SECTION V - TREATMENT DATA

First Course of Treatment or Therapy - General Instructions

First Course of Treatment (or Therapy) includes all methods of treatment recorded by the managing physician(s) in the treatment plan and administered before disease progression or recurrence. This may include the treatment choice "no therapy" (as when treatment is refused, the patient died before treatment could begin, or a medical recommendation of "no treatment" was made). In general, only code treatments actually administered to the patient (the reason why some types of treatment did not occur is also coded). The MCR follows COC rules concerning what constitutes First-Course Treatment, and also uses SEER interpretations to augment and clarify the COC rules. SEER notes that a discussion about a certain treatment or a referral to another physician about a certain treatment is not automatically to be interpreted as a recommendation for that treatment.

Treatment Plan

A treatment plan describes if and how medical care providers intend to modify or control the reported disease; Palliative Care may be included in the plan. All treatments specified in the treatment plan that are delivered to the patient are part of First Course of Therapy. A treatment plan may specify one treatment/palliation method or a combination. A single "regimen" may include a combination of concurrent or adjuvant treatments. A recommendation of "no treatment" or "watchful waiting" is also a treatment plan; but if a type of treatment or palliation begins after a planned period of watchful waiting and is triggered by apparent disease progression, then this treatment/palliation is subsequent therapy and it is not reportable to the MCR.

A treatment plan's documentation is frequently found in several different sources, including the hospital medical record, discharge plan, clinic records, consultations and outpatient records. Some information may only be recorded in a physician office.

"First Course" Time Periods for All Malignancies Except Leukemias

Follow these rules in the order listed to determine the duration of First Course of Treatment:

1. If there is a documented planned First Course of Treatment, it ends at completion of all the planned treatments.
2. If the patient is treated according to a facility's standards of practice or established protocol or is managed within accepted management guidelines for the given type of case, First Course ends with completion of these treatments.
3. If there's no documentation of a First Course of Treatment plan or standard of practice for the given case, try to get physician clarification. If that's not possible, First Course includes all treatment received before the disease progresses or treatment fails. Assume that First Course begins within four months of diagnosis. If it's unclear whether there was disease progression or treatment failure and a treatment begins more than one year after diagnosis, assume that First Course ended before that treatment (i.e., it's subsequent treatment).

page last updated 2005
TREATMENT DATA cont.

4. If all treatment is refused and the patient does not change his/her mind within one year of diagnosis and there has not been disease progression, or if the physician recommends no treatment, then the First Course consists of no treatment (code a refusal when appropriate). If recommended treatment is accepted within one year after an initial refusal and there has not been disease progression, the treatment given is First-Course; but if there has been disease progression then the treatment is subsequent treatment.

Treatment failure or disease progression may cause the planned First-Course Therapy to be stopped mid-course. Any treatment or Palliative Care administered after the discontinuation of First-Course Therapy is considered subsequent therapy (don't record it for the MCR).

"First Course" Time Periods for Leukemias Only

First course of therapy includes all cancer treatments planned by the physician(s) during or after the first diagnosis of this leukemia. It ends when the "first remission" ends (a relapse). Record all remission-inducing or remission-maintaining therapy as First-Course. Treatment regimens may include multiple therapy modes, and their administration may encompass a year or more. The induction, consolidation and maintenance phases of treatment are all First-Course.

If a complete or partial remission is achieved during the First Course of Therapy, then include all definitive therapy considered "first remission-inducing" or "first remission-maintaining", such as maintenance chemotherapy or radiation to the central nervous system. Do NOT include any treatment given after relapse of the first remission.

A patient may relapse after a first remission. All treatment and Palliative Care administered after relapse are subsequent therapy (don't record this for the MCR).

If no remission is achieved during First Course of Therapy, record all treatments that attempted to induce a remission. Do NOT include any subsequent treatments after the treatment plan has been changed.

Palliative Care vs. Treatment

Palliative Care is not therapeutic and is not done for diagnostic or staging purposes. Its purpose may be to relieve pain, make a patient more comfortable or prolong life by managing symptoms (symptomatic care). Palliative Care treats the patient rather than the cancer, although it may do so by affecting cancer cells. It is necessary to distinguish therapeutic treatments from palliation. Consult a physician if you can't determine whether a certain procedure was intended as treatment or palliation.

The MCR only collects information on Palliative Care planned and given during the First Course of Treatment time period.

page last updated 2005
Importantly, the COC has changed its position on how it wants Palliative Care (formerly called Palliative Procedures) coded. For diagnoses made in 2003, the FORDS Manual instructions had been that something done to a patient must be coded as EITHER treatment OR palliation, but not as both. The FORDS revisions issued in December 2003 instruct that for diagnoses made beginning in 2004, Palliative Care that also fell into a standard treatment modality because its effect was to remove, modify or destroy cancer cells (such as palliative radiation) should be coded as BOTH Palliative Care and as Treatment (so First-Course palliative radiation would be coded as Radiation and Palliative Care). For diagnoses made in 2003 the COC offered a choice: a facility could choose to 1) code Palliative Care for all cases diagnosed in 2003 as only Palliative Care; or 2) double-code appropriate types of Palliative Care for all cases diagnosed in 2003 as both Palliative Care and Treatment.

The MCR accepts that, for diagnoses made in 2003, Palliative Care may be coded singly OR double-coded as Treatment when appropriate. For diagnoses made beginning in 2004, ONLY double-coding should be used. Note that Palliative Care in the category "pain management only" (code 4) does not fall into one of the standard treatment modalities and is expected to be coded only as Palliative Care. The MCR tried to integrate this last-minute change into this Manual, but some language herein may date from before the double-coding revision.

Realize that the Treatment Start Date fields must correspond to their respective treatment modality fields, so if you are double-coding Palliative Care for 2003 you must also enter the start date, narrative, etc. for the involved treatment modalities.

Treatment Data Items

Treatment - Summary / Treatment - At This Facility Codes -- Numeric codes are used to describe each treatment modality (surgery, chemotherapy, etc.). For each modality except radiation and transplant/endocrine procedures, there is a field used to code a Summary of the entire First Course of Treatment, and a field to assign a separate code to that portion of the treatment administered at the reporting hospital. Radiation and transplant/endocrine procedures have only a Summary field.

For the purposes of treatment coding, the office of a physician on the hospital's medical staff should be considered to be an extension of the hospital (i.e., when coding treatment given at the reporting hospital, include treatment administered in the office of a physician on the medical staff if you have information about what procedures were done there).
TREATMENT DATA cont.

Treatment - Start Dates -- There is a start date field for each modality (but some start dates cover multiple modalities). Dates should be entered in MMDDCCYY format. For some modalities, 8's are used to specify that that type of treatment has not yet begun or it's unknown if the recommended treatment was begun at the time you are abstracting/reporting that case. If a treatment began but an exact start date is not available, please record an approximate date. An estimated date is preferable to an unknown date -- and if you report an approximate date for us, please identify this in the appropriate Narrative field. If you only know that a treatment began in the spring of the year, code April; if in summer or mid-year, use July; if in fall or autumn, code October; if in winter, use December or January; if early in the year use January; if late in the year use December.

Example: You can only estimate that radiation began in early September 2003. Enter 09072003 as an approximate start date for Radiation Therapy, and include in the Radiation Narrative a phrase like "early Sept. start date estimated".

If the treatment was administered in courses (as in a radiation regional/boost series) or included different procedures (e.g., an excisional biopsy and a resection), always enter the date of the first procedure in the "start date" field.

For any type of treatment that is not known to have been given, fill the date field with zeroes. (For example, if the Chemotherapy -- Summary and Chemotherapy -- At This Facility fields are coded 00 because the First Course of Treatment included no Chemotherapy, then Chemotherapy -- Date Started should be coded 00000000.) Do not leave any treatment date field empty.

If, however, a type of treatment is known to have begun, but its start date is not known, enter nines if you cannot estimate when it began; if the month or year can at least be estimated, however, it is important to enter this (such as 99992003). An admission date may be used if the start date cannot be estimated.

For autopsy-only cases (Class 5), the date fields should be zero-filled. For death certificate-only cases, treatment start dates are 9-filled.

Treatment Text -- There is a Narrative field for most treatment modalities (and some Narratives must cover more than one modality). These fields should be used to describe First Course of Treatment as concisely and specifically as possible. If more than one procedure was performed, list each in chronological order, including dates and the place where each procedure occurred. A text field may be left empty when that particular treatment modality was not provided; but, if that type of treatment was recommended or would normally have been given for this disease, please record the reason why it was not given in the appropriate Narrative field (for example, "mid-June patient refused lobectomy"). Use standard abbreviations and be aware of the maximum number of characters which can fit into each text field. Do NOT include information that the MCR is not authorized to collect.

Page last updated July 2007
This field records the beginning of First Course of Therapy (including Palliative Care that falls into one of the standard treatment modalities) for the case being reported (using the COC's and MCR's definition of what constitutes the "First Course"). Use the MMDDCCYY format.

This date should be either:

the earliest reported start date for one of the treatment modalities for a patient who received First-Course Treatment/palliation (Surgery; Radiation; Systemic Therapy including Chemotherapy, Hormone Therapy, Immunotherapy, Hematologic Transplants & Endocrine Procedures; Other Therapy; or Palliative Care that is also coded in a treatment modality)*

or, if the patient received no First-Course Therapy,

the date on which a decision was made to not treat the patient (including a date of refusal made by the patient or on the patient's behalf, or a decision to follow "watchful waiting"). If you do not have exact information about when the decision to not treat was made, please estimate this date.

A date of death may also be recorded if this occurred before a treatment could begin.

For autopsy-only cases (Class 5), zero-fill the date fields.

Only use the unknown date codes (9's) when absolutely necessary.

The dates of Surgical Diagnostic/Staging Procedures (such as incisional biopsies or endoscopic exams) are NOT recorded in this field. It is seldom appropriate to record the Date of Diagnosis in this field unless a case was deemed untreatable (including "no Palliative Care") when first diagnosed.

* Note that for Radiation Therapy and Systemic Therapy, the "start date" may be recorded as 88888888 to indicate that this type of treatment has not yet begun or it's unknown whether it was begun. Date of First-Course Treatment does NOT accept this special code, so use 99999999 in this field when the only First-Course Treatment has not yet begun.

Example: A brain tumor patient is only going to receive Radiation Therapy during First Course, but it has not yet begun when the case must be abstracted. Radiation - - Date Started is 88888888, the remaining treatment "start dates" are 00000000, and Date of First-Course Treatment is 99999999.
TREATMENT DATA cont.

SURGICAL DIAGNOSTIC and STAGING PROCEDURES

Surgical procedures done to diagnose or stage disease are Diagnostic/Staging Procedures. (They are included here under "Treatment" because they are surgical procedures and their field data standards parallel those governing the treatment fields.) Procedures done to the patient are coded whether or not cancer is found in the specimens. They include the following:

- Biopsy, incisional *(a tissue biopsy leaving gross residual disease)*
  (An excisional biopsy is treatment Surgery. A biopsy leaving only microscopic residual disease or no residual disease should be considered excisional.)

- Biopsy, NOS, except of lymph nodes*
  (Unless otherwise specified, if the specimen size is < 1 cm, assume the biopsy to have been incisional, and report it as a Surgical Diagnostic/Staging Procedure.)

- Dilation and curettage for invasive cervical cancer (see D&C note on p. 175)

- Dilation and curettage for invasive or in-situ cancers of the corpus uteri, including choriocarcinoma (see D&C note on page 175)

- Removal of fluid (paracentesis or thoracentesis), even if cancer cells are present, unless the fluid removal is for palliative purposes only

- Surgery in which tumor tissue is not intentionally removed*
  *Example: exploratory surgery -- celiotomy, cystotomy, gastrotomy, laparotomy, nephroty, thoracotomy

- Removal of non-cancerous endocrine gland(s)
  *(but the removal of testes, adrenals or pituitary is Endocrine Surgery for prostate primaries, and should be reported under Hematologic Transplants & Endocrine Procedures)*

- Transurethral resection (TUR) without removal of tumor tissue

* Do NOT record surgical procedures that aspirate, biopsy or otherwise remove regional lymph nodes in an effort to diagnose and/or stage cancer in these data items. Such procedures should be recorded under Scope of Regional Lymph Node Surgery.

*Exception:* For lymphomas with a lymph node primary site (C77.9, 9590-9729), the aspiration, biopsy or other removal of lymph nodes in an effort simply to diagnose and/or stage the disease is coded as a Surgical Diagnostic/Staging Procedure (and not as Surgery of Primary Site or other type of surgery). A needle *(incisional)* biopsy of a lymph node for a lymphoma is coded (as for any other cancer type) as a Surgical Diagnostic/Staging Procedure.
Brushings, washings, aspiration of cells and hematologic findings (peripheral blood smears) may be involved in the diagnosis and staging of cancer, but these are not surgical procedures. Do not code these here for the MCR. Surgical procedures done for purely palliative purposes should also not be included here. Be careful with descriptions of "aspirations" in the medical record -- non-surgical cell aspirations are not coded here, but surgical biopsies in which tissue is aspirated are coded here (or under Scope of Regional Lymph Node Surgery for lymph node aspiration); therefore do not do not automatically dismiss any "aspiration" procedure as being non-surgical. Determine what an aspiration procedure resulted in before making your coding decision.

The COC has some complicated advice regarding dilations and curettage (D&Cs). A D&C procedure may be done for different purposes while being called simply a "D&C" regardless of the circumstances. The dilation is not a surgical procedure, but what is done with the curette may or may not be considered a surgical procedure. If the curette is used to obtain an excisional biopsy, then the D&C was not done purely for diagnostic/staging purposes and it would be coded under Surgery of Primary Site. If the curette is used to perform an incisional biopsy, this would be coded here as 02. If the curette is simply used to remove some cells, then this does not qualify as a surgical procedure at all and it is not coded as Surgery or a Surgical Diagnostic/Staging Procedure. Try to determine what kind of sample was obtained from the D&C, and use these guidelines in addition to the D&C examples above; there are also notes in Appendix D (under C53, C54).

The code categories for Surgical Diagnostic/Staging Procedures do not specify needle type; they simple refer to needle biopsies. The MCR interprets this to include biopsies performed with core needles (wide enough to remove cells and tissue) and fine needles (usually only wide enough to remove cells, but tissue removal is also possible) in an effort to diagnose or stage cancer. "FNA" (fine needle aspiration) seems to often be used in medical records for both a cell aspiration performed with a fine needle and as a shorthand for a fine needle aspiration biopsy. Where the term "FNA biopsy" is not usually specified in medical records, determine if a "FNA" simply extracted cells (cytology, generally not a surgical procedure) or resulted in an incisional biopsy (histopathology, code 01 or 02). If a needle biopsy was done with the intent of diagnosing or staging the disease but it actually removed the cancer entirely or left only microscopic disease behind, this was (accidentally) an excisional biopsy and it must be coded as Surgery rather than a Surgical Diagnostic/Staging Procedure.

Surgical stent placement is not considered treatment and is not a Surgical Diagnostic/Staging Procedure. A surgical stent placement that is part of First Course of Treatment should be coded in Palliative Care (1) only.
The codes for Surgical Diagnostic/Staging Procedures are not site-specific:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>no Diagnostic or Staging surgery done</td>
</tr>
<tr>
<td>01</td>
<td>incisional biopsy, needle biopsy, or aspiration biopsy of <em>other</em> than the primary site, leaving <em>gross residual disease</em>; no exploratory surgery</td>
</tr>
<tr>
<td>02</td>
<td>incisional biopsy, needle biopsy, or aspiration biopsy of the <em>primary</em> site, leaving <em>gross residual disease</em>; no exploratory surgery</td>
</tr>
<tr>
<td>03</td>
<td>exploratory surgery*** ONLY (no biopsy or treatment Surgery)</td>
</tr>
<tr>
<td>04</td>
<td>bypass surgery or ___ostomy ONLY (no biopsy or treatment Surgery; bypass/___ostomy <em>not</em> done for palliative purposes)****</td>
</tr>
<tr>
<td>05</td>
<td>exploratory surgery*** plus incisional/needle biopsy of primary site or other sites</td>
</tr>
<tr>
<td>06</td>
<td>bypass surgery plus incisional/needle biopsy of the primary site or other sites; ___ostomy plus incisional/needle biopsy of the primary site or other sites</td>
</tr>
<tr>
<td>07</td>
<td>surgical Diagnostic/Staging Procedure(s), NOS</td>
</tr>
<tr>
<td>09</td>
<td>unknown if any Surgical Diagnostic/Staging Procedure was done</td>
</tr>
</tbody>
</table>

* If there is only microscopic *or* no residual disease, then consider this to be an excisional biopsy of a non-primary site (treatment Surgery) and code this under Surgery of Other Sites.

** If there is only microscopic residual disease *or* no residual disease, then consider this to be an excisional biopsy of the primary site and code it under Surgery of Primary Site.

*** An ___oscopy may be considered exploratory surgery only if an incision had to be made for the scope insertion. An ___oscopy that required no incision is not a surgical procedure.

**** A bypass with no tissue sample is often for palliation rather than diagnostic/staging purposes. Consider carefully if it should be coded as Palliative Care surgery rather than here.

The code priorities for the Surgical Diagnostic/Staging Procedures fields are:
- codes 01 - 07 have priority over 09;
- codes 01 - 06 have priority over 07;
- within 01 - 06, the higher code number has priority.

Example: A patient has both an incisional biopsy of the primary site (02) and of a metastatic site (01). -- Code 02 because it is the higher code number.

Using the code table above, report the Surgical Diagnostic/Staging Procedures performed during First Course of Treatment. Enter the best code to represent *all* such procedures done -- include those done at the reporting facility plus all known procedures performed elsewhere. If multiple procedures were performed, follow the code priority rules above and list these procedures, with their dates and places, in the Surgery -- Narrative field.
Surgical Diagnostic/Staging Procedures -- At This Facility

NAACCR Version 11.1 field "RX Hosp--DX/Stg Proc", Item 740, columns 471-472

Using the code table (previous page), enter the code for just the Surgical Diagnostic/Staging Procedures done at your facility (including any done in a staff physician's office if the information is available). For multiple procedures, follow the code priorities listed under the code table and be sure that all procedures, with their dates, are included in the Surgery -- Narrative field.

Surgical Diagnostic/Staging Procedures -- Date Started

NAACCR Version 11.1 field "RX Date--DX/Stg Proc", Item 1280, columns 851-858

See the general instructions for treatment date fields on page 172. When multiple procedures were performed, record the earliest date.

NOTE: There is not a separate Narrative field for Surgical Diagnostic/Staging Procedures. The field Surgery -- Narrative covers both Surgery and Surgical Diagnostic/Staging Procedures.

Date of 1st Positive Bx

NAACCR Version 11.1 Item 1080, columns 610-617

Record the date of the first positive incisional biopsy in MMDDCCYY format. This biopsy may be of the primary site, a lymph node or another site, but it must be a tissue biopsy -- i.e., a positive histopathologic finding of cancer was made (not cytologic). The first positive biopsy may or may not have been done or read at your facility. If a positive biopsy was never obtained for a case, enter 00000000. If the exact date is unknown, try to estimate it; if you can't estimate it, use 9's as usual for unknown codes. This field is optional for the MCR but if you fill it in, please do so correctly.

SURGERY

Surgical procedures done solely to establish a diagnosis or stage are Diagnostic/Staging Procedures rather than Surgery. Purely incidental surgeries (such as removing a rib to provide access during lung surgery) are NOT recorded in any field. The use of a laser simply to make an initial surgical incision is NOT recorded. Surgical procedures done for symptom relief which remove, destroy or modify cancer tissue are coded as Palliative Care AND Surgery. First-course surgical stent placement is not coded Surgery but should be included in Palliative Care (1).

Surgeries performed that are intended to remove possibly cancerous tissues for pathologic examination ARE recorded, even if these tissues are found to contain no cancer. For example, Scope of Regional Lymph Node Surgery records the extent of regional node surgery performed during the First Course of Treatment -- not just the removal of positive nodes.

Date of 1st Positive Bx added beginning with 2004 diagnoses


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Excisional biopsies are recorded as Surgery. If a surgeon states that the procedure was an excisional biopsy or that all gross tumor was removed, code it as excisional even if the pathology report shows marginal microscopic involvement (residual tumor). If there is no statement that the initial biopsy was "excisional", yet no residual tumor was found, assume the biopsy was excisional. If an excisional biopsy is followed by a First-Course re-excision or wide excision, include the later procedure when coding Surgery. Record the date of an excisional biopsy as the surgical start date whether followed by further definitive surgery or not.

There are three types of Surgery codes for diagnoses made beginning in 2003: Surgery of the Primary Site (codes in Appendix D), Scope of Regional Lymph Node Surgery, and Surgery of Other Sites. Only the Surgery of Primary Site codes in Appendix D are site- and histology-specific. The three types of Surgery are generally coded independently -- for example, a patient may have only a Scope of Regional Lymph Node Surgery and have no other type of Surgery coded.

Do not choose Surgery codes based solely on operative report titles. The procedure named may not always be the procedure that was actually done. Use all information in the surgical reports and pathologic reports to determine the most appropriate Surgery codes. If there is discrepancy between the operative and pathology reports as to exactly what tissues were removed, give priority to the pathology report information (unless it seems less reliable).

If a cancer surgery removes the remaining portion of an organ partly removed before (for any reason), code this as if the entire organ had been removed during this cancer surgery.

*Examples:* Removal of a cervical stump is coded as a total removal of the uterus. Removal of the last remaining lobe of a lung is coded as a pneumonectomy.

**Radiofrequency ablation** is Surgery that uses radiowaves (not Radiation Therapy). **Radiosurgery** is coded under Radiation but not Surgery. Embolization and chemoembolization are now considered destructive Surgery by SEER, while the COC considers physical embolization to be "not treatment" and chemoembolization to be Chemotherapy only. See MCR notes on page D-20 in Appendix D.

**Surgery of Primary Site**

Only record surgeries of the primary site here. Surgery to regional tissues or organs is coded in this section only if these tissues/organs are removed along with the primary site as part of a specified code definition (in Appendix D) or in an "en bloc resection". (An en bloc resection is the removal of multiple organs/tissues during the same surgery.)

*Example:* When a patient has a modified radical mastectomy, since the breast and axillary contents are all removed in this surgery by definition, Surgery of Primary Site is coded as a modified radical mastectomy (50) even if pathology finds no nodes in the specimen. (See the codes in Appendix D, page D-34.)

Record a non en bloc resection of a secondary or metastatic site in Surgery of Other Sites.

Note that lymphomas have no separate coding scheme in Appendix D. When lymph nodes (C77) are the primary site, use the lymph node scheme (page D-52). For an extranodal lymphoma, refer to the appropriate coding scheme for the primary site assigned.
A biopsy that removes all gross tumor or leaves only microscopically involved margins should be coded here as excisional. A biopsy that is called excisional by the surgeon should be coded as such, even if the margins are not found to be clean.

The operative report title alone may not include enough information to help you assign the best surgery code. Use all of the operative report text and the pathology report to confirm the procedure that was truly done. Use the information from the pathology report when an operative report is unclear or inconsistent, unless the pathologist states that an accurate accounting of organs removed can't be made (e.g., tumor encasement, crush artifact, etc.).

In the Surgery of Primary Site coding schemes, more physically extensive procedures are generally listed further/lower down in the code lists. In order to add new procedures into the pre-existing (ROADS) coding schemes, code numbers do not always increase in size as you move further down a list. Thus larger code numbers do not necessarily represent a more extensive surgery -- the relative position of the code numbers above or below each other is what matters. Purely destructive procedures are generally coded in the range 10-19, and tissue resections begin with code 20. The general hierarchical rules for the Surgery of Primary Site codes in Appendix D are as follows:

- code 98 has priority over 00;
- codes 00-79 have priority over 80, 90 and 99; only use 80, 90 and 99 in the absence of more specific information;
- within the range 00-79, a code that appears further down in the list of codes has priority over codes that appear before it (not necessarily the higher code number). For example, in the thyroid coding scheme (Appendix D, page D-50) a lobectomy (21) has priority over a local excision (26) because 21 appears below 26.

If the patient has multiple surgeries of the same primary site, code the most invasive, definitive surgery (generally the code listed further down in the code list). Assign the code that describes the total result (cumulative effect) of all First-Course Primary Site Surgeries.

Examples: A patient has a colonoscopy with removal of a polyp in the sigmoid colon (see the codes in Appendix D, page D-11, code 26). A week later the patient has a hemicolectomy (Surgery of Primary Site code 40) for residual disease. Record the hemicolectomy code because it is the most invasive, definitive surgery and because it is listed below the polypectomy code.

Patient has a lung wedge resection (code 21, p. D-25); later in First-Course Surgery the remainder of that lobe is removed. Code a total lobectomy (30).

A lymph node dissection during First Course of Treatment that is performed separately from a Primary Site Surgery may be combined into a single code that represents both surgeries when the coding scheme allows. For example, a simple mastectomy (code 40, p. D-33) followed by the separate removal of the axillary nodes could be coded as a modified radical mastectomy (50).
Code the appropriate surgery for each site when multiple primaries have surgery at the same time.

Examples: A total abdominal hysterectomy was performed for a patient who had cancers of the cervix and of the endometrium. Code a total abdominal hysterectomy for each of the two primaries.

Patient has a total colectomy for multiple primaries originating in three segments of the colon. Code a total colectomy for each primary.

In the Surgery -- Narrative field, record all known primary site surgical procedures done at the reporting institution and at other institutions.

Example: "11/15/2003 colonoscopy & polypectomy done here; 11/18/03 hemicolectomy at Hospital B".

Surgery of Primary Site -- Summary

Using the codes for the appropriate primary site in Appendix D, enter the best code for all Surgery of Primary Site performed as part of First Course of Treatment. This includes treatment done at the reporting facility, plus all known treatment given elsewhere. If multiple procedures were done, code the procedure that is further down in the list of codes, and list all procedures, with their dates and places of performance, in the Surgery -- Narrative field.

Surgery of Primary Site -- At This Facility

Using the codes in Appendix D, enter the code for the Surgery of Primary Site performed only at the reporting facility. If multiple primary site procedures were performed at your facility, enter the code for the procedure that appears further down in the code list, and be sure that the Surgery -- Narrative field includes all the procedures, with their dates. Include procedures performed in a staff physician's office if you have this information.

Surgery -- Date Started

See the general instructions on page 172 for treatment date fields. Record the date of an excisional biopsy here, whether followed by further definitive surgery or not, and whether or not residual tumor was found later. Record the earliest date of all coded Surgeries (of Primary Site, Regional Nodes and Other Sites) -- not just Surgery of the Primary Site.
TREATMENT DATA cont.

Date of Most Definitive Resection
NAACCR Version 11.1 field "RX Date--Most Defin Surg", Item 3170, columns 763-770

Record the date on which the most definitive or extensive surgery was performed on the Primary Site, regardless of the disease status of the specimens removed. This should correspond to the procedure coded under Surgery of Primary Site -- Summary. This will often be the same date that is recorded in Surgery -- Date Started, but it may be a later date.

If no primary site surgery took place (Surgery of Primary Site – Summary is 00 or 98), this date is zero-filled (00000000).

If Surgery of Primary Site -- Summary is coded 99 (unknown if performed, or death certificate-only case), then 9-fill this date.

Surgery -- Narrative
NAACCR Version 11.1 field "RX Text--Surgery", Item 2610, columns 4475-4624

This field holds up to 150 characters only, yet it often has to include lots of important information. Continue this important narrative in an empty treatment text field or in the Comments/Narrative Remarks field if necessary. See the general instructions on page 172 for Treatment Text fields. Include all known Diagnostic/Staging Procedures, Palliative Care surgery, and Surgery (of primary site, regional nodes, regional sites, distant sites, distant nodes) performed in chronological order, with dates and places where the surgeries were done (for example, "1/18/2005 sigmoidoscopy done here; 1/20/05 excision of rectal mass at Hospl B; 1/25/05 liver mets ablation at Hospl C"). Include reconstructive procedures when appropriate. If no Primary Site Surgery was done, give a reason here if known to you (for example, "mid-November 2005 pt refused lobectomy"). Be specific about describing any Diagnostic/Staging Procedures; do not enter vague text like "bx of other than primary site" -- tell us what site was actually biopsied. If the Surgery Date and/or Date of Most Definitive Resection reported are estimated, note that here.

Reason For No Primary Site Surgery
NAACCR Version 11.1 field "Reason for No Surgery", Item 1340, column 868

For all cancers, this field records if First-Course Surgery of Primary Site was done; and if it was not done (Surgery of Primary Site – Summary is coded 00 or 98) it records a reason why it was not done. Include all (Summary) Surgery of Primary Site that is known to you.

Record a reason why Surgery of Primary Site was not performed for this case; or, if it was performed, enter 0. This field now only refers to primary site surgery.
Assign code 1 whenever Surgery of Primary Site -- Summary is coded 98 to indicate that primary site surgery is not applicable for this diagnosis.

Enter the most applicable number from the following codes:

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery of Primary Site was performed.</td>
<td>0</td>
</tr>
<tr>
<td>Surgery of Primary Site was not recommended.</td>
<td>1</td>
</tr>
<tr>
<td>(includes inoperable or unresectable cancer; widespread cancer; conditions</td>
<td></td>
</tr>
<tr>
<td>not treated surgically, such as leukemia, etc.; unknown primary site;</td>
<td></td>
</tr>
<tr>
<td>multiple treatment types were offered and primary site surgery was not</td>
<td></td>
</tr>
<tr>
<td>chosen)</td>
<td></td>
</tr>
<tr>
<td>Surgery of Primary Site was contraindicated because of other conditions;</td>
<td>2</td>
</tr>
<tr>
<td>autopsy-only cases</td>
<td></td>
</tr>
<tr>
<td>(includes advanced age and other conditions or diseases that contraindicate</td>
<td></td>
</tr>
<tr>
<td>surgery)</td>
<td></td>
</tr>
<tr>
<td>Patient died before planned/recommended Surgery of Primary Site could be</td>
<td>5</td>
</tr>
<tr>
<td>performed. (includes death before a treatment plan was developed)</td>
<td></td>
</tr>
<tr>
<td>The reason for no Surgery of Primary Site is unknown. (Surgery would have</td>
<td>6</td>
</tr>
<tr>
<td>been the treatment of choice but it was not performed, and a reason is not</td>
<td></td>
</tr>
<tr>
<td>given.)</td>
<td></td>
</tr>
<tr>
<td>patient/guardian refused Surgery of Primary Site</td>
<td>7</td>
</tr>
<tr>
<td>(Surgery was recommended but patient/family/guardian refused; a blanket</td>
<td></td>
</tr>
<tr>
<td>refusal of all treatment was made before or after treatment recommendations.)</td>
<td></td>
</tr>
<tr>
<td>Surgery of Primary Site was recommended, but it's not known if it was</td>
<td>8</td>
</tr>
<tr>
<td>performed. (Surgery was recommended; no follow-up information is available</td>
<td></td>
</tr>
<tr>
<td>to confirm if it was performed.)</td>
<td></td>
</tr>
<tr>
<td>unknown if Surgery of Primary Site recommended or performed; death certificate-only cases</td>
<td>9</td>
</tr>
</tbody>
</table>

Scope of Regional Lymph Node Surgery

These fields define the removal of regional lymph nodes. Refer to the AJCC Cancer Staging Manual, Sixth Edition (TNM manual) to determine which nodes are considered regional for a given primary site or subsite. Nodes not listed as regional in the Sixth Edition should be considered distant nodes and their removal should be coded in Surgery of Other Sites rather than here. Regional lymph node surgeries done for purely palliative purposes should ALSO be coded in the Palliative Care fields. All regional nodes removed during First Course of Treatment should be included here (cumulatively).
Except for lymphomas with lymph node primary sites (C77.\_, 9590-9729), record here any surgical procedures which aspirate, biopsy or remove regional lymph nodes -- even if the purpose is simply to diagnose or stage disease. For lymphomas with C77.\_ primary sites, lymph nodes surgically aspirated, biopsied or otherwise removed for diagnostic or staging purposes should be coded in Surgical Diagnostic/Staging Procedures. (The Surgery of Primary Site codes in Appendix D for lymph node primaries do NOT refer to procedures done simply for diagnostic or staging purposes.) Scope of Regional Lymph Node Surgery is automatically coded 9 for lymphomas with C77 primary sites.

Remember that lymph node Surgery procedures are recorded here. Whether the nodes are positive or negative for disease does not matter. If the pathologist finds no nodes at all in the specimen(s), use code 0. When there is discrepancy between the number of nodes reported removed by the surgeon and the number of nodes reported examined by the pathologist, the pathology information takes priority (unless it seems less reliable than the operative information).

Examples: A sentinel node biopsy is performed for a breast cancer and the nodes are reported to be negative. Use code 2 to describe the procedure performed even though the results were negative.

The surgeon reports a regional node dissection with four nodes taken for a colon cancer; pathologist finds only three nodes in the specimen. Use code 4 to record the actual removal of three nodes.

The codes are hierarchical. Codes 0-7 have priority over 9. Within 1-7, if more than one procedure was performed or if more than one code applies, code the procedure that is numerically higher. However, when just a sentinel node biopsy (2) is performed, code 2 has priority over the number of nodes taken. Codes 3-5 refer to the number of nodes taken but do not pertain to sentinel node biopsies. (See details in the code table.)

The following types of case are automatically coded 9 for Scope of Regional Lymph Node Surgery:

- lymphomas with lymph node primary sites;
- hematopoietic, reticuloendothelial, immunoproliferative and myeloproliferative diseases of any primary site;
- primaries of the blood, bone marrow, reticuloendothelial system, hematopoietic system, meninges, brain, other CNS sites, ill-defined sites and unknown primary site.
The codes for Scope of Regional Lymph Node Surgery for all primary sites and types of cancer follow:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>no regional lymph node surgery; no nodes found in pathology specimens; autopsy-only case</td>
</tr>
<tr>
<td>1</td>
<td>regional lymph node biopsy or aspiration, NOS; Use 1 if the procedure is described as the biopsy or aspiration of a regional lymph node (compare with 4 below). Use 1 if the procedure is described as regional node biopsy or aspiration and there is no number of nodes specified.</td>
</tr>
<tr>
<td>2</td>
<td>sentinel lymph node biopsy; Use 2 when just a sentinel node biopsy is specified, regardless of the number of nodes taken.</td>
</tr>
<tr>
<td>3</td>
<td>regional lymph node removal, sampling or dissection, NOS (number of nodes not specified)</td>
</tr>
<tr>
<td>4</td>
<td>1 - 3 regional lymph nodes removed (by sampling or dissection) and found in the specimen; If 1-3 nodes were described as being removed but no nodes were found in the pathology specimens, use code 0 to indicate that no nodes were actually taken. Do not use 4 for a sentinel node biopsy of 1-3 nodes. Use 2 for all sentinel node biopsies unaccompanied by further node removal. Use 4 if a procedure is described as the removal of one regional node (compare with code 1).</td>
</tr>
<tr>
<td>5</td>
<td>4 or more regional lymph nodes removed (by sampling or dissection) and found in the pathology specimens; If 4 or more nodes were described as being removed but only 1-3 were found in the pathology specimens, use code 4 for the actual number of nodes removed. Do not use 5 for a sentinel node biopsy of more than 3 nodes. Use 2 for all sentinel node biopsies unaccompanied by further node removal.</td>
</tr>
<tr>
<td>6</td>
<td>sentinel lymph node biopsy (2) AND regional lymph node removal (3, 4 or 5) performed at the same time (during the same surgery); sentinel lymph node biopsy AND regional lymph node removal performed, but the timing of the procedures was not recorded</td>
</tr>
<tr>
<td>7</td>
<td>sentinel lymph node biopsy (2) AND regional lymph node removal (3, 4 or 5) performed at different times (during different surgeries)</td>
</tr>
<tr>
<td>9</td>
<td>unknown/not stated if regional lymph node surgery was performed; primary site C77._ with histologic types 9590-9729; histologic types 9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9964, 9980-9989; primary sites C42.0, C42.1, C42.3, C42.4, C70.<em>, C71.</em>, C72.<em>, C76.</em>, C80.9; death certificate-only case</td>
</tr>
</tbody>
</table>
TREATMENT DATA cont.

**Scope of Regional Lymph Node Surgery -- Summary**
NAACCR Version 11.1 field "RX Summ--Scope Reg LN Sur", Item 1292, column 861

Record the Scope of Regional Lymph Node Surgery done at your facility and elsewhere if known to you. Codes are on the preceding page.

**Scope of Regional Lymph Node Surgery -- At This Facility**
NAACCR Version 11.1 field "RX Hosp--Scope Reg LN Sur", Item 672, column 459

Code just the Scope of Regional Lymph Node Surgery done at your facility. Include procedures done in a staff physician's office (if available). Codes are on the preceding page.

**Surgery of Other Sites**

These fields record surgeries of any tissue, node or organ other than the primary site and regional lymph nodes. Use the *AJCC Cancer Staging Manual, Sixth Edition* (TNM manual) to determine whether specified lymph nodes and other sites are regional or distant (distant tissues are counted in the M element). If a regional or distant site was removed in continuity with the primary site (en bloc, during the same surgery), this is recorded only in the Surgery of Primary Site fields. Only regional or distant sites/nodes removed separately from the primary site (in separate surgeries) should be recorded here. The types of surgeries included here reflect those in the Surgery of Primary Site categories, so both surgical tissue destruction (such as radiofrequency ablation and alcohol ablation) and tissue removal are included. Palliative surgeries of sites other than the primary site and regional lymph nodes should be coded here AND in the Palliative Care fields if the surgery removed, destroyed or modified cancer tissue.

Include tissues, organs and distant lymph nodes that are removed because they are known to be cancerous or suspicious for cancer; and record the surgical procedure done even if no cancer is found by pathology. Do not record incidental removals when there was no suspicion of cancer there.

Surgery of Other Sites records (with code 1) any surgeries done for ill-defined primary sites, an unknown primary site, or hematopoietic, reticuloendothelial, immunoproliferative and myeloproliferative diseases. Whenever no surgery was performed for these cases, use code 0.

Codes 1-5 have priority over codes 0 and 9. Within the range 1-5 when multiple codes apply or when multiple procedures are performed, the higher code number has priority.
The codes for Surgery of Other Sites for all primary sites and types of cancer follow:

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>no surgical procedure of a non-primary site or distant lymph node; autopsy-only case</td>
<td>0</td>
</tr>
<tr>
<td>surgery of other site, NOS; surgery when the primary site is C42.0, C42.1, C42.3, C42.4, C76._ or C80.9; surgery when the histologic type is 9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9964 or 9800-9989; surgery of other site was performed, but it's unknown if this was a regional or distant site*</td>
<td>1</td>
</tr>
<tr>
<td>surgery of regional site(s) (not regional lymph node)</td>
<td>2</td>
</tr>
<tr>
<td>surgery to distant lymph node(s)</td>
<td>3</td>
</tr>
<tr>
<td>surgery of distant site(s) (not lymph nodes)</td>
<td>4</td>
</tr>
<tr>
<td>combination non-primary surgery (any combination of 2, 3, 4)</td>
<td>5</td>
</tr>
<tr>
<td>unknown if a non-primary surgery or non-regional node surgery was performed; death certificate-only case</td>
<td>9</td>
</tr>
</tbody>
</table>

* For example, a tumor known to be non-primary is removed from the liver but the primary site is unknown, so it's unknown if the liver is a regional or distant site.

**Surgery of Other Sites -- Summary**
NAACCR Version 11.1 field "RX Summ--Surg Oth Reg/Dis", Item 1294, column 862

Report the Surgery of Other Sites performed at your facility and elsewhere (if known to you).

**Surgery of Other Sites -- At This Facility**
NAACCR Version 11.1 field "RX Hosp--Surg Oth Reg/Dis", Item 674, column 460

Report just the Surgery of Other Sites performed at your facility as part of First Course of Therapy. Include procedures performed in a staff physician's office if known to you.
ROADS SURGERY CODES

For cases diagnosed before 2003 that are reported using the NAACCR Version 10, 10.1, 10.2 or later layouts, both ROADS and FORDS surgery codes must be entered for certain fields for the sake of information continuity. This practice is specified by the COC, NAACCR, SEER and the CDC/NPCR. Complete ROADS surgery codes can be found in the updated ROADS Manual and in the MCR Abstracting and Coding Manual for Hospitals, Fourth Edition, so they are not repeated here. This ROADS/FORDS "double coding" will not be a problem when reporting Class 3 cases diagnosed before 2003 to the MCR because First Course of Treatment does not have to be completed for such cases (use 0's and 9's as appropriate). The six ROADS surgery fields collected by the MCR follow. (The "1998-2002" in the field titles refer to the diagnosis years of the ROADS expanded surgery codes.)

For primary site surgeries, the ROADS and FORDS codes for the same procedure will often be identical. Because the regional node and "other site" surgeries were site-specific in ROADS, their codes will sometimes differ from the corresponding FORDS codes.

Example: A lung cancer patient diagnosed on December 20, 2002 has a lobectomy on December 29th and has a sentinel lymph node biopsy and ablation of a liver metastasis on January 3, 2003. The Summary ROADS codes for Surgery of Primary Site, Scope of Regional Lymph Node Surgery and Surgery of Other Sites are 31, 1 and 6. FORDS codes for the same procedures are 30, 2 and 4.

Surgery of Primary Site, 1998-2002 -- Summary
NAACCR Version 11.1 field "RX Summ--Surg Site 98-02", Item 1646, columns 939-940

Using the codes in the ROADS Manual or Appendix D of the Fourth Edition of the MCR Abstracting and Coding Manual for Hospitals, record the Summary Surgery of the Primary Site (done at your facility and elsewhere).

Surgery of Primary Site, 1998-2002 -- At This Facility
NAACCR Version 11.1 field "RX Hosp--Surg Site 98-02", Item 746, columns 478-479

Using the codes in the ROADS Manual or Appendix D of the Fourth Edition of the MCR Abstracting and Coding Manual for Hospitals, record the Surgery of the Primary Site done at your facility (including surgery in staff physicians' offices if known to you).
Scope of Regional Lymph Node Surgery, 1998-2002 -- Summary
NAACCR Version 11.1 field "RX Summ--Scope Reg 98-02", Item 1647, column 941

Using the codes in the ROADS Manual or Appendix D of the Fourth Edition of the MCR Abstracting and Coding Manual for Hospitals, record the Summary Regional Node Surgery (done at your facility and elsewhere).

Scope of Regional Lymph Node Surgery, 1998-2002 -- At This Facility
NAACCR Version 11.1 field "RX Hosp--Scope Reg 98-02", Item 747, column 480

Using the codes in the ROADS Manual or Appendix D of the Fourth Edition of the MCR Abstracting and Coding Manual for Hospitals, record the Scope of Regional Lymph Node Surgery done at your facility (including surgery in staff physicians' offices if known to you).

Surgery of Other Sites, 1998-2002 -- Summary
NAACCR Version 11.1 field "RX Summ--Surg Oth 98-02", Item 1648, column 942

Using the codes in the ROADS Manual or Appendix D of the Fourth Edition of the MCR Abstracting and Coding Manual for Hospitals, record the Summary Surgery of Other Regional or Distant Sites (done at your facility and elsewhere).

Surgery of Other Sites, 1998-2002 -- At This Facility
NAACCR Version 11.1 field "RX Hosp--Surg Oth 98-02", Item 748, column 481

Using the codes in the ROADS Manual or Appendix D of the Fourth Edition of the MCR Abstracting and Coding Manual for Hospitals, record the Surgery of Other Sites done at your facility (including surgery in staff physicians' offices if known to you).
RADIATION THERAPY

First-Course Radiation Therapy may be delivered to any part of the body (primary site, regional tissues or metastatic sites). Radiation for purely palliative purposes should be coded in Palliative Care AND here when the radiation affected cancer cells/tissue. Do not include radiation for hormonal effect such as irradiation of non-cancerous endocrine glands; (code endocrine radiation for breast or prostate cancers as Endocrine Procedures). Do not include radiation to the male breast to prevent gynecomastia. First-course prophylactic radiation (for example, whole-brain radiation for leukemia or lung cancer) may be included. If both palliative and therapeutic radiation are given, code just the non-palliative Radiation Therapy.

Radiofrequency ablation uses low-frequency radiowaves to destroy cancer cells and is NOT Radiation Therapy; it is coded in Surgery fields. Radiosurgery uses beam radiation and is coded as Radiation but not as Surgery.

Types of Radiation

The main types of Radiation Therapy include the external administration of radioactive beams, implantation of radioactive material (brachytherapy), and the internal administration of radioisotopes by means other than implantation. Radioactive materials include the following:

- gold (Au)\(^{198}\)
- cobalt (Co)\(^{60}\)
- chromic phosphate (CrO\(_4\)P)
- phosphocol (Cr\(_{25}\)PO\(_4\))
- cesium (Cs)
- iodine (I)\(^{125}\) and I\(^{131}\)
- iridium (Ir)\(^{192}\)
- phosphorus (P)\(^{32}\)
- lead (Pb)\(^{210}\)
- radium (Ra)\(^{226}\)
- radon (Rn)\(^{222}\)
- ruthenium (Ru)\(^{106}\)
- strontium (Sr)\(^{89}\) and Sr\(^{90}\)
- yttrium (Y)\(^{90}\)

Beam (Teletherapy) -- The source of radiation is outside the patient, as in a cobalt machine or linear accelerator. Examples of beam radiation include the following:

- Betatron
- Brachytron
- Cobalt
- Cyclotron
- Grenz ray
- Helium ion or other heavy particle beam
- Linear accelerator (LINAC)
- Neutron beam
- Spray radiation
- Stereotactic radiosurgery (gamma knife, proton beam)
- X-ray

Brachytherapy (implants) -- Radioactive materials are administered by interstitial implants, molds, seeds, needles or intracavitary applicators. (Heyman capsules, Fletcher suit and Fletcher after-loader are terms that should be interpreted as implants.)

Radioisotopes (other internal radiation) -- Record the name or chemical symbol and administration method of any radioactive material given internally (orally, intracavitarily or by intravenous injection) but not implanted.
If multiple types of radiation are delivered during First Course of Treatment, record only the most dominant modality here — the most significant for the treatment/palliation of the cancer. Although regional radiation is usually given before a boost (supplemental) dose, this is not always so. First-course prophylactic radiation may be considered the Regional Modality if no therapeutic radiation is given. Determine which type of radiation was the most important for treating the cancer or patient; consult physicians when this is not clear. Note that no code can be entered to represent a combination of different radiation modalities (such as beam radiation plus implants) for cases diagnosed beginning in 2003.

Examples: A patient first has stereotactic radiosurgery for a single brain metastasis, followed by beam radiation to the primary site and involved regional tissues. The earlier stereotactic surgery is less significant to treating the primary volume of disease, so code the later beam radiation as the Regional Modality. For a prostate cancer, when a course of beam radiation is delivered to the prostate area and seed implants are also used during First Course of Therapy, the beam radiation has more significance than the brachytherapy (unless a physician states otherwise). Code the beam radiation as Regional Modality.

If only one type of Radiation Therapy was given, that is recorded as Regional Modality regardless of anatomic area targeted and therapeutic significance, and even if it was done for purely palliative intent. [Everyone receiving treatment Radiation should have Regional Modality specified, but not everyone has "boost" treatment. A boost is given to a smaller portion (volume) of the area that received (or will receive) regional radiation to enhance the regional treatment. Radiation to an area not included in the regional radiation is not a boost. The MCR does not collect Boost Modality.]

Note that there are not separate fields for "Summary" and "At-This-Facility" Regional Modality. Record here the dominant type of Radiation Therapy known to you regardless of whether or not it was given at your facility (as for a Summary treatment field).

Distinguish the energy of the beam (the type of therapy, counted in volts) from the amount of total radiation reaching the targeted tissues [the therapeutic dose delivered, counted in centigrays (cGy) or rads]. The amount of radiation delivered to the tissues is recorded in a different COC field not collected by the MCR. Codes 21 and 23-27 refer to the energy of the radiation beams outside the body (generated by the particular device). Within radiation categories, the "NOS" code (for example, 20, 41, 50, 60) is listed first, followed by specific types. Note that voltage or volts (V) may also be recorded as electron-volts (eV).

Brachytherapy codes are based on dose rate (low/high) source and whether the radiation sources are placed in the targeted tissues or adjacent to them. The COC states that low dose rate brachytherapy is usually given over several days as an inpatient procedure. High dose rate brachytherapy is usually more limited in scope; iridium (Ir)-192 is a high dose rate source.
Radioimmunotherapy, radioimmunoconjugates: Radioisotopes delivered via a monoclonal antibody (Zevalin, Bexxar, etc.) should be coded here (60) rather than as Immunotherapy. Bexxar delivers iodine (I)-131, and Zevalin delivers yttrium (Y)-90. [Zevalin is also used to deliver indium (In)-111 for imaging purposes rather than treatment.] Similarly, iodine-labeled immunoglobin (especially for thyroid cancers) was formerly coded as both a radioisotope and Immunotherapy, but SEER has recently changed this instruction to specify that the antibody is simply being used to deliver radiation to the tumor and this therapy should be coded only as Radiation. (That decision was later reflected in the SEER*Rx Database.)

Record the most specific category or highest applicable code number within a modality type (general beam radiation, proton/stereotactic radiosurgery, brachytherapy, radioisotopes).

Example: 3-D conformal radiation with beam strength 6 MV: Use 32 for conformal therapy because this code is higher than the beam energy's code (24).

Categories and codes for Regional Modality Radiation Therapy follow:

<table>
<thead>
<tr>
<th>no radiation treatment <em>(includes refusal)</em>: autopsy-only case</th>
<th>00</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Beam Radiation</strong></td>
<td></td>
</tr>
<tr>
<td>external beam, NOS <em>a</em></td>
<td>20</td>
</tr>
<tr>
<td>orthovoltage <em>b</em></td>
<td>21</td>
</tr>
<tr>
<td>cobalt (Co)-60 or cesium (Cs)-137 <em>c</em></td>
<td>22</td>
</tr>
<tr>
<td>photons or X-rays, beam energy of 2 - 5 megavolts (MV)</td>
<td>23</td>
</tr>
<tr>
<td>photons or X-rays, beam energy 6 - 10 megavolts (MV)</td>
<td>24</td>
</tr>
<tr>
<td>photons or X-rays, beam energy 11 - 19 MV</td>
<td>25</td>
</tr>
<tr>
<td>photons or X-rays, beam energy of more than 19 MV</td>
<td>26</td>
</tr>
<tr>
<td>photon or X-ray beams of mixed energies; beams of multiple energy levels (combination of 23 - 26)</td>
<td>27</td>
</tr>
<tr>
<td>electron beam</td>
<td>28</td>
</tr>
<tr>
<td>photon or X-ray AND electron beams (combination of 23 - 27 and 28)</td>
<td>29</td>
</tr>
<tr>
<td>neutron beam (may also include photons, X-rays and/or electrons)</td>
<td>30</td>
</tr>
<tr>
<td>IMRT (intensity modulated radiation therapy)_tomotherapy</td>
<td>31</td>
</tr>
<tr>
<td>conformal radiation therapy; 3-D (three-dimensional) radiation therapy (Fixed portals produce beams conforming to the targeted volume's shape.)</td>
<td>32</td>
</tr>
</tbody>
</table>

* Don't confuse this with 98. Use 20 when external beam was used but you cannot assign a specific code 21-43.
* The equipment produces a beam of less than 1 million (mega) volts (< 1 MV) [less than 1000 kilovolts (< 1000 kV)]. Orthovoltage is usually counted in thousands of volts (kilovolts, kV) rather than megavolts (millions of volts, MV).
* The equipment producing the beam has one of these materials as the radiation source. (If Co-60 or Cs-137 is introduced into the patient's body rather than used to produce an external beam, code as brachytherapy.)

*page last updated July 2007*
<table>
<thead>
<tr>
<th>Beam Radiation: Stereotactic Radiotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>proton beam; proton therapy</td>
</tr>
<tr>
<td>stereotactic radiosurgery, NOS</td>
</tr>
<tr>
<td>(specific type not recorded, or some type of radiosurgery other than 42 or 43)</td>
</tr>
<tr>
<td>LINAC radiosurgery (linear accelerator produces the beam)</td>
</tr>
<tr>
<td>gamma knife radiosurgery</td>
</tr>
</tbody>
</table>

**Brachytherapy** (radioactive implants, molds, seeds or needles)

| brachytherapy, NOS (includes selective internal radiation therapy, SIRT) | 50 |
|--------------------------------------------------------------------------|
| low dose rate (LDR) intracavitary brachytherapy                           | 51 |
| (LDR applicators and radiation sources [for example, Fletcher Applicator and cesium (Cs)-137] inserted into a cavity near the targeted tissues) |
| high dose rate (HDR) intracavitary brachytherapy                          | 52 |
| (HDR after-loading applicators and radiation sources inserted into a cavity next to the targeted tissues; *mammary radiation*) |
| low dose rate (LDR) interstitial brachytherapy                            | 53 |
| (LDR radiation sources inserted into targeted tissues)                    |
| high dose rate (HDR) interstitial brachytherapy                           | 54 |
| (HDR radiation sources inserted into targeted tissues)                    |
| radium (Ra) implant                                                       | 55 |

**Radioisotopes** [unstable isotopes of elements which don't normally emit radiation, such as iodine (I)-131 or phosphorus (P)-32]

| radioisotope, NOS; any radioisotope other than 61 and 62                  | 60 |
|--------------------------------------------------------------------------|
| strontium (Sr)-89                                                        | 61 |
| strontium (Sr)-90                                                        | 62 |

**Conversion Combinations** (only used for pre-2003 diagnoses)

| specified combination modalities (beam & brachytherapy/radioisotopes)     | 80<sup>d</sup> |
|--------------------------------------------------------------------------|
| combination modalities, NOS (combination therapies not covered by 80)     | 85<sup>d</sup> |

**Radiation Therapy, NOS**

| type of radiation not specified/unknown;<sup>e</sup> | 98 |
|-----------------------------------------------------|
| type of radiation that cannot be coded using the given codes (Radiation Therapy was given, but the type is not known to you.) |

**Unknown**

| unknown if Radiation Therapy was given (not radiation type unknown); death certificate-only case | 99 |

---

<sup>d</sup> 80 and 85 may only be used for diagnoses made before 2003 -- resulting from conversion of ROADS combination codes or manually assigned to pre-2003 diagnoses. Starting with 2003 diagnoses you cannot record 80 or 85 -- you must choose just the one type of radiation most important to treating the cancer, using the highest applicable code within a category.

<sup>e</sup> Distinguish 20 from 98. Use 98 when some type of radiation was given but you can't tell if it was beam or not.
TREATMENT DATA cont.

Radiation Therapy -- Date Started

NAACCR Version 11.1 field “RX Date--Radiation”, Item 1210, columns 779-786

See the Treatment Date instructions on page 172. This is the first start date of any type of Radiation given -- usually, but not necessarily, the date on which the Regional Modality therapy began.

If Radiation Therapy is part of the planned First Course of Therapy but it has not yet begun (or it's unknown if recommended radiation has begun) when you abstract the case for the MCR, enter the special code 88888888. If your facility is administering this Radiation Therapy, please tell the MCR when it does eventually begin (or that for some reason it never takes place) so that we can update the 8's in our data system.

Radiation Therapy -- Narrative

NAACCR Version 11.1 field “RX Text--Radiation (Beam)”, Item 2620, columns 4625-4774

This field holds up to 150 characters. See the Treatment Text instructions on page 172. Although this NAACCR field is meant to contain only information on beam radiation, please note that the MCR does not collect the companion field "RX Text--Radiation Other" (NAACCR Item 2630) where any non-beam radiation would be described. Please describe all types of radiation given to the patient in Item 2620 for the MCR. For your own purposes you may also separately describe non-beam radiation in Item 2630, but remember that anything you record there will not be seen by the MCR. If we see any type of radiation coded that is not documented in Item 2620, we may have to call you to clarify the apparent discrepancy. If the Radiation Date reported is an estimate, note that here. Include a summary of all types of radiation given -- NOT just the Regional Modality. Include enough specific information to help us verify the Regional Modality code. Other information covered by fields that are not collected by the MCR (Elapsed Days, Treatment Volume, etc.) should follow after the start date and Regional Modality description.

The MCR does not collect the field "Reason for No Radiation". If Radiation Therapy was planned during First-Course Therapy but it was not done, you may record a reason here (optional).

Radiation / Surgery Sequence

NAACCR Version 11.1 field "RX Summ--Surg/Rad Seq", Item 1380, column 875

This field defines the order in which First-Course Radiation and Surgery were delivered. Include Radiation (regional and boost) and Surgery (Primary Site, Regional Nodes and Other Sites) given at your facility and elsewhere. Palliative Radiation and Palliative Surgery also count. Surgical Diagnostic/Staging procedures do not count. Enter a code 2-9 if the patient had both Radiation and Surgery during First-Course Treatment.

page last updated July 2007
Codes for Radiation / Surgery Sequence follow:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>no Radiation Therapy and/or Surgery; autopsy-only case; death certificate-only case</td>
</tr>
<tr>
<td>2</td>
<td>Radiation Therapy before Surgery</td>
</tr>
<tr>
<td>3</td>
<td>Radiation Therapy after Surgery</td>
</tr>
<tr>
<td>4</td>
<td>Radiation Therapy both before and after Surgery</td>
</tr>
<tr>
<td>5</td>
<td>intraoperative Radiation Therapy alone</td>
</tr>
<tr>
<td>6</td>
<td>intraoperative Radiation Therapy with other Radiation Therapy given before or after Surgery</td>
</tr>
<tr>
<td>9</td>
<td>sequence unknown, but both Radiation Therapy and Surgery were done; it's unknown if both were done</td>
</tr>
</tbody>
</table>

**SYSTEMIC THERAPY**

Systemic therapies include Chemotherapy, Hormone Therapy, Immunotherapy and Hematologic Transplants & Endocrine Procedures. Drugs and other agents acting on bodily systems at large (Chemotherapy, Hormone Therapy, Biological Response Modifiers) are coded separately from procedures affecting a patient's hormone or immunologic systems (Hematologic Transplants & Endocrine Procedures). There is one "start date" field covering all these modalities. Note that Hematologic Transplants & Endocrine Procedures do not have a separate Narrative field, nor an "At-This-Facility" field.

Systemic drugs and agents may be given intravenously, orally or by injection into the cerebrospinal fluid, pleural cavity, pericardial space, peritoneal cavity or hepatic artery.

**Systemic Therapy -- Date Started**

NAACCR Version 11.1 field "RX Date--Systemic", Item 3230, columns 795-802

See the Treatment Date instructions on page 172. Enter the earliest start date for First-Course Chemotherapy, Hormone Therapy, Immunotherapy and Hematologic Transplants & Endocrine Procedures. If Systemic Therapy is planned but hasn't yet begun (or it's unknown if the recommended treatment was begun) when the case is abstracted, fill the field with 88888888; if your facility or staff physician administers the treatment, let the MCR know when it begins (or if it never actually takes place) so that we can update this field on our data system.
CHEMOTHERAPY

Chemotherapy agents are anticancer drugs inhibiting cancer cell reproduction -- usually by interfering with DNA synthesis and mitosis, causing the cells to stop growing or die. Chemotherapy may be given intravenously or orally; agents may also be topical, intrathecal, intracavitary or intra-arterial. Chemotherapy is often given in cycles over weeks or months. Only record First-Course Chemotherapy. Chemotherapy for palliative purposes is coded in Palliative Care AND here. Low-dose chemotherapeutic agents administered in conjunction with radiation therapy as radiosensitizers or radioprotectants should NOT be coded as Chemotherapy; this is use is considered ancillary.

Chemotherapy agents may be administered singly or in combination regimens of two or more drugs. The drugs are frequently given in combinations referred to by acronyms or protocols codes. You may use standard acronyms and abbreviations, but do not enter protocol codes alone. Two or more single agents given at separate times during First Course of Therapy are considered to be a combination regimen. Acronyms used for combination regimens may be looked up in the SEER*Rx (Interactive Antineoplastic Drugs) Database for diagnoses made beginning in 2005, or in SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed. (1993) (pages 29-31) for pre-SEER*Rx coding.

Record Chemotherapy delivered concurrently or as adjuvant or neoadjuvant treatment. Concurrent Chemotherapy is used in combination with other therapies (Surgery, Radiation, etc.). In adjuvant therapy, when other methods have already destroyed clinically detectable cancer, Chemotherapy is then given to prevent or delay recurrence by destroying micrometastases. Neoadjuvant therapy is done before Surgery to help reduce a tumor's size.

Chemoembolization is Chemotherapy under 2006 COC rules, while SEER now considers it destructive Surgery. The two groups apparently mean to be using the same rule so the MCR isn't sure what to do: either follow the COC rule and code as Chemotherapy, follow the SEER rule and code as Surgery, or both. See also p. D-20.

Chemotherapy may be divided into the following four groups:

Group I: Alkylating Agents
- Busulfan (Myleran)
- Carmustine
- Carmustine + implant (Gliadel Wafer with BCNU)
- Chlorambucil (Leukeran)
- Cyclophosphamide (Cytoxan, Neosar)
- Mechlorethamine (Mustargen)
- Phenylalanine mustard (Alkeran, Melfalan)
- Triethylene-thiophosphoramide (Thio-TEPA)

Group II: Antimetabolites
- Capecitabine (Xeloda)
- Dacarbazine (DTIC-Dome)
- 5-Fluorouracil (5-FU)
- Gemcitabine HCl (Gemzar)
- 6-Mercaptopurine (6-MP, Purethinol)
- Methotrexate (Amethopterin, Mexate, MTX)

Page last updated April 2006
Group III: Natural Products
Bleomycin (Blenoxane)
Dactinomycin (Actinomycin D, Cosmegen)
Daunorubicin (Cerubidine, DaunoXome)
Doxorubicin (Adriamycin, Caelyx, Doxil, Rubex)
Paclitaxel (Taxol)
Vinblastine (VBL, Velban)
Vincristine (Oncovin, VCR, Vincasar)

Group IV: Miscellaneous Agents
Cis-diammine dichloroplatinum II (Cisplatin, Platinol)
Hydroxyurea (Hydrea)
Oxaliplatin (Eloxatin)
Procarbazine (Matulane, Natulan)

See the SEER*Rx Database for coding Chemotherapy agents for diagnoses made beginning in 2005. The SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed. (1993) (pages 5-28, plus updates) shows how agents were coded before the SEER*Rx Database became available.

When a patient has an adverse reaction to initial Chemotherapy a physician may change one (or more) of the agents being given. If a replacement drug belongs to the same group (Groups I-IV shown above) as the original drug, there is considered to have been no change in the regimen and this is just a continuation of the planned First Course of Therapy; but if the replacement agent falls into a different group than the original drug, then this is considered a new regimen and subsequent therapy (i.e., not First-Course and not collected by the MCR). A change in multiple drugs usually means a regimen change. If the treatment plan includes a planned drug change, however, this is all considered to be part of First Course of Therapy.

Examples: A patient begins Taxol Chemotherapy but suffers a severe reaction with the first dose. No further Chemotherapy is given. Although the planned treatment was not completed, code 02 because a single drug was administered.

A patient begins on Doxil but is switched to Temozolomide because of side effects. Code 02 because Doxil is a natural product and Temozolomide is an alkylating agent. The Temozolomide is not First-Course Therapy.

A patient begins on 5-FU but cannot tolerate it. Camptosar is substituted. Both are antimetabolites so the Camptosar is still First-Course. Code 02 because a single agent was switched for another in First-Course Therapy.

Note: Some drugs changed category between SEER Book 8 (and its updates) and the SEER*Rx Database. Code according to the Database for diagnoses made beginning in 2005. Book 8 codes that had been assigned on older diagnoses do not have to be changed.

Page updated for 2005
Ancillary drugs and Differentiation-Inducing Agents

Ancillary drugs may be given to a cancer patient, sometimes in combination with treatment or other drugs, but they do not directly treat cancer. Ancillary drugs may treat treatment side effects, enhance Chemotherapy effectiveness, or act as radiosensitizers. See the SEER*Rx Database and pages 35-46 (plus updates) in SEER Book 8 for ancillary drugs. Ancillary drugs, including radiosensitizers, are not coded as cancer treatment but they may be included in the Chemotherapy -- Narrative field and they may (if given for symptom relief) be coded as Palliative Care. Differentiation-inducing agents (SEER*Rx Database or SEER Book 8 pages 50-51 plus updates) also do not directly treat cancer and are NOT coded as treatment; record their names in Chemotherapy -- Narrative.

Examples: 5-FU and Leucovorin are given in First Course of Therapy. The Leucovorin enhances the 5-FU's effectiveness. The Chemotherapy code is 2 (single agent). Chemotherapy -- Narrative could say "5-FU (+ Leucovorin)".

5-FU is used as a radiosensitizer for a rectal cancer. 5-FU is categorized as Chemotherapy in the SEER*Rx Database; but because it is being given as a radiosensitizer in this case it is not coded as Chemotherapy; record "5-FU radiosensitizer" in the Chemotherapy -- Narrative.

Procrit is given to someone with chronic lymphocytic leukemia. Procrit relieves symptoms but does not help "cure" the disease. Record the Procrit under Palliative Care (code 7) only.

Some normally ancillary drugs (adrenocorticotropic hormones like Decadron) are coded as Hormone Therapy agents if given to treat myelomas, lymphomas or lymphoid leukemias. See the SEER*Rx Database or p. 37 in SEER Book 8, or seek physician help to distinguish ancillary-vs.-treatment use of these drugs.

Ancillary drugs and differentiation-inducing agents include the following:

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Drug Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuterol (Proventil)</td>
<td>Erythropoietin (Procrit)</td>
</tr>
<tr>
<td>Allopurinol</td>
<td>Leucovorin (Wellcovorin)</td>
</tr>
<tr>
<td>Benznidazole</td>
<td>Filgrastim (Neupogen)</td>
</tr>
<tr>
<td>Bromodeoxyuridine (5-BUdR)</td>
<td>Oprelvekin (Neumega)</td>
</tr>
<tr>
<td>Bromouracil</td>
<td>Pamidronate disodium (Aredia)</td>
</tr>
<tr>
<td>Clonidine</td>
<td>Quinidine</td>
</tr>
<tr>
<td>Desmethyl-misonidazole</td>
<td>Tretinoin (Vesanoid)</td>
</tr>
<tr>
<td>Epogen</td>
<td>Zoledronic acid (Zometa)</td>
</tr>
</tbody>
</table>

When Prednisone is given in combination with Chemotherapy agents, the Prednisone is coded as Hormone Therapy and the Chemotherapy agents are coded here. This usually pertains to the treatment of myelomas, lymphoid leukemias or lymphomas. Prednisone given without Chemotherapy is usually ancillary (not coded, unless used for palliative purposes).

Prednisolone is recorded in the same manner. The SEER*Rx Database lists each agent in combination drug regimens and shows the appropriate treatment modality for each.
When Chemotherapy was not used, if it is not normally recommended for the given type of cancer and stage of disease, use 00. If Chemotherapy was not given but it is normally recommended for this cancer type/stage, code the reason why it wasn't given using 82 - 87.

Use the following codes for First-Course Chemotherapy:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>no Chemotherapy given because it wasn't planned; (Chemotherapy is not normally given for this type/stage of cancer; multiple treatment types were offered and something other than Chemotherapy was chosen.) autopsy-only case</td>
</tr>
<tr>
<td>01</td>
<td>Chemotherapy, NOS (number of agents unknown)</td>
</tr>
<tr>
<td>02</td>
<td>Chemotherapy, single agent</td>
</tr>
<tr>
<td>03</td>
<td>Chemotherapy, multiple agents (combination regimen)</td>
</tr>
<tr>
<td>08</td>
<td>Chemotherapy not given/recommended because of contraindications (such as age or comorbid conditions).</td>
</tr>
<tr>
<td>05</td>
<td>Chemotherapy not given because patient died before planned/recommended therapy.</td>
</tr>
<tr>
<td>06</td>
<td>Chemotherapy recommended but it wasn't given, and the reason why is not recorded.</td>
</tr>
<tr>
<td>07</td>
<td>Chemotherapy refused* by patient/family/guardian.</td>
</tr>
<tr>
<td>08</td>
<td>Chemotherapy was recommended but it's unknown if it was given; Chemotherapy was planned but has not yet started</td>
</tr>
<tr>
<td>09</td>
<td>unknown if Chemotherapy recommended or administered; unknown if Chemotherapy normally recommended for this cancer type/stage; death certificate-only case</td>
</tr>
</tbody>
</table>

* Code 87 should be used when Chemotherapy is normally recommended for this type of cancer and stage of disease, and any of the following situations applies:
  - any and all treatment was refused before specific treatment recommendations could be made;
  - there was a blanket refusal of all recommended treatment;
  - recommended Chemotherapy was specifically refused.

Note: In the range 01 - 03, the higher code number has priority.
## Chemotherapy -- Summary

NAACCR Version 11.1 field "RX Summ--Chemo", Item 1390, column 878-879

Using the code table on the preceding page, report all the Chemotherapy given to the patient as part of First Course of Therapy. Include Chemotherapy given at your institution and at all others (if known to you).

## Chemotherapy -- At This Facility

NAACCR Version 11.1 field "RX Hosp--Chemo", Item 700, column 464-465

Using the code table on the preceding page, report just the Chemotherapy administered at your facility as part of First Course of Therapy. Include treatment delivered in a staff physician's office if this is recorded in your facility's medical record.

## Chemotherapy -- Date Started

NAACCR Version 11.1 field "RX Date--Chemo", Item 1220, columns 803-810

See the Treatment Date instructions on page 172. The MCR continues to collect individual Systemic Treatment start dates at this time. The special code 88888888 may be used when Chemotherapy has not yet started or when it's unknown if recommended Chemotherapy was started.

## Chemotherapy -- Narrative

NAACCR Version 11.1 field "RX Text--Chemo", Item 2640, columns 4925-5124

This field may contain up to 200 characters. Record the generic or trade names of the Chemotherapy agents used. Include those that are in the investigative or clinical trial phase if identified as Chemotherapy agents. For chemotherapeutic agents and regimens, see the SEER*Rx Database (for diagnoses beginning in 2005) or SEER Self-Instructional Manual for Tumor Registrars: Book 8, 3rd Ed. (pages 5-31) (with updates) for cases coded before SEER*Rx became available. You may use standard abbreviations and acronyms (such as "5-FU" and "MOPP"), but avoid entering protocol numbers alone. See the SEER*Rx Database and pages 29-31 in SEER Book 8 for combination regimen standard acronyms. The names of (uncoded) ancillary drugs given along with Chemotherapy agents or as radiosensitizers may also be included here. If the Chemotherapy Date reported is an estimate, note that here. If Chemotherapy was planned or recommended as First-Course Treatment but was not carried out, please record a reason why here. Agents given for First-Course Palliative chemotherapeutic care should be recorded here.

page last updated July 2007
HORMONE THERAPY

Hormone Therapy achieves its effects on cancer cells by changing hormone balance. It includes hormones, antihormones, adrenocorticotropic agents and other agents acting via hormonal mechanisms. Hormone Therapy may provide long-term cancer control but it is not usually used to "cure" cancer.

Record surgery (such as orchiectomy) and radiation given for hormonal effect as Endocrine Procedures rather than here. If Hormone Therapy is given for purely palliative reasons and it modifies cancer cells/tissue, code in Palliative Care AND here.

If cancer or treatment has lowered normal hormone production, hormone replacement therapy (HRT) may be used. Thyroid hormone replacement is not always tumor-directed; but if a cancer patient receives a thyroid hormone preparation like Synthroid to inhibit the pituitary from making thyroid-stimulating hormone (TSH, which could cause tumor growth), then this is Hormone Therapy (especially for follicular or papillary thyroid carcinomas). Endometrial cancer may be treated with Progesterone; even if prescribed for menopause it can still affect tumor growth, so code Progesterone as Hormone Therapy for endometrial cancer patients. Examples: A woman has been on Progesterone for menopausal symptoms for months before an endometrial cancer diagnosis. When coding her cancer treatment, record that she received Hormone Therapy (starting on the diagnosis date).

A patient with follicular and/or papillary thyroid cancer is given a synthetic thyroid hormone (in the SEER*Rx Database). Code as Hormone Therapy.

Adrenocorticotropic hormones (usually ancillary) have sometimes been reported as Hormone Therapy for leukemias, lymphomas, myelomas, and breast and prostate cancers; follow the SEER*Rx Database and physician guidance for these. Code Prednisone as Hormone Therapy when given in combination with Chemotherapy (e.g., MOPP or COPP) for cancer of any site. If given for other reasons, do not code such agents as Hormone Therapy. Examples: Prednisone to stimulate appetite -- Do not code this (ancillary use).

Decadron to reduce brain edema in a patient with brain metastases -- Code as Palliative Care (7) and not Hormone Therapy.

Decadron to treat multiple myeloma -- Code as Hormone Therapy (01).

For hormonal agents, see the SEER*Rx Database for diagnoses beginning in 2005 and SEER Book 8 (pp. 37, 69-81, plus updates) for pre-SEER*Rx cases. They include the following:

- adrenocorticosteroids (Decadron, Prednisolone, Prednisone)
- estrogens (diethylstilbestrol, DES)
- hormone synthesis inhibitors (Cytadren, Elipten)
- progestins (Megace, Provera)

* Prednisone (Deltasone), Prednisolone and Dexamethasone (Decadron) are usually ancillary (not coded unless used for palliation). These are Hormone Therapy for myelomas, lymphomas and lymphoid leukemias or when used with Chemotherapy (MOPP, COPP, etc.).
All First-Course Hormone Therapy is coded 01. If Hormone Therapy was recommended or planned but was NOT carried out, this field records a reason why (82 - 87). Use the following codes for Hormone Therapy:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>no Hormone Therapy given because it was not recommended/planned;</td>
<td>00</td>
</tr>
<tr>
<td>Hormone Therapy is not normally given for this cancer type/stage;</td>
<td></td>
</tr>
<tr>
<td>multiple treatment types were offered and something other than Hormone Therapy was chosen;</td>
<td></td>
</tr>
<tr>
<td>autopsy-only case</td>
<td></td>
</tr>
<tr>
<td>Hormone Therapy given.</td>
<td>01</td>
</tr>
<tr>
<td>Hormone Therapy not recommended or done because of contraindications (such as age or comorbid conditions).</td>
<td>82</td>
</tr>
<tr>
<td>Hormone Therapy recommended/planned but not given because the patient died.</td>
<td>85</td>
</tr>
<tr>
<td>Hormone Therapy recommended/planned but not administered. The reason why is not known to you.</td>
<td>86</td>
</tr>
<tr>
<td>Hormone Therapy recommended/planned but refused by patient, family or guardian.*</td>
<td>87</td>
</tr>
<tr>
<td>Hormone Therapy recommended, but unknown if it was done; Hormone Therapy was planned but has not yet started.</td>
<td>88</td>
</tr>
<tr>
<td>unknown if Hormone Therapy recommended or administered;</td>
<td></td>
</tr>
<tr>
<td>unknown if Hormone Therapy usually recommended for this type/stage of cancer; death certificate-only case</td>
<td>99</td>
</tr>
</tbody>
</table>

* Code 87 includes the following situations: Hormone Therapy is normally recommended for this type of cancer/stage of disease and the recommended Hormone Therapy was refused; or there was a blanket refusal of any/all recommended treatment; or any/all treatment was refused before specific recommendations were made.

**Hormone Therapy -- Summary**

NAACCR Version 11.1 field "RX Summ--Hormone", Item 1400, column 880-881

Using the code table above, report all Hormone Therapy performed at your facility and elsewhere (if known to you) as part of First Course of Treatment.

**Hormone Therapy -- At This Facility**

NAACCR Version 11.1 field "RX Hosp--Hormone", Item 710, column 466-467

Using the code table above, report the First Course of Therapy Hormone Therapy received at your facility. Include treatment given in a staff physician's office (if known to you).

Page last updated April 2006
IMMUNOTHERAPY

Immunotherapy (biological response modifier, BRM, biotherapy) consists of biological or chemical agents that alter the immune system or change the body's response to tumor cells. Code only Immunotherapy that the patient receives as part of First Course of Therapy. If Immunotherapy should be given for purely palliative reasons and it modifies cancer cells/tissue, code it in Palliative Care AND here. Procedures done to alter the immune system (such as a bone marrow transplant) are coded under Hematologic Transplants.

Refer to the SEER*Rx Database for diagnoses beginning in 2005 and the SEER Self Instructional Manual for Tumor Registrars: Book 8, 3rd Ed. (1993), pages 55-67 (plus updates) for pre-SEER*Rx cases for Immunotherapy agents. They include:

- bacillus Calmette-Guérin vaccine
- (BCG, TheraCys, Tice)*
- Bevacizumab (Avastin)
- C-Parvum
- Gefitinib (Iressa)
- Imiquimod (Aldara)
- Interferon alpha
- Interleukins
- Levamisole (Ergamisol)
- MVE-2
- Pegasparagase (Oncaspar)
- Pyran copolymer
- Rituximab (Rituxan)
- Thymosin
- Trastuzumab (Herceptin)
- vaccine therapy
- virus therapy

* BCG or other Immunotherapy for bladder cancer delivered via surgical installation is also coded in Surgery of Primary Site (16) unless more extensive bladder surgery occurred. Other types of bladder cancer intravesical therapy (e.g., Chemotherapy or Other Therapy) with surgical installation is also coded as Surgery of Primary Site (15) unless more extensive bladder surgery occurred.
Note: Book 8 lists Epoetin Alfa (Epogen, Procrit), Filgrastim (Neupogen) and Octreotide (Sandostatin) as BRM agents, but errata issued by SEER corrected these to be ancillary drugs. Epoegen, Neupogen and Sandostatin should not normally be coded in any treatment modality, but they may be given for Palliative Care. Book 8 also lists Pentostatin and L-Asparaginase as BRM agents, but SEER errata corrected these to be Chemotherapy agents. These changes to Book 8 are reflected in the SEER*Rx Database.

Ibritumomab tiuxetan (Zevalin) delivers radiation via a monoclonal antibody, and this should be coded as a radioisotope under Radiation Therapy only; Tositumomab (Bexxar) and iodine-labeled immunoglobulin are similar agents. Monoclonal antibodies may also deliver Chemotherapy agents (Gleevec, Mylotarg); these are coded as Chemotherapy only. When monoclonal antibodies are being used as a delivery mechanism for a radiation source or Chemotherapy agent, code as Radiation or Chemotherapy rather than Immunotherapy. This is reflected in the SEER*Rx Database. (Previously SEER had said to code some of these agents as Other Treatment temporarily until they reached a final coding decision.)

Record any First-Course Treatment Immunotherapy done with code 01. If Immunotherapy is normally recommended for this type of cancer and stage of disease but Immunotherapy was not done, code the reason why (82 - 87). Use the following codes for Immunotherapy:

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>no Immunotherapy given because it was not planned/recommended;</td>
<td>00</td>
</tr>
<tr>
<td>Immunotherapy not usually planned/recommended for this type/stage of cancer;</td>
<td></td>
</tr>
<tr>
<td>multiple treatment types were offered and something other than Immunotherapy</td>
<td></td>
</tr>
<tr>
<td>was chosen;</td>
<td></td>
</tr>
<tr>
<td>autopsy-only case</td>
<td></td>
</tr>
<tr>
<td>Immunotherapy given.</td>
<td>01</td>
</tr>
<tr>
<td>Immunotherapy not recommended/given because it was contraindicated</td>
<td>82</td>
</tr>
<tr>
<td>(comorbidities, advanced age, etc.).</td>
<td></td>
</tr>
<tr>
<td>Immunotherapy recommended/planned but not given because patient died.</td>
<td>85</td>
</tr>
<tr>
<td>Immunotherapy recommended/planned but not given; the reason is not known.</td>
<td>86</td>
</tr>
<tr>
<td>Immunotherapy refused.*</td>
<td>87</td>
</tr>
<tr>
<td>Immunotherapy recommended, but unknown if given;</td>
<td>88</td>
</tr>
<tr>
<td>Immunotherapy planned but not yet started.</td>
<td></td>
</tr>
<tr>
<td>unknown if Immunotherapy recommended or given;</td>
<td>99</td>
</tr>
<tr>
<td>unknown if Immunotherapy is normally recommended for this type of case;</td>
<td></td>
</tr>
<tr>
<td>death certificate-only case</td>
<td></td>
</tr>
</tbody>
</table>

* Code 87 includes the following situations: Immunotherapy is normally recommended for this type of cancer and stage of disease but...
  patient/family/guardian refused the recommended Immunotherapy; or
  there was a blanket refusal of all recommended treatment; or
  all/any treatment was refused before any specific recommendations were made.

page last updated April 2006
Immunotherapy -- Summary

NAACCR Version 11.1 field "RX Summ--BRM", Item 1410, column 882-883

Using the code table on the preceding page, record all First Course of Therapy Immunotherapy done at your institution, and all other institutions if known to you.

Immunotherapy -- At This Facility

NAACCR Version 11.1 field "RX Hosp--BRM", Item 720, column 468-469

Using the code table on the preceding page, record just the Immunotherapy done at your facility. Include treatment given in a staff physician's office (if known to you).

Immunotherapy -- Date Started

NAACCR Version 11.1 field "RX Date--BRM", Item 1240, columns 819-826

See the Treatment Date instructions on page 172. The MCR continues to collect individual Systemic Treatment start dates at this time. The special code 88888888 may be used here when Immunotherapy has not yet started or when it's unknown if recommended therapy has not yet started. If the first "immunotherapy" received was a Hematologic Transplant, please record its date here.

Immunotherapy -- Narrative

NAACCR Version 11.1 field "RX Text--BRM", Item 2660, columns 5325-5424

This field may contain up to 100 characters. See the Treatment Text instructions on page 172. If the Immunotherapy Date reported is an estimate, note that here.

Include the start date, Immunotherapy agents given, and Hematologic Transplants that are coded under Hematologic Transplants & Endocrine Procedures. If Immunotherapy or a Hematologic Transplant was planned or recommended as part of First-Course Therapy but were not carried out, please record the reason why. Palliative Immunotherapy and palliative Hematologic Transplant procedures should be described here.

page last updated July 2007
HEMATOLOGIC TRANSPLANTS & ENDOCRINE PROCEDURES

Immunotherapy and Hormone Therapy procedures done to alter the patient's immunologic system or hormone balance are coded separately from drugs or agents administered to produce these effects. Bone marrow transplants, stem cell transplants, endocrine surgery and endocrine radiation are included. Bone marrow and stem cell transplants are intended to help a patient recover from myelosuppression or bone marrow ablation caused by high-dose Chemotherapy and/or Radiation.

Endocrine therapy achieves antitumor effects by using surgery or radiation to suppress hormonal activity, thereby controlling tumor growth. For reporting purposes, endocrine surgery/radiation is defined as the total removal/irradiation of an endocrine gland (both glands or all of one remaining gland for paired glands). Record endocrine surgery/radiation for treatment of cancer of the breast or prostate only. Endocrine surgical procedures have historically been adrenalectomy, hypophysectomy, oophorectomy and orchiectomy, but adrenalectomy and hypophysectomy are no longer performed as endocrine surgeries. For breast and prostate cancers, record any radiation to endocrine glands to affect hormone balance. The codes do not distinguish endocrine surgery from radiation.

If cancer is incidentally found in a gland that was removed in an Endocrine Procedure, record the procedure as Surgery of Other Site also. (For example, if the testes are removed as endocrine therapy for a prostate cancer patient and it is discovered that the cancer had spread there, record 30 for the Endocrine Procedure and 4 for Surgery of Other Site.)

A Hematologic Transplant usually follows Chemotherapy ("conditioning"), so its date will not ordinarily be recorded in Systemic Therapy -- Date Started. Record the date of a Hematologic Transplant in the Immunotherapy -- Date Started field (when it was the first "immunotherapy" given) and in the Immunotherapy -- Narrative. If an Endocrine Procedure is the first or only systemic therapy received, record its start date in Systemic Therapy -- Date Started and in the Hormone Therapy -- Date Started field (when it was the first "hormone therapy" given).

There is not a separate text field for these procedures. Record the supporting text for Hematologic Transplants in the Immunotherapy -- Narrative field. Record supporting text for Endocrine Procedures in the Hormone Therapy -- Narrative field.

Hematologic Transplants & Endocrine Procedures

This field records First-Course Treatments formerly coded as Immunotherapy (bone marrow and stem cell transplants) and Hormone Therapy (endocrine radiation/surgery). The reason why such recommended procedures were not given is also coded here. There are not separate Summary and At-This-Facility fields, so this is essentially a Summary field. Record all Hematologic Transplants & Endocrine Procedures known to you, no matter where done.
Codes 82 - 99 apply to Hematologic Transplants and/or Endocrine Procedures. Codes 82 - 87 record a reason why a Hematologic Transplant and/or Endocrine Procedure was not done for cases in which one of these would normally be recommended. The codes follow:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>no Hematologic Transplant and no Endocrine Procedure was done (because they are not normally done for this type of cancer/stage of disease); multiple treatment types were offered and something other than the Transplant and/or Endocrine Procedure was chosen; autopsy-only case</td>
</tr>
<tr>
<td>10</td>
<td>bone marrow transplant, NOS; mixed chimera transplant (mix of patient's and donor cells); mini-transplant; non-myeloablative transplant</td>
</tr>
<tr>
<td>11</td>
<td>autologous bone marrow transplant (cells from the patient)</td>
</tr>
<tr>
<td>12</td>
<td>allogeneic bone marrow transplant (cells from any other person); syngeneic bone marrow transplant (cells from patient's identical twin)</td>
</tr>
<tr>
<td>20</td>
<td>stem cell transplant; stem cell harvest and infusion*</td>
</tr>
<tr>
<td>30</td>
<td>endocrine surgery and/or endocrine radiation</td>
</tr>
<tr>
<td>40</td>
<td>Hematologic Transplant (10-20) AND Endocrine Procedure (30)</td>
</tr>
<tr>
<td>82</td>
<td>Transplant/Endocrine Procedure not recommended/done because of contraindications (such as comorbid conditions or age).</td>
</tr>
<tr>
<td>85</td>
<td>Transplant/Endocrine Procedure recommended/planned but not done because the patient died.</td>
</tr>
<tr>
<td>86</td>
<td>Transplant/Endocrine Procedure recommended but not done; no reason recorded.</td>
</tr>
<tr>
<td>87</td>
<td>Transplant/Endocrine Procedure recommended but refused by patient/family/guardian.**</td>
</tr>
<tr>
<td>88</td>
<td>Transplant/Endocrine Procedure recommended, but unknown if done during First Course of Treatment; Transplant/Endocrine Procedure planned but not yet started.</td>
</tr>
<tr>
<td>99</td>
<td>unknown if Hematologic Transplant and/or Endocrine Procedure recommended; unknown if a Transplant or Endocrine Procedure is usually done for the given type/stage of cancer; death certificate-only case</td>
</tr>
</tbody>
</table>

* If there is a stem cell harvest but the cells are never reintroduced, use 88 (best code available).

** Code 87 includes situations in which a Hematologic Transplant or Endocrine Procedure would normally be recommended for the given cancer type and stage of disease, but.... the patient/family/guardian refused the recommended procedure; or a blanket refusal of all recommended treatments was made; or any/all treatment was refused before any specific recommendations could be made.

page updated 2005, 2006
TREATMENT DATA cont.

Systemic / Surgery Sequence

NAACCR Version 11.1 field "RX Summ--Systemic/Sur Seq, Item 1639, column 931

This field was introduced with Version 11. It must be coded for all diagnoses made beginning in 2006. For pre-2006 diagnoses it may be left empty; but if you code this field for a pre-2006 diagnosis, use only the correct code for that case (rather than some default value for all cases).

This field is similar to the Radiation / Surgery Sequence field. It defines the order in which a patient received First-Course Systemic Therapy and Surgery given at your facility and elsewhere. The field refers to all types of Systemic Therapy (Chemotherapy, Hormone Therapy, Immunotherapy, and/or Hematologic Transplants & Endocrine Procedures) and to the first type of Surgery given (Surgery of Primary Site, Scope of Regional Lymph Node Surgery, and/or Surgery of Other Sites -- whichever corresponds to the field Date of First Surgical Procedure). Palliative systemic treatments and palliative surgeries are included. Surgical Diagnostic/Staging procedures do not count here. Note that code categories 4 and 6 do not necessarily refer to the same type of Systemic Therapy being given.

Examples: A patient had Chemotherapy in January, primary site surgery in February, and started Hormone Therapy in March. Use code 4 because there was some type of Systemic Therapy both before and after Surgery.

A patient had Chemotherapy followed by surgery, and then completed the first-course Chemotherapy per the treatment plan. There was Systemic Therapy both before and after the surgery, so use code 4.

A patient had primary site surgery in January, Chemotherapy in February, and surgery to a distant site in March. Use code 3 because the Systemic Therapy started after the first surgery. Ignore the timing of the second surgery.

Enter a code 2-9 if the patient had both Systemic Therapy and Surgery during First Course of Treatment. The codes for Systemic / Surgery Sequence follow:

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>no Systemic Therapy and/or no Surgery; autopsy-only case; death certificate-only case</td>
<td>0</td>
</tr>
<tr>
<td>Systemic Therapy before Surgery</td>
<td>2</td>
</tr>
<tr>
<td>Systemic Therapy after Surgery</td>
<td>3</td>
</tr>
<tr>
<td>Systemic Therapy both before and after Surgery</td>
<td>4</td>
</tr>
<tr>
<td>Intraoperative Systemic Therapy alone</td>
<td>5</td>
</tr>
<tr>
<td>Intraoperative Systemic Therapy plus Systemic Therapy given before or after Surgery</td>
<td>6</td>
</tr>
<tr>
<td>Sequence unknown, but both Systemic Therapy and Surgery were done; it's unknown if both were done</td>
<td>9</td>
</tr>
</tbody>
</table>

field added for 2006

206A
DIFFERENCES BETWEEN SEER BOOK 8 and SEER*Rx

A database was released in July 2005 to replace SEER Book 8 for coding drugs in the cancer registry. It's the SEER*Rx Interactive Antineoplastic Drugs Database ("SEER*Rx"). It can be downloaded onto a computer after obtaining a username and password through email from http://seer.cancer.gov/tools/seerrx/. Book 8 was used to code drugs for cases diagnosed before 2005. The database is used for diagnoses made beginning in 2005. It was last updated in September 2006.

SEER has listed the drugs (below) that changed treatment modality between Book 8 and the new database on their Inquiry website. (Go to http://seer.cancer.gov/seerinquiry/ and search for Question ID# 20051111.) The COC and SEER do not recommend re-coding pre-2005 diagnoses to match the treatment categories in the database, but if you're trying to compare or analyze treatment across the year 2005 you may need these lists to explain why, for example, a patient diagnosed and given Avastin in 2004 was receiving Immunotherapy while a patient diagnosed and given Avastin in 2005 got Chemotherapy.

Book 8 was last published in 1993 and was then occasionally updated with new drugs and changes to drug categories. The lists of "changes" below refer to comparisons between SEER*Rx and a copy of Book 8 that was kept updated. (If any drug name is unfamiliar, look it up in SEER*Rx - it shows other names, abbreviations and NSC Numbers.)

In the past it was unclear how to code monoclonal antibodies being used to deliver Chemotherapy agents. Cytostatic agents inhibiting epidermal growth factors were also controversial, and SEER had recommended temporarily coding drugs like Avastin and Herceptin as Other Therapy. SEER*Rx reflects their decisions in these areas. The eight drugs listed below changed from Immunotherapy (or Other Therapy) to Chemotherapy.

- asparaginase
- Avastin (bevacizumab)
- Campath (alemtuzumab)
- Herceptin (trastuzumab)
- Oncaspar (pegaspargase)
- Rituxan (rituximab)
- Targetin (bexarotene)
- Velcade (bortezomib)

These agents where a monoclonal antibody delivers radiation to receptive cells may have been coded as both Immunotherapy and Radioisotopes in the past, but they should be coded now as Radioisotopes only:

- Bexxar (tositumomab)
- LymphoCide (epratuzumab)
- Zevalin (ibrutinomab tiuxetan)

Although parts of the FORDS still refer to using Book 8, the COC requires SEER*Rx to be used for coding diagnoses made beginning in 2005 (see also FORDS 2007 p. 28D). If your Cancer Committee or any physician objects to the way a drug is described in the SEER*Rx database for the purposes of standardized registry coding, we recommend direct communication with SEER to resolve this (email seerrx@imsweb.com). The database is updated periodically.
OTHER THERAPY

Other Therapy includes treatments given as part of First-Course Therapy to modify or control cancer cells that are not captured in the other treatment modality fields. It is not literally all "other" therapies given to a cancer patient -- it is cancer therapy that does not fit elsewhere. Other Therapy given for palliative purposes should be coded as Palliative Care AND here. Ancillary treatments are not Other Therapy; they are NOT coded in any modality, but ancillary drug use may be documented in Other Therapy -- Narrative.

Examples:

• (As of 2006 SEER no longer wants physical embolization, such as hepatic artery embolization, to be coded as Other Therapy. It's now Surgery for SEER. COC does not want this coded as treatment at all.)
• hyperbaric oxygen (when used as an adjunct to definitive treatment; not coded when used to promote tissue healing following head and neck surgeries)
• hyperthermia (alone or in combination with Chemotherapy, as in isolated heated limb perfusion for melanoma)
• PUVA (psoralen and ultraviolet light therapy) (psoralen is ancillary but the UV light is Other Therapy); photopheresis
• [Follow the SEER*Rx Database for coding anti-tumor antibiotics. Antibiotics treating only bacteria related to a cancer are now considered ancillary (not coded).]
• cancer-directed experimental drugs that cannot be classified as Chemotherapy, Hormone Therapy or Immunotherapy (code 2). (If an experimental drug can be classified as Chemotherapy, Hormone Therapy, etc. based on the SEER*Rx Database or the drug's mechanism of action, code it in that treatment modality.) "Cancer vaccines" would be coded 2 until appearing in the SEER*Rx Database with a treatment modality specified.
• double-blind clinical trial where the type of agent is unknown and/or there is use of a placebo (code 3). After the code is broken, report the treatment under the appropriate modality (e.g., if the agent is revealed to be Chemotherapy, code it as Chemotherapy and delete the Other Therapy code 3). If a clinical trial patient is known to receive a drug that can be classified as Chemotherapy, Hormone Therapy, etc., code this in the appropriate treatment modality field rather than as Other Therapy.
• unorthodox and unproven treatments (code 6). These include Laetrile, Krebiozen, Iscador; acupuncture/pressure; homeopathic or herbal medicine, nutritional supplements; bioelectromagnetic applications; relaxation techniques, and humor therapy. If a patient receives both unorthodox and conventional treatments, then code both. See the National Center for Complimentary and Alternative Medicine's website for potential kinds of Other Therapy (http://nccam.nih.gov/health/whatiscam/).

Page last updated 2006
TREATMENT DATA cont.

Do not code ancillary drugs and differentiation-inducing agents (non cancer-directed drugs) as Other therapy. Ancillary drugs are NOT treating cancer. Differentiation-inducing agents may be given to try to prevent recurrences or the transition of slightly abnormal cells into full-fledged cancer. Record ancillary drugs under Palliative Care (code 7) when appropriate. Also include the names, start dates, etc. of ancillary drugs and differentiation-inducing agents in a treatment Narrative field. Examples are Allopurinol, Aredia**, Epogen*, G-CSF (granulocyte colony stimulating factor), Leucovorin, Neupogen* and Sandostatin*.

Note: This is a partial list. Refer to the SEER*Rx Database for a more complete listing.

* Epogen (Procrit), Neupogen and Sandostatin were incorrectly listed in Book 8 as BRM agents. SEER errata corrected these listings to the "ancillary" drug category and that is reflected in the SEER*Rx Database. If used for palliative purposes, code them under Palliative Care (7).

** Aredia (Pamidronate Disodium) is not listed in Book 8, but SEER issued updates which stated that this should be classified as an ancillary drug. This is reflected in the SEER*Rx Database.

Special Rules for Hematopoietic Diseases

For many of the hematopoietic diseases that became reportable for diagnoses made as of 2001 (such as refractory anemias), the principal treatment given may not meet the standard definition of cancer therapy. The following treatments may be recorded as Other Therapy (1) for “newly reportable” hematopoietic diseases diagnosed after January 1, 2001 only:

- blood transfusion  [of whole blood, red blood cells (RBC), platelets, fresh frozen plasma (FFP); includes cryoprecipitation, plasmapheresis, plateletpheresis]
- phlebotomy  (blood removal, bloodletting, venesection)
- aspirin  [acetylsalicylic acid (ASA)]  (especially used to treat essential thrombocythemia)  If the reason aspirin was given is not recorded, use these guidelines:
  - if low-dose (70-100 mg/day), assume this is intended to thin the blood to help treat the disease and record this as Other Therapy;
  - if dosage is at least 160 mg/day but is not as high as the category below, assume this is for cardiovascular protection and do not code as Other Therapy;
  - if dose is higher (325-1000 mg every 3-4 hours), assume this is for pain control and do not record as Other Therapy; (record in Palliative Care as pain management).
Refer to SEER's orange booklet, *Abstracting and Coding Guide for the Hematopoietic Diseases*, for more specific guidance on what to record for a given disease. (But note that this booklet was published in 2002 and revised in 2005 and 2006.) Do NOT record these treatments for newly reportable ICD-O-3 diseases diagnosed before 2001. Examples: Refractory anemia first diagnosed in 2000, patient receiving transfusions in 2001 -- Do not code the transfusions here because the anemia was not reportable at diagnosis. Refractory anemia patient diagnosed in 2005, receiving transfusions. -- Record 1 for Other Treatment.

Standard therapy for hematopoietic diseases (Surgery, Radiation, Chemotherapy, etc.) such as phosphorus (P)-32 Radiation for polycythemia vera or splenectomy for myelofibrosis should be recorded as usual in the appropriate treatment modality categories.

The distinction between palliation and cancer treatment may be especially unclear for the hematopoietic diseases. Consult with physicians when necessary.

Use the following codes for Other Therapy:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>no Other Therapy given; autopsy-only case</td>
</tr>
<tr>
<td>1</td>
<td>Other Therapy, NOS; non-standard treatments for hematopoietic diseases</td>
</tr>
<tr>
<td>2</td>
<td>Other experimental Therapy (not included elsewhere)</td>
</tr>
<tr>
<td>3</td>
<td>double-blind clinical trial, code not yet broken (Code and report* the treatment actually given when revealed.)</td>
</tr>
<tr>
<td>6</td>
<td>only unproven therapy/therapies given (includes Laetrile, Krebiozen, treatment given by non-medical personnel, etc.)</td>
</tr>
<tr>
<td>7</td>
<td>patient/guardian refused therapy which, if given, would have been coded as 1 - 3</td>
</tr>
<tr>
<td>8</td>
<td>Other Therapy recommended, but unknown if administered; Other Therapy planned but has not yet started</td>
</tr>
<tr>
<td>9</td>
<td>unknown** if Other Therapy recommended or given; death certificate-only case</td>
</tr>
</tbody>
</table>

* You can call (617-624-5680 or 617-624-5653) to report changes to case reports already submitted.

** There is reason to believe that Other Therapy was recommended or given, but there's no information to confirm this.

page last updated April 2006
**TREATMENT DATA cont.**

**Other Therapy -- Summary**

NAACCR Version 11.1 field “RX Summ–Other”, Item 1420, column 884

Using the code table, record Other Therapy received by the patient as part of First-Course Therapy. Record all procedures done at your institution and all others (if known).

**Other Therapy -- At This Facility**

NAACCR Version 11.1 field “RX Hosp–Other”, Item 730, column 470

Using the code table, record only Other Therapy given at your facility. Include treatment given in a staff physician's office (if available).

**Other Therapy -- Date Started**

NAACCR Version 11.1 field “RX Date–Other”, Item 1250, columns 827-834

See the Treatment Date instructions on page 172 and the discussion of what constitutes Other Therapy on pages 207-209.

**Other Therapy -- Narrative**

NAACCR Version 11.1 field "RX Text–Other", Item 2670, columns 5425-5524

This field holds up to 100 characters. See the Treatment Text instructions on page 172 and the discussion of what constitutes Other Therapy on pages 207-209.

**PALLIATIVE CARE**

Palliative Care is not therapeutic and is not done for diagnostic/staging purposes. These items record procedures done during the First Course of Treatment time period to prolong a patient's life by managing symptoms (symptomatic care), to relieve pain and/or to make the patient more comfortable. Palliative Care treats the patient rather than the cancer. Consult a physician if you can't determine whether a certain procedure was done for palliative purposes.

Palliative Care may be given during or instead of First Course of Treatment. Do NOT record Palliative Care planned or given after the First Course of Treatment time period ends.

For Palliative Care that also falls under a standard treatment modality (Surgery, Radiation, Chemotherapy, Hormone Therapy, Immunotherapy, Hematologic Transplants & Endocrine Procedures, Other Therapy) that removes, destroys or modifies cancer cells/tissue, code this as Palliative Care AND as treatment. Some Palliative Care (such as surgical placement of a drainage shunt, pain management and ancillary drugs) will ONLY be coded here.

There is no code for Palliative Care refusal so use 0 whenever no Palliative Care was given; but refusal of a specific treatment should be coded in the modality fields. For example, if palliative Chemotherapy is refused, code 87 in Chemotherapy and 0 in Palliative Care.
TREATMENT DATA cont.

When First-Course Treatment AND Palliative Care in a given modality are both given, do NOT record the Palliative Care.

Example: Radiation is given to the primary site and to painful bone metastases. Record the therapeutic Radiation, but do NOT record the palliative radiation.

Some ancillary drugs may be used for symptom relief. Record such use with code 7.

The Palliative Care codes follow:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>no Palliative Care; autopsy-only case</td>
</tr>
<tr>
<td>1</td>
<td>Palliative Surgery</td>
</tr>
<tr>
<td>2</td>
<td>Palliative Radiation</td>
</tr>
<tr>
<td>3</td>
<td>Palliative Chemotherapy, Hormone Therapy or other systemic drug(s)</td>
</tr>
<tr>
<td>4</td>
<td>pain management* (given or referred) with no other Palliative Care</td>
</tr>
<tr>
<td>5</td>
<td>combination Palliative Care without pain management* (1, 2 and/or 3, without 4)</td>
</tr>
<tr>
<td>6</td>
<td>combination Palliative Care with pain management* (1, 2 and/or 3, with 4)</td>
</tr>
<tr>
<td>7</td>
<td>Palliative Care, NOS (unknown type or some type other than 1 - 6); Palliative ancillary drug use</td>
</tr>
<tr>
<td>9</td>
<td>cancer type/stage would probably receive Palliative Care, but it's unknown if Palliative Care was performed or referred; death certificate-only case</td>
</tr>
</tbody>
</table>

* "Pain management" may include non-standard (unorthodox) techniques to relieve a patient's pain.

Palliative Care -- Summary

NAACCR Version 11.1 field "RX Summ--Palliative Proc", Item 3270, column 871

Record First-Course Palliative Care given at your facility and elsewhere using the code table.

Palliative Care -- At This Facility

NAACCR Version 11.1 field "RX Hosp--Palliative Proc", Item 3280, column 473

Record First-Course Palliative Care given at your facility using the code table. Include any given in a staff physician's office if known to you.

- There are NOT specific Palliative Care start date and narratives. Provide a Palliative Care start date and supportive text in the corresponding treatment narrative (for example, use the Chemotherapy -- Narrative field to support a palliative chemotherapy code). For types of Palliative Care not falling into a standard treatment modality, use Other Therapy -- Narrative or some other MCR-collected text field.