other treatment (e.g., blinded clinical trial, hyperthermia)
- Other treatment information (e.g., treatment cycle incomplete; unknown if other treatment was given)

Data Item(s) to be verified/validated using the text entered in this field:

- Date of 1st Crs RX
- RX Date--Other
- RX--Other

TEXT-REMARKS
Maximum Field Length - 1000 characters

Information documenting the disease process should be entered manually from the medical record. If information is missing from the record, state that it is missing. Do not include irrelevant information.

- Record text information not elsewhere provided for or as an overflow from other text fields. The following information should be included in this field as applicable to the case:
  - Document the site, laterality if applicable, histology, and date of diagnosis for all known previous primaries.
  - Document text to explain any unusual or potentially questionable entry on the abstract. This will reduce the need to re-pull medical records at a later date.
  - Document text to note particular issues or clarifications that were resolved prior to completion of the abstract. For example, clarifications made with a physician through quality assurance studies.

Source Records*:*

Information for this field may be found in, but is not limited to, the following source records:

- History and Physical Report
- Pathology Reports
- Discharge Summary
- Consultation Reports
- Cancer Conference Documentation

Suggestions for Text:

VCR-approved abbreviations should be utilized. Do not repeat information from other text fields. Prioritize entered information in the order of the fields listed below:

- Personal and family history of cancer.
- Smoking, alcohol history
- Comorbidities.
- Information on sequence numbers if a person was diagnosed with another cancer out-of-state or before the registry's reference date.
- Place of birth
- Justification for unusual site/histology combinations.
- Information clarifying anything unusual such as reason for reporting a case seemingly not reportable for that facility or reason for coding numerous fields as "unknown."

VA STATE SPECIFIC FIELD - DIOXIN EXPOSURE

Record whether the patient has had any dioxin (Agent Orange) exposure.

Codes and Definitions

CODE	DEFINITION
0	No evidence of dioxin exposure
1	Evidence of dioxin exposure
8	NA; patient is not a Viet Nam Veteran
9	Unknown if any dioxin exposure

VA STATE SPECIFIC FIELD - VIETNAM VETERAN

Record the patients' Vietnam service status.

Codes and Definitions

CODE	DEFINITION
0	Patient is not a Viet Nam veteran
1	Patient is a Viet Nam veteran
9	Unknown if the patient is a Viet Nam veteran

VA STATE SPECIFIC FIELD - TOBACCO HISTORY

Record the patient's history of tobacco use.

Codes and Definitions

CODE	DEFINITION
0	Never used
1	Cigarette smoker, current
2	Cigar/pipe smoker, current
3	Snuff/chew/smokeless, current
4	Combination use, current
5	Previous use
9	Unknown

VA STATE SPECIFIC FIELD - NUMBER OF YEARS SMOKED

Record the number of years the patient smoked.

Code	Definition
000	Never used any tobacco products
001 - 249	Actual number of pack years between 1 and 249
250	>/= 250 pack years
995	Combination tobacco user
996	Cigar/pipe smoker
997	Smokeless tobacco user
998	Smoked, number of pack years unknown/not stated
999	Unknown if patient ever used tobacco products

VA STATE SPECIFIC FIELD - ALCOHOL HISTORY

Record the patient's alcohol use

Codes and Definitions

CODE	DEFINITION
0	No alcohol use
1	Patient currently uses alcohol
2	Previous history of alcohol use
9	Unknown if patient uses alcohol

VA STATE SPECIFIC FIELD - FAMILY HISTORY

Record whether the patient has a family history of any cancer.

Codes and Definitions

CODE	DEFINITION
0	No family history of cancer
1	Positive family history of cancer, NOS
2	Family history of this cancer
3	Family history of other cancer
4	Family history of this AND other cancer
9	Unknown if patient has a family history of cancer

SYSTEM CODES
(Electronic Reporting Hospitals Only)

System codes reflect types of coding systems used, record processing dates, and other information regarding how the data were collected. These codes are required to be transmitted on cases submitted electronically. System codes are added to cases submitted on the VCR Report Form at the time of data entry at the VCR.

1. Registry Hospitals- Registry hospitals using commercial or hospital-developed software are responsible for making sure the correct system codes are submitted. Since most are computer generated, the registrar must communicate problems in complying with VCR code requirements to software vendors or facility Information Systems personnel.

Required Codes and Definitions

VCR Required Data Item	NAACCR Item #	VCR Specific Instructions
Record Type	0	Must always contain "**A**" for *Full case abstract type, including text data item;* length=5966.
Registry Type	30	Allowable codes: "**2**" for central registry or hospital consortium (not population based); and "**3**" for single hospital/freestanding center.
FIN Coding System	35	Must always contain "**2**" for COC FIN 10-digit codes.
NAACCR Record Version	50	Must always contain "**B**" for 2003 version (Version V11).
Race Coding Sys—Current	170	Must always contain "**6**" indicating 2000+ SEER & COC.
Site Coding Sys—Current	450	Cases diagnosed on or after 01/1/2001 must always contain "**5**" for ICD-O-3; cases diagnosed before 1/1/2001 must always contain "**4**" for ICD-O-2; cases with an unknown *Date of Diagnosis* (99999999) and *Date of 1st Contact* on or after 01/01/2001 must always contain **"5"** for ICD-O-3; cases with an unknown *Date of Diagnosis* (99999999) and *Date of 1st Contact* prior to 01/01/2001 must always contain **"4"** for ICD-O-2.
Morph Coding Sys—Current	470	Cases diagnosed on or after 01/1/2001 must always contain "**7**" for ICD-O-3; cases diagnosed before 1/1/2001 must always contain "**6**" for ICD-O-2 plus REAL and FAB codes; cases with an unknown *Date of Diagnosis* (99999999) and *Date of 1st Contact* on or after 01/01/2001 must always contain **"7"** for ICD-O-3; cases with an unknown *Date of Diagnosis* (99999999) and *Date of 1st Contact* prior to 01/01/2001 must always contain **"6"** for ICD-O-2 plus REAL and FAB codes.
RX Coding Sys—Current	1460	Must always contain "**06**" for *Treatment data coded according to FORDS.*

SYSTEM CODES, continued
(Electronic Reporting Hospitals Only)

Required Codes and Definitions– continued

VCR Required Data Item	NAACCR Item #	VCR Specific Instructions
Date Case Completed	2090	Must contain the date abstract first passed all edits applied. 99 is not acceptable in any portion of the date.
Date Case Last Changed	2100	Contains the latest date the case was modified after completion at the reporting facility.
Date Case Report Exported	2110	Must contain the date the reporting facility exported the electronic abstract to a file for transmission to the central registry. 99 is not acceptable in any portion of the date.
ICD-O-3 Conversion Flag	2116	Cases diagnosed on or after 1/1/2001 must contain "**0**" for *Primary site and morphology originally coded in ICD-O-3.*
COC Coding Sys—Current	2140	Cases diagnosed on or after 1/1/2003 must contain "**08**" for *FORDS.* Cases diagnosed prior to 1/1/2003 must contain "**07**" for *ROADS and 1998 supplement.*
Vendor Name	2170	*Commercial Software*: name and version number must always be included; *Hospital-Developed Software*: must always enter "HOSP" for name followed by version number or month/year system was developed or last modified; *AbstractPlus*: will contain name and version number as specified by the VCR.

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PART FOUR:
QUALITY CONTROL

QUALITY CONTROL

The purpose of cancer data collection varies with the type and goals of the registry. The primary goal of hospital-based cancer registries is the improvement of patient care, and the primary goal of non-registry hospitals is to provide data to the central cancer registry. The primary objective of the central or population based incidence registries is the determination of cancer rates and trends in the population. Whether data are reported to the Virginia Cancer Registry (VCR) or reported by the VCR, there is a universal need for the data collected in any type of registry to be of the highest quality.

Quality can be defined as fitness for use. To assure data are of sufficient quality for use in meeting registry goals, quality control must be an integral component of the data collection system. Quality control involves the systematic execution of a carefully planned set of activities to monitor data quality and take appropriate action to positively affect future quality.

Activities and procedures to assure data quality should focus on three areas: completeness, accuracy and timeliness. Completeness refers to both case ascertainment and data collection. Accuracy refers to how well the abstracted data reflect the patient's diagnosis and treatment. Timeliness measures how the abstracting and reporting process are accomplished according to an expected schedule.

Evaluation of completeness, accuracy, and timeliness is the first step in quality control. To be effective, the registry's quality control plan must also involve a continuous loop of monitoring, communication, and feedback.

The following two sections describe various strategies used by reporting facilities and the VCR to assure data are as complete, accurate and timely as possible. The activities described for reporting facilities will enhance compliance to VCR reporting standards. Since communication and feedback are essential to the success of any quality control program, the major quality control procedures used by the VCR are described in order for hospital contacts to more fully understand the rationale for VCR requirements as well as verbal and written requests and questions made by the VCR.

QUALITY CONTROL: REPORTING FACILITIES

Reporting facilities must insure cancer data collected and submitted to the VCR are complete, accurate, and timely. Although some facilities may incorporate additional activities to assure quality, at a minimum, all facilities must include the following procedures to meet VCR reporting requirements and standards.

Completeness

1. Casefinding Sources - All areas where cancer patients are diagnosed or treated must be included in the casefinding system. This includes outpatient treatment areas, e.g., Radiation Therapy, Chemotherapy, Same Day Surgery Units, and Emergency Room. Review of pathology reports including private outpatient specimens and autopsy reports should also be included in casefinding.

2. Disease Index - Review of a Disease Index should be performed to verify all reportable cases are submitted to the VCR. If performed monthly, this review will simplify the annual reconciliation procedure (See *VCR Manual Part Four, Quality Control: VCR*) and aid in timeliness of reporting.

3. Transmission Verification - Facilities should check completeness of transmissions as follows:

    a. Check Totals: Verify the number of cases transmitted equals the number received by the VCR as indicated on the report *Records Accessioned by the Virginia Cancer Registry,* which is the report facilities receive back after the VCR has processed a shipment.

    b. Compare Listings: Compare the names on the report *Records Accessioned by the Virginia Cancer Registry* against your transmit list. If the lists differ, resolve the discrepancies or contact your VCR Field Representative.

    c. Maintain Listings: Keep all copies of the *Records Accessioned by the Virginia Cancer Registry* as verification of records received by the VCR. Retention for at least five years is strongly recommended; however, if space is limited, maintaining copies until your facility has had a VCR Quality Assessment Review for that specific year would be an acceptable alternative.

4. Required Fields - All data items required by the VCR must be submitted for each record. For a listing of these items, refer to *VCR Manual Appendix K, Required Data Set for Reporting Facilities.* Entries for each required data item must include specific demographic, diagnostic and treatment information that accurately reflects what is documented in the health record.

QUALITY CONTROL: REPORTING FACILITIES, continued

Accuracy

1. Text Fields - The *Required Data Set for Reporting Facilities* includes text fields (See *VCR Manual Appendix K, Required Data Set for Reporting Facilities*). The reason for requiring text is to enhance data accuracy. These fields give hospitals the ability to convey information to validate data items, document clarifications, reconcile data item discrepancies, support unusual site/histology combinations, provide history of previous cancers/reportable tumors, and explain any unusual or potentially questionable entry on the abstract. Required text information must be recorded in the designated text fields. (See also *VCR Manual Part Three, Data Item Instructions, Guidelines for Reporting Text).*

2. Computer Edits - Computer edits should be an integral component of any electronic abstracting system. These edits should check for completion of all required fields, allowable values and ranges, and interfield consistency. Edit checks should be performed on each completed abstract. Abstracts should be re-edited if any changes are made.

   AbstractPlus includes the VCR required edits. A copy of the VCR edits is also provided to the cancer registry software vendors.

3. Visual Editing - The completed abstract should be visually reviewed to identify errors not detectable by the computer. Inconsistencies among data items could be identified when comparing text to coded items, e.g., stage coded to local with text indicating lymph node involvement.

4. Physician Input - Physicians should serve as resources to the abstractor. They should be consulted when questions arise during abstracting. Physician input may assist in identifying a primary site or provide clarification of conflicting statements or reports in the health record. Documentation of the physician input should be included in the text to support abstracted data.

QUALITY CONTROL: REPORTING FACILITIES, continued

Timeliness

1. 180 Days - 90% of the records must be received by the VCR within 180 days from *Date of Inpatient Disch* if an inpatient *or Date of 1st Contact* if an outpatient.

2. VCR Deadline - The first working day in July is the deadline for submitting all reportable cases seen at the reporting facility during the previous year.

3. VCR Reporting Schedule - This schedule should be followed to assure abstracts are received by the VCR within the required 180 days.

Cases with a Date of Inpatient Disch/Date of 1st Contact in:	Mail on or before the 1st of:
January	June of same year
February	July of same year
March	August of same year
April	September of same year
May	October of same year
June	November of same year
July	December of same year
August	January of following year
September	February of following year
October	March of following year
November	April of following year
December	May** of following year

Example 1: All cases with a Date of Inpatient Disch/Date of 1st Contact on or between January 1 and January 31, 2006 must be mailed by June 1, 2006.

Example 2: All cases with a Date of Inpatient Disch/Date of 1st Contact on or between December 1 and December 31, 2006 should be mailed by June 1, 2007

** The VCR deadline has not changed. The four weeks between June 1st and July 1st should be used to perform Quality Assurance procedures to ensure all cases for the year have been identified and reported. These cases may fall into the 10% over 180 days. This is expected and acceptable.

Note: This schedule should be used by reporting facilities as a guideline to assess timeliness of reporting but will not be used by the VCR to determine exact timeliness rates for reporting facilities. Reports provided by the VCR will show specific timeliness rates based on the number of days from *Date of Inpatient Disch* or *Date of 1st Contact* and the date the abstract was received by the VCR.

QUALITY CONTROL: REPORTING FACILITIES, continued

4. Incomplete and Suspense Cases - At a registry hospital, after identifying a potential case for the registry from a casefinding source, cases unable to be completely abstracted may be placed in an electronic suspense file. At a non-registry hospital using AbstractPlus software, incomplete abstracts may be saved as incomplete creating an electronic suspense file. A system should be in place to monitor these cases so they are completed and reported to the VCR in a timely manner. A case will not export out of AbstractPlus if it is incomplete.

5. Method to Assure Timeliness - Review the Disease Index monthly using the reporting schedule as a guide to verify all reportable cases have been submitted within the 180-day timeframe.

QUALITY CONTROL: VCR

Quality control activities are conducted by the VCR to assure data in the central registry are complete, accurate, and timely. These activities fall into three categories: 1) internal procedures as data are processed, 2) on-site quality assessment reviews, and 3) trainings conducted by VCR staff or in conjunction with other organizations. These three major aspects of the VCR quality control program are described below.

Internal Quality Control Procedures

The quality control procedures described below are performed by the VCR routinely to enhance the quality of cancer data in the central cancer registry.

1. Completeness

   a. VCR Reporting Sources - The VCR establishes reporting from sources required to report and reporting through state data exchange agreements to assure all reportable cases are received. The VCR reporting sources (See *VCR Manual Part One, Reporting Requirements, VCR Reporting Sources)* include the following:

      - Acute Care Hospitals
      - Laboratories
      - Non Hospital Sources
      - States with Data Exchange Agreements

   b. Non-Reporting - All hospitals are required to submit on the 1st of every month or the last working day before the 1st if the 1st falls on a weekend or holiday. A listing of hospitals that have not submitted for two consecutive months is generated monthly at the VCR. A VCR Field Representative contacts hospitals appearing on this list and appropriate action is taken.

QUALITY CONTROL: VCR continued

c. Reconciliation - An annual comparison is made of each hospital's Disease Index with the VCR database to assure all cases have been reported. Each hospital receives a listing of cases identified as not being reported to the VCR with instructions to review each record to determine if the case is reportable. Cases missed, but now identified, must be reported. Cases that are not reportable must have justification documented on the listing explaining why the case is not reportable. Missed cases and listings must be returned to the VCR by the specified deadline.

d. Death Clearance - The VCR conducts a Death Clearance procedure annually. This process involves identifying Virginia Death Certificates with a reportable cause of death and matching them to the VCR files. Non-matched death certificates are potentially missed cases. Hospital contacts receive a listing of non-matched patients who expired at their hospital to determine if they were reportable. Missed cases must be reported. Cases that were not reportable must have justification documented on the listing. Missed cases and listings must be returned to the VCR by a specified deadline. At the conclusion of this process, the remaining non-matched cases are reviewed and may be abstracted at the VCR from the death certificates and defined as Death Certificate Only (DCO) cases. A DCO percentage (The number of DCO cases divided by the total number of incidence cases for that year) is computed. The VCR DCO percentage is measured against the North American Association of Central Cancer Registries (NAACCR) DCO standard, which states a registry should have fewer than 5% DCO's in a given year of incidence cases.

2. Accuracy

a. Computer Edits - Computer edits are performed on 100% of abstracts and consolidated records. The VCR utilizes a combination of North American Association of Central Cancer Registries (NAACCR), Surveillance, Epidemiology and End Results Reporting Program (SEER), and Commission on Cancer (COC) edits from the NAACCR metafile with VCR-developed edits added. These edits check for completion of all required fields, allowable ranges, allowable values, and interfield consistency. They check for invalid entries such as impossible site/histology combinations or flag unusual entries for review. VCR Field Representatives follow-up with hospital contacts and provide feedback on errors found.

b. Visual Editing - Records are reviewed for consistency between coded data items and text documentation. This type of review is performed to detect discrepancies not detectable by the computer. VCR Field Representatives provide hospital contacts with feedback on these reviews.

c. Electronic Reporting Approvals - An approval process is required for new facilities reporting electronically, new contacts, hospital software changes, and updated North American Association of Central Cancer Registries (NAACCR) formats. (See *VCR Manual Appendix C, Electronic Reporting* for detailed instructions.) Hospital shipments are monitored and VCR Field Representatives provide feedback to hospital contacts until acceptable accuracy is achieved.

d. Unknown Values - The frequency of *"unknown"* or code for unknown in data items, such as age at diagnosis, sex, race, state, and county is monitored and follow-up is performed to eliminate as many unknowns as possible.

QUALITY CONTROL: VCR, continued

e. Resolution of Duplicates - To assure accuracy of incidence statistics, an incidence file containing all cases for a specified time period is created and a report is generated listing all cases alphabetically by last name. Cases with the same name are identified. Those determined to be the same person are then reviewed manually to determine whether they represent multiple primaries or duplications. While cases determined to be duplicates are deleted from the file, source records are retained and attached to the appropriate tumor in the VCR database.

3. Timeliness

a. VCR Timeliness Standard - At least 90% of the records must be received by the VCR within 180 days from *Date of Inpatient Disch* if an inpatient or *Date of 1st Contact* if an outpatient.

b. Closeout Deadline -The first working in July is the deadline for submitting all reportable cases diagnosed/treated in the prior year.

c. Closeout Notification - Hospitals are notified annually of the closeout deadline and requested to notify the VCR when they anticipate closing out. Failure to meet the July deadline results in referral of the hospital to the Department of Health, Bureau of Facility Licensure and Certification.

On-Site Quality Assessment Review

Quality Assessment Reviews are routinely conducted at hospitals. Hospitals are scheduled for a review when certain criteria are met, such as unsatisfactory results from previous review, inability to perform annual reconciliation, reporting problems, and time lapse since last review. The reviews are designed to determine the quality of reporting to the VCR. During the review, casefinding completeness, data quality and timeliness of reporting are evaluated by VCR Field Representatives.

1. Notification of Quality Assessment Review- Hospitals receive a scheduling letter one month prior to the date of review. The scheduling letter includes:

a. Date and time of the review

b. *Hospital Index Verification* list of patients included on the hospital's Disease Index not reported to the VCR (Index from previous year's reconciliation is used)

c. Request to have autopsy reports from the year being reviewed available the day of the review

d. *Data Quality Evaluation* list of randomly selected cases reported to the VCR within the last twelve months that will be re-abstracted by a VCR Field Representative

e. Request for private area with adequate work space for the VCR Field Representative

Note: If a hospital did not submit a Disease Index during the reconciliation procedure, they will receive their scheduling letter two months prior to the review. The hospitals have three weeks from the date of the letter to submit a Disease Index to the VCR.

QUALITY CONTROL: VCR, continued

2. Hospital Preparation for a Quality Assessment Review- Hospitals must have the following available the day of the review:

   a. Health records for the patients on the *Hospital Index Verification* list. The patient's complete health record must be pulled including all inpatient and outpatient records.

   b. Autopsy reports for the year being reviewed.

   c. Health records and copies of corresponding abstracts for all the cases on the *Data Quality Evaluation* list. All admissions used to abstract the case must be pulled. *Note*: Additional health records may be requested on the day of review.

3. On Site Review Process- The VCR Field Representative will evaluate the following during their visit:

   a. Casefinding Completeness- The first component of the quality assessment review is the casefinding audit. The audit is a review and evaluation of the effectiveness of a facility's casefinding mechanisms used in submitting reportable cases to the VCR. The objective of the audit is to determine whether all reportable records are being identified and submitted to the VCR to insure VCR data accurately reflect cancer incidence in Virginia.

      The VCR Field Representative reviews the health records (and/or cancer registry files, if applicable) from the *Hospital Index Verification* list to determine if these records are reportable and to identify any weaknesses or trends in a hospital's casefinding procedures. The autopsy reports are reviewed to insure all autopsy reports with a reportable condition have been reported to the VCR, including incidental findings.

      If not included in the Disease Index, pathology, cytology, autopsy, chemotherapy, radiation therapy, and other outpatient clinic information and related health records are reviewed to insure the reporting of eligible records from these sources.

      The results of the casefinding audit are defined in terms of a completeness rate. The completeness rate indicates the percentage of reportable records submitted by the hospital to the VCR. The VCR acceptable completeness rate is 97 to 100%.

   b. Data Quality- The second component of the quality assessment review is a reabstracting study to evaluate data quality. Reabstracting compares the information in the health record to the previously abstracted data to determine the accuracy and completeness of the data. The VCR Field Representative re-abstracts the cases on the Data Quality Evaluation list to identify any inaccurate information or misunderstandings of reporting guidelines.

      The results of the reabstracting study are defined in terms of an accuracy rate. The accuracy rate indicates the percentage of data items reported correctly. The VCR standard for data quality is an accuracy rate of 97 to 100%.

QUALITY CONTROL: VCR, continued

c. Timeliness**-** The third component of the quality assessment review is timeliness of reporting. For the VCR to provide timely statistics and reports, facilities must submit data in a timely manner.

   The timeliness standard established by the VCR to monitor hospital reporting requires at least 90% of the hospital's records be received by the VCR within 180 days from *Date of Inpatient Disch* if an inpatient or *Date of 1st Contact* if an outpatient. To evaluate timeliness, the VCR Field Representative uses reports generated by the VCR and assessment of cases currently being abstracted based on the reporting schedule (See *VCR Manual, Quality Control, VCR Reporting Schedule*).

d. Summation**-** At the conclusion of the review, the VCR Field Representative discusses findings and recommendations with appropriate hospital personnel during a summation conference. This provides the VCR Field Representative the opportunity to provide feedback relative to areas of compliance and concern. It also enables hospital personnel to be aware of the results of the review and ask questions regarding the findings and recommendations.

e. Quality Assessment Review Report-The VCR sends a written report documenting findings, problems, recommendations, and rates to the hospital. A listing of missed records identified as reportable to the VCR and a listing of data items requiring correction are included in the report.

f. Reporting Review Deficiencies**-** Hospital staff must submit the missed records and corrections to the VCR within 30 days of when they receive the report.

g. Tracking Results**-** Upon completion of the Quality Assessment Review Report, completeness and accuracy rates by year review performed are entered into a tracking system at the VCR. This information provides a concise summary of review results for use in determining a hospital's performance over time and in identifying hospitals requiring more intense follow up.

Trainings

Education is an important part of quality control. In addition to providing feedback to contacts regarding quality assessment reviews, visual reviews and edit checks, the VCR offers trainings throughout the year. These trainings provide specific information on state reporting requirements and cancer data collection. For more information about training opportunities currently being offered, contact your VCR Field Representative.

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