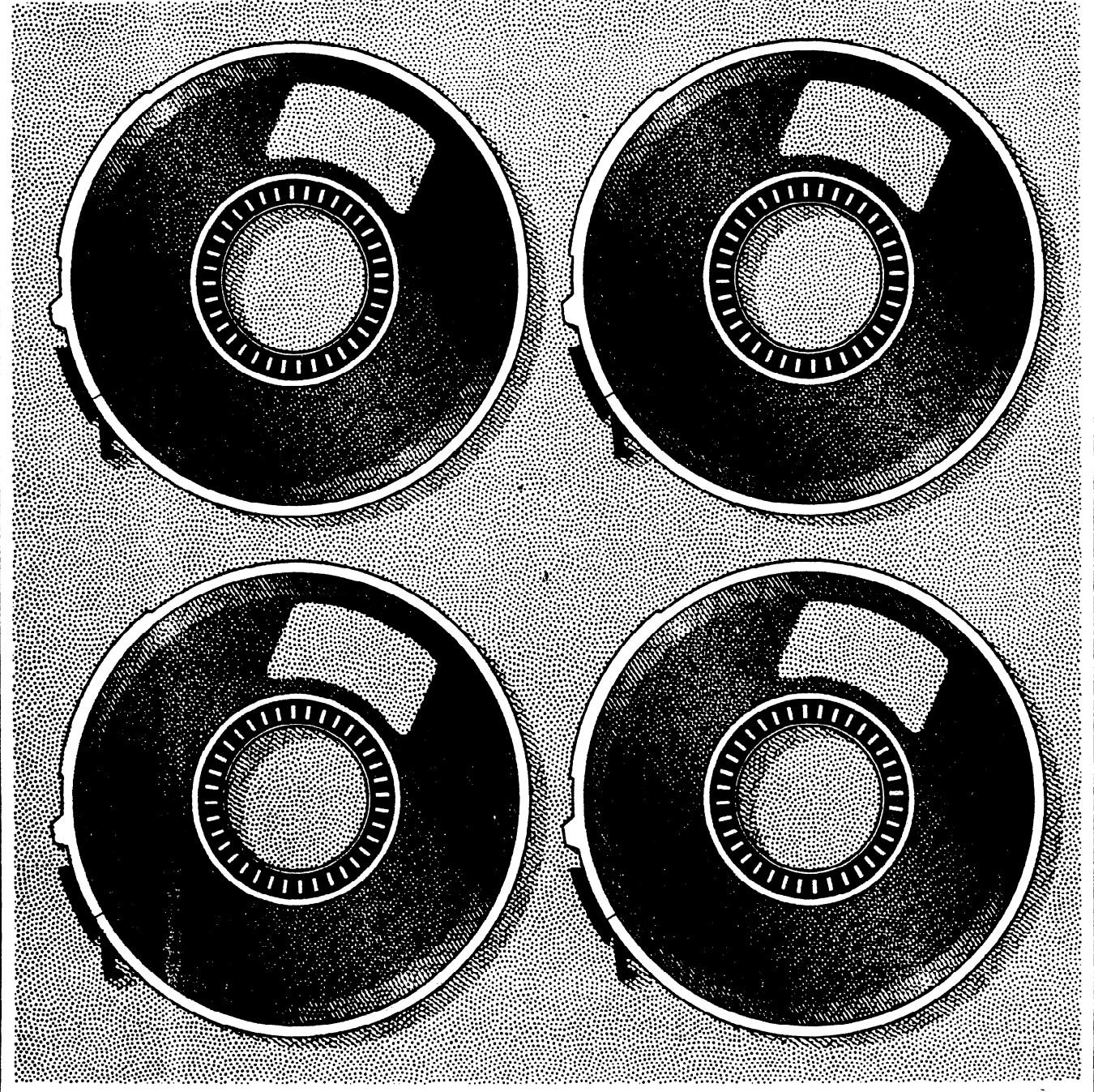


# Public Use Data Tape Documentation

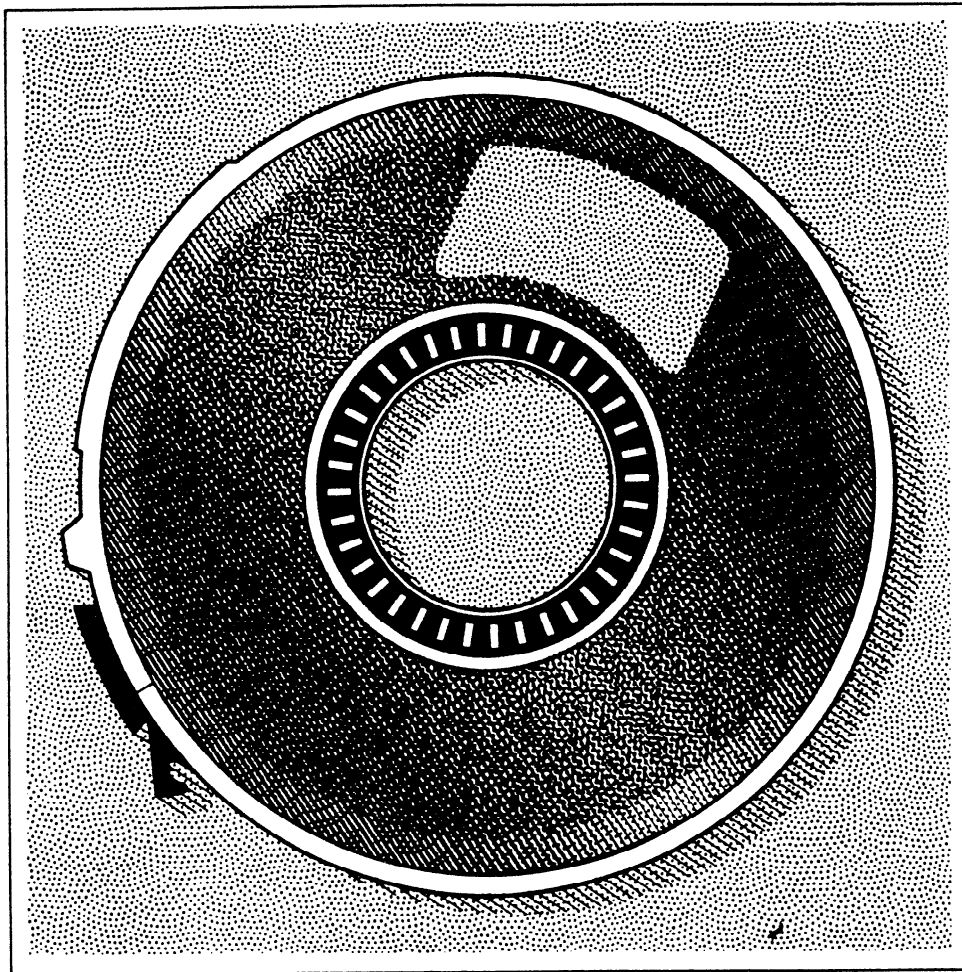
1980 National Ambulatory Medical Care  
Survey for Drug Mentions

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • Public Health Service • National Center for Health Statistics



# Public Use Data Tape Documentation

1980 National Ambulatory Medical Care  
Survey for Drug Mentions



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
National Center for Health Statistics

Hyattsville, Maryland  
December 1982

## ABSTRACT

This report provides documentation for users of the 1980 National Ambulatory Medical Care Survey (NAMCS) Micro-Data Tape for Drug Mentions. (Documentation of the 1980 NAMCS Micro-Data Tape for Patient visits is contained in a separate report.) Section I, "Description of the National Ambulatory Medical Care Survey," includes information on the history of NAMCS, the scope of the survey, the sample, field activities, data collection procedures, medical coding procedures, population estimates, and sampling errors. Section II provides technical details of the tape (number of tracks, record length, etc.). Section III provides a detailed description of the contents of each data record by location. Section IV contains marginal data or estimates for each item on the data record in Section III. An appendix defines certain terms used in the document.

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## INTRODUCTION

The NAMCS is a national sample survey of patient visits to physicians' offices. As in previous years, patient visit data were obtained in 1980 through use of a patient encounter form (figure 3, page 10) completed by physicians for a sample of their patient visits. In 1980, the NAMCS encounter form included a new question, item 11, which asked for a listing of all drugs/medications ordered, administered or provided during the visit. To facilitate analysis of these drug data, a data tape has been prepared which includes a separate record for each drug entered on each sample encounter form. This tape, called the drug mention tape, contains information on 51,372 drugs mentioned in the national sample of 46,081 patient visits.

The information contained in the drug mention tape is derived from two major sources. Patient visit and physician characteristics are derived from the 1980 NAMCS. These data are supplemented by drug characteristics obtained from the Drug Product Information File developed and maintained by the American Society of Hospital Pharmacists. The precise data items included in the data set, their sources and definitions, are described below. The coding and classification of the the NAMCS drug data is described in reference 7. Review of this reference material is essential to the proper understanding and interpretation of the NAMCS drug data.

For a brief description of the survey design and data collection procedures, see below. For a more detailed description of the survey design, data collection procedures, and the estimation process see references 1 and 2. A brief statement on sampling errors can be found in the appendix of this document.

## I. Description of the National Ambulatory Medical Care Survey

### HISTORY

The NCHS, in 1967, began exploring possibilities for surveying morbidity in private physicians' offices in order to provide more complete and precise information on the utilization of the nation's ambulatory care resources and on the nature and treatment of illness. A national technical advisory group was established. Initial discussions resulted in a tentative protocol that called for periodic meetings of a working group comprised of the Director of the NCHS Division of Health Care Statistics, the Project Officer and staff, the contractor's representatives, and a consultant group from the Johns Hopkins University in Baltimore.

The background and development of methods employed for the NAMCS required exploratory and feasibility studies conducted over a period of 6 years. Literature review and consultation documented needs and potential uses for national ambulatory medical care statistics. Information regarding accepted definitions, uniform terminology, procedural experience, or practical classifications for the problems and conditions encountered in ambulatory care settings was found to be limited. First, data collection forms and procedures were developed and tested by sample physicians in a national field survey which demonstrated the difficulty of achieving high levels of participation. Refined data collection forms and improved procedures were further tested by a second sample of physicians in an extensive national survey lasting over 2 quarters in 1 year. Results demonstrated the usefulness of professional endorsement, procedural efficiency, and minimal work requirements in achieving physician-participation levels exceeding 80 percent.

Finally, with advice and support from the technical advisory group, the American Medical Association, individual experts, other professional groups, and elements of the Public Health Service, NCHS initiated the National Ambulatory Medical Care Survey in 1973.

It was evident from the beginning that the checkbox items for drug therapy yielded limited and nonspecific descriptive detail about the role played by drugs in office-based medical care. The NAMCS panel of advisory experts had for several years urged a more ambitious effort, but it was not until 1978 that collecting specific drug data began to appear feasible. In that year, two experimental versions of the Patient Record were tested, each containing a different method of collecting the drug data. In one version, physicians were asked to complete a precoded

checklist item, while in the second version physicians recorded all drugs they provided in an open-ended write-in item. Both versions seemed quite feasible and agreeable to doctors, but the write-in version was chosen to be used in the 1980 survey largely because of its richer potential in providing useful information. The details of this process are contained in reference 7.

#### SCOPE OF THE SURVEY

The basic sampling unit for the NAMCS is the physician-patient encounter or visit. Only visits in the offices of nonfederally employed physicians classified by the American Medical Association (AMA) or the American Osteopathic Association (AOA) as "office-based, patient care" were included in the 1980 NAMCS. In addition, physicians in the specialties of anesthesiology, pathology, and radiology were excluded from the physician universe. Major types of ambulatory encounters not included in the 1980 NAMCS were those made by telephone, those made outside of the physician's office, and those made in hospital or institutional settings.

#### SAMPLING FRAME AND SIZE OF SAMPLE

The sampling frame for the 1980 NAMCS was composed of all physicians contained in the master files maintained by the AMA and AOA as of December 31, 1979, who met the following criteria:

Office-based, as defined by the AMA and AOA:

Principally engaged in patient care activities;

Nonfederally employed;

Not in specialties of anesthesiology, pathology, clinical pathology, forensic pathology, radiology, diagnostic radiology, pediatric radiology, or therapeutic radiology.

The 1980 NAMCS sample included 2,959 physicians: 2,891 MD's and 68 doctors of osteopathy. Sample physicians were screened at the time of the survey to assure that they met the above-mentioned criteria; 538 physicians did not meet all of the criteria and were, therefore, ruled out of scope (ineligible) for the study. The most frequent reasons for being out of scope were that the physician was retired, deceased, or employed in teaching, research, or administration. Of the 2,421 in-scope (eligible) physicians, 1,870 (77.2 percent) participated in the study. The physician universe, sample size, and response rates by physician specialty are shown in table I. Of the participating physicians, 250 saw no patients during their assigned reporting period because of vacations, illness, or other reasons for being temporarily not in practice.

Table I. Distribution of physicians in the universe<sup>1/</sup> and in the 1980 National Ambulatory Medical Care Survey Sample by physician specialty, United States, January-December 1980.

Physician specialty	Universe	Gross Total	Out of Scope	Net Total	Non-Response	Response	Response Rate
All specialties	227,558	2,959	538	2,421	551	1,870	77.2
General and family practice	53,147	676	142	534	146	388	72.7
Medical specialties	66,692	864	144	720	166	554	76.9
Internal medicine	35,199	458	78	380	99	281	73.9
Pediatrics	16,043	204	43	161	22	139	86.3
Other	15,450	202	23	179	45	134	74.9
Surgical specialties	77,625	1,002	103	899	191	708	78.8
General surgery	21,486	269	31	238	67	171	71.8
Obstetrics and gynecology	18,246	247	31	216	32	184	85.2
Other	37,893	486	41	445	92	353	79.3
Other specialties	30,094	417	149	268	48	220	82.1
Psychiatry	16,662	223	51	172	26	146	84.9
Other	13,432	194	98	96	22	74	77.1

<sup>1/</sup> Includes doctors of medicine (M.D.'s) and doctors of osteopathy (D.O.'s).

## SAMPLE DESIGN

The 1980 NAMCS utilized a multistage probability design that involved probability samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within practices. The first-stage sample of 87 PSU's was selected by the National Opinion Research Center (NORC), the organization responsible for field operations under contract to the NCHS. A PSU is a county, a group of adjacent counties, or a standard metropolitan statistical area (SMSA). A modified probability proportional-to-size procedure using separate sampling frames for SMSA's and for nonmetropolitan counties was employed. After sorting and stratifying by size, region, and demographic characteristics, each frame was divided into sequential zones of 1 million residents, and a random number was drawn to determine which PSU came into the sample from each zone.

The second stage consisted of a probability sample of practicing physicians selected from the master files maintained by the American Medical Association (AMA) and American Osteopathic Association (AOA). Within each PSU, all eligible physicians were arranged by nine specialty groups: general and family practice, internal medicine, pediatrics, other medical specialties, general surgery, obstetrics and gynecology, other surgical specialties, psychiatry, and other specialties. Then, within each PSU, a systematic random sample of physicians was selected in such a way that the overall probability of selecting any physician in the United States was approximately constant.

The final stage was the selection of patient visits within the annual practices of sample physicians. This involved two steps. First, the total physician sample was divided into 52 random subsamples of approximately equal size, and each subsample was randomly assigned to 1 of the 52 weeks in the survey year. Second, a systematic random sample of visits was selected by the physician during the assigned week. The sampling rate varied for this final step from a 100-percent sample for very small practices to a 20-percent sample for very large practices as determined in a presurvey interview. The method by which the sampling rate was determined is described in reference 3.

## FIELD ACTIVITIES

The first contact with the sample physician is through a letter from the Director, NCHS, which may be accompanied by a letter from one of the 17 national medical associations that endorse the NAMCS providing the physician is a member of one or more of these associations. Examples of these





DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE  
OFFICE OF HEALTH RESEARCH, STATISTICS AND TECHNOLOGY  
HYATTSVILLE, MARYLAND 20782

NATIONAL AMBULATORY  
MEDICAL CARE SURVEY

Date

Endorsing Organizations

- American Academy of Dermatology
- American Academy of Family Physicians
- American Academy of Neurology
- American Academy of Orthopaedic Surgeons
- American Academy of Pediatrics
- American Association of Neurological Surgeons
- American College of Emergency Physicians
- American College of Obstetricians and Gynecologists
- American College of Physicians
- American College of Preventive Medicine
- American Osteopathic Association
- American Society of Colon and Rectal Surgeons
- American Psychiatric Association
- American Society of Internal Medicine
- American Society of Plastic and Reconstructive Surgeons, Inc.
- American Urological Association
- Association of American Medical Colleges
- National Medical Association

John Doe, M.D.  
1000 Anywhere Street  
Sunnyville, Anywhere 99999

Dear Dr. Doe:

The National Center for Health Statistics, as part of its continuing program to provide information on the health status of the American people, is conducting a National Ambulatory Medical Care Survey (NAMCS).

The purpose of this survey is to collect information about ambulatory patients, their problems, and the resources used for their care. The resulting published statistics will help your profession plan for more effective health services, determine health manpower requirements, and improve medical education.

Since practicing physicians are the only reliable source of this information, we need your assistance in the NAMCS. As one of the physicians selected in our national sample, your participation is essential to the success of the survey. Of course, all information that you provide is held in strict confidence.

Many organizations and leaders in the medical profession have expressed their support for this survey, including those shown to the left. In particular, your own specialty society has reviewed the NAMCS program and supports this effort (see enclosure). They join me in urging your cooperation in this important research.

Within a few days, a survey representative will telephone you for an appointment to discuss the details of your participation. We greatly appreciate your cooperation.

Sincerely yours,

Dorothy P. Rice  
Director

Enclosure



PRESIDENT  
Frederick A. J. Kingery, M.D.  
VICE PRESIDENT  
Adolph Rostenberg, Jr., M.D.  
SECRETARY-TREASURER  
John M. Shaw, M.D.  
ASSISTANT SECRETARY-TREASURER  
Walter G. Larsen, M.D.  
EXECUTIVE SECRETARY  
Mrs. Betty Suor

*AMERICAN ACADEMY of DERMATOLOGY, Inc.*

Dear Doctor:

As a result of the need for hard data about skin disease, our specialty has become a part of the Health and Nutrition Examination Survey, which is now underway. Facts gathered by this survey pertain to a population unselected for the dermatological complaint.


Now there is an opportunity to look at dermatological practices in the United States for the kinds of problems that are presented to the specialist, and your participation in the National Ambulatory Medical Care Survey (NAMCS) may be requested. This is a survey, five years in the development, which should prove to be a valuable mechanism for collecting data on office based ambulatory practice.

To gather these facts, the support of the members of the American Academy of Dermatology is indispensable. Only by having hard data can we assess health facility and manpower requirements and determine desirable modifications in medical education programs.

The contribution to be made by our specialty will come from a small sample of practicing dermatologists and will require some effort and time (about 15 minutes a day for a week). Judging from the response to surveys conducted by the National Program for Dermatology, I am sure you will feel it worth the individual effort if you are called upon to participate. The survey itself minimizes record keeping and emphasizes the utilization of data collected. Strict confidentiality is of course preserved, and only summary data will be published.

I urge your support of this National Ambulatory Medical Care Survey. We, as a specialty, can look forward to utilizing the results of this important research.

Sincerely,

  
John M. Shaw, M.D.  
Secretary-Treasurer

JMS/mr

letters are shown in Figures 1 and 2. After the physician has received the introductory letter(s), the interviewer telephones the physician to set up an appointment with him or her to discuss the survey and instruct the doctor on how to complete the forms. Rather than include copies of all the interviewer materials in this documentation, copies are available on request. These materials include instructions to interviewers as well as all the forms used in the field by the interviewer in carrying out his or her assignment.

#### DATA COLLECTION

The actual data collection for the NAMCS was carried out by the physician aided by his office staff when possible. Two data collection forms were employed by the physician: The Patient Log and the Patient Record (Figure 3). The Patient Log is a sequential listing of patients seen in the physician's office during his assigned reporting week. This list served as the sampling frame to indicate the visit for which data were to be recorded. A perforation between the patient names and patient visit characteristics permitted the physician to remove patient names and protect confidentiality.

Based on the physician's estimate of the expected number of office visits each physician was assigned a patient-sampling ratio. These ratios were designed so that about 30 Patient Records were completed during the assigned reporting week. Physicians expecting 10 or fewer visits each day recorded data for all of them, while those expecting more than 10 visits per day recorded data for every second, third, or fifth visit based on the predetermined sampling interval. These procedures minimized the data collection workload and maintained approximate equal reporting levels among sample physicians regardless of practice size. For physicians assigned a patient sampling ratio, a random start was provided on the first page of the log, so that predesignated sample visits on each succeeding page of the log provided a systematic random sample of patient visits during the reporting period.

#### DATA PROCESSING

In addition to the completeness checks made by the field staff, clerical edits were performed upon receipt of the data for central processing. These procedures proved quite efficient, reducing the item nonresponse rates to a negligible amount--2 percent or less for all data items.

Information from the Induction Interview and Patient Record was keypunched, with 100-percent verification and converted to computer tape. At this time, extensive computer consistency and edit checks were performed. Data items still unanswered at this point were imputed by randomly assigning a value from a Patient Record with similar characteristics; imputations were based on physician specialty, major reason for visit, and broad diagnostic categories.



## MEDICAL CODING

The patient record form contains three medical items, each of which requires a separate coding system. The three coding systems are described briefly below. A two-way independent verification procedure with 100-percent verification was used to control the medical coding operation. Differences between coders were adjudicated at the National Center for Health Statistics.

(A) Patient's Reason for Visit: Information contained in item 6 (patient's reason for visit) of the Patient Record was coded according to A Reason for Visit Classification for Ambulatory Care (RVC). The RVC system utilizes a modular structure composed of seven modules. The digits 1 through 8 preceding the 3-digit RVC codes identify the various modules as follows:

- "1" = symptom module, e.g., '1010'=S010=fever
- "2" = disease module, e.g., '2205'=D205=diabetes mellitus
- "3" = diagnostic, screening, and preventive module, e.g., '3100'=X100 = general medical exam
- "4" = treatment module, e.g., '4110'=T110=injections
- "5" = injuries and adverse effects module, e.g., '5020'=J020=fracture and dislocation of leg
- "6" = test results module, e.g., '6100' = R100 = results of blood glucose test
- "7" = administrative module, e.g., '7100' = A100 =physical examination required for employment
- "8" = Uncodeable entries, e.g. '8997' = U997 = entry of "none" or no complaint
- "0" = special code=blank

A maximum of 3 problems were coded, in sequence; coding instructions concerning the patient's reason for visit are contained in the NAMCS medical Coding Manual. Copies are available upon request.

(B) Physician's Diagnoses: Diagnostic information in item 9 of the Patient Record was coded according to the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).<sup>5/</sup> For 1980 NAMCS tabulations involving principal diagnoses, the following characteristics exist:

1. The prefix "1" preceding the diagnostic codes represents 001.00-999.90, e.g. '138100' = '381.00' = Acute nonsuppurative otitis media, unspecified.
2. The prefix "2" preceding diagnostic codes represents V code diagnoses V01.00-V82.90, e.g. '201081' = 'V10.81' = personal history of malignant neoplasm of bone. In other words, eliminate the prefix "2" and change the first "0" (zero) to "V."

NOTE: The use of prefixes facilitates the calculation of percent distributions, while substituting "0" (zero) for the letter "V" allows that all fields on the data tape will contain numerical data.

3. In addition to the diagnostic codes from the ICD-9-CM there are 5 unique codes in the diagnostic fields that were developed by the NAMCS staff:

100000 = blank diagnosis  
209900 = unsuitable diagnosis  
209970 = diagnosis given as "none"  
209980 = noncodable diagnosis  
209990 = illegible diagnosis

A maximum of three diagnoses were coded in sequence; coding instructions concerning diagnoses are contained in the NAMCS Medical Coding Manual.<sup>1/</sup>

(C) Medication Therapy This Visit: Drug mentions contained in item 11 of the Patient Record were coded according to the Medication Code List 1980 (MCL) contained in reference 7. The Medication Code List contains 7,081 brand and generic names of medications, alphabetized and coded serially from 00005 to 35405. In addition, there is a code (99999) for illegible entries and an 'other' code (99980) for entries that are legible but cannot be found on the MCL 1980. Thus, one of three coding choices will be applied to every medication entry:

- 1 - a code from the MCL
- 2 - an illegible code, or
- 3 - an 'other' code.

There is a 100 percent, independent coding of every medication entry. Disagreements between coders are referred to an adjudicator to be resolved. For a more comprehensive description about the medication coding process see Appendix IV of reference 6.

### Drug Product Information File

The broad range of drug dimensions intended for exploration by the NAMCS required the use of an exhaustive inventory of the drugs anticipated to be prescribed in office-based ambulatory care. Such an inventory is the Drug Product Information File (DPIF) a computer-processable data base of information on more than 30,000 commercially available drug products. Developed and maintained under the auspices of the American Society of Hospital Pharmacists, the DPIF is continually updated to add new products when they are marketed and to withdraw products when they are no longer available. Drug products are described in a fixed-field format in which 68 fields are used to record a broad range of drug dimensions desired for NAMCS needs. The following fields were selected from the DPIF to be on the NAMCS drug file:

Medication Code List Name: The name of a drug as it appears on the NAMCS Medication Code List, an alphabetized inventory of single-source and multiple-source drugs for use in coding the entries on the NAMCS patient records. The complete list is in appendix III of reference 7. The core constituents of the list are the brand names of the drugs. Selected generic names have been added to insure a more complete representation of generic-entry choices.

Medication Code List Code: The code assigned to each Medication Code List Name. The serial order of the MCL codes parallels the alphabetic order of the MCL names (see Appendix III of reference 7.)

Generic Name: The (public, scientific, nonproprietary, established) name as assigned by the United States Pharmacopeia or other responsible authorities. In the NAMCS Drug File, the records in the DPIF generic name field have been modified to agree in nomenclature with the generic forms used in the current volumes of the American Hospital Formulary Service (American Society of Hospital Pharmacists, Inc., January 1980). A further

modification was undertaken which aimed at selectively replacing certain product-specific generics in the DPIF by the more functional, utilization-oriented configurations needed by NAMCS. The final result of these adaptations was the NAMCS Inventory of Generic Names, which appears in appendix II of reference 7.

Generic Name Code: A code created for and unique to the NAMCS Drug File, which is assigned to each generic name.

Brand Name: The name under which the drug product is marketed and may or may not be a trademark.

Entry Status Code: The code, unique to NAMCS, denotes the nature of the entry that the physician makes on the Patient Record.

Prescription Status Code: The code derived from the DPIF Legal Status Code, which is used to indicate the Federal legal classification of drug products.

Federal Controlled Substance Status Code: The code derived from the DPIF Legal Status Code which denotes the degree of potential abuse and Federal Control of a drug.

Composition Status Code: The code derived from the DPIF Record Type Code and is used to distinguish between single--and multiple--entity drugs.

Ingredient Codes: Codes to identify the active, generic ingredients of combination drugs. A maximum of 5 codes are adapted from the DPIF to the NAMCS Drug File; this represents a truncation of the DPIF, in which 12 ingredient code fields are allowed. An estimated 84 percent of all active ingredients are identified in the five fields retained by NAMCS.

NOTE: The NAMCS Drug File does not retain the DPIF ingredient codes for generic components that cannot also function as single-entity drugs.

Copies of reference 7: "The Collection and Processing of Drug Information, National Ambulatory Medical Care Survey, United States, 1980," are available upon request. Interested persons should contact the Ambulatory Care Statistics Branch, Division of Health Care Statistics, Room 2-63 3700 East-West Highway, Hyattsville, Maryland 20782. The telephone number is 301/436-7132.



POPULATION FIGURES

The base population used in computing annual drug mention rates is presented in table II. These figures are based on provisional estimates for the civilian noninstitutionalized population as of July 1, 1980, provided by the U.S. Bureau of the Census. Because the NAMCS includes data for only the coterminous United States, the original census estimates were modified to account for the exclusion of Alaska and Hawaii from the study. For this reason the population estimates should not be considered as official population estimates and are presented here solely for the purpose of providing denominators for rate computations.

ESTIMATION PROCEDURES

Statistics produced from the 1980 National Ambulatory Medical Care Survey were derived by a multistage estimating procedure. The procedure produces essentially unbiased national estimates and has basically three components: (1) inflation by reciprocals of the probabilities of selection, (2) adjustment for nonresponse, and (3) a ratio adjustment to fixed totals. Each of these components is described briefly below.

(1) INFLATION BY RECIPROCAL OF SAMPLING PROBABILITIES.--Since the survey utilized a three-stage sample design, there were three probabilities: (A) The probability of selecting the PSU, (B) the probability of selecting a physician within the PSU, and (C) the probability of selecting a patient visit within the physician's practice. The last probability was defined to be the exact number of office visits during the physician's specified reporting week divided by the number of Patient Records completed. All weekly estimates were inflated by a factor of 52 to derive annual estimates.

(2) ADJUSTMENT FOR NONRESPONSE.--Estimates from the NAMCS data were adjusted to account for sample physicians who did not participate in the study. This was done in such a manner as to minimize the impact of nonresponse on final estimates by imputing to nonresponding

Table II. Estimates of the civilian noninstitutionalized population of the United States,<sup>1</sup> by age, according to race and sex, geographic region, and metropolitan and nonmetropolitan area as of July 1, 1979

Race, sex, geographic region, and metropolitan and nonmetropolitan area	All ages	Age				
		Under 15 years	15-24 years	25-44 years	45-64 years	65+ years
<u>Race and Sex</u>		Number in thousands				
All races	216,580	49,542	39,760	60,140	43,318	23,820
Male	104,490	25,292	19,562	29,111	20,716	9,809
Female	112,090	24,251	20,197	31,029	22,602	14,011
<u>White</u>	186,513	40,792	33,622	52,080	38,455	21,564
Male	90,343	20,873	16,657	25,490	18,457	8,867
Female	96,170	19,918	16,966	26,590	19,999	12,697
<u>All Other</u>	30,066	8,751	6,137	8,060	4,863	2,256
Male	14,146	4,419	2,905	3,621	2,259	942
Female	15,920	4,333	3,232	4,439	2,604	1,314
<u>Geographic region</u>						
Northeast	48,240					
North Central	57,508					
South	71,358					
West	39,475					
<u>Area</u>						
Metropolitan	148,203					
Nonmetropolitan	68,377					

<sup>1</sup>Excludes Alaska and Hawaii

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physicians the practice characteristics of similar responding physicians. For this purpose, similar physicians were judged to be physicians having the same specialty designation and practicing in the same PSU.

(3) RATIO-ADJUSTMENT.--A poststratification adjustment was made within each of nine physician specialty groups. The ratio adjustment as a multiplication factor which had as its numerator the number of physicians in the universe in each physician specialty group, and as its denominator the estimated number of physicians in that particular specialty group. The numerator was based on figures obtained from the AMA-AQA master files, and the denominator was based on data from the sample.

#### SAMPLING ERRORS

Procedures for calculating sampling errors as well as estimates of standard errors of statistics derived from the NAMCS are described in Appendix I of reference 2, as well as the Appendix of this document.

#### DRUG WEIGHT

The "drug weight" is a vital component in the process of producing national estimates from sample data and its use should be clearly understood by all micro-data tape users. The statistics contained on the micro-data tape reflect data concerning only a sample of drug mentions--and not a complete count of all the drug mentions that were provided in the United States. The "drug weight" is an inflation factor assigned to each drug record. By aggregating the "drug weights" an estimated complete count or national estimate can be obtained.

References<sup>1/</sup>

NCHS published statistics from the NAMCS in Series 13 of VITAL AND HEALTH STATISTICS, PHS No. 1000, Public Health Service, Washington, U.S. Government Printing Office.

1. National Center for Health Statistics: National Ambulatory Medical Care Survey: Background and Methodology, United States, VITAL AND HEALTH STATISTICS. Series 2-No. 61 DHEW Pub. (HRA) 74-1335. Health Resources Administration. Washington. U.S. Government Printing Office. March 1974.
2. National Center for Health Statistics: 1980 Summary: National Ambulatory Medical Care Survey, United States. Advance Data from Vital and Health Statistics, No. 77. DHEW Publication No. (PHS) 82-1250. Public Health Service. Hyattsville, Maryland.
3. Induction Interview Form. National Ambulatory Medical Care Survey. National Opinion Research Center. University of Chicago. OMB NO. 068-572106.
4. National Center for Health Statistics: A Reason for Visit Classification for Ambulatory Care, United States. VITAL AND HEALTH STATISTICS. Series 2-No. 78. DHEW Pub. No. (PHS) 79-1352. Public Health Service. Hyattsville, Maryland. U.S. Government Printing Office, February 1979.
5. National Center for Health Statistics: International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM). DHHS Pub. No. (PHS) 80-1260. Public Health Service. Washington. U.S. Government Printing Office, September, 1980.
6. National Ambulatory Medical Care Survey: 1977 Medical Coding Manual.
7. National Center for Health Statistics, H. Koch: The collection and processing of drug information, National Ambulatory Medical Care Survey, United States, 1980. Vital and Health Statistics. Series 2-No. 90. DHHS Pub. No. (PHS) 82-1364. Public Health Service. Washington. U.S. Government Printing Office. In press.
8. National Ambulatory Medical Care Survey: Coding Procedures for Medication Entries, NAMCS 1980.

<sup>1/</sup> Information concerning other reports to be written on 1980 data may be obtained from the Ambulatory Care Statistics Branch.

II. Technical Description of Tape

Data Set Name:	DRUG1980
Number of Reels:	1
Number of Recording Tracks:	9
Density (bpi):	1600 or 6250
Language:	EBEDIC
Parity:	ODD
Record Length:	257
Blocksize:	25700
Number of Records:	51,372
Computer Compatibility:	IBM 360 or 370

## III. RECORD FORMAT

This section consists of a detailed breakdown of each tape record, providing a brief description of each item of data included in the records. The data are arranged sequentially according to their physical location on the tape record. The data in fields 1-10 were obtained from the Drug Product Information File, described on page 13 of this document. Unless otherwise stated in the "Item description" column, the remaining data are derived from the patient record (page 10). The AMA and the induction interview (reference 3) are alternate sources of data, while the computer generates other items by recoding selected data items.

<u>Field No.</u>	<u>Field Length</u>	<u>Tape Location</u>	<u>Item Description and Codes</u>
1	5	1-5	<p><u>Medication Code List Code (MCL#)</u></p> <p>See Appendix III of reference 7 for all codes. The following codes are used:</p> <p>00005-35510: MCL Names in Field 2            99980 : Other            99999 : Illegible</p>
2	40	6-45	<p><u>Medication Code List Name (MCL Name-see page 13)</u></p> <p>The brand or generic name of a drug. See Appendix III of reference 7 for all names.</p>
3	5	46-50	<p><u>Generic Name Code (GN#)</u></p> <p>See Appendix II of reference 7 for all codes. The following codes are used:</p> <p>50005-56300: generic name in Field 3            50000 : generic name undetermined</p>
4	40	51-90	<p><u>Generic Name (see page 13)</u></p> <p>See Appendix II of reference 7 for all names.</p>

<u>Field No.</u>	<u>Field Length</u>	<u>Tape Location</u>	<u>Item Description and Codes</u>
5	40	91-130	<u>Brand Name</u> (see page 14)
6	1	131	<u>Entry Status Code</u> (see page 14) 1 = Generic Name 2 = Brand name 3 = Therapeutic effect 4 = Other (entry not in the MCL)
7	1	132	<u>Prescription Status Code</u> 1 = Prescription drug 2 = Nonprescription drug 3 = Undetermined
8	1	133	<u>Federal Controlled Substance Status Code</u> (see page 14) 1 = Schedule I (research only) 2 = Schedule II (most abused) 3 = Schedule III (less abused) 4 = Schedule IV (potential abuse) 5 = Schedule V (Controlled sale by pharmacy only--RX required-- or State restricted) 6 = No control 7 = Undetermined
9	1	134	<u>Composition Status Code</u> (see page 14) 1 = Single-entity drug 2 = Combination drug 3 = Undetermined 5 = Multivitamin
10	25	135-159	<u>Ingredient Codes</u> (Ingredients of combination drugs; maximum of 5 generic name codes)
10.1	5	135-139	Ingredient Code (50005-56300, or 50000)
10.2	5	140-144	Ingredient Code "
10.3	5	145-149	Ingredient Code "
10.4	5	150-154	Ingredient Code "
10.5	5	155-159	Ingredient Code "
11	1	160	<u>Number of Drugs Coded</u> Range: 0-8

<u>Field No.</u>	<u>Field Length</u>	<u>Tape Location</u>	<u>Item Description and Codes</u>
12	4	161-164	<u>Date of visit</u>
12.1	2	161-162	<u>Month of visit</u> 01-12: January-December
12.2	2	163-164	<u>Year of visit</u> Last 2 digits of year
13	4	165-168	<u>Date of birth</u>
13.1	2	165-166	<u>Month of birth</u> 01-12: January-December
13.2	2	167-168	<u>Year of birth</u> Last 2 digits of year
14	1	169	<u>Sex</u> 1=Female 2=Male
15	1	170	<u>Race</u> 1=White 2=Black 3=Asian/Pacific Islander 4=American Indian/Alaskan Native
16	1	171	<u>Ethnicity</u> 1=Hispanic Origin 2=Not hispanic
17	15	172-186	<u>Patient Problems</u> (see Page 11)
17.1	5	172-176	Most important problem #1
17.2	5	177-181	Most important problem #2 (if any reported)
17.3	5	182-186	Other problem
18	1	187	<u>Major reason for this visit</u> 1=Acute problem 2=Chronic problem, routine 3=Chronic problem, flareup 4=post surgery/post injury 5=non-illness care (routine prenatal, general exam, well baby, etc.)



<u>Field No.</u>	<u>Field Length</u>	<u>Tape Location</u>	<u>Item Description and Codes</u>
19	12	188-199	<u>Diagnostic services this visit</u>
19.1	1	188	None (1=Yes and 0=No)
19.2	1	189	Limited history/exam "
19.3	1	190	General history/exam "
19.4	1	191	Pap test "
19.5	1	192	Clinical lab. test "
19.6	1	193	X-ray "
19.7	1	194	Blood pressure check "
19.8	1	195	EKG "
19.9	1	196	Vision test "
19.10	1	197	Endoscopy "
19.11	1	198	Mental status exam "
19.12	1	199	Other "
20	18	200-217	<u>Physician's principal diagnosis (see page 12)</u>
20.1	6	200-205	First diagnosis associated with item 6a
20.2	6	206-211	Second Diagnosis associated with item 6a (if any
20.3	6	212-217	other significant current diagnosis reported)
21	2	218-219	<u>Even seen patient before</u>
21.1	1	218	1=Yes 2=No
21.2	1	219	<u>"If yes, for the condition in item 8a?"</u> 0=Blank 1=Yes 2=No
22	9	220-228	<u>Non-medication Therapy</u>
22.1	1	220	None (1=yes and 2=no)
22.2	1	221	Physiotherapy "
22.3	1	222	Office surgery "
22.4	1	223	Family planning "
22.5	1	224	Psychotherapy/therapeutic listening "
22.6	1	225	Diet counseling "
22.7	1	226	Family/social counseling "
22.8	1	227	Medical counseling "
22.9	1	228	Other "
23	1	229	<u>Patient Referred by Another Physician</u> 1=Yes 2=No

<u>Field No.</u>	<u>Field Length</u>	<u>Tape Location</u>	<u>Item Description and Codes</u>
24	8	230-237	<u>Disposition of visit</u>
24.1	1	230	No follow-up planned (1=Yes and 0=No)
24.2	1	231	Return at specified time "
24.3	1	232	Return if needed "
24.4	1	233	Telephone follow-up "
24.5	1	234	Referral "
24.6	1	235	Return to referring physician "
24.7	1	236	Admit to hospital "
24.8	1	237	Other "
25	3	238-240	<u>Duration of visit in minutes (000-999)</u>
26	10	241-250	<u>Drug Weight</u> A right justified, alphanumeric integer developed by the NAMCS staff for the purpose of producing national estimates from sample estimates. See notes on page 17 of these documentation.
27	1	251	<u>Geographic Region (Based on actual location of physician's practice.)</u>  1=Northeast 2=North Central 3=South 4=West
28	1	252	<u>Metropolitan/Nonmetropolitan (Based on actual location in conjunction with the definition of the Bureau of the Census and the U.S. Office of Management and Budget.)</u> 1=Standard Metropolitan Statistical Area (SMSA) 2=Non-SMSA
29	3	253-255	<u>Physician Specialty (Derived from Induction Interview - reference 3)</u>  ALSO: See "List of Designated Specialty Codes" on page 26 of these documentation, and the NAMCS recodes on page 27..

List of Designated Specialty Codes

AM	Aerospace Medicine	P	Psychiatry
A	Allergy	CHP	Psychiatry, Child
*AN	Anesthesiology	PYA	Psychoanalysis
BE	Broncho-Esophagology	PYM	Psychosomatic Medicine
CD	Cardiovascular Diseases	PH	Public Health
D	Dermatology	PUD	Pulmonary Diseases
DIA	Diabetes	*R	Radiology
END	Endocrinology	*DR	Radiology, Diagnostic
FP	Family Practice	*PDR	Radiology, Pediatric
GE	Gastroenterology	*TR	Radiology, Therapeutic
GP	General Practice	RHU	Rheumatology
GPM'	General Preventive Medicine	RHI	Rhinology
GER	Geriatrics	ABS	Surgery, Abdominal
GYN	Gynecology	CDS	Surgery, Cardiovascular
HEM	Hematology	CRS	Surgery, Colon and Rectal
HYP	Hypnosis	GS	Surgery, General
ID	Infectious Diseases	HS	Surgery, Hand
IM	Internal Medicine	HNS	Surgery, Head and Neck
LAR	Laryngology	NS	Surgery, Neurological
LM	Legal Medicine	ORS	Surgery, Orthopedic
ND	Neoplastic Diseases	PDS	Surgery, Pediatric
NEP	Nephrology	PS	Surgery, Plastic
N	Neurology	TS	Surgery, Thoracic
CHN	Neurology, Child	TRS	Surgery, Traumatic
*NM	Nuclear Medicine	U	Surgery, Urological
NTR	Nutrition		
OBS	Obstetrics		
OBG	Obstetrics and Gynecology		
OM	Occupational Medicine		
OPH	Ophthalmology		
OT	Otology	OS	Other, i.e., physician designated a specialty other than those appearing above.
OTO	Otorhinolaryngology		
*PTH	Pathology		
*CLP	Pathology, Clinical		
*FOP	Pathology, Forensic	US	Unspecified, i.e., physician did not specify a specialty.
PD	Pediatrics		
PDA	Pediatrics, Allergy		
PDC	Pediatrics, Cardiology	EM	Emergency Medicine
PA	Pharmacology, Clinical		
PM	Physical Medicine and Rehabilitation		

In addition to the above specialties the following designations are also used:

\* Excluded from NAMCS by definition.

## NAMCS Recodes for Physician Specialty

<u>Specialty Group</u>	<u>AMA Codes Included</u>
1. G.P.	G.P., FP
 <u>Medical Specialties</u>	
2. IM	IM
3. Pediatrics	PD, PDA, PDC
4. Other Med. Spec.	A, BE, CD, D, DIA, END, GE, HEM, ID, ND, NEP, NTR, PUD, RHU
 <u>Surgical Specialties</u>	
5. General surgery	GS
6. OBG	OBS, OBG, GYN
7. Other Surg. Spec.	ABS, CDS, CRS, HS, HNS, LAR, OTO, OT, RHI, NS, ORS, PDS, PS, TS, TRS, U, OPH
 <u>Other Specialties</u>	
8. Psychiatry	P, CHP, PYA, PYM, HYP
9. Other	AM, CHN, GER, EM OM, PM, N, OS, US, LM, PA, PH, GPM

## IV. Marginal Data

Any cell with an estimate of 412,000 visits or less has a relative standard error of 30 percent or more. Such an estimate is considered an unreliable statistic according to the standards of reliability of the National Center for Health Statistics. Micro-data tape users should be aware that the following symbols are used with tabular presentation in all Center publications:

- Data not available
- ... Category not applicable
- Quantity zero
- 0.0 Quantity more than 0 but less than 0.05
- \* Figure does not meet standards of reliability or precision
- = Figure suppressed to comply with confidentiality requirements

KEY

ROW 01 = Unweighted frequency

ROW 02 = Weighted frequency\*

ROW 03 = Column percent

ROW 04 - Row percent

\* See notes on "patient weight" on page of these documentation.

PATIENT AGE	ALL	UNDER15	15-24	25-44	45-64	65+
	51372	7544	5438	11517	13849	13024
	679592929	115643344	75213118	148125925	175572107	165038435
	100.00	100.00	100.00	100.00	100.00	100.00
	100.00	17.02	11.07	21.80	25.83	24.23

PATIENT SEX	ALL	F	M
	51372	31467	19905
	679592929	413569907	266023022
	100.00	100.00	100.00
	100.00	60.86	39.14

RACE	ALL	WHITE	BLACK	ASIAN ILANDER	INDIAN ALASKAN
	51372	46338	4501	315	218
	679592929	608345905	64608028	3947637	2491299
	100.00	100.00	100.00	100.00	100.00
	100.00	89.52	9.54	0.52	0.37

ETHNICITY	ALL	HISPAN	NOT HISPAN
	51372	2983	48389
	679592929	34239361	645353568
	100.00	100.00	100.00
	100.00	5.04	94.96

PATIENT REFERRAL STATUS	ALL	YES	NO
	51372	1618	49754
	679592929	18958234	660634695
	100.00	100.00	100.00
	100.00	2.79	97.21

ALL	GENERIC NAME	BRAND NAME	THERA PEUTIC EFFECT	UNDETER MINED	KEY
51372	12215	36920	1553	684	
679592929	164463526	483587066	21524904	10017433	
100.00	100.00	100.00	100.00	100.00	
100.00	24.20	71.16	3.17	1.47	

ALL	RX DRUG	OTC DRUG	UNDETER MINED	KEY
51372	42528	6357	2347	RAW
679592929	561227543	85343973	33321413	WT1
100.00	100.00	100.00	100.00	W1C
100.00	82.58	12.56	4.86	W1R

ALL	SINGLE INGRED DRUG	COMB DRUG	MULTI VITAMIN	UNDETER MINED	KEY
51372	35930	12185	1320	2237	RAW
679592929	468752360	165797948	13500284	31542337	WT1
100.00	100.00	100.00	100.00	100.00	W1C
100.00	53.98	24.40	1.99	4.64	W1R

ALL	SCHED 2 DRUG	SCHED 3 DRUG	SCHED 4 DRUG	SCHED 5 DRUG	UNCON TROLLED DRUG
51372	511	952	2516	706	44340
679592929	5752530	12037076	30304750	10445460	583021700
100.00	100.00	100.00	100.00	100.00	100.00
100.00	0.85	1.77	4.46	1.54	86.53

UNDETER MINED	KEY
------------------	-----

2347	RAW
33021413	WT1
100.00	W1C
4.86	W1R

MAJOR REASON FOR VISIT	ALL	ACUTE PROB	CHRONIC PROB ROUTINE	CHRONIC PROB FLAREUP	POST SURGERY INJURY	NON ILLNESS CARE
	51372	12853	19651	6280	1627	4961
679592929	271380336	236214956	83235707	21439663	66721667	
100.00	100.00	100.00	100.00	100.00	100.00	
100.00	39.33	34.85	12.25	3.15	9.82	

NON-MED THERAPY SERVICES	ALL	NONE	PHYSIO THERAPY	OFFICE SURGERY	FAMILY PLANNING
	51372	25989	2314	2389	858
679592929	356326186	32923321	34054745	10360185	
100.00	100.00	100.00	100.00	100.00	
100.00	52.44	4.84	5.01	1.52	

PPSYCHO THERAPY LISTENG	DIET COUNSEL	FAMILY SOCIAL COUNSEL	MED COUNSEL	OTHER NON-MED THERAPY
31127373	85154778	16467595	183126165	8467055
100.00	100.00	100.00	100.00	100.00
4.58	12.53	2.42	26.95	1.25

DISPOSITION	ALL	NO FOLLOW	RETURN SPEC TIME	RETURN IF NEEDED	TEL FOLLOW
		51372	3689	34541	12063
679592929	55116431	443719169	155113492	26265794	
100.00	100.00	100.00	100.00	100.00	
100.00	9.11	65.29	24.30	3.86	

REFER	RETURN	ADMIT HOSP	OTHER
1087	336	402	66
13122525	3699163	4616737	763353
100.00	100.00	100.00	100.00
1.93	0.54	0.62	0.11

DURATION OF VISIT	ALL	ZERO	1-5	6-10	11-15
	51372	962	3725	13889	15976
679592929	14867973	64168702	214320841	202437423	
100.00	100.00	100.00	100.00	100.00	
100.00	2.19	9.44	31.54	29.79	

13353	3216	254
151650213	28901459	3246318
100.00	100.00	100.00
22.31	4.25	0.48



	ALL	SYMPTOM MODULE	DISEASE MODULE	DIAG SCREEN PREVEN	TREAT- MENT MODULE
GENERAL RFV-7 MODULES	51372	31568	5678	7595	4172
	679592929	425020964	66952316	99855344	56984391
	100.00	100.00	100.00	100.00	100.00
	100.00	62.54	9.85	14.70	8.39

	INJURY ADVERSE EFFECTS	TEST RESULTS MODULE	ADMIN MODULE	UNCODE- ABLE
	977	193	238	744
	14419325	2226343	3678827	8388134
	100.00	100.00	100.00	100.00
	2.12	0.33	0.54	1.23

	ALL	NE	NC	S	W
GEOG REGION	51372	14755	12356	16810	7451
	679592929	172834504	165899312	234865517	105993596
	100.00	100.00	100.00	100.00	100.00
	100.00	25.43	24.41	34.56	15.60

	ALL	METRO	NON METRO
METRO-NONMETRO	51372	39331	12041
	679592929	504735417	174857512
	100.00	100.00	100.00
	100.00	74.27	25.73

	ALL	SOLO	PARTNER	GROUP
TYPE OF PRAC	51372	30319	9977	11076
	679592929	390715710	143510339	145366380
	100.00	100.00	100.00	100.00
	100.00	57.49	21.12	21.39

	ALL	MD	DO
MD VS DO	51372	48401	2971
	679592929	525985252	53607677
	100.00	100.00	100.00
	100.00	92.11	7.89

MAJOR ICDA CLASSES	ALL	INF-PAR DIS	NEOPLSM	ENDS NUTR MET	MENTAL DISORDR	DIS NERV SYSTEM	
		51372 679592929 100.00 100.00	1622 22554464 100.00 3.33	1071 12395415 100.00 1.22	3134 42606531 100.00 6.27	2768 21791350 100.00 3.21	3897 53634797 100.00 7.89
		DIS CIRC SYSTEM	DIS RESP SYSTEM	DIS DIGEST SYSTEM	DIS GENITO SYSTEM	DIS SKIN DIS	DIS MUSKETL SYSTEM
	8651 105320435 100.00 15.50	8850 127732267 100.00 18.80	2292 30373980 100.00 4.47	2533 32276339 100.00 4.75	3375 57954060 100.00 8.53	3785 47337209 100.00 6.97	
		SYMPTOM	SPECL COND	OTHER	DX NONE	DX UNK	
	1605 21225108 100.00 3.12	2201 31489115 100.00 4.63	4563 58716300 100.00 8.64	605 7803417 100.00 1.15	91 1203217 100.00 0.18	369 5073415 100.00 0.75	
		ALL	LIMITED EXAM	GEN EXAM	PAP TEST		
DIAG SERVICES	51372 679592929 100.00 100.00	3357 42875279 100.00 6.31	33106 447317598 100.00 65.82	8635 109869507 100.00 16.17	1704 20583250 100.00 3.03		
		CLIN LAB TEST	X-RAY	BLOOD PRES CK	EKG		
		12535 157636782 100.00 23.20	3243 41459353 100.00 6.10	23593 291706893 100.00 42.92	2475 26164184 100.00 3.95		
		VISION TEST	ENDOS COPY	MENTAL STATUS EXAM	OTHER DIAG		
		1762 21590063 100.00 3.18	375 3919337 100.00 0.59	1300 9365812 100.00 1.38	2440 39852535 100.00 5.86		
		ALL	NEW PT	OLD PAT NEWPROB	OLD PT OLDPROB		
STATUS OF VISIT	51372 679592929 100.00 100.00	5930 80330277 100.00 11.83	11206 164278995 100.00 24.17	34236 434933657 100.00 64.00			

ALL  
SPECIALTIES

ALL	A	CD	D	GE	GP
51372	458	1395	2386	569	16827
572592329	5679105	10152126	45286539	4628475	279185793
100.00	100.00	100.00	100.00	100.00	100.00
100.00	0.97	1.50	6.66	0.68	41.08

GPM	GYN	HEM	IM	NEP	N
47	19	49	11785	4	408
819022	127700	1209908	118942630	15500	3824274
100.00	100.00	100.00	100.00	100.00	100.00
0.12	0.02	0.18	17.50	0.00	0.56

OBC	OM	OPH	OTO	PD	PDA
2951	189	1519	801	4601	177
32897383	1742079	19280720	9225423	70871947	1895753
100.00	100.00	100.00	100.00	100.00	100.00
4.84	0.29	2.84	1.36	10.43	0.28

PDC	PM	P	CHP	PH	PUD
16	83	1843	74	12	341
57145	383829	9154675	499915	54204	2530027
100.00	100.00	100.00	100.00	100.00	100.00
0.01	0.06	1.35	0.07	0.01	0.37

CDS	CRS	GS	NS	ORS	PS
45	227	1280	144	892	106
487135	1968627	15880892	987184	11529342	916599
100.00	100.00	100.00	100.00	100.00	100.00
0.07	0.29	2.34	0.15	1.70	0.13

TS	U	OS	US
123	594	817	582
2382636	5264946	14380785	6186211
100.00	100.00	100.00	100.00
0.35	0.77	2.12	0.91

3 SPEC(15)

ALL	GP	MED SPECIAL TIES	IM	PEDIA TRICS	CARDIOV
51372	16820	79	11785	4794	1395
679592929	279185793	325931	118942630	72824845	10162125
100.00	100.00	100.00	100.00	100.00	100.00
100.00	41.08	0.06	17.50	10.72	1.50

DERM	OTHER MED SPECS	SU SPECIAL TIES	GS	ORS	UROL
2386	1431	215	1280	992	594
45286539	14993015	1098769	15880892	11529342	5264946
100.00	100.00	100.00	100.00	100.00	100.00
6.66	2.21	0.16	2.34	1.70	0.77

OPHTHAL	OTO	OTHER SURG SPECS	OTHER SPECIAL TIES	PSYCH	NEURO
1519	801	3515	51377	1917	403
19280720	9229423	39767664	678101741	9654590	3824274
100.00	100.00	100.00	100.00	100.00	100.00
2.84	1.36	5.85	99.78	1.42	0.56

OTHER OTHER SPECS	KEY
1735	RAW
23766130	WT1
100.00	W1C
3.50	W1R

## APPENDIX

## Sample Errors and Rounding of Numbers

The standard error is primarily a measure of the sampling variability that occurs by chance because only a sample, rather than the entire universe, is surveyed. The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate. Relative standard errors of selected aggregate statistics are shown in table I. The standard errors for estimated percentages of drug mentions are shown in table II.

---

Table I. Approximate relative standard errors of estimated numbers of drug mentions based on all physician specialties: NAMCS, 1980

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Estimated number of drug mentions in thousands	Relative standard error in percent
1,000.. . . . .	27.3
2,000.. . . . .	19.7
5,000.. . . . .	13.2
10,000. . . . .	10.1
20,000. . . . .	8.2
50,000. . . . .	6.8
100,000 . . . . .	6.2
300,000 . . . . .	5.8
650,000 . . . . .	5.7

---

Example of use of table: An aggregate of 75,000,000 drug mentions has a relative standard error of 6.5 percent or a standard error of 4,875,000 mentions (6.5 percent of 75,000,000).

Table II. Approximate standard errors of percents of estimated numbers of drug mentions based on all physician, specialties: NAMCS 1980

Base of percent (number of drug mentions in thousands)	Estimated percent					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
	Standard error in percentage points					
1,000	2.7	5.8	8.0	10.7	12.2	13.3
2,000	1.9	4.1	5.7	7.6	8.7	9.4
5,000	1.2	2.6	3.6	4.8	5.5	6.0
20,000	0.6	1.3	1.8	2.4	2.7	3.0
100,000	0.3	0.6	0.8	1.1	1.2	1.3
600,000.	0.1	0.2	0.3	0.4	0.5	0.5

Example of use of table: An estimate of 30 percent based on an aggregate of 12,500,000 drug mentions has a standard error of 4.1 percent or a relative standard error of 13.7 percent (4.1 percent ÷ 30 percent).

#### DEFINITIONS OF CERTAIN TERMS USED IN THIS DOCUMENT

*Office(s).*--Premises that the physician identifies as locations for his ambulatory practice. Responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than with any institution.

*Visit.*--A direct, personal exchange between ambulatory patient and the physician (or members of his staff) for the purpose of seeking care and rendering health services.

*Ambulatory patient.*--An individual presenting for personal health services, neither bedridden nor currently admitted to any health care institution on the premises.

*Drug mention(s).*--The physician's entry of a pharmaceutical agent ordered or provided--by any route of administration--for prevention, diagnosis, or treatment. Generic as well as brand-name drugs are included. Along with all new drugs, the physician also records continued medications, if the patient was specifically instructed during the visit to continue the medication.

*Patients.*--Can be classified as either:

*In-scope:* All patients seen by the physician or member of his staff in his office(s).

*Out-of-scope:* Patients seen by the physician in a hospital, nursing home, or other extended care institution, or the patient's home. (Note: if the doctor has a *private* office (which fits definition of "office") located in a hospital, the ambulatory patients seen there would be considered "in-scope."] The following types of patients are also considered out of scope:

patients seen by the physician in any institution (including outpatient clinics of hospitals) for which the institution has the primary responsibility for the care of the patient over time

patients who telephone and receive advice from the physician

patients who come to the office only to leave a specimen, pick up insurance forms, or pay their bills

patients who come to the office only to pick up medications previously prescribed by the physician.

*Physician.*--Can be classified as either:

*In-scope:* All duly licensed doctors of medicine and doctors of osteopathy currently in practice who spend some time in caring for ambulatory patients at an office location.

*Out-of-scope:* Those physicians who treat patients only indirectly, including specialists in anesthesiology, pathology, forensic pathology, radiology, therapeutic radiology, and diagnostic radiology, and the following physicians.

physicians in military service

physicians who treat patients only in an institutional setting (e.g., patients in nursing homes and hospitals)

physicians employed full time by an industry or institution and having no private practice (e.g., physicians who work for the VA, the Ford Motor Company, etc.)

physicians who spend no time seeing ambulatory patients (e.g., physicians who only teach, are engaged in research, or are retired).

*Physician specialty.*--Principal specialty (including general practice) as designated by the physician at the time of the survey. Those physicians for whom a specialty was not obtained were assigned the principal specialty recorded in the Master Physician files maintained by the AMA or AOA.

*Region of practice location.*--The four geographic regions, excluding Alaska and Hawaii, which correspond to those used by the U.S. Bureau of the Census, are as follows:

<u>Region</u>	<u>States Included</u>
Northeast.....	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
North Central.....	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska North Dakota, Ohio, South Dakota, Wisconsin
South.....	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
West.....	Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

*Metropolitan status of practice location.*--Physician's practice is classified by its location in metropolitan or nonmetropolitan areas. Metropolitan areas are standard metropolitan statistical areas (SMSA's) as defined by the U.S. Office of Management and Budget, and the Bureau of the Census.

The definition of an individual SMSA involves two considerations: first, a city or cities of specified population which constitute the central city and identify the county in which it is located as the central county; second, economic and social relationships with "contiguous" counties which are metropolitan in character, so that the periphery of the specific metropolitan area may be determined. SMSA's may cross State lines. In New England SMSA's consist of cities and towns, rather than counties.



## 1980 NAMCS USER QUESTIONNAIRE

In order to improve the NCHS Micro-Data Tape Release program, we would appreciate your assistance in regard to the following questionnaire.

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Date of tape purchase: \_\_\_\_\_  
Type of organization (university, insurance, etc.): \_\_\_\_\_

1. Have you used this tape? (If not, please indicate why.)
2. Did you have any computer problems using the data?
3. Did you have any analytic problems with the data?
4. What output was produced using the tape?
5. How was this output used?
6. How was the overall quality of the documentation?
7. Did you find the explanation of the survey helpful? Was it clear, concise, etc.?
8. Was the description of the tape record format easy to use? Were the item descriptions understandable? Did you find any errors?
9. Do you have any other comments or complaints?

Return this questionnaire to the address on back. Please feel free to include additional comments. Thank you very much for your assistance.

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Data Tape Coordinator  
Scientific and Technical Information Branch  
National Center for Health Statistics  
3700 East-West Highway  
Hyattsville, Maryland 20782

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