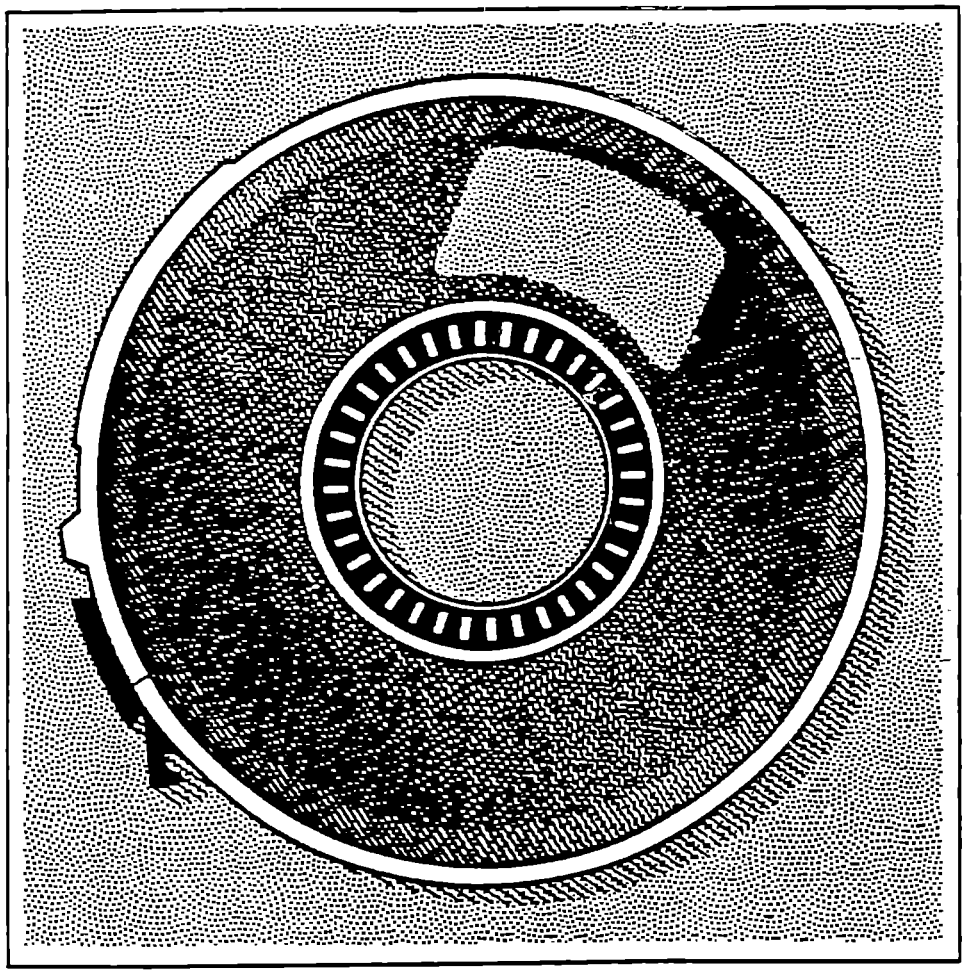
Public Use Data Tape Documentation

1980 National Ambulatory Medical Care Survey



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

Hyattsville, Maryland
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ABSTRACT

This material provides documentation for users of the Micro-Data tapes of the National Ambulatory Medical Care Survey (NAMCS) conducted by the National Center for Health Statistics. 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 this document.

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I. DESCRIPTION OF THE NATIONAL AMBULATORY MEDICAL CARE SURVEY

INTRODUCTION

These Micro-Data Tapes comprise the data collected by the National Ambulatory Medical Care Survey (NAMCS) in 1980, conducted by the National Center for Health Statistics (NCHS). The National Ambulatory Medical Care Survey provides continuous data from samples of patient records selected from a national sample of office-based physicians. These national estimates describe the utilization of ambulatory medical care services in the coterminous United States. In 1980 there were approximately 46,000 patient records provided by 1,870 doctors that participated in the survey. 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.

HISTORY

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 among the population seeking ambulatory care, the NCHS in 1967 began exploring possibilities for surveying morbidity in private physicians' offices. 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.

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.

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

Table I. Distribution of physicians in the universe[1/] 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
[illegible]	13,432	194	98	96	22	74	77.1

[illegible] includes doctors of medicine (M.D.'s) and doctors of osteopathy (D.O.'s).

(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 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.

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

- Academy Dermatology
- Academy of Physicians
- American Academy Neurology
- American Academy of Orthopaedic Surgeons
- American Academy 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 Anesthesiologists
- American Society of Plastic and Reconstructive Surgeons, Inc.
- American Urological Association
- Association of American Medical Colleges
- 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

AMERICAN ACADEMY of DERMATOLOGY, Inc.

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Mrs. Betty Suor

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

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.

D 749606

PATIENT LOG

As each patient arrives, record name and time of visit on the log below. For the patient entered on line 05, complete the patient record to the right.

	PATIENT'S NAME	TIME OF VISIT
1		
2		
3		
4		
5		

CONTINUE LISTING PATIENTS ON NEXT PAGE

[illegible] D 749606

PATIENT RECORD
NATIONAL AMBULATORY MEDICAL CARE SURVEY

1. DATE OF VISIT — Month / Day / Year

2. DATE OF BIRTH — Month / Day / Year

3. SEX
- 1 ☐ FEMALE
- 2 ☐ MALE

4. COLOR OR RACE
- 1 ☐ WHITE
- 2 ☐ BLACK
- 3 ☐ ASIAN/PACIFIC ISLANDER
- 4 ☐ AMERICAN INDIAN/ ALASKAN NATIVE

5. ETHNICITY
- 1 ☐ HISPANIC ORIGIN
- 2 ☐ NOT HISPANIC

6. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT *(In patient's own words)*
- a. MOST IMPORTANT
- b. OTHER

7. MAJOR REASON FOR THIS VISIT *(Check one)*
- 1 ☐ ACUTE PROBLEM
- 2 ☐ CHRONIC PROBLEM, ROUTINE
- 3 ☐ CHRONIC PROBLEM, FLARE-UP
- 4 ☐ POST SURGERY/POST INJURY
- 5 ☐ NON-ILLNESS CARE (ROUTINE PRENATAL, GENERAL EXAM, WELL BABY, ETC.)

8. DIAGNOSTIC SERVICES THIS VISIT *(Check all ordered or provided)*
- 1 ☐ NONE
- 2 ☐ LIMITED HISTORY/EXAM
- 3 ☐ GENERAL HISTORY/EXAM
- 4 ☐ PAP TEST
- 5 ☐ CLINICAL LAB TEST
- 6 ☐ X-RAY
- 7 ☐ BLOOD PRESSURE CHECK
- 8 ☐ EKG
- 9 ☐ VISION TEST
- 10 ☐ ENDOSCOPY
- 11 ☐ MENTAL STATUS EXAM
- 12 ☐ OTHER *(Specify)* _____

9. PHYSICIAN'S DIAGNOSES
- a. PRINCIPAL DIAGNOSIS/PROBLEM ASSOCIATED WITH ITEM 8a
- b. OTHER SIGNIFICANT CURRENT DIAGNOSES

10. HAVE YOU SEEN PATIENT BEFORE?
- 1 ☐ YES
- 2 ☐ NO

IF YES, FOR THE CONDITION IN ITEM 9a?
- 1 ☐ YES
- 2 ☐ NO

11. MEDICATION THERAPY THIS VISIT ☐ NONE
(Using brand or generic names, record all new and continued medications ordered, injected, administered, or otherwise provided at this visit. Include immunizing and desensitizing agents)

	a. FOR PRINCIPAL DIAGNOSES IN ITEM 9a	b. FOR ALL OTHER REASONS
1		
2		
3		
4		

12. NON-MEDICATION THERAPY *(Check all services ordered or provided this visit)*
- 1 ☐ NONE
- 2 ☐ PHYSIOTHERAPY
- 3 ☐ MINOR SURGERY
- 4 ☐ FAMILY PLANNING
- 5 ☐ PSYCHOTHERAPY/ THERAPEUTIC LISTENING
- 6 ☐ DIET COUNSELING
- 7 ☐ FAMILY/SOCIAL COUNSELING
- 8 ☐ MEDICAL COUNSELING
- 9 ☐ OTHER *(Specify)* _____

13. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?
- 1 ☐ YES
- 2 ☐ NO

14. DISPOSITION THIS VISIT *(Check all that apply)*
- 1 ☐ NO FOLLOW UP PLANNED
- 2 ☐ RETURN AT SPECIFIED TIME
- 3 ☐ RETURN IF NEEDED, P.R.N.
- 4 ☐ TELEPHONE FOLLOW UP PLANNED
- 5 ☐ REFERRED TO OTHER PHYSICIAN
- 6 ☐ RETURNED TO REFERRING PHYSICIAN
- 7 ☐ ADMIT TO HOSPITAL
- 8 ☐ OTHER *(Specify)* _____

15. DURATION OF THIS VISIT *(Time actually spent with physician)*
_____ Minutes

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OMB No. 68-R1498

Figure 3

PAGE 9

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).[1] 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.[1] 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).[5] 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 nonsupporative 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.[7]

(C) Medication Therapy This Visit: The NAMCS drug data in item 11 have been classified and coded according to a unique classification scheme[6] developed at NCHS. The patient record form allows for the recording of up to 8 drugs; the first 4 for item 11a (drugs ordered for the principal diagnosis) and the second 4 for item 11b (drugs ordered for all other reasons). The tape format includes a corresponding allocation of drug fields.

There is, however, a substantial amount of information concerning each drug which is not contained in these data. This additional drug information is contained in a special NAMCS Drug File and is available in a separate micro-data tape. The NAMCS Drug File was created from the Drug Product Information File (DPIF)* and contains the following information:

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

Generic Name: the generic (public, nonproprietary, established) name as assigned by USP, NF, USAN, or FDA.

USP = United States Pharmacopeia
NF = New Formulary
USAN = United States Approved Names

Generic Name Code: Created for and unique to the NAMCS Drug File, is assigned to each generic name.

Medication Code List Name: the name of a drug as it appears on the NAMCS Medication Code List (MCL). An alphabetized inventory of single-source and multiple-source drugs for use in coding the entries on the NAMCS patient records.

* The broad range of drug dimensions intended for exploration by the NAMCS required the use of 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 information, including information on all the drug dimensions desired for NAMCS needs. The NAMCS Drug File was constructed by adopting or adapting relevant fields from the DPIF.

Medication Code List Code: assigned to each MCL name and is unique to the NAMCS Drug File.

Entry Status Code: also unique to the NAMCS, and denotes the nature of the entry that the physician makes on the patient record, i.e., generic entry, brand name entry, or entry status undetermined.

Prescription Status Code: derived fromn the DPIF* Legal Status Code, which is used to indicate the federal legal classification of drug products, i.e., prescription drug, nonprescription drug, or prescription status undetermined.

Federal Controlled Substance Status Code: derived from the DPIF Legal Status Code and denotes the degree of potential abuse and federal control of a drug.

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

Complete coding lists and instructions for using the NAMCS 1980 drug information are contained in the publication entitled: "The Collection and Processing of Drug Information, National Ambulatory Medical Care Survey, United States, 1980."[8] Copies are available upon request. For information on ordering the micro-data tape for drugs, 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 visit 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 RECIPROCALS 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 pratice. 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 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.

Table II. Estimates of the civilian noninstitutionalized population of the United States,[1] 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
Race and Sex		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
White	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
All Other	30,006	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
Geographic region						
Northeast	48,240					
North Central	57,508					
South	71,358					
West	39,475					
Area						
Metropolitan	148,203					
Nonmetropolitan	68,377					

[1] Excludes Alaska and Hawaii

(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-AOA 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 6, as well as the Appendix of this document.

PATIENT WEIGHT

The "patient 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 patient visits--and not a complete count of all the visits that occurred in the United States. The "patient weight" is an inflation factor assigned to each patient record. By aggregating the "patient weights" an estimated complete count or national estimate can be obtained.

References[1/]

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: MEDICATION CODE LIST, NAMCS 1981

7. National Ambulatory Medial Care Survey: 1977 Medical Coding Manual.

8. 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. Goverment Printing Office. March, 1982.

9. National Ambulatory Medical Care Survey: Coding Procedures for Medication Entries, NAMCS 1980.

[1/] 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:	NAMC1980
Number of Reels:	1
Number of Recording Tracks:	9
Density (bpi):	1600 or 6250
Language:	EBEDIC
Parity:	ODD
Record Length:	138
Blocksize:	13800
Number of Records:	46,081
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. Unless otherwise stated in the "Item description" column, the data are derived from the patient record (page 9). The AMA and the induction interview (reference 3) are alternate sources of data, while the computer generates other items by recoding selected data items.

Item No.	Field Length	Tape Location	Item Description and Codes
1	4	1-4	Date of visit
1.1	2	1-2	Month of visit 01-12: January-December
1.2	2	3-4	Year of visit Last 2 digits of year
2	4	5-8	Date of birth
2.1	2	5-6	Month of birth 01-12: January-December
2.2	2	7-8	Year of birth Last 2 digits of year
3	1	9	Sex 1=Female 2=Male
4	1	10	Race 1=White 2=Black 3=Asian/Pacific Islander 4=American Indian/Alaskan Native
5	1	11	Ethnicity 1=Hispanic Origin 2=Not hispanic
6	15	12-26	Patient Problems (see Page 10)
6.1	5	12-16	Most important problem #1
6.2	5	17-21	Most important problem #2 (if any reported)
6.3	5	22-26	Other problem

Item No.	Field Length	Tape Location	Item Description and Codes
7	1	27	Major reason for this visit 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.)
8	12	28-39	Diagnostic services this visit
8.1	1	28	None (1=Yes and 0=No)
8.2	1	29	Limited history/exam "
8.3	1	30	General history/exam "
8.4	1	31	Pap test "
8.5	1	32	Clinical lab. test "
8.6	1	33	X-ray "
8.7	1	34	Blood pressure check "
8.8	1	35	EKG "
8.9	1	36	Vision test "
8.10	1	37	Endoscopy "
8.11	1	38	Mental status exam "
8.12	1	39	Other "
9	18	40-57	Physician's principal diagnosis (see page 11)
9.1	6	40-45	First diagnosis associated with item 6a
9.2	6	46-51	Second Diagnosis associated with item 6a (if any
9.3	6	52-57	Other significant current diagnoses reported)
10	2	58-59	Even seen patient before 1=Yes 2=No
10.1	1	58	
10.2	1	59	"If yes, for the condition in item 9a?" 0=Blank 1=Yes 2=No
11	40	60-99	Medication Therapy This visit (see page 11)
			a. For principal diagnoses in item 9a
11.1	5	60-64	Medication #1
11.2	5	65-69	Medication #2
11.3	5	70-74	Medication #3
11.4	5	75-79	Medication #4
			b. For all other Reasons
11.5	5	80-84	Medication #1
11.6	5	85-89	Medication #2
11.7	5	90-94	Medication #3
11.8	5	95-99	Medication #4

Item No.	Field Length	Tape Location	Item Description and Codes
12	1	100	Number of Drugs Coded Range: 0-8
13	9	101-109	Non-medication Therapy
13.1	1	101	None (1=yes and 2=no)
13.2	1	102	Physiotherapy "
13.3	1	103	Office surgery "
13.4	1	104	Family planning "
13.5	1	105	Psycotherapy/therapeutic listening "
13.6	1	106	Diet counseling "
13.7	1	107	Family/social counseling "
13.8	1	108	Medical counseling "
13.9	1	109	Other "
14	1	110	Patient Referred by Another Physician 1=Yes 2=No
15	8	111-118	Disposition of visit
15.1	1	111	No follow-up planned (1=Yes and 0=No)
15.2	1	112	Return at specified time "
15.3	1	113	Return if needed "
15.4	1	114	Telephone follow-up "
15.5	1	115	Referral "
15.6	1	116	Return to referring physician "
15.7	1	117	Admit to hospital "
15.8	1	118	Other "
16	3	119-121	Duration of visit in minutes (000-999)
17	10	122-131	Patient Weight A right justified, alphanumeric integer developed by the NAMCS staff for the purpose of producing national estimates from sample estimates. See notes on page 16 of these documentation.
18	1	132	Geographic Region (Based on actual location of physician's practice.) 1=Northeast 2=North Central 3=South 4=West

Item No.	Field Length	Tape Location	Item Description and Codes
19	1	133	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.) 1=Standard Metropolitan Statistical Area (SMSA) 2=Non-SMSA
20	3	134-136	Physician Specialty (Derived from Induction Interview - reference 3) ALSO: See "List of Designated Specialty Codes" on page 23 of these documentation.
21	1	137	Type of practice (Derived from Induction Interiew-see reference 3) 1=solo 2=partnership 3=group 4=other
22	1	138	Type of doctor 1=AMA (American Medical Association) 2=AOA (American Osteopathic Association)

List of Designated Specialty Codes

AM	Aerospace Medicine
A	Allergy
*AN	Anesthesiology
BE	Broncho-Esophagology
CD	Cardiovascular Diseases
D	Dermatology
DIA	Diabetes
END	Endocrinology
FP	Family Practice
GE	Gastroenterology
GP	General Practice
GPM	General Preventive Medicine
GER	Geriatrics
GYN	Gynecology
HEM	Hematology
HYP	Hypnosis
ID	Infectious Diseases
IM	Internal Medicine
LAR	Laryngology
LM	Legal Medicine
ND	Neoplastic Diseases
NEP	Nephrology
N	Neurology
CHN	Neurology, Child
*NM	Nuclear Medicine
NTR	Nutrition
OBS	Obstetrics
OBG	Obstetrics and Gynecology
OM	Occupational Medicine
OPH	Ophthalmology
OT	Otology
OTO	Otorhinolaryngology
*PTH	Pathology
*CLP	Pathology, Clinical
*FOP	Pathology, Forensic
PD	Pediatrics
PDA	Pediatrics, Allergy
PDC	Pediatrics, Cardiology
PA	Pharmacology, Clinical
PM	Physical Medicine and Rehabilitation
P	Psychiatry
CHP	Psychiatry, Child
PYA	Psychoanalysis
PYM	Psychosomatic Medicine
PH	Public Health
PUD	Pulmonary Diseases
*R	Radiology
*DR	Radiology, Diagnostic
*PDR	Radiology, Pediatric
*TR	Radiology, Therapeutic
RHU	Rheumatology
RHI	Rhinology
ABS	Surgery, Abdominal
CDS	Surgery, Cardiovascular
CRS	Surgery, Colon and Rectal
GS	Surgery, General
HS	Surgery, Hand
HNS	Surgery, Head and Neck
NS	Surgery, Neurological
ORS	Surgery, Orthopedic
PDS	Surgery, Pediatric
PS	Surgery, Plastic
TS	Surgery, Thoracic
TRS	Surgery, Traumatic
U	Surgery, Urological

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

OS	Other, i.e., physician designated a specialty other than those appearing above.
US	Unspecified, i.e., physician did not specify a specialty.
EM	Emergency Medicine

* Excluded from NAMCS by definition.

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+
	46091	7658	6290	13086	10908	8139
	575745213	109355609	81560668	154695475	125645151	100488310
	100.00	100.00	100.00	100.00	100.00	100.00
	100.00	18.99	14.17	26.87	22.52	17.45

PATIENT SEX	ALL	F	M
	46091	27903	18178
	575745213	346105937	229639276
	100.00	100.00	100.00
	100.00	60.11	39.89

RACE	ALL	WHITE	BLACK	ASIAN ILANDER	INDIAN ALASKAN
	46081	41629	3918	355	179
	575745213	516616365	52871836	4132852	2124160
	100.00	100.00	100.00	100.00	100.00
	100.00	89.73	9.18	0.72	0.37

ETHNICITY	ALL	HISPAN	NCT HISPAN
	46081	2527	43554
	575745213	28720156	547025057
	100.00	100.00	100.00
	100.00	4.99	95.01

PATIENT REFERRAL STATUS	ALL	YES	NO
	46081	2419	43662
	575745213	25370446	550374767
	100.00	100.00	100.00
	100.00	4.41	95.59

MAJOR ICDA CLASSES

	ALL	INF-PAR DIS	NEOPLSM	ENDO NUTR MET	MENTAL DISORDR	DIS NERV SYSTEM
	46081	1392	1356	1864	3638	3949
	575745213	19529419	16020564	24166109	24342905	25592994
	100.00	100.00	100.00	100.00	100.00	100.00
	100.00	3.41	2.78	4.20	4.23	6.13

	DIS CIRC SYSTEM	DIS RESP SYSTEM	DIS DIGEST SYSTEM	DIS GENITO SYSTEM	SKIN DIS	DIS MUSKETL SYSTEM
	4441	5124	1944	2303	2245	2587
	53690606	72836312	23421114	32935920	36213811	36832983
	100.00	100.00	100.00	100.00	100.00	100.00
	9.33	12.66	4.07	5.72	6.29	6.40

	SYMPTOM	ACCDNT	SPECL CONS	OTHER	CX ACNE	CX UNK
	1524	3402	8106	700	137	434
	19019314	46137042	102236829	7951107	2016047	5596542
	100.00	100.00	100.00	100.00	100.00	100.00
	3.30	8.02	17.76	1.38	0.35	0.97

DIAG SERVICES

	ALL	NONE	LIMITED EXAM	GEN EXAM	PAP TEST
	46081	4491	29321	7564	2193
	575745213	47125711	367467252	90790100	25419310
	100.00	100.00	100.00	100.00	100.00
	100.00	8.19	63.82	15.77	4.42

	CLIN LAB TEST	X-RAY	BLOOD PRES CK	EKG
	10223	3332	15950	1592
	125612623	41925044	195321693	16294414
	100.00	100.00	100.00	100.00
	21.82	7.28	33.94	2.83

	VISION TEST	ENDOS COPY	MENTAL STATUS EXAM	OTHER DIAG
	2633	473	1302	2104
	32725663	4696736	8907333	29222043
	100.00	100.00	100.00	100.00
	5.68	0.81	1.55	5.09

STATUS OF VISIT

	ALL	NEW PT	OLD PT NEWPROB	OLD PT OLDPROB
	46081	7041	9333	29707
	575745213	85513568	130294094	359932250
	100.00	100.00	100.00	100.00
	100.00	14.85	22.63	62.52

GENERAL PRV-T MODULES	ALL	SYMPTOM MODULE	DISEASE MODULE	DIAG SCREEN PREVEN	TREAT-MENT MODULE
	46061	24960	3873	9776	5123
	575745213	313162100	46279251	112725911	59109606
	100.00	100.00	100.00	100.00	100.00
	100.00	54.39	8.04	19.58	10.27

	INJURY ADVERSE EFFECTS	TEST RESULTS MODULE	ADMIN MODULE	UNCODE-ABLE
	1691	221	687	574
	23150976	2600754	8829634	7741223
	100.00	100.00	100.00	100.00
	4.02	0.45	1.53	1.34

GEOG REGION	ALL	NE	MC	S	W
	46061	13162	10633	14199	8067
	575745213	147396113	139623430	182274762	106450903
	100.00	100.00	100.00	100.00	100.00
	100.00	25.60	24.25	31.66	18.49

METRO-NONMETRO	ALL	METRO	NON METRO
	46061	36221	9360
	575745213	439720877	136024336
	100.00	100.00	100.00
	100.00	76.37	23.63

TYPE OF PRAC	ALL	SOLO	PARTNER	GROUP
	46061	26549	9050	10462
	575745213	313962712	123642566	138139935
	100.00	100.00	100.00	100.00
	100.00	54.53	21.48	23.98

MD VS DO	ALL	MD	DO
	46061	43957	2124
	575745213	539593162	36152051
	100.00	100.00	100.00
	100.00	93.72	6.28

SPECIALTIES	ALL	A	CD	D	GE	GP
	46091	326	1511	1432	357	11404
	575745213	4672706	6153666	27956382	2911258	11743791
	100.00	100.00	100.00	100.00	100.00	100.00
	100.00	0.81	1.07	4.84	0.51	33.30

	GPM	GYN	HEM	IM	NEP	N
	25	25	17	5759	3	321
	435650	194210	413764	69481093	11525	2499272
	100.00	100.00	100.00	100.00	100.00	100.00
	0.08	0.03	0.07	12.07	0.00	0.43

	OBG	OM	OPH	OTO	PD	PDA
	4536	154	2370	1086	4251	130
	54928475	1437346	30810301	12281792	62503491	1548533
	100.00	100.00	100.00	100.00	100.00	100.00
	9.54	0.25	5.35	2.13	10.86	0.27

	PDC	PM	P	CHP	PM	PUD
	46	78	2893	173	13	191
	165459	340101	14891920	964313	58721	1387006
	100.00	100.00	100.00	100.00	100.00	100.00
	0.03	0.06	2.59	0.17	0.01	0.24

	CDS	CRS	GS	NS	ORS	PS
	21	277	2627	293	2031	546
	227203	2249424	23315412	2100057	26325664	4553611
	100.00	100.00	100.00	100.00	100.00	100.00
	0.04	0.39	4.12	0.36	4.57	0.79

	TS	U	US	UT
	141	969	645	395
	1776706	8761152	9947473	3775426
	100.00	100.00	100.00	100.00
	0.31	1.52	1.73	0.66

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 tables I and II. The standard errors for estimated percentages of visits are shown in tables III and IV.

Table I. Approximate relative standard errors of estimated number of office visits based on all physician specialties: NAMCS, 1980

Estimated number of office visits in thousands	Relative standard error in percent
500	27.3
1,000	19.5
2,000	16.1
5,000	9.4
10,000	7.3
20,000	5.9
50,000	4.9
100,000	4.5
550,000	4.1

Example of use of table: An aggregate of 35,000,000 visits has a relative standard error of 5.4 percent or a standard error of 1,890,00 visits (5.4 percent of 35,000,000).

Table II. Approximate relative standard errors of estimated number of office visits based on an individual physician specialty: NAMCS 1980

Estimated number of office visits in thousands	Relative standard error in percent
500	28.0
1,000	20.3
2,000	15.1
5,000	10.8
10,000	9.0
20,000	7.9
50,000	7.1
100,000	6.9

Example of use of table: An aggregate of 7,500,000 visits has a relative standard error of 9.9 percent or a standard error of 742,500 visits (9.9 percent of 7,500,000).

Table III. Approximate standard errors of percent of estimated numbers of office visits based on all physician, specialties: NAMCS, 1980

Base of percent (number of office visits 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					
500	2.7	5.9	8.1	10.8	12.4	13.5
1,000	1.9	4.2	5.7	7.6	8.7	9.5
2,000	1.3	2.9	4.0	5.4	6.2	6.7
5,000	0.8	1.9	2.6	3.4	3.9	4.3
10,000	0.6	1.3	1.8	2.4	2.8	3.0
20,000	0.4	0.9	1.3	1.7	2.0	2.1
50,000	0.3	0.6	0.8	1.1	1.2	1.3
100,000	0.2	0.4	0.6	0.8	0.9	1.0
500,000	0.1	0.2	0.3	0.3	0.4	0.4

Example of use of table: An estimate of 30 percent based on an aggregate of 15,000,000 visits has a standard error of 2.4 percent or a relative standard error of 8.0 percent (2.4 percent ÷ 30 percent).

Table IV. Approximate standard errors of percent of estimated numbers of office visits based on an individual physician specialty: NAMCS, 1980

Base of percent (number of office visits 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					
500	2.7	5.9	8.2	10.9	12.5	13.6
1,000	1.9	4.2	5.8	7.7	8.8	9.6
2,000	1.4	3.0	4.1	5.4	6.2	6.8
5,000	0.9	1.9	2.6	3.4	3.9	4.3
10,000	0.6	1.3	1.8	2.4	2.8	3.0
20,000	0.4	0.9	1.3	1.7	2.0	2.1
50,000	0.3	0.6	0.8	1.1	1.2	1.4
100,000	0.2	0.4	0.6	0.8	0.9	1.0

Example of use of table: An estimate of 20 percent based on an aggregate of 35,000,000 visits has a standard error of 1.4 percent, or a relative standard error of 7.0 percent (1.4 percent ÷ 20 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.

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).

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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