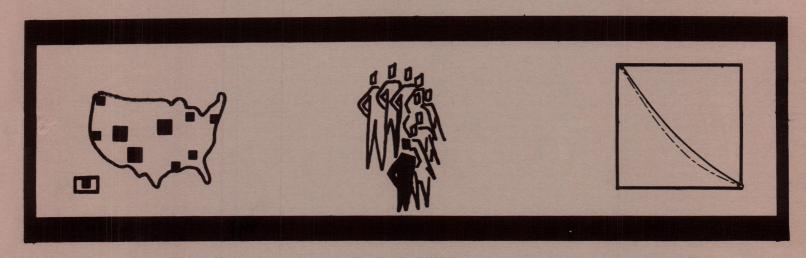
THE 1976 SEER CODE MANUAL

Cancer Surveillance
Epidemiology and
End Results Reporting

SEER Program



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service National Institutes of Health

THE 1976 SEER CODE MANUAL

Edited by William I. Lourie, Jr.

with the advice and collaboration of
Paula Baylis Harvey Geller
Jack Cunningham Phyllis Rosenberg

and the technical assistance of
Kathleen Daly
Betty Davison
Harriett Donovan
Anita Petersen

NATIONAL CANCER INSTITUTE

BIOMETRY BRANCH



February 27, 1976 Page 1/1

DESCRIPTION AND ARRANGEMENT

Description:

The 1976 SEER Code Manual is intended to be a loose-leaf publication so that revisions can be substituted easily. Pages within each segment are numbered independently using a fractional notation, the denominator indicating the total number of pages in the segment and the numerator showing the sequence of a particular page. Each page is dated. Presumably any revision should entail replacement of an entire segment with new date and paging.

Arrangement:

The segments listed below are in the following order, as originally published:

Introductory Note (3 pages)
SEER Computer Record Format (1 page)
SEER Code Summary (10 pages)
Specific Instructions for Each Field (30 Fields,
 each a separate segment)

The format of the data to be submitted on magnetic tape to the National Cancer Institute by the participants in the SEER Program will utilize 120 character positions.

Field		Number of	Character
Numbe	-	Digits	Position
	Basic Identification	0	1 0
1	SEER Participant	2	1-2
2	Case Number & Check Digit	7	3-9
3	Type of Reporting Source	1	10
,	Demographic Information		11 10
4	Place of Residence at Diagnosis	9	11-19
5	Residence Summary	1	20
6	Place of Birth	3	21-23
7	Year of Birth	2	24-25
8	Age at Diagnosis	2	26-27
9	Race/Ethnicity	1	28_
10	Sex	1	29 `
11	Marital Status at Diagnosis	1	3 0
	Description of This Neoplasm		
12	Date of Diagnosis	4	31-34
13	Diagnostic Procedures	4	35-38
14	Sequence Number	1	33–38
15	<u>-</u>	4	40-43
16			
17			
18	Histologic Type	6	46-51
19	0		52
20	Extent of Disease (EOD)	16	53-68
	Therapy		
21	Date Cancer-Directed Therapy Started	4	69-72
22	First Course of Cancer-Directed Therapy	7	73-79
	Follow-Up Information		
23	Later New Lesions at Same Site	1	80
24	Date of Last Follow-Up or of Death	4	81-84
25	Follow-Up Status	i	85
26	Cause of Death 5		86-90
27	ICD Code Used for Cause of Death	ĩ	91
41	TOD Code used for cause of beach	1	71
	Administrative Codes		
28	Type of Follow-Up Expected	1	92
29	Coding System used for EOD	1	93
30	Inter-Field Review	5	94-98
31	Reserved for Administrative Usage	22	99-120

The 1976 SEER Code Manual is a limited explanation of the format and definitions of the computerized record routinely submitted by each SEER Participant to the NCI SEER Staff for analysis of the pooled data. It is, therefore, concerned only with providing description in detail sufficient to achieve consensus in coding the routinely required data. In no way does this code manual imply any restriction on the type or degree of detailed information collected, classified, or studied at the local level.

However, the SEER Program is a continuation of at least two preceding NCI programs, the End Results Group Program and the Third National Cancer Survey. The working or operational definitions in these two large studies were not identical in all respects. This is one of the reasons for this manual — to spell out the boundaries of definitions, especially in areas where the traditions are different. Whether or not there is theoretical agreement on which is the best or proper limitation of a particular concept, there should at least be clear understanding of what has been agreed to as a basis for common data. The interpretations presented here represent the decisions in force at this time. (See date of this document.)

Some concepts are so fundamental as to underlie the entire Program and cannot properly be discussed in the instructions for a particular information item. These basic ideas are usually assumed and taken for granted and, therefore, not examined. One purpose of this Introductory Note is to present the editor's impression of these concepts in a fashion resembling a definition so that they will be discussed in case no real consensus exists.

"What is a Diagnosis (of Cancer)?"

The simplest way to state the answer is that a patient has cancer if a recognized medical practitioner says so. Then the question changes to "How can one tell from the medical record that the doctor has stated a cameer diagnosis?" In most cases the patient's record clearly presents the diagnosis by use of specific terms which are synonymous with cancer. However, not always is the doctor certain or his recorded language definitive. SEER rules concerning the usage of vague or inconclusive diagnostic language can be found in the November 1975 booklet entitled "Extent of Disease -- Codes and Coding Instructions". At the bottom of page 1 under the heading of "Ambiguous Terminology" are the two following rules:

- 1. "Probable", "suspected", "compatible with...", or "consistent with..." are to be interpreted as involvement by tumor.
- 2. "Questionable", "possible", "suggests", or "equivocal" are not to be considered as evidence of involvement by tumor.

These instructions provide a clear statement of the present operational policy for interpreting the language of the medical record. However, to round out the listing in rule 2, the phrase or directive "rule out cancer" should be added to the array of non-diagnostic terms.

The question under attention is discussed here only in the context of establishing the "fact" of cancer and not the details of which specific type of cancer is present. The rules apply to the wording of clinical diagnoses as well as to microscopically confirmed diagnoses.

"How unchangeable are the diagnosis items?"

Most of the diagnostic information items are restricted to information available or procedures performed within the time limits defined for each item. However, with the passage of time the patient's medical record gets more complete in regard to information originally missing or uncertain. It was, therefore, established practice in the earlier programs of repeated submission of data on the same patients to accept the thinking and information about the case at the time of the latest submission. This is also the philosophy of the SEER Program. Thus, there may be changes in the coding of primary site, histology, extent of disease, and even residence as the information becomes more certain. There are also cases reported originally as cancer which on review are deleted as never having been malignant.

"What is CANCER so far as reporting to SEER is concerned?"

Except for cases of superficial basal and/or squamous cell neoplasms of skin which are <u>not</u> presently required from every SEER Participant the SEER Program definition of Cancer is explicitly defined in Field 18, Histologic Type, as follows:

"...all of the M codes ending in a terminal digit of 2 or higher are required for routine reporting with the SEER Program. Of those with a terminal digit 0 or 1, the only diagnoses required in the SEER Program are those indicated by (*) a symbol for 'reportable by agreement' cases for specified sites only."

In the excerpt above, the reference is to the SEER booklet "Codes for Primary Site and Histologic Type". Any changes in definition will be reflected in new editions of that booklet after previous notification by Operational Note or Technical Note.

See the instructions for Field 14, Sequence Number.

It is not coded except as 0000000 in Field 22. The first course of <u>cancer-directed therapy</u> is the only treatment information coded at present.

[&]quot;What is the policy when there is more than one cancer?"

[&]quot;Where is symptomatic or supportive treatment coded in the absence of any cancer-directed therapy?"

SEER CODE SUMMARY

SUMMARY

1976 Code

Field Number	Character Position	Code Description
	Basic Io	dentification
1	1-2	SEER Participant A specific two digit identification of each participant in the SEER Program.
2	3-9	Case Number & Check Digit A six digit number assigned by the participating SEER registry followed by a seventh or check digit calculated according to an algorithm acceptable to the SEER staff.
3	10	Type of Reporting Source 1 Hospital Inpatient 2 Clinic (Hospital or Private) 3 Laboratory (Hospital or Private) 4 Private Medical Practitioner (LMD) 5 Nursing/Convalescent Home 6 Autopsy Only - (Diagnosed at Autopsy) 7 Death Certificate Only Note: Code 6 takes precedence over code 7; for codes 1-5, give priority to the lowest number if more than one

Demographic Information

4	11-19	Place of Residence at Diagnosis
	1113	County Code
	14-19	Census Tract
5	20	Residence Summary Non-resident of Incidence Reporting Area Resident of Incidence Reporting Area
6	21-23	Place of Birth See SEER booklet "SEER Program Geocoding for Place of Birth" which includes states within the U.S. as well as foreign countries.
7	24-25	Year of Birth Last two digits of birth year Unknown

Field Number	Character Position	Code Description
	Demogra	phic Information (continued)
8	26-27	Age at Diagnosis (Age at last birthday) OD Less than one year old OD One year old, but less than two years old Ninety-seven years old, but less than ninety-eight Ninety-eight years old or older Unknown Age
9	28	Race/Ethnicity Caucasian NOS Caucasian of Spanish surname or Spanish origin Black American Indian Chinese Japanese Filipino Hawaiian Other Unknown
		Note: The Census Bureau publishes three different sets of population data relative to Caucasians of Spanish surname, heritage, or mother tongue. Use the definition appropriate to the Census population data available for the area covered.
10	29	Sex 1 Male 2 Female 3 Other (Hermaphrodite) 9 Not stated
11	30	Marital Status at Diagnosis 1 Single (never married) 2 Married 3 Separated 4 Divorced 5 Widowed 9 Unknown

Field Number	Character Position	Code Description
	Descrip	tion of this Neoplasm
12	31-34 31-32	Date of Diagnosis Month Ol January O2 February O3 March
		11 November 12 December 99 Month
	33-34	Year Last two digits of year 99 Year Unknown
13	35-38 35-36	<u>Diagnostic Procedures</u> Clinical procedures, physical examination, x-ray films scans, mammography and thermography reports, results chemistry tests
	37	Manipulative procedures and exploratory surgery
	38	Procedures' requiring microscopic observation of tissue and cells
		Site-specific codes for authorized sites. Leave CP 35-38 blank if site not authorized. Use 0000 as code for "Autopsy Only" and "Death Certificate Only" cases.
14	39	Sequence Number One Primary Only First of Two or More Primaries Second of Two or More Primaries Third or Later Primary Unspecified Sequence Number

Field Number	Character Position	Code Description
	100101011	
	Descrip	tion of Neoplasm (continued)
15	40-43 4042	Primary Site See SEER booklet "Codes for Primary Site and Histologic
		Type".
	43	Leave blank.
16	44	Laterality
		O Not a paired organ, therefore not applicable
		1 Right organ involvement only
		2 Left organ involvement only3 Only one organ involved, right or left unspecified
		4 Both organs involved simultaneously
		5 Left organ involved after previous involvement of right organ.
		6 Right organ involved after previous involvement of left organ.
		7 Both organs involved at different times, but unknown which one was first.
		9 Paired organ, but no information concerning lateral involvement.
		Note: Laterality information presently required by SEER is limited to that for paired organs.
17	45	Multiplicity Within Primary Site
		O No information (including records from a time before this type of data was collected for this site or this registry)
		1 Single lesion at first episode (single histology) - not described as multifocal or multicentric
		2 Single lesion described as multicentric or multifocal at first episode (even if only on pathology report) - same histology
		3 Single lesion with multiple histologies at first episode
		4 Multiple lesions at first episode - same histology
		5 Multiple lesions at first episode - different histologies
		9 Not applicable (example: leukemia)

SEER	Pro	gram
------	-----	------

SEER CODE SUMMARY

SUMMARY

1976 Code

Field Number	Character Position	Code Description
	Descripti	ion of Neoplasm (continued)
18	46-51	Histologic Type See SEER booklet "Primary Site and Histologic Type"
	46-48	First three digits of M code number
	49-50 51	Leave blank Last digit of M code number
	31	Last digit of it code number
19	52	Diagnostic Confirmation 1 Positive histology
		Positive exfoliative cytology, no positive histology Positive microscopic confirmation, method not specified
		5 Radiography without microscopic confirmation 6 Direct visualization without microscopic confirmation 8 Not microscopically confirmed, other than codes 5 or 6
		9 Unspecified whether or not microscopically confirmed
20	53-68 53-54 55 56-59 60 61-62	Extent of Disease Tumor Size Primary Site Vessel Invasion Direct Extension of Primary Tumor Site-Specific Information Regional Lymph Node Involvement
	63-64 65	Distant Lymph Node Involvement Distant Site Involvement
	66	(No Usage at this time. Leave blank.)
	67-68	1967 EOD Code, First Two Columns
		For sites for which there is no approved SEER EOD code for CP 53-65 and for which there is also no site-specific 1967 EOD code, use the "non-specific code" below

For sites for which there is no approved SEER EOD code for CP 53-65 and for which there is also no site-specific 1967 EOD code, use the "non-specific code" below in CP 67-68. This code is also used where the available information is too vague for a detailed code to be useful.

```
Field
       Character
Number Position Code
                         Description
         Description of Neoplasm (continued)
                       Extent of Disease (continued)
        53-68
                      Non-Specific Code
          67-68
                  0- In situ carcinoma
                  4- Localized
                  5- Regional, Direct Extension Only
                  6- Regional, Nodes Only
                  7- Regional, Direct Extension and Nodes
                  8- Regional, NOS
                  9- Non-Localized, NOS
                  &- Distant
                  -- Unstaged
         Therapy
21
        69-72
                       Date First Cancer-Directed Therapy Started
          69-70
                  Month
                  01 January
                  02 February
                  03 March
                  09 September
                  10 October
                  11 November
                  12 December
                  99 Unknown
          71-72
                  Year
                  Last two digits of year
```

99 Unknown

Note: Use code 0000 if no cancer-directed therapy.

		
Field Number	Character Position	Code Description
	Therapy	(continued)
22	73-79	First Course of Cancer-Directed Therapy
	15 17	0000000 Only symptomatic or supportive therapy
	73	Surgery
		0 None
		1 Surgical resection
		8 Surgery recommended, unknown if performed 9 Unknown
	74	Radiation
		0 None
		1 Beam Radiation
		2 Other Radiation
		3 Combination of 1 and 2
		7 Radiation, NOS
		8 Radiation recommended, unknown if performed 9 Unknown
	75	Radiation Sequence with Surgery
		0 No radiation
		1 Radiation, no Surgery
		2 Radiation before Surgery
		3 Radiation after Surgery
		4 Radiation both before and after Surgery
		9 Radiation given, sequence with Surgery unknown
	76	Chemotherapy
		0 None
		1 Chemotherapy
		8 Chemotherapy recommended, unknown if performed 9 Unknown
	77	Hormonal Therapy
		0 None
		l Hormones (including NOS)
		2 Endocrine Surgery (if cancer is of another site)
		3 Combination of 1 and 2
		4 Endocrine Radiation (if cancer is of another site)
		5 Combination of 1 and 4
		6 Combination of 2 and 4 7 Combination of 1 and 2 and 4
		8 Hormonal therapy recommended, unknown if performed
		9 Unknown
) UIRIOWII

Field Character Number Position Code Description

Therapy (continued)

First Course of Cancer-Directed Therapy (continued)

- 78 Immunotherapy
 - 0 None
 - 1 Immunotherapy
 - 8 Immunotherapy recommended, unknown if performed
 - 9 Unknown
- 79 Other Cancer-Directed Therapy
 - O None (No cancer-directed therapy except as coded in CP 73-78)
 - 1 Other cancer-directed therapy (including dermoplaning, hyperbaric oxygen as adjunct, etc)
 - 2 Experimental cancer-directed therapy (not included in CP 73-78)
 - 3 Double-blind study, code not yet broken
 - 7 Nonacceptable type of therapy (including laetrile, krebiozen, etc)
 - 8 Other cancer-directed therapy recommended, unknown if performed
 - 9 Unknown

Follow-Up Information

23 80 Later New Lesions at First Site

- O Information unknown concerning recurrence or appearance of new primaries at original site. (Including records from a time before this type of data was collected for this site or this registry.)
- 1 No other reportable neoplasm develops at later time within the same major site as at first episode (same first two digits of primary site code)
- 2 At later time, other reportable neoplasms appear, all within the same sub-site (same three digit primary site code) as at first episode
- 3 At later time, other reportable neoplasms appear in the same major site, but at least one of which appears in a different sub-site than at first episode
- 4 At later time, other reportable neoplasms appear in the same major site as at first episode, but precise location is unknown

February 27, 1976 Page 8/10

Field Number	Character Position	Code Description				
	Follow-Up Information					
24	81-84 81-82	Date of Last Follow-Up or Death Month Ol January O2 February O3 March . O9 September 10 October				
		11 November 12 December				
		99 Month Unknown				
	83-84	Year Last two digits of year Note: There should be no code of unknown year in Field 24.				
25	85	Follow-Up Status 1 Alive - No Evidence of Cancer 2 Alive - With Any Cancer 3 Alive - Cancer Status Unknown				
		<pre>4 Dead - No Evidence of Cancer at Death 5 Dead - This Cancer Present at Death (even if other cancer is also present) 6 Dead - No Evidence of This Cancer, but Another Cancer</pre>				
		Present at Death Dead - Cancer Present at Death, but it cannot be established whether it was This One or Another Bead - Indeterminate whether Cancer was Present at Death				
26	86-89 86-89	Cause of Death (according to Death Certificate) ICDA code (four digits). Use E series for violent or accidental deaths. If ICDA code does not use fourth digit, enter (9) in CP 89. Also use the following special codes with 8th Revision:				
		7969 Death certificate available, cause of death unknown 7777 Death certificate not available 6666 Information not submitted 0000 Patient alive at last contact				
	90	Leave blank; for future expansion if needed				

					
Field Number	Character Position	Code Description			
	Follow-Up Information (continued)				
27	91	ICD Code Used for Cause of Death (Field 26) 7 Seventh Revision of ICD 8 Eighth Revision of ICDA (9) Ninth Revision of ICD 0 Patient Alive at Last Follow-Up			
	Adminis	trative Codes			
28	92	Type of Follow-Up Expected 1 Not in active follow-up system (including cases coded as "Autopsy Only" and "Death Certificate Only")			
		2 Case is (or was) in active follow-up system			
29	93	Coding System for Extent of Disease (Field 18) O SEER Non-Specific Code in CP 67-68; blanks in CP 53-65 1 1967 Site-Specific EOD Code (first two digits) in CP 67-68; blanks in CP 53-65 2 SEER Expanded Site-Specific EOD Code in CP 53-65 (only for authorized sites); blanks in CP 67-68			
30	94-98 94 95-98	Inter-Field Review 1 Already reviewed for apparent anomaly between the coding of primary site and histologic type. No need to review again. Leave blank.			
31	99-120	Reserved for Administrative Usage Leave blank.			

CP 1-2

Each registry participating in the SEER Program is assigned a specific two-digit number.

February 27, 1976 Page 1/1

SEER Program

CP 3-9

The first six digits of Field 2, CP 3-8, are reserved for the case number used by the SEER Participant to identify the patient. The seventh digit, CP 9, is for a check-digit referring to that case number.

Each computer record pertaining to the same patient should have the identical entry in Field 2.

It is assumed that joint use of Field 14, Sequence Number, with Field 2 will identify <u>cancers</u>, whereas use of Field 2 alone will identify patients.

Case Number (CP 3-8):

If the case number is less than six digits, enter leading zeros to create a six-digit entry. For example, Case #7034 will be coded as 007034.

Use no blanks in any of the positions CP 3-8.

Check-Digit (CP 9):

For our purposes, a check-digit is a number derived from the elements of a numerical code and is then appended to that code. In a sense, it becomes part of the code.

The entire field, including the check-digit, is checked by recalculating the check-digit. If the newly calculated check-digit does not match the recorded check-digit, an error of some kind is indicated. While not all errors can be detected by this type of rechecking, most transposing and many transcribing errors will be picked up.

If no check-digit is coded, leave CP 9 blank. However, registries not using check-digits are advised to begin to do so.

Each SEER Participant must notify the SEER Staff of the details of the system used to generate the check-digits on computer records submitted.

On the other hand, the SEER Staff can be of help if you are seeking a method to generate a check-digit. Several methods (Vienna, IBM Modulus 11, TNCS) are in use by various SEER Participants and the rules are easily obtainable.

CP 10

Code:

- 1 Hospital Inpatient
- 2 Clinic (Hospital or Private)
- 3 Laboratory (Hospital or Private)
- 4 Private Medical Practitioner (LMD)
- 5 Nursing/Convalescent Home
- 6 Autopsy Only (Diagnosed at Autopsy)
- 7 Death Certificate Only

General:

This field helps explain why some records are incomplete. Probably the most important use for Field 3 is to identify those cases coded 6 or 7 which are excluded from studies of therapy, but included in studies of incidence.

Specific:

Within code numbers 1-5, code to the lowest number if there are several reporting sources. In other words, the hospital record for an impatient with a cancer diagnosis (before death) takes precedence over all other types of reports.

Code 6, Autopsy Only, means that the cancer was not diagnosed even as a clinical diagnosis while the patient was alive. If the patient was an inpatient with another admitting diagnosis and the autopsy at the same hospital disclosed the cancer for the first time, code 6 is proper. Autopsy findings take precedence over death certificate information. However, a clinical diagnosis of cancer at any of the sources coded 1-5 has priority over confirmation at autopsy. Code 6 takes precedence over code 7.

Code 7 is used only when "follow-back" activities have produced no other reports - the death certificate is truly the only source of information. Often a case is reported first via the death certificate, but later registry action yields missing or additional reports. Such reports take precedence as in the rules above.

CP 11-19

Field 4 provides nine digits (CP 11-19) for the coding of residence at diagnosis. The Field is divided into two subfields, the first (CP 11-13) to indicate County, and the second (CP 14-19) to indicate Census Tract. Census Bureau statistics by census tract provide much of the socioeconomic data easily available for evaluation studies. The most meaningful data are provided for census tracts within a SMSA (Standard Metropolitan Statistical Area), but a SEER Participant may cover an area with more than one SMSA. Therefore, the County Code is provided for identification of the SMSA and its component census tracts. It may also be useful in the coding of residents of the covered area outside a specific SMSA.

There is enough coding space in Field 4 to accommodate the coding of residence for nonresidents of the SEER area. However, there are no central office requirements at this time upon such coding. Each SEER Participant should develop a code identifying in detail the counties or neighboring states which are useful in studying the source of patients treated within the areas.

Specific:

The County Code required for usage in CP 11-13 is that to be found in "Geographical Location Codes", published by the (U.S.) General Services Administration, Office of Finance. Appropriate selections from this code will be supplied to each SEER Participant.

SEER Program

- O Non-resident of Incidence Reporting Area
- 1 Resident of Incidence Reporting Area

General:

Each SEER Participant covers one or more areas for which complete reporting for cancer incidence is attempted. This means a complete inventory of all cancer morbidity in residents of such incidence reporting areas. There are very few registries for which the incidence reporting areas are not identical with the covered area for analysis of therapy. The areas of incidence reporting should be so defined that Census population data are readily available.

Specific:

Field 5 refers to the residence of this patient at diagnosis for this cancer.

CP 21-23

Field 6 indicates place of birth. It includes states within the United States as well as foreign countries.

Code:

See "SEER Program Geocoding for Place of Birth".

CP 24-25

Field 7 indicates the year of the patient's birth.

Code:

Last 2 digits of the patient's birth year.

-- Unknown

CP 26-27

Field 8

Field 8 represents the age of the patient at diagnosis for this cancer. Age is measured in completed years of life - age at last birthday.

Code:

Number of years of age at last birthday

- 00 Less than one year old
- Ol One year old, but less than two years old
- 97 Ninety-seven years old, but less than ninety-eight
- 98 Ninety-eight years old or older
- 99 Unknown age

CP 28

Code:

- O Caucasian NOS
- 1 Caucasian of Spanish surname or Spanish origin
- 2 Black
- 3 American Indian
- 4 Chinese
- 5 Japanese
- 6 Filipino
- 7 Hawaiian
- 8 Other
- o orner
- 9 Unknown

Specific:

Census Bureau definitions are followed. This means that persons of mixed parentage are classified according to the race of the non-white parent. Mixtures of non-white races are generally classified according to the race of the father.

Code 1: For analysis it is necessary to know the Census Bureau definitions for data pertinent to a particular registry. Unfortunately, the population data for persons with Spanish ancestry is defined differently for different parts of the country. Therefore, following is a retyping of the definitions to be found in Appendix 6 of the Census Bureau series PC(1)-D publications for the 1970 U.S. Census of Population:

MOTHER TONGUE

Definition: The data on mother tongue were derived from answers to question 17Question 17 was 'What language, other than English, was spoken in this person's home when he was a child?' Answers (check one) were 'Spanish, French, German, Other (specify), and None (English only).' The only instruction was 'If more than one language other than English was spoken, mark principal language.'

The question was asked of all persons in the 15-percent sample. Mother tongue information is used to assist in identification of the various ethnic groups in the population. In particular, the Spanish language population is defined primarily on this basis. The data on mother tongue may not reflect a person's current language skills since the vast majority of persons reporting a mother tongue other than English have learned to speak English during or after their childhood.

CP 28

(Census Definition, continued)

Comparability with earlier census data: Before the 1960 census, a question on mother tongue was asked in the censuses of 1910, 1920, 1930, and 1940. The comparability of these data is limited to some extent by changes in question wording, in the categories of the population to whom the question was addressed, and in the detail that was published. In the 1910 and 1920 censuses, statistics on mother tongue were published for the foreign white stock; in 1930, they were published for the foreign-born white population; and in 1940, they were published for the native white of native parentage as well as the foreign white stock. In 1960, the data on mother tongue were shown for the foreign-born population of all races combined. In 1970, they were shown for all persons and according to various subgroups. In 1960 and 1970, if both English and another mother tongue were reported, preference was always given to the language other than English. This procedure may reduce somewhat the proportion of the foreign-born population classified as having English as their mother tongue.

SPANISH HERITAGE

In this report, social and economic characteristics are presented for the population of Spanish heritage, which is identified in various ways, using information derived from the 15-percent sample. In 42 States and the District of Columbia, this population is identified as 'Persons of Spanish Language'; in five Southwestern States, as 'Persons of Spanish language or Spanish surname'; and in the three Middle Atlantic States, as 'Persons of Puerto Rican birth or parentage'. The specific definitions involved in identifying these population groups are given below. (The number of persons of Spanish language and the number of persons of Puerto Rican birth or parentage are available for all States in the Series PC (1)-C reports.)

<u>Spanish language</u>: Persons of Spanish language comprise persons of Spanish mother tongue and all other persons in families in which the head or wife reported Spanish as his or her mother tongue.

Spanish surname: In five Southwestern States (Arizona, California, Colorado, New Mexico, and Texas) persons with Spanish surnames were identified by means of a list of over 8,000 Spanish surnames originally compiled by the Immigration and Naturalization Service* (and later updated by the Bureau

U.S. Immigration and Naturalization Service, Supplement to Manual of Immigration Spanish-Spanish Personal Names, selected by Inspector George Lockwood, New York, 1936.

(Census Definition, continued)

of the Census). In the five Southwestern States social and economic characteristics are presented for persons of Spanish language combined with all other persons of Spanish surname.

<u>Puerto Rican birth or parentage</u>: The population of Puerto Rican birth or parentage includes persons born in Puerto Rico and persons born in the United States or an outlying area with one or both parents born in Puerto Rico. Social and economic characteristics are shown for this group in the reports for New York, New Jersey, and Pennsylvania.

In two standard metropolitan statistical areas that cross State lines, Wilmington, Del.--N.J.--Md., and Texarkana, Tex.--Ark., the population of Spanish heritage in each State portion is identified, for tabulation purposes, in the manner specified above for that State, and the segments for the different States are combined to form a total for the area. The term used to describe this population, however, is the term applicable in the State containing the major portion of the SMSA. Thus, for the Wilmington SMSA, the term applicable in Delaware, 'Persons of Spanish language', is used; and in the Texarkana SMSA the term applicable in Texas, 'Persons of Spanish language or Spanish surname', is used.

SPANISH ORIGIN OR DESCENT

On the 5-percent sample questionnaire, a question was asked to identify persons of Spanish origin or descent and was used in cross-tabulations with 5-percent sample data. A person was classified as being of Spanish origin or descent if his or her entry for this question was any of the following: Mexican, Puerto Rican, Cuban, Central or South American, or 'Other Spanish'.

For certain areas, the number of persons of Spanish origin or descent is overstated because some respondents apparently misunderstood the question and interpreted 'Central or South American' to mean central or southern United States. Available evidence suggests that this misinterpretation resulted in an overstatement which was substantial in some southern States, and may have occurred, to a lesser degree, in States in the central area of the country.

February 27, 1976 Page 3/3

CP 29

Code:

- 1 Male
- 2 Female
- 3 Other (Hermaphrodite)
- 9 Not stated

CP 30

Field 11 indicates the marital status of the patient at diagnosis for this cancer.

Code:

- 1 Single (never married)
- 2 Married
- 3 Separated
- 4 Divorced
- 5 Widowed
- 9 Unknown

CP 31-34

Code:

Month (CP 31-32)

- 01 January
- 02 February
- 03 March

•

- 09 September
- 10 October
- 11 November
- 12 December
- 99 Month Unknown

Year (CP 33-34)

Last two digits of year

99 Year Unknown

Definition:

The date in Field 12 refers to the <u>first</u> diagnosis of this cancer by any recognized medical practitioner. This is often a clinical diagnosis and may not ever be confirmed histologically. Even if later confirmed, the date in Field 12 refers to the date of the <u>first clinical diagnosis</u> and not to the date of confirmation.

General:

In the absence of an exact date of diagnosis, the best approximation is acceptable. Approximation is preferred to coding the date as unknown.

- a) For patients diagnosed while in a hospital, the date of admission may be used as best estimate of date of diagnosis.
- b) For patients diagnosed before entering a hospital, the date of first admission may be used as an acceptable estimate of date of initial diagnosis if it seems that the patient was hospitalized within a "reasonable time" (approximately one month or less) from true date of diagnosis by the referring doctor.
- c) If the only information is "Spring of", "Middle of the Year", "Fall", approximate these as April, July, and October respectively. For "Winter of" it is important to discover whether the beginning or end of the year is meant before approximating the month.

d) If there is no basis for an approximation, code the month of diagnosis as 99 in CP 31-32.

e) If necessary, approximate the year. If no approximation is possible, code year of diagnosis as 99 in CP 33-34. If code 99 is used in CP 33-34, code 99 should also be used in CP 31-32. There is no utility in coding the month if the year is unknown. Therefore, if the year is unknown, Field 12 will be coded 9999.

CP 35-38

CP 35-36: Clinical procedures, physical examination, x-ray films, scans, mammography and thermography reports, results of chemistry tests

CP 37: Manipulative procedures and exploratory surgery

CP 38: Procedures requiring microscopic observation of tissues and cells

Specific:

The detailed site-specific codes for Field 13 are on pages 64, 67-68, 71-72 of the November, 1975 SEER booklet entitled "Extent of Disease--Codes and Coding Instructions". These cover Colon and Rectum, Breast - the only sites for which there are authorized codes for Field 13, at this time. To indicate "Information Unknown", use code 0000.

Leave CP 35-38 blank for all sites except Colon, Rectum, Breast until further instructions are received.

For all sites, use code 0000 for "Autopsy Only" and "Death Certificate Only" cases.

General:

CP 35-37 include only those procedures done prior to initiation of definitive therapy.

For untreated patients all procedures and reports should be included up to the time the decision was made not to treat the patient definitively. In the absence of such a statement, use the date of hospital discharge from first hospitalization or two months after diagnosis, whichever comes first.

CP 38 should be limited to reports based on specimens obtained up to and including the first surgical treatment or initiation of other definitive therapy.

For those patients whose treatment is initiated more than two months after diagnosis, the cut off point for coding CP 35-38 has already been passed.

Code:

- One Primary Only
- 1 First of Two or More Primaries
- 2 Second of Two or More Primaries
- 3 Third or Later Primary
- 9 Unspecified Sequence Number

Specific:

Sequence Number, Field 14, codes the chronological appearance of all primary malignant tumors. Even if the first primary tumor was experienced by the patient before coming into the area of the SEER Participant, it would be coded as sequence number 1 (and code 1) if later primaries are known to the reporting SEER member.

In the chronological ordering of primaries, the coder must include "reportable by agreement" neoplasms. These are indicated by an (*) in the booklet on Primary Site and Histologic Type.

If two or more independent primaries are diagnosed simultaneously, the lowest sequence number will be assigned to the diagnosis with the worst prognosis. This means consideration of stage or extent of disease and also the grade or degree of malignancy. Therefore, look first at the information concerning Extent of Disease (Field 20). If there is not much difference in EOD, give priority to the diagnosis with the highest terminal digit (omitting 6 and 9) in the histology code (Field 18). If no difference in prognosis is evident, the decision must be arbitrary.

Determination of Primary Tumors, Operational Rules:

The discussion above is secondary to a determination of how many primary tumors the patient has or when there is a new primary. This is, of course, a medical decision, but some operational rules are needed when the answer is unclear from the record. Basic factors include the site of origin, the date of apparent onset, the date of diagnosis, the histologic type, and the extent of disease at diagnosis.

In general, if there is a difference in the site where the tumor originates, it is fairly easy to determine whether it is a separate primary, regardless of dates of detection and of differences in histology.

Likewise, if there is a clearcut difference in histology, other data such as site and time of detection are not essential. In some neoplasms, however, one must be careful since different histologic terms are used to describe progressive stages or phases of the same disease process.

Most of the problems arise when there are apparently multiple neoplasms of the same site, simultaneously or over time. A similar problem is that of a seemingly single tumor with two different histologies. The 1976 SEER Code handles these situations in several different ways. Without determination of whether there are different primary tumors, Field 17 records the singleness or multiplicity at the "first episode" and Field 23 records the appearance of later tumors at the same site. Field 14, Sequence Number, uses the following rules to determine when there is an independent primary tumor and, therefore, a separate record:

- 1. A single lesion with multiple histologic types is to be considered as a single primary.
- 2. If a new independent primary cancer of the same histology as the early one(s) is diagnosed in the same site at a later time, code this new cancer as a separate primary.
- 3. Simultaneous multiple lesions of the same histologic type within the same primary site will be considered a single primary. Use the most precise sub-site code which includes them all.
 - a) If more than one sub-site (three-digit primary site code) is involved, use the sub-site code number ending in 8 as the code for primary site (Field 15) except for bone and colon.
 - b) For bone, use code 709 in Field 15 for more than one sub-site.
 - c) For colon, each sub-site is considered a major primary site. Therefore, a separate record will be created for each sub-site involved.
- 4. Multiple lesions of different histologic types within a single site are to be considered separate primaries whether occurring simultaneously or at different times. This rule applies to lesions of urinary bladder or skin which are of different histology than those specified for the summary records.
- For certain specified histologies, all simultaneous neoplasms of urinary bladder or of skin are reported by a single summary record. This summary record is considered a single primary site. However,

additional records are to be made for any histologic diagnosis not specified for inclusion in the summary record. See instructions for Field 17 for further instructions.

6. A "reportable by agreement" neoplasm followed by a later diagnosis of a malignant neoplasm of the same general histologic series (same first three digits of the histology code) is considered a case requiring two separate records, two different primaries.

CP 40-43

Code:

See the SEER booklet "Codes for Primary Site and Histologic Type". There is a Numeric Index for Topography as well as an Alphabetic Index of combined Topography and Morphology terms. In the Alphabetic Index all Primary Site (Topography) codes are indicated by a "T-" preceding the number. The site code is adapted from the proposed 9th Revision of ICD by dropping the first digit. It is essentially a first version of ICD(0) a code devised for oncological use - and may be modified as that code achieves final status.

Place the 3-digit code in CP 40-42. Leave CP 43 blank.

DEFINITION

Primary vs Secondary:

The major emphasis within the SEER Program is that the <u>primary</u> site be identified, not a metastatic site. It is proper to code 999 (unknown primary site) if the only information pertains to a secondary site. However, if a precise site of origin cannot be determined, it may be possible to use the NOS category for an organ system or the regional codes 990-998 instead of rubric 999 completely unknown.

Where the record is not entirely explicit, it is suggested that a doctor determine whether the cancer is primary or secondary and which is the most definitive code that can be used. If arbitrary decisions must be made, it is required that they be made at the reporting level rather than by an analyst using only the computer record as a source of information.

Multiple Sub-sites:

If a single primary tumor originates in more than one sub-site

- a) use the sub-site code number ending in 8 as the code for primary site (Field 15) except for bone and colon.
- b) for bone, use code 709 in Field 15 for more than one sub-site.
- c) for colon, each sub-site is considered a major primary site.

 Therefore, a separate record will be created for each sub-site involved.

CP 44

Field 16 indicates the involvement that occurs when cancer is found in one or both of a set of paired organs without any judgement as to whether the lesions are independent primaries or metastatic disease.

Code:

- 0 Not a paired organ, therefore not applicable
- 1 Right organ involvement only
- 2 Left organ involvement only
- 3 Only one organ involved, right or left unspecified
- 4 Both organs involved simultaneously
- 5 Left organ involved after previous involvement of right organ
- 6 Right organ involved after previous involvement of left organ
- 7 Both organs involved at different time, but unknown which one was first
- 9 Paired organ, but no information concerning lateral involvement

General:

In case the reporting registry considers the right and left tumors as independent primaries and makes a separate record for each, it is expected that each record shall carry the same code (4-7) in Field 16.

This field is a follow-up item for cases coded 1-3.

Specific:

There are a number of sites to which this code obviously applies:

adrenal gland nipple breast ovary parathyroid gland bronchus carotid body parotid gland pleura eustachian tube renal pelvis eye fallopian tube seminal vesicle frontal sinus submaxillary gland kidney parenchyma testis tonsil maxillary sinus tonsillar pillar middle ear ureter

> February 27, 1976 Page 1/1

CP 45

Code:

In the following code definitions the words "single" and "multiple" refer to clinical description or to the pathologist's gross description. The words "multicentric" and "multifocal" refer to a pathologist's microscopic description.

- O No information (including records from a time before this type of data was collected for this site or this registry)
- Single lesion at first episode (single histology) not described as multifocal or multicentric
- Single lesion described by the pathologist as multicentric or multifocal at first episode same histology
- 3 Single lesion with multiple histologies at first episode
- 4 Multiple lesions at first episode same histology
- 5 Multiple lesions at first episode different histologies
- 9 Not applicable (example: leukemia)

Definitions:

"First episode" is defined as the first two months following diagnosis.

"Multiple histologies" or "different histologies" refer to differences in the first three digits of the histology code (Field 18). Differences only in the terminal digit of the histology code are not included since the terminal digit may reflect only differences in stage or grade. However, a specific decision of a doctor at the reporting source may override this operational rule.

Discussion:

Field 17 and Field 23 divide the information on multiple areas of neoplasia within the same primary site. The status at diagnosis (first episode) is coded in Field 17; later occurrence in the same site is coded in Field 23. Stated in a different way, Field 17 is essentially part of the description of the original diagnosis and its coding will not change to reflect follow-up information. Field 23, however, is a follow-up item and summarizes any evidence of later recurrence at the original site.

The coding in both fields ignores whether the multiple tumor areas are considered to be independent primaries. It is obvious that most cases coded 5 in Field 17 are to be coded as separate primaries according to

the rules for Field 14, Sequence Number. In the usual code 5 case, each record for a different primary will have the same code in Field 17, but a different histology code. The exception is the "summary record" (see below) where a single record can represent more than one tumor because of special histology codes.

Summary Records:

For specific sites - at present bladder and skin - a single record covers multiple malignancies within a list of specified histologic types. Special histology codes indicate the various combinations and are the only SEER histology codes ending in a 6 or 9. These special codes are designated by a (+) in the booklet on Primary Site and Histologic Type. The information below indicates the compatibility between these special codes and the codes in Field 17:

Field 17 Code	Special site-specific histology codes in Field 18
2,4	For skin: 8076, 8079, 8096, 8099 For bladder: 8126, 8129 - if all specified are of same type - same first three digits (i.e., all papillomas and no transitional cells; or all transitional cells and no papilloma)
3,5	For skin: 8086, 8089 For bladder: 8136, 8139, 8126, 8129

CP 46-51

Code:

See the SEER booklet "Codes for Primary Site and Histologic Type". There is a Numerical Index for Morphology and an Alphabetic Index of combined Morphology and Topography terms. In the Alphabetic Index all Histology codes have an "M-" preceding the number. There is a detailed "Introduction and Instructions" section.

The SEER Histology code is essentially the Morphology part of MOTNAC which is the 8000-9999 section of SNOP's Morphology Classification. The SEER booklet lists benign as well as malignant conditions. It is important to realize that all of the M codes ending in a terminal digit of 2 or higher are required for routine reporting within the SEER Program. Of those with terminal digit 0 or 1, the only diagnoses required in the SEER Program are those indicated by (*), a symbol for "reportable by agreement" cases for specified sites only.

SEER does not utilize the terminal digits of 6 or 9 as listed in MOTNAC or SNOP to indicate respectively, "Malignant, metastatic site" and "Malignant, uncertain whether primary or metastatic site". However, SEER does use the the terminal 6 and 9 digits in a few instances for its own purposes. These are all signaled by a (+), a symbol of a special code for use in the summary record for multiple cancers of urinary bladder and skin. At present, such summary coding is restricted to specified histologies for these two sites (codes 8076, 8079, 8086, 8089, 8096, 8099 and 8126, 8129, 8136, 8139). Note that for urinary bladder such codes pertain to the joint occurrence of any papillomas, papillary carcinomas, transitional cell neoplasms, epidermoid carcinomas, and carcinoma NOS. For skin, the codes on the summary record include all malignant basal cell, baso-squamous, and squamous cell neoplasms as well as carcinoma NOS. See Field 17 for further comments on the summary reports.

To determine whether a patient has more than one primary tumor, see the instructions for Field 14, Sequence Number. The decision often depends upon whether multiple lesions have the same or different histology. Of course, a specific determination by a local doctor is often overriding, but lacking this, the operational rule is that "different histology" means a difference in the first three digits of the histology code in Field 18. If the difference is only in the fourth or terminal digit, in most instances this will put the situation in the "same histology" category. Thus, an "in situ" lesion and a concurrent invasive lesion in the same site will not produce a decision that two primaries are present.

Specific:

While the present code has four digits, Field 18 provides for six digits. CP 49-50 are reserved for future expansion. Enter in CP 46-48 the first three digits of the M code number. Enter in CP 51 the malignancy or behavior code which is the terminal digit of the M number.

Field 19 indicates whether at any time during the patient's medical history there was microscopic confirmation of the malignancy of this cancer. Field 19 indicates not only the <u>fact</u> of microscopic confirmation, but the nature of the best evidence available. Thus, this is a priority series with code 1 taking precedence. Each number takes priority over all higher numbers.

Code:

- 1 Positive histology
- 2 Positive exfoliative cytology, no positive histology
- 4 Positive microscopic confirmation, method not specified
- 5 Radiography without microscopic confirmation
- 6 Direct visualization without microscopic confirmation
- 8 Not microscopically confirmed, other than codes 5 or 6
- 9 Unspecified whether or not microscopically confirmed

Specific:

Code 1: Microscopic diagnoses based upon specimen from biopsy, frozen section, surgery, autopsy, or D & C. Positive hematologic findings relative to leukemia are also included. Bone marrow specimens including aspiration biopsies are coded as 1.

Code 2: Essentially diagnoses based on microscopic examination of cells as contrasted with tissue. Included are smears from sputum, bronchial washings, prostatic secretions, breast secretions, gastric fluid, spinal fluid, peritoneal fluid, pleural fluid, urinary sediment. Cervical and vaginal smears are common examples. Also included in Code 2 are diagnoses based upon paraffin block specimens from concentrated spinal, pleural or peritoneal fluid.

Code 4: If cases diagnosed or confirmed only by exfoliative cytology cannot be separated from those diagnosed or confirmed by histology, all confirmed cases from such a registry should be coded as 4. Include individual cases which are stated to be microscopically confirmed but with no detailed information.

Code 5: This includes all cases with diagnostic radiology for which there is not also a positive histology or a positive cytology report. This will include all "scans" not also microscopically confirmed.

Code 6: Visualization includes diagnosis made at surgical exploration or by use of the various endoscopes (including colposcope, mediastinoscope, pertineoscope). However, use code 6 only if such visualization is not supplemented by positive histology or positive cytology reports. Code 6 is also used when gross autopsy findings are the only positive information.

Code 8: This code includes all cases diagnosed by laboratory or clinical methods which are not assigned a specific code and for which there are no positive microscopic findings.

Code 9: A major use of this code is for "Death Certificate Only" cases.

General:

Note that, since Field 19 covers the patient's entire medical history, follow-up information may change the coding in this field for any case not coded 1.

SEER Program	EXTENT OF DISEASE	FIELD 20
1976 Code		CP 53-68

There are three Extent of Disease schemes which are coded according to the following general format:

		CP	Description
1.	Expanded Site-Specific		· ·
	EOD scheme:	53-54	Tumor Size
		55	Primary Site Vessel Invasion
		56-59	Direct Extension of Primary Tumor
		60	Site-Specific Information
		61-62	Regional Lymph Node Involvement
		63-64	Distant Lymph Node Involvement
		65	Distant Site Involvement
		66	(No usage at this time. Leave blank)
2.	Two-digit Site-Specific EOD scheme:	67-68	Two-digit code
3.	Non-Specific scheme:	67-68	Non-specific code

As indicated in the outline above, the coding of CP 53-68 depends upon the coding scheme used.

1. Expanded Site-Specific EOD schemes (CP 53-65):

A 13-digit site-specific coding scheme has been approved for a number of major sites and is being developed for additional sites. See the SEER booklet entitled "Extent of Disease--Codes and Coding Instructions" for coding definitions. Leave CP 67-68 blank.

2. Two-Digit Site-Specific EOD schemes (CP 67-68):

Two-digit site-specific coding schemes are also included in the booklet "Extent of Disease--Codes and Coding Instructions". There are schemes for most of the well-defined sites. Leave CP 53-65 blank.

CP 53-65 1976 Code

3. Non-Specific scheme (CP 67-68)

Use the Non-specific code below when there is neither an expanded nor a two-digit scheme for the primary site. Leave CP 53-65 blank.

Non-Specific Code:

- 0-In situ
- 4-Localized to site of origin
- 5--Regional, Direct Extension to adjacent organs or tissues only
- 6-Regional, Lymph Nodes Only
- 7-Regional, Direct Extension and Lymph Nodes (5 and 6)
- Regional, NOS 8-
- 9-Non-Localized, NOS
- Distant (direct extension beyond adjacent organs or tissues or metastases to distant site or distant lymph node)
- Unstaged, No Information, Death Certificate Only

Extent of Disease should be limited to all information available by the end of the first hospitalization for surgical resection if done within two months of diagnosis or two months after diagnosis for all other cases, both treated and untreated.

Discussion:

For "Death Certificate Only" cases, code -- in the Non-Specific code.

Note that "in situ" is a concept based upon histologic evidence. Therefore, clinical evidence alone cannot justify the usage of this term. In addition, any pathological diagnosis qualified as "microinvasive" is not acceptable as carcinoma in situ, but must be coded in one of the "localized" categories.

CP 69-72

This is a four-digit field representing the date of initiation of the patient's first cancer-directed treatment for this cancer. The first two digits indicate the month; the last two digits identify the year.

Code:

Month (CP 69-70)

- 01 January
- 02 February
- 03 March
- •
- 09 September
- 10 October
- 11 November
- 12 December
- 99 Unknown

Year (CP 71-72)

Last two digits of year

99 Year Unknown

General:

The date of admission for that hospitalization during which the first cancer-directed therapy was begun is an acceptable entry in Field 21. If cancer-directed treatment was first received on an outpatient basis, code the precise date. Should there be a case with unknown year of cancer-directed therapy, the entire field should be coded 9999.

Note: Use code 0000 if no cancer-directed therapy

CP 73-79

CP	Code	
73		Surgery:
	0	None
	1	Surgical Resection
	8	Surgery recommended, unknown if performed
	9	Unknown
74		Radiation:
	0	None
	1	Beam Radiation
	2	Other Radiation
	3	Combination of 1 and 2
	7	Radiation, NOS
	8	Radiation recommended, unknown if performed
	9	Unknown
	,	Officiowii
75		Radiation Sequence with Surgery:
, ,	0	No radiation
	1	Radiation, no Surgery
	2	Radiation before Surgery
	3	Radiation after Surgery
	4	Radiation both before and after Surgery
	9	Radiation given, sequence with Surgery unknown
	,	Radiation given, sequence with Surgery unknown
76		Chemotherapy:
, ,	0	None
	1	Chemotherapy
	8	Chemotherapy recommended, unknown if performed
	9	Unknown
	,	Onknown
77		Hormonal Therapy:
• •	0	None
	1	Hormones (including NOS)
	2	Endocrine Surgery (if cancer is of another site)
	3	Combination of 1 and 2
	4	Endocrine Radiation (if cancer is of another site)
	5	Combination of 1 and 4
	6	Combination of 2 and 4
	7	Combination of 1 and 2 and 4
	8	Hormonal therapy recommended, unknown if performed
	9	Unknown
		Olicitowit
78		Immunotherapy:
70	0	None
	1	Immunotherapy
	8	Immunotherapy Immunotherapy recommended, unknown if performed
	9	Unknown
	7	Olikliowii

FIRST COURSE OF CANCER-DIRECTED THERAPY

CP 73-79

1976 Code

- 79 Other Cancer-Directed Therapy:
 - None (No cancer-directed therapy except as coded in CP 73-78)
 - 1 Other cancer-directed therapy (including dermoplaning, hyperbaric oxygen as adjunct, etc.)
 - 2 Experimental cancer-directed therapy (not included in CP 73-78)
 - 3 Double-blind study, code not yet broken
 - Nonacceptable type of therapy (including laetrile, krebiozen, etc.)
 - 8 Other cancer-directed therapy recommended, unknown if performed
 - 9 Unknown

For the SEER Program the concept of definitive treatment is limited to procedures directed toward cancer tissues whether of the primary site or metastases. If a specific therapy normally affects, controls, changes, removes, or destroys cancer tissue, it is classified as definitive treatment even if it cannot be considered curative for a particular patient in view of the extent of disease, incompleteness of treatment, lack of apparent response, size of dose, operative mortality, or other criterion.

DEFINITION OF "FIRST COURSE" FOR ALL MALIGNANCIES EXCEPT LEUKEMIAS

- 1. For all cases, the first course of therapy includes cancer-directed treatment received by the patient within the first four months of initiation of therapy. All modalities of treatment are included regardless of sequence or the degree of completion of any component method.
- 2. EXCEPTION: should there be a change in therapy due to apparent failure of the original planned treatment or because of progression of the disease, such therapy should be excluded from the first course and considered part of a second course of therapy.

Field 22 CP 73-79

DEFINITIONS OF "FIRST COURSE" FOR LEUKEMIAS

The basic time period is two months after the date of initiation of therapy. When precise information permits, the first course of definitive treatment is to be related to the first "remission" as follows - even in violation of the two-month rule:

- A. If a remission complete or partial is achieved during the first chemotherapeutic attack upon the leukemic process, include
 - 1. All definitive therapy considered as "remission inducing" for the first remission, and
 - 2. All definitive therapy considered as "remission maintaining" for the first remission, i.e. irradiation to the Central Nervous System.
- B. Disregard all treatment received by the patient after the lapse of the first remission.
- C. If no remission is attained during the first course of chemotherapy use the two-month rule.

DEFINITIONS OF CANCER-DIRECTED THERAPY

By "cancer tissue" is meant proliferating malignant cells or an area of active production of malignant cells. In some instances, malignant cells are found in tissues in which they did not originate and in which they do not reproduce. A procedure removing malignant cells but not attacking a site of proliferation of such cells is NOT to be considered cancer treatment for the purpose of this program.

The definition includes only cancer-directed (definitive therapy) and excludes therapy which treats the patient but has no effect on malignant tissue. Treatment solely for the relief of symptoms is therefore excluded.

The term "palliative" is normally used in two senses: (a) as meaning non-curative and (b) as meaning the alleviation of symptoms. Thus, some of the treatments termed palliative fall within the definition of cancerdirected treatment and some are excluded as treating the patient but not the cancer.

It is recognized that in some cases a lay person cannot determine from the medical record whether the treatment falls within the definition since it is not clear whether the treatment was given to attack or control the cancer or only as symptomatic or supportive therapy. Knowledge of dose levels might be necessary to determine whether in a particular case the hormonal therapy was cancer-directed or supportive. It is important that a doctor interpret the medical record in problem cases.

It is understood that it is the treatment actually received by the patient that is coded - not the plan of treatment.

SEER Program

CP 73-79

1976 Code

SURGERY (CP 73)

The removal of cancer tissue by manual or operative procedures.

Examples: Hysterectomy for uterine cancer

Mastectomy for breast cancer Gastrectomy for stomach cancer

TUR (Transurethral Resection) with removal of cancer tissue

for bladder and prostate neoplasms

Local Excision with removal of cancer tissue (including excisional biopsy and excluding incisional biopsy) Dessication and Curettage for bladder and skin neoplasms

Fulguration for bladder and skin neoplasms

Electrocautery

Photocoagulation

Cryosurgery

Chemosurgery

Conization for carcinoma in situ of the cervix

Surgery removing metastatic malignant tissue Endocrine Surgery when cancer is of another site and the gland contains metastatic tissue

RADIATION - BEAM THERAPY (CP 74):

All teletherapy directed to cancer tissue regardless of source of radiation. Included is treatment via:

X-ray

Cobalt Bomb

Linear Accelerator

Neutron Beam

Betatron

Spray Radiation

Also included is Radiation, NOS - method or source not specified

RADIATION - OTHER (CP 75):

All radiation other than beam therapy directed to cancer tissue. Included is treatment via:

> Internal use of radioactive isotopes whether given orally, intracavitarily, interstitially, or by intravenous injection.

All implants, molds, seeds, needles, applicators of radioactive material such as radium, radon, radioactive gold, etc.

February 27, 1976

Page 4/6

FIRST COURSE OF CANCER-DIRECTED THERAPY

Field 22

CP 73-79

1976 Code

CHEMOTHERAPY (CP 76):

Any chemical which is administered to attack or treat cancer tissue and which is not considered to achieve its effect through change of the hormone balance. Method of administration of the drug is not to be considered in coding - only the agent.

HORMONAL TREATMENT (CP 77):

The use of any type of therapy which exercises its effect on cancer tissue via change of the hormone balance of the patient. Included are the administration of hormones, anti-hormones, or steroids, surgery for hormonal effect on cancer tissue, and radiation for hormonal effect on cancer tissue.

Specifically:

Hormones, anti-hormones, steroids - drugs which are hormones, have hormonal properties, or which alter the natural production of hormones by the patient.

Endocrine Surgery - coded only when the cancer is primary in another site and only when the gland contains no metastatic tissue. In the event of paired glands, both must be removed. Exceptions: (a) when a remaining gland is removed; and (b) when both glands of a pair are removed and only one gland is involved with metastatic tumor tissue.

Endocrine Radiation - radiation of any type specifically focused on or directed toward an endocrine organ in order to affect cancer tissue by altering the hormonal balance. "Incidental" endocrine radiation is excluded.

The specific rules for coding endocrine radiation are the same as in endocrine surgery.

IMMUNOTHERAPY (CP 78):

Administration of antigen or antibody plus any technique which heightens the patient's immune response. Almost always as an adjunct to surgery, radiation, and/or chemotherapy.

Examples: Virus Therapy B.C.G.

Bone Marrow Transplant Vaccine Therapy

OTHER CANCER-DIRECTED THERAPY (CP 79):

Any and all cancer-directed therapy that is not appropriately assigned to

CP 73-79

1976 Code

the other specific treatment codes, including an experimental or newly developed method of treatment differing greatly from accepted types of cancer therapy.

Examples: Dermoplaning or wire brush surgery (multiple skin cancer)
Hyperbaric Oxygen (as adjunct to definitive treatment)

<u>Double-Blind Clinical Trial</u> information: After the code is broken, code Field 22 according to the treatment actually administered.

NO CANCER-DIRECTED THERAPY (CP 79):

If patient receives symptomatic or supportive therapy this is classified as "no cancer-directed therapy". Field 22 would be coded as 0000000 for such a case.

1976 Code CP 80

Code:

- O Information unknown concerning recurrence or appearance of new primaries at original site. (Including records from a time before this type of data was collected for this site or this registry)
- 1 No lesion develops at later time within the same major site as at first episode (same first two digits of primary site code)
- 2 At later time, other lesions appear, all within the same subsite (same three digit primary site code) as at first episode
- 3 At later time, other lesions appear in the same major site, but at least one of which appears in a different sub-site than at first episode
- 4 At later time, other lesions appear in the same major site as at first episode, but precise location is unknown

Definitions:

"At later time" means after the time period designated as "first episode". In the instructions for Field 17, the following definition appears:

"First episode" is defined as the first two months following diagnosis.

Discussion:

As in Field 17, Field 23 ignores any decisions that the additional neoplasia is or is not a new primary neoplasm. By study of all the reports pertaining to the same individual, the analyst can determine which of the manifestations were considered new tumors and which were recurrences. Thus, Field 23 becomes the first SEER field to permit a start on the study of recurrence at the original site.

1976 Code

CP 81-84

Field 24 indicates the date of latest follow-up or the date of death. The first two digits indicate the appropriate month and the last two digits identify the year. This field pertains to the date of the actual information and not the date the follow-up inquiry was forwarded or the date the follow-up report was received.

Code:

Month (CP 81-82)

- 01 January
- 02 February
- 03 March

•

•

- 09 September
- 10 October
- 11 November
- 12 December
- 99 Month Unknown

Year (CP 83-84)

Last two digits of the year of latest follow-up or death. There should be no use of 99.

General:

If there is no new follow-up information, the entry in Field 24 is the same as that of the previous follow-up for this patient. If no follow-up information is ever received, code the date of first hospital discharge.

Remember, this field pertains to the patient and not to the cancer. Thus, for a patient with more than one malignancy, all records for that patient should have the same code in Field 24.

CP 85

Field 25 summarizes the best <u>available</u> information concerning the vital and cancer status of the patient as of the date of last follow-up or death. Detailed information from autopsies, when available, should be used in coding this field.

Code:

- 1 Alive No evidence of Cancer
- 2 Alive With Any Cancer
- 3 Alive Cancer Status Unknown
- 4 Dead No Evidence of Cancer at Death
- 5 Dead <u>This</u> Cancer Present at Death (even if other cancer is also present)
- Dead No Evidence of This Cancer, but Another Cancer Present at death
- 7 Dead Cancer Present at Death, but it cannot be established whether it was This or Another
- 8 Dead Indeterminate whether Cancer was Present at Death

General:

If there is no new follow-up information, the code in Field 25 is the same as on the previous follow-up for this patient. If \underline{no} follow-up information is \underline{ever} received, the patient's status at first discharge from the hospital should be coded in Field 25.

It should be emphasized that death certificates are often in error. If the official death certificate does not indicate the presence of cancer although the registry records demonstrate that the patient had cancer at death, this field is to be coded 5, 6, or 7 in accordance with the registry information. Conversely, a death certificate may indicate cancer but receive no support from registry information. In these cases, selection of the best code will depend upon such factors as: how long before death the last follow-up information was obtained, whether it was based upon medical examination, whether the death occurred in a registry hospital, and whether the autopsy findings were available to the registry staff.

CP 86-90

Field 26 indicates the primary or underlying cause of death <u>as found on</u> the death certificate. Even when the death certificate is believed to be in error, the entry on the death certificate is to be used. <u>The International Statistical Classification of Disease</u>, Injuries and <u>Causes of Death (ICD)* published by the World Health Organization is the basis for the code in this field. However, the WHO publication for the Eighth Revision is not used in the U.S.A. Instead we use the Eighth Revision of ICDA, <u>International Classification of Diseases</u>, <u>Adapted</u> for use in the United States, which is published by the U.S. Government Printing Office as Public Health Service Publication No. 1693.</u>

CP 86-89

The four-digit ICDA code is used in CP 86-69. There are two alternative code series presented for violent and accidental deaths. SEER uses the E series, E800-E999, but without coding the letter E.

Where ICDA does not make use of the fourth digit, enter a code of 9. This rule applies also to any of the E series where there are only three numbers following the letter.

It is not necessary to have possession of a copy of the death certificate so long as the official code for the cause of death is available.

Code these specific situations as follows:

	CP 80-89
Death certificate available, cause of death unknown	7969
Death certificate not available	7777
Information not being submitted	6666
Patient alive at last contact	0000

CP 90

Leave CP 90 blank. For future expansion, as needed.

Examples:

Cause of Death	ICDA-8	CP 86-89
Cancer of the Esophagus	150	1509
Viral pneumonia	480	4809
Acute appendicitis with peritonitis	540.0	5400
Suicide by gum shot	E955	9559

^{*}The ICD is revised every ten years.

CD 06 00

CP 91

Field 27 indicates which revision of the ICD has been used in coding Field 26. This code provides for identification of any past revisions of ICD codes that are still on the records. It also provides for incorporation of the upcoming ninth ICD revision.

Code:

- 7 Seventh Revision of ICD
- 8 Eighth Revision of ICDA
- (9)* Ninth Revision of ICD
- O Patient Alive at Last Follow-Up

Note: The following SEER codes used to supplement ICD are considered part of the Eighth Revision for coding of Field 26. 7969, 7777, 6666.

^{*}Request revised instructions for this field when ICD (9) is in force in the U.S.A. for Death Certificate coding - probably about 1978.

1976 Code

CP 92

Code:

- 1 Case not in active follow-up system
- 2 Case is (or was) in active follow-up system

Discussion:

- Code 1: Normally coded here are cases identified as "Autopsy Only" and "Death Certificate Only". (See Field 3) In addition, Code 1 includes any cases which are collected only for incidence study and are not regularly followed to acquire treatment or survival data. Even should there be other reports which provide the more complete information, if the original diagnosis was from an "incidence only" source, use Code 1 for this case.
- Code 2: Even if the information is incomplete at the time of coding, if the case is in the active follow-up system so that more data will probably become known to the registry, use Code 2. Cases coded 2 will be the source data for survival or therapy evaluation studies.

1976 Code

CP 93

Code:

- O SEER Non-Specific Code in CP 67-68; blanks in CP 53-65.
- 1 1967 EOD Code (first two digits) in CP 67-68; blanks in CP 53-65.
- 2 SEER EOD Code for a specific primary site in CP 53-65; blanks in CP 67-68.
- Code 0: The SEER Non-Specific Code is summarized in the instructions for Field 20. It is used for most cases not in the active follow-up system, for sites for which no specific detailed EOD code has been issued in either ERG or SEER Programs, and for those cases for which EOD information available is too limited to be described in other terms. Note that while there is a non-specific code contained in the 1967 EOD Code, the SEER Non-Specific Code is more detailed in describing cases with regional spread.

Even though "Death Certificate Only" and "Autopsy Only" cases are usually not in the active follow-up system, there may be adequate information on EOD. Therefore, note that the Non-Specific Code is not obligatory for "Death Certificate Only" or "Autopsy Only" cases.

- Code 1: The 1967 EOD Code (first two digits) may be found in the buff pages of instructions for Field 0 in the "End Results Group 1967 Code Manual". Photocopies have also been supplied to SEER Participants where needed.
- Code 2: The SEER EOD Code for CP 53-65 is presented in the SEER booklet entitled "Extent of Disease -- Codes and Coding Instructions". This booklet contains only the codes for those primary sites for which such approved code schemes have been issued. At the time noted at the bottom of this page, the expanded SEER EOD codes are in force only for Breast, Colon and Rectum the latter two with specific "sub-site" codes for Cecum, Ascending Colon, Transverse Colon including Flexures, Descending Colon, Rectosigmoid including Junction, and Rectum.

CP 94-98

The purpose of this field is to indicate those combinations of codes in different fields of this record which have already been reviewed for possible error. In effect, coding in this field identifies the improbable combinations which have been found possible. The major utility of Field 30 is to prevent the continuing selection of the case for review after it has already been checked at least once.

The Field is designated as a five-digit field, but at present only one CP is used, CP 94. Blanks are to be used in CP 94-98 unless a specific "flag" is warranted.

CP Code

94 Site-Type Edit

Already reviewed for apparent anomaly between the coding of primary site and histologic type. No need to review again.

NATIONAL CANCER INSTITUTE BIOMETRY BRANCH

