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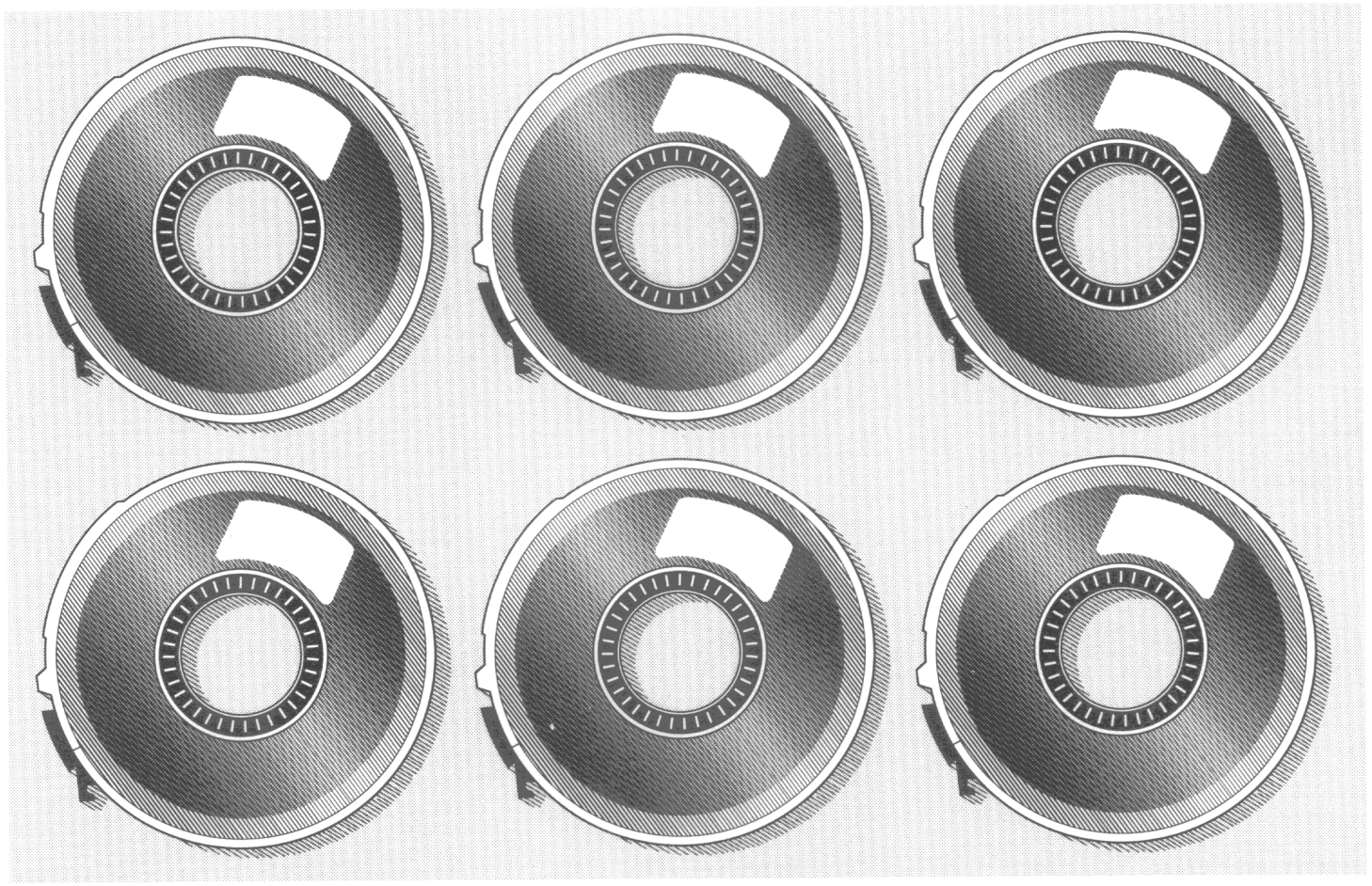
Public Use Data Tape Documentation

NHANES I Epidemiologic Followup Study, Supplemental

Health Care Facility Stay



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Center for Health Statistics

CENTERS FOR DISEASE CONTROL AND PREVENTION

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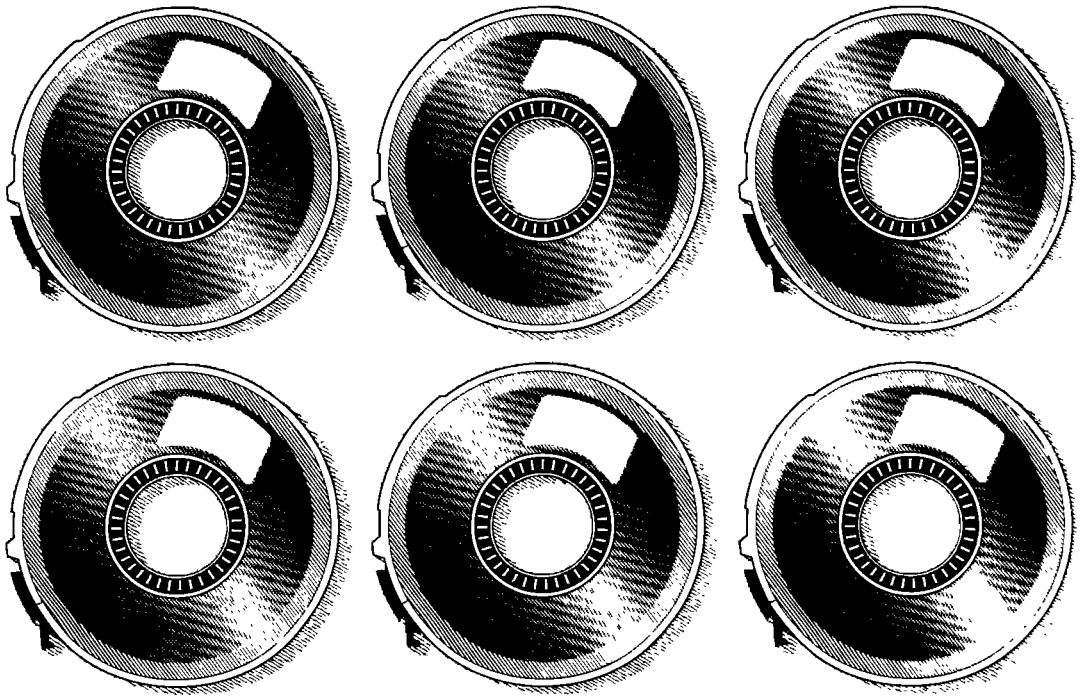

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Hyattsville, Maryland
July 1996

ACKNOWLEDGMENTS

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The NHEFS originated as a joint project between the National Center for Health Statistics (NCHS) and NIA. It has been funded primarily by NIA, with additional financial support from the following components of the National Institutes of Health (NIH) and other Public Health Service agencies: the National Cancer Institute; the National Institute of Child Health and Human Development; the National Heart, Lung, and Blood Institute; the National Institute on Alcohol Abuse and Alcoholism; the National Institute of Mental Health; the National Institute of Diabetes and Digestive and Kidney Diseases; the National Institute of Arthritis and Musculoskeletal and Skin Diseases; the National Institute of Allergy and Infectious Diseases; and, the National Institute of Neurological and Communicative Disorders and Stroke.

CONTENTS

USE OF NHEFS DATA

With the goal of mutual benefit, NCHS requests the cooperation of recipients of data tapes in certain actions related to their use:

A. Any published material derived from the data should acknowledge the National Center for Health Statistics (NCHS) as the original source. It should also include a disclaimer which credits any analyses, interpretations, or conclusions reached to the author (recipient of the tape) and not to NCHS, which is responsible only for the initial data.

B. Consumers who wish to publish a technical description of the data will make a reasonable effort to insure that the description is not inconsistent with that published by NCHS. This does not mean, however, that NCHS will review such descriptions.

C. Authors should provide NCHS with a reprint of published articles which utilize the NHEFS Supplemental data. Please send reprints to:

NHEFS Data Management Staff
Division of Epidemiology
National Center for Health Statistics
Presidential Building, Room 730
6525 Belcrest Road
Hyattsville, MD 20782

ERRORS IN THE DATA TAPES AND SURVEY DIFFERENCES

The NHEFS Public Use data tapes have been subjected to a great deal of careful editing. However, due to the large volume of data in the series, it is likely that a small number of errors or discrepancies remain undetected.

In general, the NHEFS data management team has not attempted to resolve substantive data discrepancies that may exist 1) within the NHEFS Supplemental data tape, or 2) between the NHEFS Supplemental data tape and the data tapes of the original National Health and Nutrition Examination Survey (NHANES I) and other NHEFS followup waves.

NHANES I EPIDEMIOLOGIC FOLLOWUP STUDY, SUPPLEMENTAL HCFS

I. NHEFS BACKGROUND INFORMATION

The NHANES I Epidemiologic Followup Study (NHEFS) is a longitudinal study which uses as its baseline those adult persons ages 25 to 74 years who were examined in the first National Health and Nutrition Examination Survey (NHANES I). The NHEFS is comprised of a series of four followup surveys. The first wave of data collection, the 1982-84 NHEFS, was conducted from 1982 to 1984 and included all persons who were between 25 and 74 years at their NHANES I examination (n=14,407). The second wave of data collection, the 1986 NHEFS, was conducted for members of the NHEFS cohort who were 55-74 years at their baseline examination and not known to be deceased at the 1982-84 NHEFS (n=3,980). The third wave of data collection, the 1987 NHEFS, was conducted for the entire non-deceased NHEFS cohort (n=11,750). The fourth wave of data collection, the 1992 NHEFS, was also conducted for the entire non-deceased NHEFS cohort (n=11,195). This file documentation describes data collected for the Supplemental Health Care Facility Stay (HCFS) file of the 1992 NHEFS.

NHANES I collected data from a national probability sample of the United States civilian noninstitutionalized population between the ages of 1 and 74 years. The survey, which included a standardized medical examination and questionnaires that covered various health-related topics, took place from 1971 through 1974 and was augmented by an additional national sample in 1974-75. The NHANES I sample included 20,729 persons 25 to 74 years of age, of whom 14,407 (70 percent) completed a medical examination. The design, content and operation of NHANES I has been described elsewhere (Vital and Health Statistics, Series 1, Nos. 10a, 10b, and 14).

Although NHANES I provided a wealth of information on the prevalence of health conditions and risk factors, the cross-sectional nature of the original survey limits its usefulness for studying the effects of clinical, environmental, and behavioral factors and in tracing the natural history of disease. Therefore, the NHEFS was designed to investigate the association between factors measured at the baseline and the development of specific health conditions. It originated as a joint project between the National Center for Health Statistics (NCHS) and the National Institute on Aging with collaboration from components of the National Institutes of Health and other Public Health Service agencies. The 14,407 participants who were 25 to 74 years of age when they were examined in NHANES I

(1971-75) were included in the followup study population.

In the first wave, the 1982-84 NHEFS, data were collected on all 14,407 subjects (i.e., individuals examined at NHANES I) in the cohort. Tracing of subjects began in 1981 and data collection was conducted from 1982 to 1984. Approximately 93 percent (n=13,383) of the cohort was successfully traced by the end of the survey period. Detailed information on the design, content, and operation of the 1982-84 NHEFS may be found in the Plan and Operation of the NHANES I Epidemiologic Followup Study 1982-84, Vital and Health Statistics, Series 1, No. 22. The basic design of the 1982-84 NHEFS consisted of the following components:

-- tracing subjects or their proxies to a current address;

-- acquiring death certificates for deceased subjects;

-- performing in-depth interviews with the subjects or with their proxies including, for surviving subjects, taking pulse, blood pressure, and weight measurements of subjects; and,

-- obtaining hospital and nursing home records, including pathology reports and electrocardiograms.

The second wave of the NHEFS, the 1986 NHEFS, was conducted to assess changes in the health and functional status of the oldest members of the NHEFS cohort since the last contact period. It included 5,677 subjects who were 55 years or older at their NHANES I examination (almost 40 percent of the entire NHEFS cohort). Data collection was restricted to 3,980 subjects aged 55 years or older at NHANES I who were not known to be deceased at the time of the 1982-84 NHEFS, regardless of their tracing or interview status in 1982-84. The remaining 1,697 subjects who were deceased at the time of the 1982-84 NHEFS were excluded from additional data collection in the 1986 NHEFS. Detailed information on the design, content, and operation of the 1986 NHEFS may be found in the Plan and Operation of the NHANES I Epidemiologic Followup Study 1986, Vital and Health Statistics, Series 1, No. 25.

The 1987 NHEFS, the third wave of data collection was designed to collect information on changes in the health and functional status of the NHEFS cohort since the last contact period. Tracing and data collection were conducted during this followup survey only for the members of the NHEFS cohort who had not been identified as deceased in 1982-84 or 1986 (n=11,750) regardless of their previous tracing or interview status. The 2,657 previously deceased subjects were

excluded from additional data collection in the 1987 NHEFS. Detailed information on the design, content and operation of the 1987 NHEFS may be found in the Plan and Operation of the NHANES I Epidemiologic Followup Study 1987, Vital and Health Statistics, Series 1, No. 27.

The 1992 NHEFS, the fourth wave of data collection was designed to collect information on changes in the health and functional status of the NHEFS cohort since the last contact period. Tracing and data collection were conducted during this followup survey only for the members of the NHEFS cohort who had not been identified as deceased in 1982-84, 1986 or 1987 (n=11,195) regardless of their previous tracing or interview status. The 3,212 previously deceased subjects were excluded from additional data collection in the 1992 NHEFS. Detailed information on the design, content, and operation of the 1992 NHEFS may be found in the Plan and Operation of the NHANES I Epidemiologic Followup Study 1992, Vital and Health Statistics, Series 1, No. 35.

The NHEFS Supplemental Health Care Facility Stay file was created as a result of the substantial number of out-of-scope abstracts received from facilities during the 1992 NHEFS. These abstracts should have been received on an earlier NHEFS wave. The large number of abstracts was partly due to the procedures instituted for maximizing the collection of reports of hospital or nursing home stays, i.e., deliberately requesting out-of-scope report information. A total of 70 abstracts were collected for 52 subjects. Thirty-nine of these abstract records replace non-match records on the 1982-84, 1986 or 1987 NHEFS. These changes are presented in the Table 1. For data analysis, the Supplemental file should used in conjunction with one or more of the previous NHEFS Health Care Facility Stay waves and not as the sole data source. The Supplemental HCFS file records contain data from the first three NHEFS waves.

Table 1. NHEFS Supplemental HCFS records which replace non-matched records on previous waves.

Supplemental File			Previous Wave		
Sequence #	Stay #		Stay #		Survey
04325	S0101	MAT	30203	XNS	87
04325	S0102	MAT	30204	XNS	87
04753	S0101	MAT	20101	ONR	86
04753	S0102	CRM	30301	CRX	87
05020	S0101	MAT	20101	ONR	86
05020	S0102	CRM	30301	CRX	87
05603	S0101	MAT	20102	REF	86
08011	S0101	MAT	10101	ANO	82-84
08011	S0102	MAT	10102	ANO	82-84
08394	S0101	MAT	20201	ONR	86
08404	S0101	MAT	20101	REF	86
08404	S0102	CRM	30301	CRX	87
10090	S0101	MAT	30401	XNH	87
11026	S0101	MAT	30201	XNS	87
13590	S0101	MAT	10101	XNH	82-84
13769	S0101	MAT	30101	XNH	87
14307	S0101	MAT	30101	REF	87
14929	S0101	MAT	30101	ABT	87
19586	S0101	MAT	30101	REF	87
19636	S0101	MAT	30101	REF	87
20410	S0101	MAT	30101	DKH	87
20598	S0101	MAT	30201	REF	87
20878	S0101	MAT	30104	XRD	87
20878	S0102	MAT	30103	XRD	87
20883	S0101	MAT	30101	XRD	87
20905	S0101	MAT	30101	XRD	87
20932	S0101	MAT	30101	XRD	87
20932	S0102	MAT	30102	XRD	87
20945	S0101	MAT	30102	XRD	87
20976	S0101	MAT	30102	XNH	87
21692	S0101	MAT	30101	XNH	87
21692	S0102	MAT	30102	XNH	87
21814	S0101	MAT	10201	XNS	82-84
21980	S0101	XNH	10101	XNH	82-84
21980	S0102	MAT	10201	XNS	82-84
22194	S0101	MAT	30101	REF	87
24256	S0101	MAT	10101	ONR	82-84
24256	S0102	CRM	20201	ONR	86
24256	S0103	CRM	30201	CRX	87

NHEFS SUPPLEMENTAL HEALTH CARE FACILITY STAY DATA TAPE CHARACTERISTICS

Title:	NHEFS Supplemental Health Care Facility Stay Data Tape
Data Set Name:	NHEFS4.HCFSUPPL.FINAL
Record Length:	429
Blocksize:	31746
Number of Records:	70
Recording/ Storage Media:	FIXED BLOCK, EBCDIC/IBM 3480 Cartridge Tape
Created by:	Office of Analysis, Epidemiology and Health Promotion Division of Epidemiology National Center for Health Statistics Presidential Building, Room 730 6525 Belcrest Road Hyattsville, Maryland 20782

NHEFS SUPPLEMENTAL HEALTH CARE FACILITY STAY INTRODUCTION

The 1982-84, 1986, 1987 and 1992 NHEFS Health Care Facility Stay files contain information on overnight stays that are in-scope for each NHEFS period. The in-scope period depends upon the timing of the subject's interviews and his/her vital status. For example, among subjects who have not been interviewed since the NHANES I exam, the 1992 in-scope period is from the date of the NHANES I exam to the date of the 1992 interview for surviving subjects and from the exam date to the date of death for deceased subjects. For subjects who have had at least one followup interview prior to the 1992 followup, the in-scope period is from the date of the last interview (either 1982-84, 1986 or 1987) to the date of the 1992 interview for surviving subjects and from the date of the last interview to the date of death for deceased subjects. The in-scope period for other waves is defined similarly. Stays that were reported prior to the in-scope period were defined as out-of-scope for the 1992 survey. The Supplemental file contains records that are out-of-scope for the 1992 followup, but in-scope for a previous wave. These records have not been collected in prior waves. This file provides the data user with access to information on overnight health care facility stays that are not available on previously released data files.

Identification of Stay Reports:

Reports of overnight hospital or nursing home facility stays were obtained from various sources. Most reports were elicited through a series of detailed questions in section B of the interview. Generally, respondents were asked to report all overnight facility stays since 1987 if the subject was last interviewed in the 1987 NHEFS, since 1985 if the subject was last interviewed in the 1986 NHEFS, since 1980 if the subject was last interviewed in the 1982-84 NHEFS, or since 1970 if the subject was last interviewed at NHANES I examination. In addition to interview information, data on facility stays were gathered from other reporting sources: from the death certificate, from other hospital abstracts and from miscellaneous other sources. At the conclusion of the interview, authorization was obtained for permission to contact facilities.

Facility Data Collection:

For each stay reported during the interview, the name and address of the facility, the reported dates of the stay, and the reason for the stay were recorded on the hospital and health care facility chart (HHCF). A separate log book was kept containing similar data for reports gathered from the death certificates, hospital abstracts and other sources. All reports of facility stays were compiled and entered into a computerized tracking system. All reported facilities were contacted by mail and asked to review the subject's medical records and to abstract information on exact dates of admission, discharge and diagnoses onto standard abstract forms. In addition to completing abstract forms, facilities were requested to submit photocopies of selected sections of the subject's inpatient record i.e., the "facesheet", the discharge summary and of pathology reports (for any admission where a new malignancy was diagnosed).

Matching Records:

As the abstracts were received, they were checked against report information in the tracking system to determine if the abstract "matched" any of the reported stays. Date of admission and diagnosis were used as matching criteria but exact matches on date or diagnosis were not required for a stay to be considered matched. Abstracts were matched to reports if the reported date of admission was within a year of the actual date of admission and if the reported reason for admission involved the same body system as at least one of the diagnoses present on the abstract. Cases that did not meet these specific criteria were reviewed by NCHS staff and matched when appropriate.

Each record on the file represents an overnight facility stay. Therefore, one or more Supplemental records will exist for some subjects, while other subjects will have no records on the file. The structure of the data file reflects the system used to obtain and process stay information. The record is divided into three major sections: 1) the report section, 2) the record status section and 3) the abstract section. An example of the record layout is provided in figure 1.

The subject identification number (i.e. the sample sequence number) is in positions 1-5 on each record. This number is unique for each subject and is used when linking the Health Care Facility Stay tape to all other NHEFS and NHANES I Public Use Data Tapes. The total number of records per subject is found in positions 6-7 on the file. The first section of the record is the report section

(positions 29-59 and 63-204) which contains information from the reporting source as well as stay identification numbers assigned by NCHS. Each stay entered into the report section is assigned a health care facility stay id number (positions 29-33). When used in conjunction with the sample sequence number, this number uniquely identifies each record on the file. The reported date of admission is found in positions 47-52. This date is used in conjunction with the other interview dates to determine in which followup wave the record should have appeared.

The record status section (positions 60-62) contains a code for the result of an abstract request. If a facility returned an abstract that matched a report from a previous wave then a record status code of MAT (match) was applied. A returned abstract that did not match any reports, either for 1992 or for any previous waves and was out-of-scope for the 1992 survey period was assigned a record status code of ASF (additional stay found). A record status code of CRM (cross-referenced match) was applied to a stay that was the continuation of a stay begun in a prior survey period.

The abstract section (positions 205-379) contains the information obtained from the facility records including actual dates of admission, discharge and diagnoses. The diagnoses on the abstracts were coded using the ICD-9-CM according to the medical coding specifications detailed in the following section of this codebook. The abstract section is similar to the original 1982-84 NHEFS Health Care Facility record file released in August 1987.

Information will be present in one or more sections of the record depending on whether a previous report had been obtained. The presence or absence of information in the three sections results in two different record profiles. Figure 2 illustrates these profiles. The first is the successfully matched stay record, where an abstract was received which matched a report on a previous wave. Refer to Table 1. Non-match reports on the 1982-84, 1986 and 1987 NHEFS were compared to Supplemental file abstracts for possible matches. Records were matched based on reported admission date, facility identification number and reported conditions. Abstract information is added to the report and the code of MAT was entered into the record status section. Complete information is available in the first three sections of the record for these stays. The second type of record is one which was generated solely by the receipt of a facility abstract. This type of record resulted when the facility returned an out-of-scope (for 1992) abstract that did not match with any report on 1992 or on a previous wave. When this occurred, the abstract was entered on the file, and stay identifiers were assigned in the report section of the record but no other

information in the report section is present. An ASF (additional stay found) code was entered in the record status section.

In summary, the NHEFS Supplemental HCFS file contains records which could be included with previous NHEFS waves in 1982-84, 1986 and 1987. The majority of these abstracts replace previous non-matched records. For data users looking for a specific medical condition, the Supplemental file should be appended to other waves. The survey identifier in column 28 indicates the appropriate earlier wave (1982-84, 1986 or 1987) where the record should have been collected. Records with a discharge date of 979797 (still in facility) may be pointed to in a later wave in columns 55-59 indicating that the stay overlaps with more than one survey period.

MEDICAL CODING SPECIFICATIONS

Medical coding for the NHEFS Supplemental HCFS data tape was based on the International Classification of Diseases-9th Revision-Clinical Modification (ICD-9-CM). The health care facility was asked to abstract all diagnoses and procedures onto a special form. In most cases, a copy of the hospital discharge summary and/or medical records facesheet was attached to the abstract. The diagnoses and procedures listed on the discharge summary or facesheet were then compared with those provided on the abstract form. In most instances, discrepancies were resolved by coding the diagnoses or procedures as provided on the discharge summary or the facesheet.

All diagnoses were coded to the highest level of specificity possible. The fourth-digit subcategory for diagnosis and procedure codes was used whenever possible. The fifth-digit subclassification of disease for diagnosis codes was also used when appropriate. A three-digit ICD code was used only if it could not be further subdivided. The following rules were used to code diagnoses and procedures.

Rules Governing Medical Coding of Diagnoses:

All medical diagnoses listed on the health care facility abstract form or the discharge summary are coded by trained medical coders. The coders assigned the principal diagnosis as the condition established after study to be chiefly responsible for occasioning the admission of the patient to the health care facility. The admitting diagnosis is not used as the principal diagnosis unless the admitting and discharge diagnoses are the same.

> Ex: Patient admitted with a diagnosis of bronchopneumonia. After workup and treatment, x-ray findings, etc., the patient was discharged with a final diagnosis of bronchopneumonia. The principal diagnosis is coded 485 for bronchopneumonia.

All other diagnoses or conditions existing at the time of admission or that developed subsequently during the stay are coded.

> Ex: Patient was admitted with a diagnosis of uncontrolled diabetes mellitus, and during the course of examination and treatment, phlebitis was discovered. The diabetes and the phlebitis are coded.

Diagnoses documented as probable, possible, suspected, question of, suggestive of, compatible with, or questionable are coded and prefixed with a "P".

> Ex: If the diagnosis is stated possible myocardial infarction, the diagnosis code is P410.9.

If a diagnosis is stated as "rule out" or "R/O", the condition is coded as if it exists and the "P" prefix is not used. If a diagnosis is stated as "ruled out", the condition is not coded.

Ex: If "R/O M.I." appears on the facesheet, the code is 410.9
If "M.I. ruled out" appears, the condition is not coded.

Hospital acquired infections, such as a "staph" infection, if documented on the facesheet and/or discharge summary are coded. Documentation may be in the form of a note by the infections committee, stamped notation, or a checkmark, depending on the record format.

Malignant neoplasms are coded according to ICD-9-CM coding specifications which indicate primary site of origin.

Injuries and poisonings are coded, where applicable, using both the nature of the injury and the external cause of injury code (E800-E999).

Ex: Patient sustained comminuted fracture of the femur due to a fall down stairs. Nature of injury code is 821.00 and external cause of injury code is E880.9

"History of" conditions are not coded with the following exceptions:

Old myocardial infarction (more than 8 weeks since last occurrence)

Status post bypass surgery

Malignant neoplasm (cancer in remission or under treatment)

Old cerebrovascular accident

Sterilization

Normal pregnancy undelivered

Manipulation of an IUD

These diagnoses are coded using "V" codes and were used on a limited basis. Recurrent malignancy codes are prefixed with an "R".

Symptoms (ICD-9-CM codes 7800-7999) were coded using the following guidelines:

1. When the only diagnosis listed on the abstract form, facesheet, and/or discharge summary is a symptom, the symptom is coded.

   Ex: The only discharge diagnosis listed is "chest pain". The code number 786.50 (chest pain, unspecified) is assigned.

2. When a symptom is listed that is unrelated to any of the diagnoses listed, the symptom is coded.

   Ex: The discharge diagnoses listed are acute myocardial infarction, diabetes mellitus, and hepatomegaly. The hepatomegaly is also coded.

3. When a symptom is listed and is related to a listed discharge diagnosis the symptom is not coded.

   Ex: The discharge diagnoses listed are diabetes mellitus, acute appendicitis, severe abdominal pain. Only the diabetes and the appendicitis are coded. The abdominal pain is not coded.

Rules Governing Medical Codes for Procedures:

The same general rules apply to coding procedures as to coding diagnoses. Medical procedures are coded by trained medical coders from the information described on the health care facility abstract form or the discharge summary/facesheet.

The principal procedure is the primary procedure most related to the principal diagnosis and is performed for definitive treatment as opposed to diagnostic and/or exploratory purposes.

Ex: Diagnosis = uterine fibroids.
Procedures = biopsy of uterus, total abdominal hysterectomy, incidental appendectomy.

The hysterectomy is coded as the principal procedure and the appendectomy and the biopsy are coded as secondary procedures.

All procedures documented on the discharge summary and/or facesheet are coded if they fall into the following categories:

Biopsies (if related to the principal diagnosis and procedure or if related to other listed diagnoses)

Surgical procedures

Cardiac catheterizations

D and C (following delivery or abortion only)

The following procedures are not coded:

Surgical approach

Operative cholangiogram

Lumbar puncture

CT scan

Endoscopy

Diagnostic D and C

Diagnostic radiology
Examination (under anesthesia, physical exam, etc.)

Manipulations

Physical therapy

Application or removal of casts, splints, etc.

Medical Coding Conventions:

Diagnostic codes--Up to ten diagnoses are coded for each hospital and nursing home stay. The format for each diagnosis code is six positions. The following conventions were used when entering diagnostic codes on the data tape:

1. ICD-9-CM diagnostic codes (including "V" codes) were entered beginning with the second position of the variable field continuing through the sixth position. There is an implied decimal point between the fourth and fifth positions of the variable field.

2. If the diagnoses code required less than five digits the remaining tape positions are blank.

3. Prefix codes "P" and "R" are coded in the first tape position. If the diagnosis code has no prefix the first position is blank.

Ex. 1:	_ 4 2 2 9 0	Code is 422.90
Ex. 2:	_ V 7 1 1 _	Code is V71.1
Ex. 3:	_ 4 3 6 _ _	Code is 436
Ex. 4:	P 1 8 0 0 _	Code is P180.0
Ex. 5:	R 1 7 4 9 _	Code is R174.9

4. E codes - External cause of injury codes
An external cause of injury code is provided, when applicable, immediately after the medical diagnosis code which describes the nature of the injury. E codes were entered on the data tape beginning in the first position of the variable field and continuing through the fifth position. There is an implied decimal point between the fourth and fifth positions of the variable field. If an E code required less than five positions the remaining positions are blank. If an E code is not

applicable (i.e. the medical diagnosis code is not a nature of injury code) or could not be coded, the variable field is blank.

Ex. 1: E 9 0 6 1 Code is E906.1
Ex. 2: E 8 5 1 _ Code is E851

Procedure codes--Up to five procedures are coded for each health care facility record. Each procedure code is formatted in a field containing four positions. Procedure codes were entered beginning with the first position of the variable field continuing through the fourth position. There is an implied decimal point between the second and third positions of the variable field. If a procedure code required less than four positions the remaining positions are blank.

Ex. 1: 4 2 9 2 Code is 42.92
Ex. 2: 0 3 1 _ Code is 03.1

NHANES I EPIDEMIOLOGIC FOLLOWUP STUDY SUPPLEMENTAL
Health Care Facility File Codebook

Column Number	Frequencies	Variable description and Codes
		SUBJECT INFORMATION
1-5	70	NHANES I Sample Sequence Number
6-7		Record Count
	70	01-03 = Total number of records
		Note: Each record on the file represents an overnight stay in a health care facility (hospital or nursing home). This variable identifies for each subject the total number of records on the file. It will be the same for each record the subject has on the file.
8-27	70	Blank
28		Survey Period Identifier
	15	1 = NHEFS 1982-84
	12	2 = NHEFS 1986
	43	3 = NHEFS 1987
		Note: This variable identifies the wave where the record should have been collected.
		STAY IDENTIFIERS AND REPORTED INFORMATION ON FACILITY STAYS
		Note: The report section of the record (positions 29-59 and 63-204) contains the information on health care facility stays that was reported on the questionnaire, on a death certificate, on another hospital/nursing home abstract form, or obtained from other sources.
(29-33)		Health Care Facility Stay ID Number
		Note: When used in conjunction with the sample sequence number this number uniquely identifies each record on the tape. It is composed of three variables: Supplemental File Identifier, Facility Number and Stay Number Within Facility. For example: a Stay Number of S0102 refers to a facility stay on the Supplemental file (S) in the first facility reported for that subject (01) and the second admission to that facility (02).

Column Numbers	Frequencies	Variable Description and Codes
29		Survey Period Identifier
	70	S = Supplemental
		Note: This variable identifies all Supplemental records.
30-31		Facility Number
	70	01-02 = Hospital/nursing home number
		Note: For each NHEFS subject, a two digit number was assigned to each facility in which a stay occurred. Thus, if a subject had multiple stays at the same facility, all stays will have the same facility number.
		Facility numbers were assigned consecutively. However, due to tape editing, there are missing numbers in the sequence of facility numbers.
32-33		Stay Number Within Facility
	70	01-03 = Stay number
		Note: The two digit stay numbers were assigned to identify different stays in the same facility.
		Stay numbers within facilities were assigned consecutively.
34-35		Facility ID Prefix
	54 16 0	01 = Hospital 02 = Nursing Home 03 = Out of country, don't know, not ascertained
		Note: This variable identifies the type of facility to which the request for a stay record was mailed.
36-46	70	Blank
(47-52)		Reported Admission Date
		The date of admission to a facility is reported by month, day and year.

Column Numbers	Frequencies	Variable Description and Codes
47-48		Reported Month of Admission
	28	01-12 = Month of admission
	5	98 = Don't know
	6	99 = Not ascertained
	31	Blank = Record status code ASF (positions 60-62), or source code 3 (position 200) and record status code (positions 60-62) not a cross-referenced stay (CRM)
49-50		Reported Day of Admission
	18	01-31 = Day of admission
	15	98 = Don't know
	6	99 = Not ascertained
	31	Blank = Record status code ASF (positions 60-62), or source code 3 (position 200) and record status code (positions 60-62) not a cross-referenced stay (CRM)
51-52		Reported Year of Admission
	38	81-87 = Year of admission (1981-1987)
	1	98 = Don't know
	0	99 = Not ascertained
	31	Blank = Record status code ASF (positions 60-62), or source code (position 200) 3 and record status code (positions 60-62) not a cross-referenced stay (CRM)
53-54	70	Blank
(55-59)		ID Number of Cross-Referenced Facility Status Stay Note: The ID number on the 1982-84, 1986 or 1987 NHEFS Facility Tape (positions 29-33) is used to reference stays in a hospital or nursing home that began during the 1982-84, 1986 or 1987 NHEFS periods and which continue into the survey period identified in column 28. This variable is coded only for records with a CRM in positions 60-62.
55		Survey Period Identifier of Cross-Referenced Facility Stay
	0	1 = NHEFS 1982-84
	0	2 = NHEFS 1986
	0	3 = NHEFS 1987
	5	S = NHEFS Supplemental HCFS file
	65	Blank = Stay not cross-referenced

Column Numbers	Frequencies	Variable Description and Codes
56-57		Facility Number of Cross-Referenced Stay
	5	01 = Stay number
	65	Blank = Stay not cross-referenced
58-59		Stay Number Within Facility of Cross-Referenced Stay
	5	01-02 = Stay number
	65	Blank = Stay not cross-referenced
(60-62)		**RECORD STATUS**
		Note: The record status section of the record (positions 60-62) contains information on the outcome of the request for a health care facility stay.
60-62		Record Status Code
		Note: See Appendix A for an explanation of the record status codes.
	70	ASF - MAT = Record status code
(63-198)		Reported Conditions and Codes
		During the process of completing the Hospital and Health Care Facility Chart (HHCF) respondents described the conditions that led to their overnight facility stays. This information is included as a text field on the stay record. Space is allotted for the recording of up to four reasons for the hospital or nursing home stay (see positions 67-96, 101-130, 135-164 and 169-198).
		A numeric code was assigned to each text description to aid the researcher in the use of this information (see positions 63-66, 97-100, 131-134, 165-168). These variables should be used in conjunction with information in the abstract section, i.e., ICD-9-CM diagnosis codes, present on records with a record status code of MAT, ASF or CRM. Appendix B contains a complete description of these codes.
(63-96)		First Reported Condition
63-66		Condition Code
	39	01-37 = Condition Code (See Appendix B)
	31	Blank = Source Code equal to 3 or Record Status Code ASF.

Column Numbers	Frequencies	Variable Description and Codes
67-96		Condition Text
	39	Description of reason for facility stay
	31	Blank = Source Code equal to 3 or Record Status Code ASF.
(97-130)		Second Reported Condition
97-100		Condition Code
	10	01-37 = Condition Code (See Appendix B)
	60	Blank = Source Code equal to 3 or Record Status Code ASF or only one condition reported.
101-130		Condition Text
	10	Description of reason for facility stay
	60	Blank = Source Code equal to 3 or Record Status Code ASF or only one condition reported.
(131-164)		Third Reported Condition
131-134		Condition Code
	1	01-37 = Condition Code (See Appendix B)
	69	Blank = Source Code equal to 3 or Record Status Code ASF or less than three conditions reported.
135-164		Condition Text
	1	Description of reason for facility stay
	69	Blank = Source Code equal to 3 or Record Status Code ASF or less than three conditions reported.
(165-198)		Fourth Reported Condition
165-168		Condition Code
	0	01-37 = Condition Code (See Appendix B)
	70	Blank = Source Code equal to 3 or Record Status Code ASF or less than four conditions reported.
169-198		Condition Text
	0	Description of reason for facility stay
	70	Blank = Source Code equal to 3 or Record Status Code ASF or less than four conditions reported.
199	70	Blank

Column Numbers	Frequencies	Variable Description and Codes
200		Source of Report of Stay that Initiated Request for Abstract
	31 39	3 = Information from other source 4 = Information from prior NHEFS interview
201-204	70	Blank
(205-379)		**ABSTRACT DATA**
		Note: The abstract data portion of the record (positions 205-379) contains information obtained from an abstract form returned by the facility. This section of the stay record (excluding positions 207-208) will be blank when a facility did not return an abstract form for a stay.
205-206		Abstract Number
	70	01-03 = Number of abstract
		Note: For each subject, a two digit number was assigned consecutively to each abstract form received.
207-208		Total Number of Abstracts Received
	70	01-03 = Total number of abstracts received
		Note: This number represents the total number of abstracts received for each subject. The total number is repeated on each subject record.
209		Facility Record Type
	54 16	1 = Hospital 2 = Nursing home
(210-215)		Date of Admission
210-211		Month of Admission
	70	01-12 = Month of admission
212-213		Day of Admission
	70	01-31 = Day of admission
214-215		Year of Admission
	70	72-87 = Year of admission (1972-1987)

Column Numbers	Frequencies	Variable Description and Codes
(216-221)		Date of Discharge
216-217		Month of Discharge
	55	01-12 = Month of discharge
	15	97 = Inapplicable (still at facility on date of last interview)
	0	99 = Not ascertained
218-219		Day of Discharge
	55	01-31 = Day of discharge
	15	97 = Inapplicable (still at facility on date of last interview)
	0	99 = Not ascertained
220-221		Year of Discharge
	55	72-87 = Year of discharge (1972-1987)
	15	97 = Inapplicable (still at facility on date of last interview)
	0	99 = Not ascertained
222-225		Length of Facility Stay
	55	0001-0106 = Total number of days in facility
	15	9997 = Inapplicable (still at facility on date of last interview)
	0	9999 = Not ascertained
		Note: Length of stay is calculated by subtracting the date of admission from the date of discharge. For subjects with nursing home stays, brief breaks were collapsed into one continuous nursing home stay (see positions 216-221).
226		Was the Patient in Cardiac Intensive Care Unit?
	5	1 = Yes
	30	2 = No
	16	7 = Inapplicable (facility is a nursing home)
	19	9 = Not ascertained

Column Numbers	Frequencies	Variable Description and Codes
227-229		Number of Days in Cardiac Intensive Care Unit
	5	001-009 = Number of days
	65	997 = Inapplicable (position 226 = 2,7,9)
	0	999 = Not ascertained
230		Was the Patient In Other Intensive Care Unit?
	0	1 = Yes
	35	2 = No
	16	7 = Inapplicable (facility is a nursing home)
	19	9 = Not ascertained
231-233		Number of Days in Other Intensive Care Unit
	70	997 = Inapplicable (Position 230 = 2,7,9)
234		Patient Admitted to Nursing Home From:
	5	1 = Private residence
	9	2 = Acute care hospital
	0	3 = Chronic disease hospital
	1	4 = Other nursing home
	54	7 = Inapplicable (facility is a hospital)
	1	9 = Not ascertained
235		Disposition of Hospital Patient
	36	1 = Routine discharge/discharged home
	0	2 = Left against medical advice
	2	3 = Discharged/transferred to another facility or organization
	2	4 = Discharged/referred to organized home care service
	1	5 = Died
	1	6 = Not discharged/still in hospital on the date of last interview
	16	7 = Inapplicable (facility is a nursing home)
	12	9 = Subject discharged, disposition not ascertained

Column Numbers	Frequencies	Variable Description and Codes
236		Disposition of Nursing Home Patient
	14	1 = Not discharged/still in a nursing home on date of last interview
	1	2 = Discharged to private residence/referral to organized home care services
	0	3 = Died
	0	4 = Discharged to private residence/no referral
	1	5 = Transferred to another facility
	54	7 = Inapplicable (facility is a hospital)
	0	9 = Subject discharged, disposition not ascertained
237		Transferred to Another Health Care Facility
	0	1 = Acute care hospital
	0	2 = Other nursing home
	1	3 = Chronic disease hospital
	0	4 = Other
	69	7 = Inapplicable (Position 236 = 1,2,3,4,7 or 9)
	0	9 = Not ascertained
238-239		Number of Diagnoses
	67	01-10 = Number of diagnoses
	3	99 = Not ascertained
		Note: This variable identifies the total number of diagnoses entered on the abstract. The number of coded diagnoses may exceed the maximum number allowed on the data tape (10).
240-245		Principal Diagnosis
	67	ICD-9-CM Code
	3	999999 = Not ascertained
		Note: See medical coding specifications.
246-250		Principal Diagnosis E Code
	10	ICD-9-CM Code
	60	Blank = Principal diagnosis does not require E code
		Note: See medical coding specifications.

Column Numbers	Frequencies	Variable Description and Codes
251-256		Second Diagnosis
	52	ICD-9-CM Code
	18	999997 = Inapplicable (only one diagnosis coded)
		Note: See medical coding specifications.
257-261		Second Diagnosis E Code
	3	ICD-9-CM Code
	18	99997 = Inapplicable (only one diagnosis coded)
	49	Blank = Second diagnosis does not require E code
		Note: See medical coding specifications.
262-267		Third Diagnosis
	40	ICD-9-CM Code
	30	999997 = Inapplicable (less than three diagnoses coded)
		Note: See medical coding specifications.
268-272		Third Diagnosis E Code
	2	ICD-9-CM Code
	30	99997 = Inapplicable (less than three diagnoses coded)
	38	Blank = Third diagnosis does not require E code
		Note: See medical coding specifications.
273-278		Fourth Diagnosis
	30	ICD-9-CM Code
	40	999997 = Inapplicable (less than four diagnoses coded)
		Note: See medical coding specifications.
279-283		Fourth Diagnosis E Code
	0	ICD-9-CM Code
	40	99997 = Inapplicable (less than four diagnoses coded)
	30	Blank = Fourth diagnosis does not require E code
		Note: See medical coding specifications.

Column Numbers	Frequencies	Variable Description and Codes
284-289		Fifth Diagnosis
	16	ICD-9-CM Code
	54	999997 = Inapplicable (less than five diagnoses coded)
		Note: See medical coding specifications.
290-294		Fifth Diagnosis E Code
	1	ICD-9-CM Code
	54	99997 = Inapplicable (less than five diagnoses coded)
	15	Blank = Fifth diagnosis does not require E code
		Note: See medical coding specifications.
295-300		Sixth Diagnosis
	8	ICD-9-CM Code
	62	999997 = Inapplicable (less than six diagnoses coded)
		Note: See medical coding specifications.
301-305		Sixth Diagnosis E Code
	0	ICD-9-CM Code
	62	99997 = Inapplicable (less than six diagnoses coded)
	8	Blank = Sixth diagnosis does not require E code
		Note: See medical coding specifications.
306-311		Seventh Diagnosis
	4	ICD-9-CM Code
	66	999997 = Inapplicable (less than seven diagnoses coded)
		Note: See medical coding specifications.
312-316		Seventh Diagnosis E Code
	0	ICD-9-CM Code
	66	99997 = Inapplicable (less than seven diagnoses coded)
	4	Blank = Seventh diagnosis does not require E code
		Note: See medical coding specifications.

Column Numbers	Frequencies	Variable Description and Codes
317-322		Eighth Diagnosis
	2	ICD-9-CM Code
	68	999997 = Inapplicable (less than eight diagnoses coded)
		Note: See medical coding specifications.
323-327		Eighth Diagnosis E Code
	0	ICD-9-CM Code
	68	99997 = Inapplicable (less than eight diagnoses coded)
	2	Blank = Eighth diagnosis does not require E code
		Note: See medical coding specifications.
328-333		Ninth Diagnosis
	2	ICD-9-CM Code
	68	999997 = Inapplicable (less than nine diagnoses coded)
		Note: See medical coding specifications.
334-338		Ninth Diagnosis E Code
	0	ICD-9-CM Code
	68	99997 = Inapplicable (less than nine diagnoses coded)
	2	Blank = Ninth diagnosis does not require E code
		Note: See medical coding specifications
339-344		Tenth Diagnosis
	2	ICD-9-CM Code
	68	999997 = Inapplicable (less than ten diagnoses coded)
		Note: See medical coding specifications.
345-349		Tenth Diagnosis E Code
	0	ICD-9-CM Code
	68	99997 = Inapplicable (less than ten diagnoses coded)
	2	Blank = Tenth diagnosis does not require E code
		Note: See medical coding specifications.

Column Numbers	Frequencies	Variable Description and Codes
350-351		Number of Procedures
	54	00-05 = Number of procedures
	16	97 = Inapplicable (facility is a nursing home)
		Note: This variable identifies the total number of procedures coded on the facility abstract. The number of reported procedures from a hospital may exceed the maximum number of five coded on this data tape.
352-355		First Procedure
	21	ICD-9-CM Code
	49	9997 = Inapplicable (facility is a nursing home or no procedures coded)
		Note: See medical coding specifications.
356-359		Second Procedure
	6	ICD-9-CM Code
	64	9997 = Inapplicable (facility is a nursing home or only one procedure coded)
		Note: See medical coding specifications.
360-363		Third Procedure
	3	ICD-9-CM Code
	67	9997 = Inapplicable (facility is a nursing home or less than three procedures coded)
		Note: See medical coding specifications.
364-367		Fourth Procedure
	2	ICD-9-CM Code
	68	9997 = Inapplicable (facility is a nursing home or less than four procedures coded)
		Note: See medical coding specifications.
368-371		Fifth Procedure
	1	ICD-9-CM Code
	69	9997 = Inapplicable (facility is a nursing home or less than five procedures coded)
		Note: See medical coding specifications.

Column Numbers	Frequencies	Variable Description and Codes
372		Pathology Report
	3	1 = Required and present
	0	2 = Required and not present
	51	6 = Not required
	16	7 = Inapplicable (facility is a nursing home)
373-429	70	Blank

Figure 1

NHANES I Epidemiologic Followup Study (NHEFS)
Supplemental HCFS record layout

Report Section	Record Status Section	Abstract Section
- Facility identifers - Reported date of admission - Reported cause of admission - Source of report	MAT, CRM or ASF	- Actual dates admission and discharge - ICD-9-CM diagnoses - Discharge status from hospitals and nursing homes

Figure 2

NHANES I Epidemiologic Followup Study (NHEFS)
Examples of matching process and record status codes

Record status code

Match

Report Section	MAT or CRM	Abstract Section

Additional abstract found

No Report section	ASF	Abstract Section

APPENDIX A

RECORD STATUS CODES
(positions 60-62)

Code	Frequency	Description
ASF -	31	"Additional Stay Found." This code was assigned when a returned in-scope abstract could not be matched to a reported stay.
CRM -	5	"Cross-Referenced Match." This code indicates a stay that was begun prior to a NHEFS survey period and continues into a later survey period. For this type of stay, the abstract is brought forward from the previous wave. The discharge date and discharge status information are the only positions that are updated. The admission date is prior to the most recent interview because this is a continuing stay. Thus, it appears to be, but is not, out-of-scope for the wave specified in position 28.
MAT -	34	"Record Match." This code was assigned when a received abstract matched a reported stay. This code was assigned to in-scope reports.

APPENDIX B

NUMERIC CODES FOR REPORTED CONDITIONS ON HEALTH CARE FACILITY STAY RECORDS
(positions 63-66, 97-100, 131-134, 165-168)

Code for reported Condition	Condition Description
01	Arthritis
02	Gout
03	Heart attack
04	Another heart condition besides heart attack
05	Coronary bypass surgery
06	Pacemaker repair, insertion and/or replacement
07	Not assigned in 1987 or 1992 files, see notes below
08	Stroke or CVA (cerebrovascular accident)
09	Diabetes
10	High blood pressure
11	Cancer and/or cancer treatment other than skin cancer
1101	Malignant melanoma
1102	Skin cancer other than malignant melanoma
12	Fractured hip
13	Another type of bone fracture besides a hip fracture
14	Not assigned in 1987 or 1992 files, see notes below
15	Surgery
16	Don't know
17	Not ascertained
18	Tests/observation/x-rays/physical exam
19	Digestive/endocrine condition
20	Respiratory condition (including influenza and pneumonia)
21	Infection
22	Kidney/bladder/urinary condition
23	Debility/pain
24	Male reproductive condition

25	Musculoskeletal problem or injury other than a fracture
2502	Back pain (1982-84 only)
26	Circulatory condition
27	Female reproductive condition
28	Mental illness
29	Neurologic condition
30	Nutritional condition or dehydration
31	Bleeding or blood disorder
32	Skin condition
33	Condition not elsewhere coded
34	Admission to a facility other than an acute care hospital
35	In a facility at time of death
36	Cataracts
3603	Eye problem other than cataracts, detached retina or glaucoma
37	A fall

Guidelines for Use of Numeric Codes for Reported Conditions

Background

During the process of completing the Hospital and Health Care Facility (HHCF) chart respondents were asked to describe the conditions that led to their facility stays and this information is included as a text field on the stay record. The text portion of the reported condition contains standard nomenclature for certain conditions (see Type A conditions below) or the respondent's own words. If necessary the respondent's descriptions was edited to fit into the 30 positions available in the record. A numeric code was also assigned to each description. This was done so that users would not have to deal with alphabetic description fields when investigating reasons for facility stays. Space is allotted on the report section of the facility stay record for recording of up to four reasons for the hospitalization or nursing home stay (positions 63-198 of the HCFS record).

Note that codes "07" and "14" are not included in the coding structure for the 1987 and 1992 files. These codes had been assigned to conditions in the 1982-84 and 1986 followups. The 1987 and 1992 followup questionnaires differ from the earlier versions and sufficient information was not collected to assign these codes.

Reported conditions and their associated codes can be divided into six types depending on where in the interview the stay was reported and the amount of information obtained: specific conditions included in interview questions (Type A); conditions which are well-defined but for which no question exists in the interview (Type B); unknown conditions (Type C); conditions about which there is no specific interview question but for which sufficient information is available to attribute them to disorders of a major body system (Type D); conditions that are broadly defined and/or cannot be attributed to a single major body system (Type E); and conditions that cannot be classified into any of the above categories (Type F). Each condition type, the associated codes and the rules for assigning the reported conditions to the categories of the coding structure are described in detail below.

Type A - Conditions about which the respondent was asked in the interview. For example, if a respondent answered "yes" to 1992 interview question B-17 ("Were you hospitalized for your arthritis?"), then a condition code of "01" and a text field containing "arthritis" would be included on the facility stay record. Type A conditions are:

01	Arthritis (B-17)
02	Gout (B-17)
03	Heart attack (B-23)
04	Other heart conditions (B-24)
05	Coronary bypass surgery (B-27)
06	Procedures for pacemakers (B-29)
08	Stroke (B-35)
09	Diabetes (B-42)
10	High blood pressure (B-52)
11	Cancer (B-66) other than skin cancer
1101	Malignant Melanoma (B-60)
1102	Skin cancer (B-63) other than malignant melanoma
12	Fractured hip (B-80)
15	Surgery (B-63) (1986 only)
20	Pneumonia, bronchitis and influenza (B-90) Note: this code is also found under Type D because other respiratory conditions are also coded to category 20
22	Kidney, bladder or urinary problem (B-97)
2502	Back pain (E-46) (1982-84 only)
34	Care in non-acute care facility (B-121)
35	In a facility at death (B-127)
36	Cataracts (B-108)
37	A fall (B-89)

Complete agreement between responses to the questions in interviews and Type A condition codes on the facility stay file should not be expected. There are several reasons for a lack of agreement between these two data sources.

First, the respondent may report a facility stay for a given condition in the interview and yet no facility stay record containing the condition may appear on the HCFS file. This would result if: (1) it was determined that the hospitalization did not last overnight causing the stay to be deleted from the HCFS file; or (2) the reported stay was found to be "out-of-scope". (See the introduction to this codebook and the Plan and Operation for definitions of out-of-scope stays.)

Second, data may be inconsistent between the interview and the HCFS file if the respondent remembered and reported a condition after responding to the corresponding question in the interview. This tended to occur at the time the interviewer was recording information on the HHCF chart. For example, while recording information on a stay for high blood pressure, the respondent may add that he/she was also hospitalized at that time for a heart condition. The respondent may not have reported the hospitalization when asked about heart conditions in the interview and the interview information may not have been updated to reflect this additional condition. However, heart condition would appear on the HCFS file.

Type B - Conditions which do not have a corresponding question in the interview but for which sufficient descriptive information is available to allow them to be easily coded:

13 Bone fracture
18 Tests and observation

Type C - Unknown conditions:

16 Don't know
17 Not ascertained

Type D - Conditions for which there is not a specific question in the interview but which can be attributed to disorders of a major body system:

19 The digestive/endocrine system
20 The respiratory system
Note: this code is also found under Type A because the specific question about pneumonia, bronchitis and influenza (B-90) is coded to the general category
24 The male reproductive system
25 The musculoskeletal system
26 The circulatory system (except strokes)
27 The female reproductive system
29 Neurologic disorders
31 Blood disorder/bleeding
32 Skin problem
3603 Eye problem (except cataracts, detached retina or glaucoma)

Type E - Conditions which are broadly defined or are attributed to problems of more than one major body system:

15 Surgery
21 Infections
23 Debility and pain
28 Mental illness
30 Nutrition and dehydration

Type F - All conditions that cannot be assigned to one of the above codes:

33 Other conditions

Additional information on reasons for a facility stay is available in the abstract section of the record (positions 205-379) if an abstract has been matched to the report. In general information from the abstract is considered a more accurate determination of the conditions associated with the stay than are the reported conditions. The condition codes in the report section of stay records do provide useful information in the absence of a medical abstract. Both flexibility and caution should be exercised when selecting stays based on these codes. In order to help the analyst use these condition codes effectively, a description of the code assignment procedure along with an example is provided.

Rules for Assignment

The numeric codes were assigned to the respondent's non-technical descriptions by trained medical coders. In order to minimize variation among the coders assigning these codes, precedence rules were defined. Generally, a condition was coded to the most specific category in which it could be placed. The assignment rules are described below in priority order, e.g. Rule 2 was used only if Rule 1 did not apply and so forth.

Rule 1: If a condition was one about which there was a specific question in the interview, the code appropriate for that question was assigned. (Type A conditions)

Rule 2: If the textual description could be coded to a narrowly defined condition not specifically asked or to the unknown category, the appropriate Type B or Type C code was assigned.

Rule 3: Conditions that could not be coded to a specific question but could be coded to a major body system were assigned the appropriate Type D code.

Rule 4: General descriptions, symptoms and conditions not coded by rules 1 through 3 were coded at the discretion of the medical coder, again with emphasis on as much specificity as possible. For example, "HEADACHES, BRAIN TUMOR" would be coded to "29 - Neurologic disorders", not to "23 - Debility and pain". (Type D or Type E conditions)

Rule 5: Everything that could not be assigned a code after applying the above rules was coded to "33 - Other conditions". (Type F conditions)

Considerations for the data user

The condition codes in the report section should be used in conjunction with the information in the abstract section. Returned abstracts were matched to reports if one of the reported conditions matched one of the discharge diagnoses on the abstract. Other conditions reported for the same stay may or may not be confirmed in the matched medical abstract. If the condition of interest is not indicated as a discharge diagnosis on the medical record, the analyst may not want to accept the reported condition as a reason for the stay. Similarly, conditions may be listed as discharge diagnoses that do not appear on the report section. See the introduction to this codebook for a description of the match criteria.

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