Vital and Health Statistics

Advance Data From Vital and Health Statistics: Numbers 21–30

Series 16: Compilations of Advance Data From Vital and Health Statistics No. 3

Data in this report from health and demographic surveys present statistics by age and other variables on food consumption profiles; ambulatory medical care; utilization of selected medical practitioners; contraceptive efficacy among married women; health characteristics of minority groups; and a comparison of nursing home residents and discharges. Estimates are based on the civilian noninstitutionalized population of the United States. These reports were originally published in 1978.

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Selected Findings: Food Consumption Profiles of White and Black Persons 1-74 Years of Age in the United States, 1971-74[1]

Information on each sample person's usual pattern of food intake was obtained during the first national Health and Nutrition Examination Survey (HANES). The survey was conducted by the National Center for Health Statistics during April 1971-June 1974 from a national probability sample of persons aged 1-74 in the U.S. civilian noninstitutionalized population. These selected dietary findings, based on the HANES food frequency data, are directed to a quantitative assessment of food pattern profiles of the white and black populations, both combined and separately, excluding other races.

Of the 28,043 sample persons selected to represent 194 million persons aged 1-74 years in the U.S. population, the program examined 20,749 persons, or 74 percent of the sample. This is an effective response rate of 75 percent when adjustment is made for the effect of oversampling among preschool children, women of childbearing age, the poor, and the elderly.

The dietary interview consisted of a 24-hour recall of food consumption and a food frequency questionnaire and was conducted by professional dietary staff. The nutrition examination also included a general medical examination by a physician for indicators of nutritional deficiencies, a skin examination by a dermatologist, and a dental examination by a dentist. Body measurements were taken by a trained technician and numerous laboratory tests were performed on whole blood, serum, plasma, and urine. A description of the sampling process, HANES operation, and response rates has been published.[2]

The frequency of consumption of the 19 food groups ingested daily and/or weekly over the 3-month interval prior to the nutrition interview will be described and analyzed in forthcoming reports in the *Vital and Health Statistics* series.[3,4] Eight of the 19 food groups with similar nutritional characteristics are presented here by age, race, and sex. The food frequency interview accounted for all regular meals, as well as for between-meal foods or snacks, eaten during the week, including special occasions and holidays. The food frequency method served as a quality control technique for the 24-hour recall method of obtaining data, while depicting diet profile patterns over a longer period of time.

The frequency of consumption of food items is reported in six categories: 4 times or

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[1]This report prepared by Connie M. Villa Dresser, R.D., Margaret D. Carroll, M.S.P.H., and Sidney Abraham, Division of Health Examination Statistics.

[2]National Center for Health Statistics: Plan and operation of the Health and Nutrition Examination Survey, United States, 1971-73 by Henry W. Miller. *Vital and Health Statistics.* Series 1-Nos. 10a and 10b. DHEW Pub. No. (HSM) 73-1310. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Feb. 1973.

[3]National Center for Health Statistics: Food consumption profiles of the white and black U.S. population ages 1-74 years: 1971-74—graphic and tabular findings. *Vital and Health Statistics.* Series 11. Public Health Service, DHEW, Hyattsville, Md. To be published.

[4]National Center for Health Statistics: Supplemental report—Food consumption profiles of the white and black U.S. population ages 1-74 years: 1971-74—analysis and discussion. *Vital and Health Statistics.* Series 11. Public Health Service, DHEW, Hyattsville, Md. To be published.

more a day, 3 times a day, 2 times a day, once a day, 1-6 times a week, and seldom or never consumed. The category 1-6 times a week consists of foods consumed at least once a week but not more than 6 times a week.

The cross-sectional data of food frequency intake of subjects were obtained on different age cohorts. The age trends show percentage values for successive cohorts of different age groups and reflect the effect of different environmental influences. The limitations of cross-sectional data are recognized in considering group age changes.

SELECTED FINDINGS

Whole milk including 2-percent fat milk.— Table 1 shows that 21 percent of the white and black U.S. population drink milk once daily, 22 percent drink milk at least 1-6 times a week, and another 21 percent seldom or never drink milk. Generally, there is little difference between the races in the percent of persons reporting milk consumption.

Table 2 shows that a slightly higher percentage of males of both races reported consuming milk than females did.

Table 1. Percent distribution of persons of all ages 1-74 years by frequency of intake of selected food groups, according to race: United States, 1971-74

Race and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
Both races						
Whole milk	5.9	14.0	16.5	21.2	21.9	20.5
Meat and poultry	0.2	1.8	30.5	51.7	15.2	0.6
Fish and shellfish	0.0	0.0	0.1	0.9	54.2	44.8
Eggs	0.0	0.1	0.2	15.4	66.6	17.6
Fruits and vegetables, all kinds	4.3	17.7	37.1	31.4	9.1	0.4
Cereals	0.1	0.1	0.6	15.9	44.8	38.5
Desserts	0.4	1.5	8.6	30.2	46.5	12.7
Salty snacks	0.1	0.2	1.0	10.1	51.5	37.1
White						
Whole milk	6.2	14.5	16.8	21.2	21.0	20.3
Meat and poultry	0.2	1.6	30.0	52.5	15.1	0.6
Fish and shellfish	0.0	0.0	0.1	0.9	53.5	45.5
Eggs	0.1	0.0	0.2	14.6	67.3	17.8
Fruits and vegetables, all kinds	4.4	18.4	38.1	30.8	8.0	0.4
Cereals	0.0	0.1	0.6	16.2	44.6	38.5
Desserts	0.4	1.6	8.8	30.4	46.3	12.5
Salty snacks	0.1	0.1	0.9	9.6	51.7	37.7
Black						
Whole milk	3.4	10.0	14.5	21.3	29.3	21.5
Meat and poultry	0.4	3.9	34.1	44.7	16.3	0.5
Fish and shellfish	0.0	0.0	0.1	0.9	59.4	39.6
Eggs	0.0	0.1	0.4	22.0	61.5	16.0
Fruits and vegetables, all kinds	3.5	12.7	29.2	35.9	17.9	0.7
Cereals	0.2	0.1	0.9	13.8	46.8	38.2
Desserts	0.3	1.4	7.2	28.8	48.1	14.1
Salty snacks	0.2	0.6	1.9	14.8	50.2	32.4

Table 2. Percent distribution of white and black persons of all ages 1-74 years by frequency of intake of selected food groups, according to sex: United States, 1971-74

Sex and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
Male						
Whole milk	6.9	16.4	17.9	22.0	20.8	16.1
Meat and poultry	0.3	2.7	35.1	47.7	13.6	0.6
Fish and shellfish	0.0	0.0	0.1	1.2	53.1	45.7
Eggs	0.1	0.1	0.2	16.7	67.2	15.7
Fruits and vegetables, all kinds	3.7	16.2	36.6	32.6	10.3	0.6
Cereals	0.1	0.2	0.8	17.5	44.7	36.7
Desserts	0.5	1.9	9.3	30.8	46.3	11.2
Salty snacks	0.1	0.1	1.2	11.3	53.9	33.3
Female						
Whole milk	4.9	11.8	15.2	20.5	23.0	24.6
Meat and poultry	0.1	1.0	26.1	55.4	16.8	0.5
Fish and shellfish	0.0	0.0	0.1	0.7	55.2	44.0
Eggs	0.0	0.0	0.2	14.2	66.1	19.4
Fruits and vegetables, all kinds	4.8	19.1	37.6	30.2	8.0	0.3
Cereals	0.0	0.1	0.4	14.4	44.9	40.2
Desserts	0.3	1.2	8.0	29.7	46.7	14.1
Salty snacks	0.1	0.2	0.7	9.0	49.3	40.6

Table 3 presents the data by race and sex.

Tables 4-9 show a decline of milk consumption with age. One-third of the children and youths aged 1-11 years reported consuming this food 3 times a day, while 22 percent of the youths 12-17 years reported this frequency; 9 percent of the 18-44 age group and 4 percent of adults aged 45-65 and over are so classified. One-third of the persons in age groups 45-64 years and 65 years and over reported seldom or never consuming milk.

Meat and poultry excluding organ meats.—Most Americans derive an abundant amount of nutrients from the meat and poultry group. The food frequency data from HANES reinforce the fact that America is a nation of "meat-eaters." Table 1 shows that approximately half of the white and black U.S. population eat meat or poultry once daily. Another 31 percent consume these foods twice a day, and approximately 2 percent consume foods from this group 3 times a day. Less than 1 percent of all age groups reported that they seldom or never eat meat or poultry.

Table 2 shows relatively more white and black females than males reported consuming these foods once a day, but relatively more white and black males than females reported consuming meat and poultry 2 times a day or more. Table 3 shows a higher percentage of white persons than black persons consume these foods once a day. However, relatively more black persons than white persons consume these foods 2 times a day or more.

Tables 4-9 show the percent of persons consuming meat and poultry once a day remains generally constant for all ages. The percent of persons consuming these foods twice a day increases with age until age 45 and then decreases in the remaining age groups.

Fish and shellfish.—Fish and shellfish can be used as an alternate for the meat and poultry

Table 3. Percent distribution of persons all ages 1-74 years by frequency of intake of selected food groups, according to sex and race: United States, 1971-74

Sex, race, and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
MALE						
White						
Whole milk	7.3	17.2	18.0	21.9	19.7	16.0
Meat and poultry	0.2	2.4	35.1	48.3	13.3	0.7
Fish and shellfish	0.0	0.0	0.1	1.1	52.8	46.0
Eggs	0.1	0.1	0.2	15.8	67.7	16.1
Fruits and vegetables, all kinds	3.7	16.8	37.6	32.3	9.1	0.5
Cereals	0.0	0.2	0.8	17.8	44.4	36.8
Desserts	0.5	2.0	9.5	31.1	46.1	10.9
Salty snacks	0.1	0.0	1.1	11.0	54.1	33.7
Black						
Whole milk	3.8	10.0	17.0	22.6	29.4	17.2
Meat and poultry	0.6	5.4	35.4	42.9	15.5	0.3
Fish and shellfish	0.0	0.0	0.0	1.3	55.4	43.2
Eggs	0.0	0.0	0.5	24.2	62.8	12.5
Fruits and vegetables, all kinds	3.4	11.8	28.2	35.0	20.7	1.0
Cereals	0.4	0.1	1.4	14.8	47.3	36.1
Desserts	0.5	1.2	7.6	28.9	48.2	13.6
Salty snacks	0.3	0.7	2.1	14.4	52.1	30.4
FEMALE						
White						
Whole milk	5.2	12.0	15.6	20.6	22.1	24.5
Meat and poultry	0.1	0.8	25.2	56.6	16.8	0.5
Fish and shellfish	0.0	0.0	0.0	0.7	54.2	45.0
Eggs	0.0	0.0	0.2	13.5	66.9	19.4
Fruits and vegetables, all kinds	5.0	19.9	38.6	29.3	7.0	0.3
Cereals	0.0	0.1	0.4	14.6	44.7	40.2
Desserts	0.3	1.2	8.2	29.8	46.5	14.1
Salty snacks	0.1	0.2	0.6	8.2	49.4	41.5
Black						
Whole milk	3.0	10.0	12.4	20.2	29.1	25.2
Meat and poultry	0.3	2.6	33.1	46.3	17.0	0.7
Fish and shellfish	0.0	0.0	0.1	0.5	62.8	36.5
Eggs	0.1	0.1	0.3	20.1	60.3	19.2
Fruits and vegetables, all kinds	3.6	13.5	30.1	36.7	15.5	0.5
Cereals	0.0	0.2	0.6	12.9	46.3	40.0
Desserts	0.1	1.6	6.9	28.7	48.0	14.6
Salty snacks	0.0	0.5	1.6	15.2	48.5	34.2

group. Table 1 shows that about 45 percent of the white and black U.S. population seldom or never eat fish or shellfish. For the population consuming these foods, 54 percent reported their consumption to be 1-6 times a week. Less than 1 percent of the white and black population consume fish and shellfish once daily.

Table 3 shows a consistent pattern of fish and shellfish consumption between the sexes and races. A slightly higher percentage of black females than males reported consuming fish and shellfish, and relatively more black persons reported eating these foods than white persons.

Eggs.—Table 1 shows that 18 percent of the white and black U.S. population reported they seldom or never consume eggs. For the remainder of the white and black population who do eat eggs, approximately 67 percent reported eating this food less than once daily but at least 1-6 times a week.

Table 2 shows a slightly higher percentage of males than females of both races consume eggs once a day. Table 3 shows relatively more black persons than white persons of both sexes consume this food once a day.

Tables 4-9 show the percent of persons consuming eggs once daily decreases with age until

Table 4. Percent distribution of persons aged 1-5 years by frequency of intake of selected food groups, according to race: United States, 1971-74

Race and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
Both races						
Whole milk	19.6	33.7	21.1	11.6	7.8	6.3
Meat and poultry	0.3	2.1	29.1	53.9	14.2	0.3
Fish and shellfish	0.0	0.0	0.1	0.7	51.7	47.5
Eggs	0.0	0.0	0.4	17.4	69.8	12.4
Fruits and vegetables, all kinds	7.2	22.8	34.6	27.1	7.8	0.5
Cereals	0.1	0.5	1.8	32.6	56.7	8.4
Desserts	0.6	3.4	15.3	40.0	36.9	3.8
Salty snacks	0.0	0.4	1.8	12.6	65.3	19.9
White						
Whole milk	20.2	34.3	20.8	11.0	7.1	6.5
Meat and poultry	0.3	1.7	28.4	55.4	13.9	0.3
Fish and shellfish	0.0	0.0	0.1	0.7	50.2	49.0
Eggs	0.0	0.0	0.4	17.2	69.6	12.9
Fruits and vegetables, all kinds	7.6	24.2	34.9	25.9	6.9	0.6
Cereals	0.1	0.4	1.8	32.1	56.8	8.7
Desserts	0.7	3.5	15.9	39.4	36.9	3.5
Salty snacks	0.0	0.4	1.8	10.7	64.9	22.1
Black						
Whole milk	15.5	29.6	22.9	15.2	11.9	4.9
Meat and poultry	0.5	4.7	33.1	45.7	15.9	0.2
Fish and shellfish	0.0	0.0	0.0	1.0	60.0	39.0
Eggs	0.1	0.1	0.6	18.5	71.0	9.7
Fruits and vegetables, all kinds	5.0	14.6	32.8	34.1	13.4	0.0
Cereals	0.0	0.8	1.5	35.2	55.9	6.6
Desserts	0.1	2.4	11.8	43.4	36.9	5.4
Salty snacks	0.1	0.0	1.9	24.0	67.3	6.7

Table 5. Percent distribution of persons aged 6-11 years by frequency of intake of selected food groups, according to race: United States, 1971-74

Race and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
Both races						
Whole milk	11.8	32.7	25.1	19.1	7.5	3.8
Meat and poultry	0.4	1.7	30.0	56.8	10.8	0.4
Fish and shellfish	0.0	0.0	0.1	0.7	56.1	43.0
Eggs	0.0	0.0	0.1	9.7	74.3	15.8
Fruits and vegetables, all kinds	4.2	18.8	40.6	29.5	6.8	0.2
Cereals	0.0	0.2	1.7	28.8	60.9	8.4
Desserts	0.3	3.0	15.1	44.8	34.4	2.4
Salty snacks	0.2	0.2	1.9	19.6	66.0	12.0
White						
Whole milk	13.2	35.0	24.6	17.4	5.9	3.9
Meat and poultry	0.4	1.5	28.5	58.2	11.0	0.4
Fish and shellfish	0.0	0.0	0.2	0.6	54.8	44.4
Eggs	0.0	0.0	0.0	8.7	75.2	16.1
Fruits and vegetables, all kinds	4.4	18.9	41.7	28.7	6.2	0.2
Cereals	0.0	0.3	1.7	29.2	60.4	8.4
Desserts	0.4	3.2	15.8	44.5	33.6	2.6
Salty snacks	0.1	0.2	1.6	18.6	66.6	12.9
Black						
Whole milk	3.2	19.1	28.4	28.9	17.3	3.2
Meat and poultry	0.1	2.5	39.1	48.3	9.8	0.3
Fish and shellfish	0.0	0.0	0.0	1.6	64.3	34.1
Eggs	0.1	0.1	0.8	16.2	68.5	14.2
Fruits and vegetables, all kinds	3.6	18.0	33.8	34.2	10.4	0.0
Cereals	0.1	0.0	1.6	26.1	63.8	8.4
Desserts	0.1	1.9	11.1	46.6	39.2	1.1
Salty snacks	0.8	0.1	4.0	26.1	62.6	6.4

age group 12-17 years, and increases in age groups 18 years and over.

Fruits and vegetables.—Table 1 shows that less than 1 percent of the white and black U.S. population reported they seldom or never consume fruits and vegetables. Four percent reported consuming these foods 4 times a day; 18 percent, 3 times a day; 37 percent, twice daily; 31 percent, at least once a day; and 9 percent reported consuming these foods 1-6 times a week. Relatively more black persons than white persons of all ages reported consuming these foods once a day. However, a higher percentage of white persons than black persons reported eating these foods 2 times or more a day.

Table 2 shows that, regardless of age or race, more males than females consume these foods once a day. However, generally more females of both races reported consuming these foods 2 times a day or more.

Tables 4-9 show that the percent of persons consuming these foods once a day increases from ages 1 through 44 and declines from ages

45 through 74. For each age group, a generally greater percentage of persons consume these foods twice daily rather than once daily.

Breakfast cereals.—Table 1 shows that 39 percent of the white and black U.S. population reported seldom or never consuming cereal, while only 16 percent reported consuming this food once daily. Forty-five percent of this population did report consuming cereal at least 1-6 times a week. There is little difference between the races in the percent of persons reporting cereal consumption.

Table 2 shows relatively more males than females of both races consume cereal once a day, and table 3 shows a slightly higher percentage of white persons consume cereal than black persons.

While 8 percent of the children aged 1-11 reported they seldom or never eat cereal (tables 4 and 5), 31 percent of the youths aged 12-17 (table 6) and an average of 44 percent of adults aged 18-74 (tables 7-9) are so classified.

Tables 4-9 show that the once-daily frequency of cereal consumption decreases with

Table 6. Percent distribution of persons aged 12-17 years by frequency of intake of selected food groups, according to race: United States, 1971-74

Race and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
Both races	Percent distribution					
Whole milk	11.4	22.2	22.9	20.1	15.7	7.7
Meat and poultry	0.2	2.0	34.3	48.6	14.4	0.5
Fish and shellfish	0.0	0.0	0.0	0.9	49.9	49.2
Eggs	0.1	0.1	0.1	8.7	65.3	25.7
Fruits and vegetables, all kinds	4.4	16.5	37.1	30.8	10.8	0.4
Cereals	0.2	0.2	1.0	16.0	51.8	30.9
Desserts	0.8	2.6	11.8	32.9	47.1	4.8
Salty snacks	0.2	0.4	1.9	15.8	65.8	16.0
White						
Whole milk	12.6	24.1	23.1	18.0	14.3	8.0
Meat and poultry	0.1	1.8	33.6	49.6	14.5	0.5
Fish and shellfish	0.0	0.0	0.0	0.8	49.2	49.9
Eggs	0.1	0.1	0.1	7.7	65.5	26.5
Fruits and vegetables, all kinds	4.8	17.3	37.4	30.6	9.5	0.4
Cereals	0.0	0.3	0.8	16.6	50.7	31.6
Desserts	0.7	2.6	11.6	33.4	46.7	5.0
Salty snacks	0.2	0.0	1.5	14.4	66.1	17.8
Black						
Whole milk	4.1	10.1	21.8	33.3	24.5	6.1
Meat and poultry	1.0	3.5	38.7	42.2	14.0	0.7
Fish and shellfish	0.0	0.0	0.0	1.1	54.4	44.5
Eggs	0.0	0.0	0.4	14.9	63.7	21.0
Fruits and vegetables, all kinds	2.3	11.2	35.2	31.8	18.9	0.6
Cereals	1.1	0.0	2.1	12.2	58.4	26.1
Desserts	1.5	2.7	12.9	29.9	49.5	3.5
Salty snacks	0.3	2.5	4.7	24.0	63.4	5.2

Table 7. Percent distribution of persons aged 18-44 years by frequency of intake of selected food groups, according to race: United States, 1971-74

Race and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
Both races						
Whole milk	2.7	8.5	15.0	22.4	27.4	24.0
Meat and poultry	0.2	2.6	35.1	49.1	12.6	0.5
Fish and shellfish	0.0	0.0	0.0	1.0	54.6	44.3
Eggs	0.0	0.1	0.2	16.1	66.3	17.3
Fruits and vegetables, all kinds	3.3	15.1	35.6	35.8	9.9	0.4
Cereals	0.0	0.0	0.1	8.0	38.1	53.8
Desserts	0.2	0.9	6.5	24.9	52.9	14.6
Salty snacks	0.1	0.1	0.7	9.6	55.5	34.0
White						
Whole milk	2.9	8.8	15.9	22.9	26.0	23.4
Meat and poultry	0.1	2.2	34.7	49.9	12.6	0.5
Fish and shellfish	0.0	0.0	0.0	1.1	54.2	44.7
Eggs	0.0	0.1	0.2	14.9	67.4	17.4
Fruits and vegetables, all kinds	3.2	15.7	36.6	35.5	8.7	0.3
Cereals	0.0	0.0	0.1	8.2	38.3	53.3
Desserts	0.2	0.9	6.6	25.2	52.9	14.2
Salty snacks	0.1	0.1	0.7	9.6	56.0	33.6
Black						
Whole milk	1.2	5.4	7.2	18.3	38.5	29.3
Meat and poultry	0.5	6.1	38.1	42.4	12.4	0.5
Fish and shellfish	0.0	0.0	0.1	0.5	58.3	41.0
Eggs	0.0	0.1	0.3	26.3	56.9	16.4
Fruits and vegetables, all kinds	3.5	9.6	27.6	38.8	19.7	0.9
Cereals	0.0	0.0	0.1	6.0	36.2	57.7
Desserts	0.0	1.2	5.4	22.1	53.2	18.1
Salty snacks	0.0	0.3	0.9	9.2	51.7	37.8

age regardless of race until age 45 and then increases in the remaining age groups. The percents of persons consuming cereal in the age group 45-64 and those 65 years and over are very similar to those for age groups 12-17 and 6-11, respectively.

Desserts includes cakes, pies, cookies, puddings, ice cream, etc.—Table 1 shows that about one-third of the white and black U.S. population consume desserts once daily, and more than 45 percent eat these foods at least 1-6 times a week. Table 3 shows a slightly higher percentage of white persons than black persons consume desserts either once or twice a day. Tables 4-9 show that dessert consumption generally declines with age.

Salty snack foods excluding nuts.—Table 1 shows that 10 percent of the white and black U.S. population consume salty snack foods once daily, while more than 50 percent consume these foods 1-6 times a week. Thirty-seven percent reported that they seldom or never con-

sume these foods. Relatively more black persons than white persons reported eating these foods once a day.

Table 2 shows that a slightly higher percent of males than females of both races consume salty snack foods once or twice a day. Table 3 shows a higher percentage of black persons than white persons consume salty snack foods once daily and, for the same category, almost twice as many black females as white females consume these foods.

Tables 4-6 show that salty snack foods are consumed most frequently by children and youths of ages 1-17, with only an average of 16 percent reporting they seldom or never eat these foods. An average of 16 percent of these ages consume salty snack foods once daily, while another 66 percent reported eating these foods at least 1-6 times a week. On the other hand, tables 7-9 show that an average of 5 percent of the adults of ages 18-74 reported consuming salty snack foods once daily, 36 percent reported 1-6 times a week, and 58 percent stated they seldom or never consume these foods.

Table 8. Percent distribution of persons aged 45-64 years by frequency of intake of selected food groups, according to race: United States, 1971-74

Race and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
Both races						
Whole milk	1.1	4.0	10.7	23.4	28.1	32.7
Meat and poultry	0.1	0.8	25.1	53.7	19.7	0.7
Fish and shellfish	0.0	0.0	0.0	1.1	57.7	41.2
Eggs	0.1	0.0	0.2	18.7	65.0	16.0
Fruits and vegetables, all kinds	4.9	19.9	38.4	28.0	8.5	0.4
Cereals	0.0	0.0	0.3	13.2	40.1	46.3
Desserts	0.4	0.7	5.3	27.2	45.9	20.6
Salty snacks	0.0	0.1	0.1	4.1	32.3	63.4
White						
Whole milk	1.1	4.2	11.0	24.3	27.4	32.0
Meat and poultry	0.1	0.8	25.2	54.2	19.1	0.7
Fish and shellfish	0.0	0.0	0.0	1.1	57.2	41.6
Eggs	0.1	0.1	0.2	18.2	65.4	16.0
Fruits and vegetables, all kinds	5.0	20.3	40.0	27.1	7.2	0.4
Cereals	0.1	0.0	0.2	13.8	40.1	45.9
Desserts	0.4	0.8	5.7	27.9	45.5	19.8
Salty snacks	0.0	0.1	0.1	3.8	33.1	62.8
Black						
Whole milk	0.6	1.3	8.0	14.6	35.6	39.9
Meat and poultry	0.0	1.0	23.7	48.8	25.8	0.7
Fish and shellfish	0.0	0.0	0.0	1.0	62.5	36.5
Eggs	0.0	0.0	0.2	24.1	60.0	15.7
Fruits and vegetables, all kinds	4.0	15.6	21.4	36.4	21.6	1.1
Cereals	0.0	0.1	0.9	7.3	40.9	50.7
Desserts	0.0	0.1	0.9	20.2	50.1	28.7
Salty snacks	0.0	0.0	0.1	6.6	23.6	69.6

Table 9. Percent distribution of persons aged 65 years and over by frequency of intake of selected food groups, according to race: United States, 1971-74

Race and food group	Frequency of intake					
	4 times or more a day	3 times a day	2 times a day	Once a day	1-6 times a week	Seldom or never
	Percent distribution					
Both races						
Whole milk	0.6	4.1	10.8	25.7	26.0	32.8
Meat and poultry	0.1	0.6	17.4	53.6	26.8	1.5
Fish and shellfish	0.0	0.0	0.1	0.7	47.7	51.5
Eggs	0.1	0.0	0.4	21.4	58.8	19.3
Fruits and vegetables, all kinds	3.7	19.9	38.8	27.0	9.6	1.0
Cereals	0.0	0.1	0.6	25.4	41.3	32.6
Desserts	0.1	0.7	5.9	27.2	44.9	21.2
Salty snacks	0.0	0.1	0.4	2.5	21.4	75.6
White						
Whole milk	0.6	4.3	11.1	26.3	25.7	32.0
Meat and poultry	0.1	0.5	17.7	54.6	25.6	1.5
Fish and shellfish	0.0	0.0	0.1	0.7	46.9	52.3
Eggs	0.1	0.0	0.4	20.6	59.6	19.3
Fruits and vegetables, all kinds	3.9	20.8	39.8	26.2	8.5	0.9
Cereals	0.0	0.1	0.5	26.5	41.7	31.0
Desserts	0.1	0.7	6.1	28.0	44.3	20.8
Salty snacks	0.0	0.1	0.5	2.6	21.9	74.9
Black						
Whole milk	0.4	2.0	8.1	20.2	28.9	40.3
Meat and poultry	0.1	1.8	14.7	43.0	39.3	1.1
Fish and shellfish	0.0	0.0	0.0	0.6	56.5	42.9
Eggs	0.0	0.1	0.2	29.9	50.3	19.5
Fruits and vegetables, all kinds	1.9	10.4	28.0	35.5	21.6	2.6
Cereals	0.0	0.0	0.7	13.1	37.3	48.9
Desserts	0.5	0.0	4.1	19.1	51.1	25.2
Salty snacks	0.0	0.6	0.0	1.3	16.0	82.1

TECHNICAL NOTES

The sampling plan of the Health and Nutrition Examination Survey (HANES) followed a highly stratified multistage probability design in which a sample was selected of the civilian noninstitutionalized population of ages 1-74 of the coterminous United States. Successive elements dealt with in the process of sampling were the primary sampling unit, census enumeration district, segment (cluster of households), household, eligible person, and, finally, sample person. The sampling design focused special attention on groups of people known to be at greater risk of malnutrition by oversampling these groups—preschool children, women of childbearing ages, the poor, and the elderly.

The food frequency intake values are shown as population estimates, that is, the dietary intake findings for each individual have been "weighted" by the reciprocal of the probability of selecting the person. An adjustment for persons in the sample who were not examined and poststratified ratio adjustments were also made so that the final sampling estimates of the population size are brought into closer alignment with the independent U.S. Bureau of the Census estimates for the civilian noninstitutionalized population of the United States as of November 1, 1972, by race, sex, and age.

SYMBOLS

Data not available	---
Category not applicable	...
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

advancedata
FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ▪ Public Health Service | Number 22 ▪ March 22, 1978

Office Visits by Persons Aged 65 and Over: National Ambulatory Medical Care Survey, United States, 1975[1]

In 1975 there were an estimated 93 million visits made to office-based physicians by persons aged 65 years and over. This represents an annual rate of 426 visits per 100 persons per year.

These and other preliminary data about visits by persons 65 years and over are presented in this report from the 1975 National Ambulatory Medical Care Survey (NAMCS). NAMCS is a probability sample survey conducted by the Division of Health Resources Utilization Statistics of the National Center for Health Statistics. A complete description of the background and survey methodology is available in an earlier report entitled "National Ambulatory Medical Care Survey: Background and Methodology, United States, 1967-72."[2]

The reader may find it useful to refer to the facsimile of the "Patient Record", figure 1, in Advance Data No. 12 as selected aspects of the survey findings are discussed. The "Patient Record" was used by participating physicians to record information about their office encounters.

DATA HIGHLIGHTS

During 1975 there were an estimated 568 million patient visits to the offices of all physicians within the scope of NAMCS. Persons aged 65 years and over accounted for 93 million, or 16 percent, of these visits.

From table 1 the reader can compare office visits made by persons in various age-sex groups. The visit rate increased considerably with age for both sexes, yet the difference between the sexes decreased in the oldest age groups.

It should be noted that in this report the descriptors "elderly," "aged persons," and "persons aged 65 years and over" are used synonymously.

Tables 2-9 describe visits made by persons aged 65 years and over according to selected characteristics of the visitor and of the physician. For each characteristic, the visit experience of aged persons is compared with that of persons under 65. The data show that the visit experience of aged persons differed markedly from that of persons under 65. Compared with younger patients, the elderly

- Had more return visits for the same problems.
- Were twice as likely to have a chronic condition.
- Visited internists more frequently.

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[1] This report prepared by Raymond O. Gagnon, Division of Health Resources Utilization Statistics.

[2] National Center for Health Statistics: National Ambulatory Medical Care Survey: Background and Methodology, United States, 1967-72, by J. B. Tenney and others. *Vital and Health Statistics.* Series 2-No. 61. DHEW Pub. No. (HRA) 76-1335. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1974.

Table 1. Annual rate of visits to office-based physicians by age and sex of visitors: United States, 1975

Sex	Age						
	All ages	Under 15 years	15-24 years	25-44 years	45-64 years	65 years and over	Under 65 years of age
	Number of visits per 100 persons per year						
Both sexes	273	189	222	275	343	426	255
Male	222	198	150	191	284	399	205
Female	322	180	294	356	396	445	305

[1]The base populations used in computing the rates are national estimates published by the U.S. Bureau of the Census for the civilian noninstitutionalized population as of July 1, 1975, in Series P25 and P26 of Current Population Reports.

- Had a substantially greater proportion of visits when the problem was reported by the physician as being serious or very serious.
- Had a much smaller proportion of visits when no followup was planned.
- Had an EKG or blood pressure check more often.
- Had a much greater proportion of visits for diseases of the circulatory system.

Table 2 shows visits for the two age groups in terms of sex, prior visit status, and nature of the problem or reason for the visit. Statistics on prior visit status reflect more return visits for the same problems among the older group. For persons under 65 years of age, 84 percent of the visits were return visits and 70 percent of these were for the same problem. For persons 65 years or older, 92 percent of the visits were return visits and 83 percent of these were for the same problem.

Also accompanying an increase in age was an increase in the prevalence of chronic conditions. It is apparent from table 3, where visits for acute and chronic conditions are distributed among several age groups, that the proportion of visits for chronic conditions increases dramatically with age. In addition table 2 shows that the nature of the problem for aged persons was considered to be chronic in 62 percent of the visits; for persons under age 65, the problems were considered to be chronic in only 31 percent of the visits.

Table 4 shows visits by persons 65 and over and persons under 65 according to physician specialty and type of practice. The two distributions are very similar except for the proportion of visits to internists. For persons 65 and over, 1

Table 2. Number and percent distribution of office visits made by persons 65 years and over and percent distribution of office visits made by persons under 65 years by sex of visitor, prior visit status, and nature of the problem: United States, 1975

Sex of visitor, prior visit status, and nature of the problem	Office visit		
	65 years and over	65 years and over	Under 65 years
	Number in thousands	Percent distribution	
All visits	93,061	100.0	[1]100.0
Sex of visitor			
Female	57,339	61.6	60.2
Male	35,721	38.4	39.8
Prior visit status			
Patient seen for first time	7,857	8.4	16.2
Patient seen before:			
New problem	14,889	16.0	24.9
Old problem	70,314	75.6	58.9
Nature of problem			
Morbid condition:			
Acute condition:			
Initial visit	19,603	21.1	33.7
Followup	11,254	12.1	12.4
Chronic condition:			
Routine	43,151	46.4	21.8
Flareup	14,694	15.8	9.5
Other problem or reason for visit	4,358	4.7	22.6

[1]Based on an estimated 474,540,000 visits.

Table 3. Percent of visits to office-based physicians by age of visitor and selected reasons for visit: United States, 1975

Reason for visit	Age of visitor					
	All ages	Under 15 years	15-24 years	25-44 years	45-64 years	65 years and over
	Percent					
Acute conditions	43.9	57.7	46.3	44.1	39.8	33.2
Chronic conditions	36.4	15.6	20.6	30.5	49.1	62.2

Table 4. Number and percent distribution of office visits made by persons 65 years and over and percent distribution of office visits made by persons under 65 years by physician specialty and type of practice: United States, 1975

Physician specialty and type of practice	Office visit		
	65 years and over	65 years and over	Under 65 years
	Number in thousands	Percent distribution	
All visits	93,061	100.0	[1]100.0
Physician specialty			
General and family practice	42,343	45.5	40.5
Internal medicine	17,925	19.3	9.3
General surgery	7,335	7.9	7.2
Ophthalmology	6,429	6.9	3.8
Cardiovascular diseases	3,177	3.4	0.9
Urology	3,175	3.4	1.6
Otolaryngology	2,231	2.4	3.0
Dermatology	2,173	2.3	2.5
Orthopedic surgery	1,750	1.9	3.7
Obstetrics and gynecology	1,132	1.2	9.9
Other specialties	5,388	5.8	17.6
Type of practice			
Solo	60,677	65.2	58.8
Other[2]	32,383	34.8	41.2

[1]Based on an estimated 474,540,000 visits.
[2]Includes partnership and group practices.

out of every 5 visits in 1975 was made to an internist compared with about 1 out of 11 for persons under 65.

Table 5 contains data on seriousness of problems and disposition and duration of patient visits. Seriousness refers to the physician's clinical judgment as to the extent of the patient's impairment that might result if no care were available. About 29 percent of the visits by persons 65 years and over were reported by the physician as being serious or very serious compared with 17 percent of the visits by persons under 65 years.

Disposition refers to the physician's disposition of the visit in terms of the seven specific alternatives listed in item 11 on the patient record. The only differences between the age groups 65 and over and under 65 occurred when the final disposition was either "return at a specified time" or "no followup planned." For the group 65 and over the final instruction to "return at a specified time" occurred in 7 out of every 10 visits compared with 6 out of 10 visits for those under 65. On the other hand, "no followup planned" was the final instruction in 6 percent of the visits by persons 65 and over; for

Table 5. Number and percent distribution of office visits made by persons 65 years and over and percent distribution of office visits made by persons under 65 years by seriousness of the problem and disposition of the patient visit: United States, 1975

Seriousness of the problem and disposition of the patient visit	Office visit		
	65 years and over	65 years and over	Under 65 years
	Number in thousands	Percent distribution	
All visits	93,061	100.0	[1]100.0
Seriousness of problem			
Not serious	32,560	35.0	51.5
Slightly serious	33,111	35.6	31.7
Serious or very serious	27,389	29.4	16.8
Disposition of visit[2]			
Return at specified time	65,198	70.1	57.1
Return if needed	17,827	19.2	22.9
No followup planned	5,615	6.0	14.5
Telephone followup planned	2,836	3.1	3.8
Referred to other physician agency	2,753	3.0	2.8
Admitted to hospital	2,510	2.7	2.0
Returned to referring physician	1,018	1.1	0.9
Duration of visit[3]			
No face-to-face encounter with physician	1,291	1.4	1.2
1-5 minutes	11,083	11.9	17.0
6-10 minutes	25,078	27.0	32.1
11-15 minutes	28,495	30.6	26.0
16-30 minutes	22,545	24.2	17.9
31 minutes or more	4,568	4.9	5.8

[1]Based on an estimated 474,540,000 visits.
[2]Percents will add to more than 100 because some patients required more than one disposition.
[3]Time spent in face-to-face encounter between physician and patient.

persons under 65, it was the final instruction in 15 percent of the visits.

Duration of visit refers to the time the physician spent in face-to-face contact with the patient. For the aged the duration of visit was not much different from that of persons under 65 years of age. Six out of 10 visits by the elderly lasted 11 minutes or more compared with 5 out of 10 visits for persons under 65 years of age. The mean duration of visit for the elderly was 16 minutes; for those under 65 the mean was 15 minutes.

Table 6. Number and percent of office visits made by persons 65 years and over and percent of office visits made by persons under 65 years by diagnostic and therapeutic services most frequently ordered or provided: United States, 1975

Diagnostic and therapeutic services most frequently ordered or provided	Office visit		
	65 years and over[1]	65 years and over[1]	Under 65 years[2]
Diagnostic services	Number in thousands	Percent	
Limited history, exam	51,200	55.0	50.6
Blood pressure check	44,812	48.2	30.2
Clinical lab test	23,133	24.9	22.5
General history, exam	11,039	11.9	16.5
X-ray	7,007	7.5	7.3
EKG	6,155	6.6	2.8
Vision test	5,620	6.0	4.4
Endoscopy	1,765	1.9	1.0
Hearing test	912	1.0	1.4
Therapeutic services			
Drug prescribed	44,289	47.6	43.7
Injection	15,654	16.8	13.2
Medical counseling	11,220	12.1	12.3
Office surgery	5,833	6.3	6.8
Immunization, desensitization	2,603	2.8	4.9
Psychotherapy, therapeutic listening	2,346	2.5	4.6
Physiotherapy	2,285	2.5	2.2

[1]Based on an estimated 93,061,000 visits.
[2]Based on an estimated 474,540,000 visits.

Table 6 contains data on the diagnostic and therapeutic services provided. The distribution of visits by diagnostic and therapeutic services for persons 65 years and over was not unlike that for persons under 65 except for two procedures. The blood pressure check was rendered to persons 65 and over in about half the visits compared with a third of the visits for persons in the age group under 65. In addition, an EKG was provided at 7 percent of the visits by the elderly compared with 3 percent of the visits by persons under 65.

Data on the diagnosis associated with each ambulatory visit are shown in table 7 by classes of the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States (ICDA).*[3] Although the diagnoses rendered to persons 65 years and over covered a broad spectrum of conditions, four of the ICDA classes accounted for more than half (53 percent) of all visits. These are shown in figure 1. Diseases of the circulatory system accounted for 1 out of every 4 visits by older persons compared with 1 out of every 15 visits for persons under 65 years.

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[3]National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the United States.* PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office. 1967.

Table 7. Number and percent distribution of office visits made by persons 65 years and over and percent distribution of office visits made by all persons by physician diagnoses in diagnostic groups: United States, 1975

ICDA group and code for diagnosis[1]	Office visit		
	65 years and over	65 years and over	Under 65 years
	Number in thousands	Percent distribution	
All diagnoses	93,061	100.0	[2]100.0
Infective and parasitic diseases—000-136	1,909	2.1	4.4
Neoplasms—140-239	3,862	4.2	2.0
Endocrine, nutritional, and metabolic diseases—240-279	5,895	6.3	3.9
Diseases of blood and blood forming organs—280-289	1,809	1.9	0.6
Mental disorders—290-315	2,353	2.5	4.8
Diseases of nervous system and sense organs—320-389	8,709	9.4	7.6
Diseases of circulatory system—390-458	24,134	25.9	6.8
Diseases of respiratory system—460-519	7,776	8.4	15.3
Diseases of digestive system—520-577	4,463	4.8	3.3
Diseases of genitourinary system—580-629	5,074	5.5	6.9
Diseases of skin and subcutaneous tissue—680-709	3,346	3.6	5.3
Diseases of musculoskeletal system and connective tissue—710-738	8,647	9.3	5.1
Symptoms and ill-defined conditions—780-796	3,457	3.7	4.8
Accidents, poisoning, and violence—800-999	4,191	4.5	7.7
Special conditions and examinations without illness—Y00-Y13	6,399	6.9	19.9
Diagnosis given as "none" or diagnosis unknown[3]	879	0.9	1.1
All other categories[4]	*157	0.2	0.7

[1]Diagnostic groupings and codes are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

[2]Based on an estimated 474,540,000 visits.

[3]Blank diagnosis; noncodable diagnosis; illegible diagnosis.

[4]280-289, Diseases of the blood and blood-forming organs; 630-678, Complications of pregnancy, childbirth,and the puerperium; 740-759, Congenital anomalies; 760-779, Certain causes of perinatal morbidity and mortality.

Figure 1. DIAGNOSES ACCOUNTING FOR 53 PERCENT OF VISITS TO OFFICE-BASED PHYSICIANS BY PERSONS 65 AND OVER: UNITED STATES, 1975

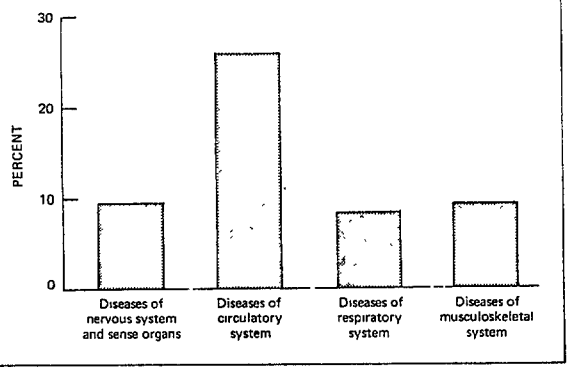

Table 8 contains more specific information on diagnoses, listing the 20 most frequent ICDA three-digit categories of the principal diagnosis given by the physician during visits made by persons 65 years and over. The most frequently rendered diagnoses are essential benign hypertension, chronic ischemic heart disease, and diabetes mellitus, accounting for 20 percent of all the diagnoses. These diagnoses accounted for only 5 percent of the visits by persons under 65.

Table 9 presents data on the most frequent problems, complaints, or symptoms presented by persons 65 years and older to office-based physicians. These data reflect the reasons for seeking care in the patients' own words. The most frequent reasons given by older people for visiting office-based physicians were lower extremity problems, surgical aftercare, fatigue, back problems, and high blood pressure. Together these reasons accounted for 20 percent of all visits by persons 65 and over compared with 14 percent of the visits for persons in the age group under 65.

Table 8. Number, percent, and cumulative percent of office visits made by persons 65 years and over by the 20 most frequent ICDA three-digit categories of principal diagnosis: United States, 1975

	20 most frequent diagnoses and ICDA codes[1]	Number of visits in thousands	Percent of visits	Cumulative percent
1.	Essential benign hypertension----------401	7,756	8.3	8.3
2.	Chronic ischemic heart disease----------412	6,988	7.5	15.8
3.	Diabetes mellitus----------250	4,195	4.5	20.3
4.	Medical and surgical aftercare----------Y10	3,883	4.2	24.5
5.	Osteoarthritis and allied conditions----------713	2,811	3.0	27.5
6.	Symptomatic heart disease----------427	2,128	2.3	29.8
7.	Arthritis, unspecified----------715	1,896	2.0	31.8
8.	Cataract----------374	1,424	1.5	33.3
9.	Medical or special exam----------Y00	1,341	1.4	34.7
10.	Neuroses----------300	1,336	1.4	36.1
11.	Glaucoma----------375	1,127	1.2	37.3
12.	Other and unspecified anemias----------285	1,113	1.2	38.5
13.	Emphysema----------492	1,108	1.2	39.7
14.	Other eczema and dermatitis----------692	1,091	1.2	40.9
15.	Synovitis, bursitis, and tenosynovitis-------731	989	1.1	42.0
16.	Arteriosclerosis----------440	983	1.1	43.1
17.	Acute upper respiratory infections of multiple or unspecified site----------465	952	1.0	44.1
18.	Other diseases of eye----------378	879	0.9	45.0
19.	Bronchitis, unqualified----------490	816	0.9	45.9
20.	Refractive errors----------370	774	0.8	46.7

[1] Diagnostic categories and code numbers are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

Table 9. Number, percent, and cumulative percent of office visits made by persons 65 years and over by the 20 most frequent patient problems: United States, 1975

	20 most frequent patient problems and NAMCS codes[1]	Number of visits in thousands	Percent of visits	Cumulative percent
1.	Progress visits----------980,985	13,482	14.5	14.5
2.	Problems of lower extremity----------400	5,049	5.4	19.9
3.	Surgical aftercare----------986	3,939	4.2	24.1
4.	Fatigue----------004	3,875	4.2	28.3
5.	Problems of back----------415	2,795	3.0	31.3
6.	High blood pressure----------205	2,711	2.9	34.2
7.	Pain in chest----------322	2,653	2.9	37.1
8.	Abdominal pain----------540	2,570	2.8	39.9
9.	Vertigo----------069	2,464	2.7	42.6
10.	Shortness of breath----------306	2,453	2.6	45.2
11.	Problems of upper extremity----------405	2,056	2.2	47.4
12.	Vision dysfunction, except blindness----------701	1,883	2.0	49.4
13.	General physical examination----------900	1,759	1.9	51.3
14.	Visit for medication----------910	1,691	1.8	53.1
15.	Eye examination----------908	1,586	1.7	54.8
16.	Cough----------311	1,582	1.7	56.5
17.	Arthritis-rheumatism----------427	1,278	1.4	57.9
18.	Headache----------056	1,257	1.4	59.3
19.	Problems of face, neck----------410	1,157	1.2	60.5
20.	Diabetes mellitus----------991	1,107	1.2	61.7

[1]Symptomatic categories and code number inclusions are based on a symptom classification developed for use in NAMCS.

SYMBOLS

Data not available	---
Category not applicable	...
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

TECHNICAL NOTES

SOURCE OF DATA: Data presented in this report were obtained during 1975 through the National Ambulatory Medical Care Survey (NAMCS). The target population of NAMCS encompasses office visits within the conterminous United States made by ambulatory patients to physicians who are principally engaged in office practice.

SAMPLE DESIGN: The 1975 NAMCS utilized a multistage probability design that involved samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within practices. Within the 87 PSU's composing the first stage of selection, a sample of approximately 3,500 physicians was selected from master files maintained by the American Medical Association and the American Osteopathic Association. Sampled physicians, randomly assigned to 1 of the 52 weeks in the survey year, were requested to complete Patient Records (brief encounter forms) for a systematic random sample of office visits taking place within their practice during the assigned reporting period. (A facsimile of the Patient Record used is shown in a previous issue of *Advance Data From Vital and Health Statistics*, No. 12, October 12, 1977.) Additional data concerning physician practice characteristics such as primary specialty and type of practice were obtained during an induction interview.

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SAMPLING ERRORS: Since the estimates for this report are based on a sample rather than the entire universe, they are subject to sampling variability. The standard error is primarily a measure of sampling variability. 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 percent of the estimate. Relative standard errors of selected aggregate statistics are shown in table I. The standard errors appropriate for the estimated percentages of office visits are shown in table II.

ROUNDING: Aggregate estimates of office visits presented in the tables are rounded to the nearest thousand. The rates and percents, however, were calculated on the basis of original, unrounded figures. Due to rounding of percents, the sum of percentages may not equal 100.0 percent.

Table I. Approximate relative standard errors of estimated numbers of office visits

Estimate in thousands	Relative standard error in percentage points
500	30.1
1,000	21.4
2,000	15.3
5,000	10.0
10,000	7.5
30,000	5.1
100,000	4.0
550,000	3.5

Example of use of table: An aggregate of 80,000,000 has a relative standard error of 4.3 percent or a standard error of 3,440,000 (4.3 percent of 80,000,000).

Table II. Approximate standard errors of percentages for estimated numbers of office visits

Base of percentage (number of visits in thousands)	Estimated percentage					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
1,000	2.1	4.6	6.3	8.5	9.7	10.6
3,000	1.2	2.7	3.7	4.9	5.6	6.1
5,000	0.9	2.1	2.8	3.8	4.3	4.7
10,000	0.7	1.5	2.0	2.7	3.1	3.3
50,000	0.3	0.7	0.9	1.2	1.4	1.5
100,000	0.2	0.5	0.6	0.8	1.0	1.1
500,000	0.1	0.2	0.3	0.4	0.4	0.5

Example of use of table: An estimate of 30 percent based on an aggregate of 75,000,000 has a standard error of 1.2 percent. The relative standard error of 30 percent is 4.0 percent (1.2 percent÷30 percent).

DEFINITIONS: An *ambulatory patient* is an individual presenting himself for personal health services who is neither bedridden nor currently admitted to any health care institution on the premises.

An *office* is a place that the physician identifies as a location for his ambulatory practice. Responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than an institution.

A *visit* is a direct personal exchange between an ambulatory patient and a physician or a staff member working under the physician's supervision for the purpose of seeking care and rendering health services.

A *physician* is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) currently in practice who spends time in caring for ambulatory patients at an office location. Excluded from NAMCS are physicians who specialize in anesthesiology, pathology, radiology; physicians who are Federally employed; physicians who treat only institutionalized patients; physicians employed full time by an institution; and physicians who spend no time seeing ambulatory patients.

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FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ▪ Public Health Service | Number 23 ▪ March 24, 1978

Office Visits to General Surgeons: National Ambulatory Medical Care Survey, United States, 1975[1]

In 1975 there were an estimated 41.3 million visits made to office-based physicians specializing in general surgery, resulting in an average of 20 visits per 100 persons per year.

These and other preliminary data about visits to general surgeons are presented in this brief report from the 1975 National Ambulatory Medical Care Survey (NAMCS). NAMCS is conducted by the Division of Health Resources Utilization Statistics of the National Center for Health Statistics. The sampling frame for the survey is a list of licensed physicians in "office-based, patient care" practice compiled from files that are classified and maintained by the American Medical Association (AMA) and the American Osteopathic Association (AOA). NAMCS currently excludes physicians practicing in Alaska and Hawaii as well as physicians specializing in anesthesiology, pathology, or radiology and all physicians who are Federally employed.

A complete description of the background and survey methodology is available in an earlier report entitled "National Ambulatory Medical Care Survey: Background and Methodology, United States, 1967-72."[2]

DATA HIGHLIGHTS

The 41.3 million patient visits to general surgeons in 1975 represent about 7 percent of the total 567.6 million visits made by Americans to all physicians engaged in office-based patient care. From table 1 the reader can compare visits to general surgeons with those made to physicians in the other largest specialties.

Table 1. Number and rate of visits per 100 persons per year, by selected specialties: United States, 1975

Physician specialty	Number of visits in thousands	Number of visits per 100 persons per year[1]
All specialties--	567,600	273
General and family practice----------	234,660	113
Internal medicine--	62,117	30
Obstetrics and gynecology--------	48,076	23
Pediatrics---------	46,684	22
GENERAL SURGERY----	41,292	20
Psychiatry---------	14,806	7

[1]The base populations used in computing the rates are national estimates published by the U.S. Bureau of the Census for the civilian noninstitutionalized population as of July 1, 1975, in Series P-25 and P-26 of Current Population Reports.

[1]This report prepared by Raymond O. Gagnon, Division of Health Resources Utilization Statistics.

[2]National Center for Health Statistics: National Ambulatory Medical Care Survey: Background and Methodology, United States, 1967-72, by J. B. Tenney and others. *Vital and Health Statistics.* Series 2-No. 61. DHEW Pub. No. (HRA) 76-1335. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1974.

Of the 41.3 million patient visits to general surgeons, 64 percent were made to solo practitioners and 36 percent were made to surgeons in other types of practice (table 2). The data in table 2 also show that 6 of every 10 visits to general surgeons were made by females. The largest proportion of visits (about one-third) was made by persons in the 45-64 year age group.

As shown in tables 2 and 3, patient visits to surgeons in standard metropolitan statistical areas outnumber those to surgeons in nonmetropolitan areas by almost 3 to 1 (72 to 28 percent, respectively). As with other specialties, the distribution of visits by location of practice parallels the distribution of physicians (table 3).

Table 4 lists—in order of frequency—the 15 most common patient problems, complaints, or symptoms encountered by the general surgeon in his office practice.[3] This information represents the patient's reason for seeking care as expressed in the patient's own words. These 15 problems accounted for more than half of the visits to general surgeons. The primary need of patients visiting general surgeons in 1975 was "surgical aftercare," which accounted for 21 percent of the visits. Surgical aftercare includes cast and/or suture removal or inspection as well as other types of care which come under the general heading of postoperative care.

Table 5 distributes office visits to general surgeons by seriousness of the patient's problem, prior visit status, and duration of the visit. Seriousness refers to the physician's clinical judgment as to the extent of impairment that might result if care were not available to the patient. About half the problems presented to general surgeons were considered "not serious" by the surgeons, and 18 percent were "very serious" or "serious." Concerning prior visit status, about 84 percent of the visits were made by patients who had been seen before, and three-fourths of these had been seen for the same problem.

Data on duration of visit show that the typical encounter between patient and general surgeon lasted 13 minutes. In this survey duration means the amount of time the physician spent in face-to-face contact with the patient. The data also show that 56 percent of the visits lasted under 11 minutes.

Table 2. Number and percent distributions of office visits to general surgeons by selected variables: United States, 1975

Selected variable	Number of visits in thousands	Percent distribution
All visits---	41,292	100.0
Type of practice		
Solo---	26,241	63.5
Other[1]---	15,051	36.5
Location of practice		
Metropolitan areas---	29,803	72.2
Nonmetropolitan areas---	11,489	27.8
Sex of patient		
Male---	16,394	39.7
Female---	24,898	60.3
Age of patient		
Under 25 years---	8,039	19.5
25-44 years---	11,863	28.7
45-64 years---	14,055	34.0
65 years and over---	7,335	17.8

[1]Includes partnership and group practices.

In NAMCS diagnoses are coded according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*[4] (ICDA). Table 6 presents data on the nine most common diagnoses rendered by general surgeons, which accounted for about one-third of their total visits. The most frequent diagnoses were "medical and surgical aftercare" and "essential benign hypertension." Together

[3]Excluded from the table are progress visits for followup care other than surgical aftercare.

[4]National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the United States.* PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

Table 3. Number and percent distributions of visits to office-based physicians by location of practice, according to selected specialties: United States, 1975

Selected physician specialty	Number in thousands	Location of practice		
		Total	Metropolitan area	Non-metropolitan area
		Percent distribution		
All physicians	567,600	100.0	73	27
General surgery	41,292	100.0	72	28
General and family practice	234,660	100.0	58	42
Internal medicine	62,117	100.0	85	15
Pediatrics	46,684	100.0	89	11
Obstetrics and gynecology	48,076	100.0	82	18

Table 4. Number, percent, and cumulative percent of office visits to general surgeons, by the 15 most frequent patient problems, complaints, or symptoms: United States, 1975

	15 most frequent patient problems, complaints, or symptoms, and NAMCS codes[1]	Number of visits in thousands	Percent of visits	Cumulative percent
1.	Surgical aftercare[2]-986	8,486	20.6	20.6
2.	Problems of lower extremity-400	2,048	5.0	25.6
3.	Abdominal pain-540	1,895	4.6	30.2
4.	Swelling or mass of skin-115	1,651	4.0	34.2
5.	Problems of upper extremity-405	1,448	3.5	37.7
6.	Lump or mass of breast-680	1,094	2.7	40.4
7.	Wounds of skin-116	1,092	2.6	43.0
8.	Weight gain-010	929	2.3	45.3
9.	Problems of back-415	837	2.0	47.3
10.	Abdominal swelling-542	762	1.8	49.1
11.	Anus, rectal problems-560	751	1.8	50.9
12.	Throat soreness-520	660	1.6	52.5
13.	Fatigue-004	647	1.6	54.1
14.	Pain in chest-322	576	1.4	55.5
15.	High blood pressure-205	538	1.3	56.8

[1]Symptomatic groupings and code number inclusions are based on a symptom classification developed for use in NAMCS.

[2]Includes: cast-change or removal; suture removal or inspection.

Table 5. Number and percent distributions of office visits to general surgeons by seriousness of problem, prior visit status, and duration of visit: United States, 1975

Seriousness of problem, prior visit status, and duration of visit	Number of visits in thousands	Percent distribution
All visits	41,292	100.0
Seriousness of problem		
Serious and very serious	7,442	18.0
Slightly serious	11,883	28.8
Not serious	21,967	53.2
Prior visit status		
New patient	6,538	15.8
Return patient:		
New problem	7,881	19.1
Old problem	26,874	65.1
Duration of visit		
Less than 6 minutes	9,034	21.9
6-10 minutes	13,928	33.7
11-15 minutes	10,747	26.0
16 minutes or more	7,583	18.4

Table 6. Number, percent, and cumulative percent of office visits to general surgeons, by the 9 most frequent ICDA 3-digit categories containing the principal diagnosis: United States, 1975

	9 most frequent diagnoses and ICDA codes[1]	Number of visits in thousands	Percent of visits	Cumulative percent of visits
1.	Medical and surgical aftercare—Y10	6,992	16.9	16.9
2.	Essential benign hypertension—401	1,242	3.0	19.9
3.	Chronic cystic disease of breast—610	957	2.3	22.2
4.	Obesity—277	926	2.2	24.4
5.	Inguinal hernia without mention of obstruction—550	874	2.1	26.5
6.	Acute upper respiratory infection—465	734	1.8	28.3
7.	Diseases of sebaceous glands—706	680	1.6	29.9
8.	Varicose veins of lower extremities—454	656	1.6	31.5
9.	Synovitis, bursitis, and tenosynovitis—731	621	1.5	33.0

[1] Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

these two diagnoses accounted for 8.2 million patient visits to general surgeons.

In table 7 the visits to all physicians and general surgeons are distributed according to the major diagnostic categories of the ICDA. For the categories shown, general surgeons' practices were quite similar to the practices of physicians in general; however, a few differences may be worthy of mention. The proportions of visits diagnosed as mental disorders, diseases of the nervous system, and diseases of the respiratory system were slightly lower for general surgeons than for all physicians. On the other hand, the proportions of visits for neoplasms, diseases of the digestive system, and accidents, poisonings, and violence were somewhat higher for general surgeons than for all physicians.

Table 8 distributes office visits to general surgeons by diagnostic and therapeutic services ordered or provided and disposition of the visit. The provision of a limited history and/or exam was the most frequently provided service being rendered at 47 percent of the patient visits. Data on disposition of visit show that the final advice or instruction given by the physician in the majority of patient visits (62 percent) was to "return at a specified time."

Table 9 compares general surgeons with all physicians in terms of three selected diagnostic and/or therapeutic services provided. It is evident that fewer drugs were prescribed or dispensed by general surgeons than by all physicians and that fewer laboratory tests were performed. Drugs were provided at 44 percent

Table 7. Number and percent distributions of office visits to all physicians and general surgeons by principal diagnosis: United States, 1975

Principal diagnosis classified by ICDA category and ICDA code[1]	All physicians	General surgeons
	Number in thousands	
All diagnoses	567,600	41,292
	Percent distribution	
All diagnoses	100.0	100.0
Infective and parasitic diseases---000-136	4.0	2.6
Neoplasms---140-239	2.4	7.6
Endocrine, nutritional, and metabolic diseases---240-279	4.3	4.9
Mental disorders---290-315	4.4	*1.0
Diseases of nervous system and sense organs---320-389	7.9	1.8
Diseases of circulatory system---390-458	9.9	8.8
Diseases of respiratory system---460-519	14.1	6.1
Diseases of digestive system---520-577	3.5	9.2
Diseases of genitourinary system---580-629	6.6	7.8
Diseases of skin and subcutaneous tissue---680-709	5.0	6.0
Diseases of musculoskeletal system---710-738	5.8	4.0
Symptoms and ill-defined conditions---780-796	4.6	4.9
Accidents, poisonings, and violence---800-999	7.2	9.7
Special conditions and examinations without illness---V00-V13	17.8	23.4
All other diagnoses[2]	2.5	2.4

[1] Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

[2] The category "all other diagnoses" includes 280-289, Diseases of the blood and blood-forming organs; 630-678, Complications of pregnancy, childbirth, and the puerperium; 740-759, Congenital anomalies; 760-779, Certain causes of perinatal morbidity and mortality; blank diagnosis, noncodable diagnosis, illegible diagnosis, and diagnosis given as "None."

Table 8. Number and percent distributions of office visits to general surgeons by diagnostic and/or therapeutic services ordered or provided, and disposition of visit: United States, 1975

Diagnostic and/or therapeutic services ordered or provided, and disposition of visit	Number of visits in thousands	Percent distribution
All visits	41,292	100.0
Diagnostic and/or therapeutic services ordered or provided[1]		
None	3,120	7.6
Limited history and/or exam	19,235	46.6
General history and/or exam	4,532	11.0
Clinical lab test	4,853	11.8
Blood pressure check	9,531	23.1
EKG	862	2.1
Office surgery	6,844	16.6
Drug prescribed	11,272	27.3
X-ray	2,993	7.3
Injection	6,034	14.6
Medical counseling	4,839	11.7
Psychotherapy and/or therapeutic listening	775	1.9
Other	5,044	12.2
Disposition of visit[1]		
No followup planned	4,320	10.5
Return at specified time	25,414	61.6
Return if needed	7,503	18.2
Telephone followup planned	689	1.7
Referred to other physician and/or agency	1,180	2.9
Returned to referring physician	*435	*1.1
Admitted to hospital	2,391	5.8
Other	899	2.2

[1]Percents will add to more than 100 because many patients received more than one service and some patient visits had more than one disposition.

Table 9. Percent of office visits to all physicians and general surgeons, by selected diagnostic and/or therapeutic services: United States, 1975

All physicians and general surgeons	Drug prescribed or dispensed	Clinical lab test	Office surgery
	Percent		
All physicians	44.3	22.9	6.7
General surgeons	27.3	11.8	16.6

of the visits to all physicians compared with 27 percent of the visits to general surgeons. Lab tests were ordered at 23 percent of the visits to all physicians and at 12 percent of the visits to surgeons. As expected, general surgeons provided office surgery considerably more often than did all physicians. Office surgery was provided at 17 percent of the visits to general surgeons as compared with 7 percent of the visits to all physicians. These latter differences are perhaps reflective of the large proportion of visits to general surgeons (21 percent), where the primary need of the patient was surgical aftercare (table 4).

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Base of percentage (number of visits in thousands)	Estimated percentage					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
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3,000	1.2	2.7	3.7	4.9	5.6	6.1
5,000	0.9	2.1	2.8	3.8	4.3	4.7
10,000	0.7	1.5	2.0	2.7	3.1	3.3
50,000	0.3	0.7	0.9	1.2	1.4	1.5
100,000	0.2	0.5	0.6	0.8	1.0	1.1
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Example of use of table: An estimate of 30 percent based on an aggregate of 75,000,000 has a standard error of 1.2 percent. The relative standard error of 30 percent is 4.0 percent (1.2 percent ÷ 30 percent).

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SYMBOLS

Data not available	---
Category not applicable	...
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Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

advancedata
FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • Public Health Service | Number 24 • March 24, 1978

Utilization of Selected Medical Practitioners: United States, 1974[1]

Some ambulatory medical care is provided each year by a wide variety of nonphysician health care personnel, referred to in this report as "medical practitioners."[2,3] This report presents estimates from the 1974 Health Interview Survey on the number and percent of the U.S. civilian noninstitutionalized population who consulted a chiropractor, a podiatrist/chiropodist, or physicial therapist during a 12-month reference period. Further details on the survey design are given in the Technical Notes.

Data on the use of chiropractors and podiatrists were collected previously in the Health Interview Interview Survey during 1963-64. (See footnote 2.) It should be noted, however, that the data from these two surveys are not strictly comparable. Different questions were used in each survey period. Moreover, the 1963-64 questions were asked on a household basis for each household member, and proxy responses as well as self-responses were accepted. The 1974 items were asked on a self-respondent basis. In addition, the 1963-64 questions were asked as part of a special supplement on medical specialists and practitioners. The 1974 items were asked as part of a special supplement on sources of and barriers to medical care.

According to responses to a special question in the 1974 Health Interview Survey on medical practitioners, an estimated 3.6 percent of the population (7.5 million persons) used the services of a chiropractor; 2.4 percent (5.0 million persons) consulted a podiatrist or a chiropodist; and 1.6 percent (3.2 million persons) used the services of a physical therapist. (See chart on page 2.) Contact with each of these practitioners was, with some exceptions, proportionately more prevalent among older and white persons than it was among younger persons and persons in all other color groups. A more detailed discussion on the use of these medical practitioners among various groupings of the population is given.

USE OF CHIROPRACTORS

An estimated 3.6 percent of the population consulted a chiropractor at least once during the 12 months preceding the interview (table 1). There was some variation in the use of chiropractors among the various categories of the population, ranging from 0.7 percent for children under 6 years of age to 6.6 percent for farm residents.

Among persons under 65 years of age, the likelihood of consulting a chiropractor was

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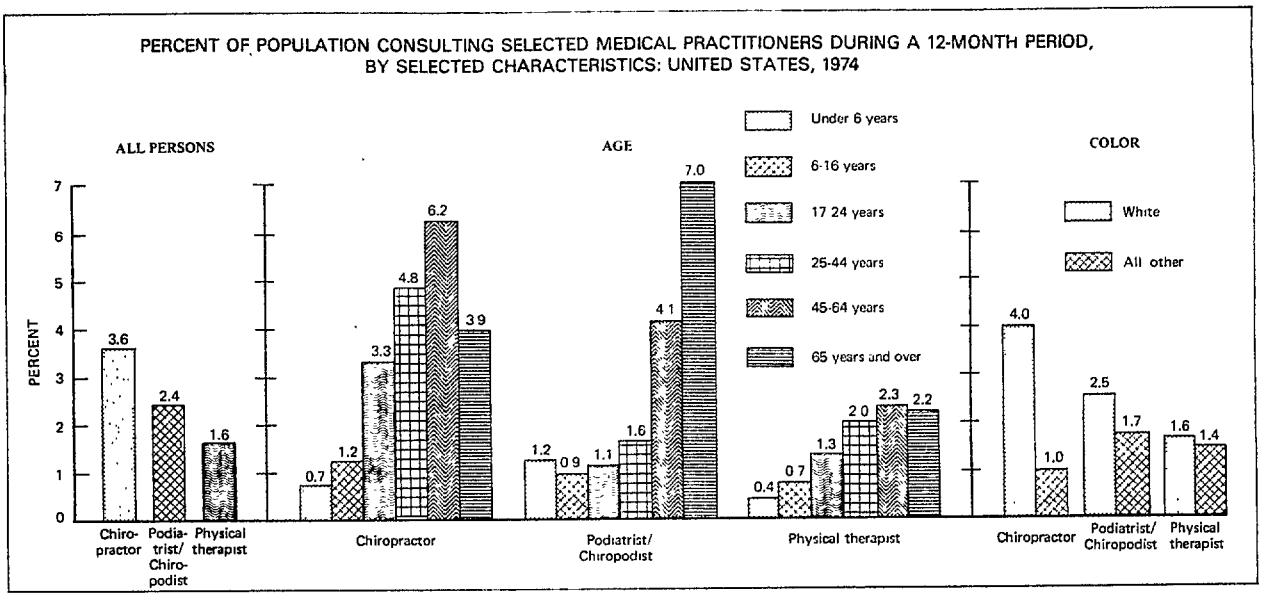
[1] This report prepared by Lonnie Jean Howie, Division of Health Interview Statistics.

[2] National Center for Health Statistics: Characteristics of patients of selected types of medical specialists and practitioners, United States, July 1963-June 1964. *Vital and Health Statistics.* PHS Pub. No. 1000-Series 10-No. 28. Public Health Service. Washington. U.S. Government Printing Office, May 1966.

[3] Schach, E., Kalimo, E., and Crawford, J.: Use of selected nonphysician health care personnel services, in R. Kohn and K. L. White, eds., *Health Care: An International Study.* New York. Oxford University Press, 1976. pp. 329-350.



greater for each older age group. During the survey year 0.7 percent of children under 6 years of age and 6.2 percent of adults aged 45 to 64 years consulted a chiropractor. However, the utilization rate drops to 3.9 percent for persons 65 years of age and over.

Use of chiropractors was greater among white persons (4.0 percent) than among persons in all other color groups (1.0 percent). Proportionately, for families with an annual income of less than $15,000, there was a tendency for utilization to increase as family income increased. The rate decreased to 3.5 percent for families with higher incomes, which is similar to the proportion for all persons. Contact with a chiropractor was also greater among persons living in the West (5.0 percent) and North Central Regions (4.2 percent) than among persons living in the other geographic regions. Contact with a chiropractor was more prevalent among persons residing outside standard metropolitan statistical areas (5.1 percent) than among persons living within such areas (3.0 percent). Within standard metropolitan statistical areas (SMSA's), central city dwellers consulted a chiropractor less often (2.4 percent) than did SMSA residents outside the central city (3.4 percent). Outside SMSA's the percent of persons who received services from a chiropractor during the survey year was higher among residents in farm areas (6.6 percent) than among residents in nonfarm areas (4.9 percent).

Differences also occurred among usual activity status groupings, with proportionately more persons who were working, keeping house, or retired than persons in the other activity status groupings seeing a chiropractor (table 1).

Whereas the overall estimate of percents for males is slightly higher than that for females, the differences can be accounted for by sampling variability, as is the case with the differences by sex for the selected sociodemographic variables.

USE OF PODIATRISTS

An estimated 2.4 percent of the population saw a podiatrist at least once during the 12 months preceding the interview (table 2). As few as 0.8 percent of persons living in farm areas outside of SMSA's and as many as 7.0 percent of persons 65 years and over consulted a podiatrist during the 12-month reference period. Proportionately more white persons (2.5 percent) saw a podiatrist than did persons in all other color groups (1.7 percent).

The use of podiatrists also varied somewhat among age, sex, family income, usual activity

Table 1. Number and percent of persons who received services from a chiropractor during the year preceding time of interview, by sex and selected characteristics: United States, 1974

Characteristic	Both sexes	Male	Female	Both sexes	Male	Female
	Number of persons who received service in thousands			Percent of persons who received service		
All persons[1]	7,527	3,811	3,715	3.6	3.8	3.5
Age						
Under 6 years	130	69	61	0.7	0.7	0.6
6-16 years	533	336	197	1.2	1.5	0.9
17-24 years	966	478	488	3.3	3.4	3.2
25-44 years	2,345	1,229	1,206	4.8	5.0	4.6
45-64 years	2,650	1,326	1,325	6.2	6.5	5.9
65 years and over	812	374	438	3.9	4.4	3.6
Color						
White	7,252	3,680	3,572	4.0	4.2	3.8
All other	275	132	143	1.0	1.1	1.0
Family income						
Less than $2,000	208	52	156	2.8	2.0	3.3
$2,000-$3,999	506	192	314	3.1	3.0	3.2
$4,000-$6,999	1,064	504	559	3.7	3.7	3.6
$7,000-$9,999	1,086	494	592	4.0	3.7	4.3
$10,000-$14,999	2,115	1,111	1,005	4.1	4.2	4.0
$15,000 or more	2,229	1,303	927	3.5	4.1	3.0
Usual activity status[2]						
Going to school	837	486	352	1.6	1.8	1.3
Working	4,058	2,669	1,389	5.1	5.3	4.8
Keeping house	1,856	...	1,856	4.7	...	4.7
Retired	497	482	15	5.3	5.6	2.0
Other	148	105	43	2.8	3.3	2.1
Geographic region						
Northeast	1,645	837	808	3.3	3.6	3.1
North Central	2,353	1,156	1,198	4.2	4.3	4.2
South	1,657	818	839	2.5	2.6	2.5
West	1,871	1,001	870	5.0	5.5	4.5
Place of residence						
SMSA	4,266	2,189	2,078	3.0	3.2	2.8
Central city	1,531	794	737	2.4	2.7	2.2
Outside central city	2,735	1,394	1,341	3.4	3.6	3.2
Outside SMSA	3,260	1,623	1,638	5.1	5.1	5.0
Nonfarm	2,760	1,340	1,419	4.9	4.8	4.9
Farm	500	282	218	6.6	7.2	6.0

[1] Includes unknown income.
[2] Excludes children under 6 years of age.

Table 2. Number and percent of persons who received services from a podiatrist during the year preceding time of interview, by sex and selected characteristics: United States, 1974

Characteristic	Both sexes	Male	Female	Both sexes	Male	Female
	Number of persons who received service in thousands			Percent of persons who received service		
All persons[1]	4,978	1,629	3,349	2.4	1.6	3.1
Age						
Under 6 years	239	127	112	1.2	1.3	1.2
6-16 years	339	208	191	0.9	1.0	0.9
17-24 years	330	153	177	1.1	1.1	1.2
25-44 years	801	304	498	1.6	1.2	1.9
45-64 years	1,747	463	1,285	4.1	2.3	5.7
65 years and over	1,460	373	1,087	7.0	4.3	8.9
Color						
White	4,526	1,460	3,066	2.5	1.7	3.3
All other	452	170	283	1.7	1.4	2.0
Family income						
Less than $2,000	205	44	160	2.8	1.7	3.4
$2,000-$3,999	468	81	387	2.9	1.3	3.9
$4,000-$6,999	728	254	474	2.5	1.9	3.1
$7,000-$9,999	551	207	344	2.0	1.6	2.5
$10,000-$14,999	988	401	587	1.9	1.5	2.3
$15,000 or more	1,688	578	1,110	2.7	1.8	3.6
Usual activity status[2]						
Going to school	489	241	248	0.9	0.9	0.9
Working	1,902	854	1,048	2.4	1.7	3.6
Keeping house	1,747	...	1,747	4.4	...	4.4
Retired	425	335	90	4.5	3.9	12.0
Other	176	71	105	3.4	2.2	5.2
Geographic region						
Northeast	1,932	559	1,373	3.9	2.4	5.3
North Central	1,429	528	901	2.6	2.0	3.2
South	863	317	547	1.3	1.0	1.6
West	754	225	529	2.0	1.2	2.8
Place of residence						
SMSA	3,988	1,230	2,758	2.8	1.8	3.7
Central city	1,960	590	1,370	3.1	2.0	4.1
Outside central city	2,029	640	1,388	2.5	1.6	3.4
Outside SMSA	990	399	591	1.5	1.3	1.8
Nonfarm	931	377	554	1.6	1.4	1.9
Farm	59	22	37	0.8	0.6	1.0

[1]Includes unknown income.
[2]Excludes children under 6 years of age.

status, place of residence, and geographic region groups. Proportionately more females (3.1 percent) saw a podiatrist than did males (1.6 percent). The likelihood of consulting a podiatrist is greater among older persons. During the survey year 1.2 percent of children under 6 years of age and 7.0 percent of adults 65 years of age and over consulted a podiatrist. Among persons with family incomes of less than $15,000, there was a slight inverse relationship between income and the use of podiatrists. The usual activity categories that had the greatest percent of persons consulting a podiatrist were persons keeping house and retired persons. Contact with a podiatrist was proportionately less frequent among persons living in the South (1.3 percent) and in the West Regions (2.0 percent) than among persons living in the other two regions. Proportionately more persons residing within SMSA's (2.8 percent) consulted a podiatrist than did persons residing outside SMSA's (1.5 percent). Within SMSA's, central city residents consulted a podiatrist more often (3.1 percent) than did residents outside the central city (2.5 percent). Outside SMSA's, the percent of persons who received services from a podiatrist was higher among nonfarm dwellers (1.6 percent) than it was among farm dwellers (0.8 percent).

While there were some exceptions among the sociodemographic groups, these differences in the use of podiatrists also occurred for each sex considered separately. Among females, however, the differences were usually more pronounced. For instance, among the age groups the range for females was from 0.9 percent to 8.9 percent, while for males a much smaller range was found, from 1.0 percent to 4.3 percent.

USE OF PHYSICAL THERAPISTS

An estimated 1.6 percent of the population saw a physical therapist at least once during the 12 months preceding the interview (table 3). There was less variation in the utilization rates of physical therapists among categories of the population compared with the use of chiropractors and podiatrists. The range was from 0.4 percent for children under 6 years of age to 3.2 percent for retired persons.

The differences for sex, color, and place of residence groups with respect to the utilization of physical therapists were within the range associated with the sample variation of the estimates. However, substantial differences in the use of physical therapists occurred among age, family income, usual activity status, and geographic region groups. The likelihood of contacting a physical therapist tended to increase with age. During the survey year 0.4 percent of children under 6 years of age and 2.3 percent of adults 45-64 years of age consulted a physical therapist. The slight difference between the percents shown for persons 65 years of age and over and for persons 45-64 years is within the sampling variability of the two estimates. Persons with family incomes of less than $4,000 and persons in the income range of $7,000 to $9,999 consulted a physical therapist proportionately more often than did persons in other family income groups. Proportionately more persons keeping house and retired persons consulted a physical therapist; however, the "other" usual activity group also had a relatively large percent (5.8) of persons who consulted a physical therapist (table 3). Contact with a physical therapist was more likely among persons living in the West (1.9 percent) and North Central Regions (1.7 percent) than among persons in the other two geographic regions.

The data for males and females shown in table 3 indicate only one notable difference between the sexes in the use of physical therapists; retired females (7.8 percent) consulted a physical therapist proportionately more often than did retired males (2.8 percent).

Table 3. Number and percent of persons who received services from a physical therapist during the year preceding time of interview, by sex and selected characteristics: United States, 1974

Characteristic	Number of persons who received service in thousands			Percent of persons who received service		
	Both sexes	Male	Female	Both sexes	Male	Female
All persons[1]	3,242	1,581	1,660	1.6	1.6	1.5
Age						
Under 6 years	86	53	33	0.4	0.5	0.4
6-16 years	294	181	114	0.7	0.8	0.5
17-24 years	383	213	171	1.3	1.5	1.1
25-44 years	1,034	567	467	2.0	2.3	1.8
45-64 years	984	419	565	2.3	2.1	2.5
65 years and over	460	149	311	2.2	1.7	2.6
Color						
White	2,869	1,384	1,485	1.6	1.6	1.6
All other	372	197	175	1.4	1.6	1.2
Family income						
Less than $2,000	145	45	100	2.0	1.7	2.1
$2,000-$3,999	377	143	234	2.3	2.2	2.4
$4,000-$6,999	464	274	190	1.6	2.0	1.2
$7,000-$9,999	501	217	285	1.9	1.6	2.1
$10,000-$14,999	680	382	297	1.3	1.5	1.2
$15,000 or more	889	458	430	1.4	1.4	1.4
Usual activity status[2]						
Going to school	417	246	171	0.8	0.9	0.6
Working	1,325	861	465	1.7	1.7	1.6
Keeping house	811	...	811	2.0	...	2.0
Retired	298	239	58	3.2	2.8	7.8
Other	305	182	122	5.8	5.7	6.0
Geographic region						
Northeast	701	342	359	1.4	1.5	1.4
North Central	954	457	498	1.7	1.7	1.7
South	870	434	436	1.3	1.4	1.3
West	715	348	367	1.9	1.9	1.9
Place of residence						
SMSA	2,268	1,048	1,220	1.6	1.5	1.6
Central city	1,029	470	559	1.6	1.6	1.7
Outside central city	1,239	578	661	1.5	1.5	1.6
Outside SMSA	973	533	440	1.5	1.7	1.3
Nonfarm	891	476	415	1.6	1.7	1.4
Farm	83	57	26	1.1	1.5	0.7

[1] Includes unknown income.
[2] Excludes children under 6 years of age.

TECHNICAL NOTES

The data presented in this report were obtained from household interviews in the Health Interview Survey. These interviews were conducted throughout 1974 in a probability sample of the civilian noninstitutionalized population of the United States. During that year approximately 116,000 persons living in about 40,000 households were included in the sample. The questions on utilization of medical practitioners were asked of each household member who was identified as a "sample person." This subsample included approximately 37,062 persons.

For a detailed discussion of the limitations and qualifications of data collected in the Health Interview Survey, see an earlier report entitled "Current Estimates from the Health Interview Survey, United States, 1974," *Vital and Health Statistics*, Series 10, No. 100, DHEW Publication No. (HRA) 76-1527.

The sampling pattern for sample person selection was based on the total number of related and unrelated household members. Sample persons (a one-third subsample of the actual Health Interview Survey sample) were selected by the interviewer at the time of interview. To determine which household member(s) to designate as a sample person, the interviewer referred to a preselected flashcard after listing all related and unrelated persons in the household on the questionnaire. The flashcard contained, for each household size, one or more person numbers that were to be identified as the sample person(s).

Since the estimates shown are based on a sample of the population rather than on the entire population, they are subject to sampling error. Standard errors appropriate for the estimates of the number of persons are shown in table I; standard errors appropriate for percentages are shown in table II.

In this report, terms such as "similar" and "the same" mean that no statistical significance exists between the statistics being compared. Terms relating to differences (i.e., "greater," "less," etc.) indicate that differences are statistically significant. The *t* test with a critical value of 1.96 (0.05 level of significance) was used to test all comparisons which are discussed. Lack of comment regarding the difference between any two statistics does *not* mean the difference was tested and found to be not significant.

Table I. Standard errors of estimates of aggregates

Size of estimate in thousands	Standard error in thousands
70	21
100	25
300	43
500	55
700	65
1,000	78
5,000	173
10,000	243
20,000	337
30,000	405
50,000	501
100,000	626

Table II. Standard errors, expressed in percentage points, of estimated percentages

Base of percentage in thousands	Estimated percentage				
	.02 or 98	.05 or 95	10 or 90	20 or 80	50
70	4.1	6.4	8.9	11.8	14.8
100	3.5	5.4	7.4	9.9	12.4
300	2.0	3.1	4.3	5.7	7.1
500	1.5	2.4	3.3	4.4	5.5
700	1.3	2.0	2.8	3.7	4.7
1,000	1.1	1.7	2.3	3.1	3.9
5,000	0.5	0.8	1.0	1.4	1.7
10,000	0.3	0.5	0.7	1.0	1.2
20,000	0.2	0.4	0.5	0.7	0.9
30,000	0.2	0.3	0.4	0.6	0.7
50,000	0.2	0.2	0.3	0.4	0.6
100,000	0.1	0.2	0.2	0.3	0.4

SYMBOLS

Data not available	- - -
Category not applicable	. . .
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

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FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • Public Health Service | Number 25 • March 22, 1978

Office Visits to Doctors of Osteopathy: National Ambulatory Medical Care Survey, United States, 1975[1]

Using data from the National Ambulatory Medical Care Survey (NAMCS), this report describes an estimated 46.9 million visits made by ambulatory patients to the offices of osteopathic physicians in 1975.

The NAMCS is a sample survey designed to explore the provision and utilization of ambulatory medical care in the offices of physicians practicing within the conterminous United States. It is conducted yearly by the National Center for Health Statistics. The survey sample is selected from doctors of medicine and osteopathy (M.D.'s and D.O.'s) who are primarily engaged in office-based, patient-care practice. It excludes physicians whose specialties are anesthesiology, pathology, and radiology and all physicians in Federal service. The 1975 sample consisted of 3,507 physicians, of whom 141 were doctors of osteopathy. For the week of their participation in the NAMCS, physicians collected information on a sample of their office visits. Participants averaged about 30 visit reports per physician. Response rate was about 80 percent among eligible doctors of osteopathy.

FINDINGS

When reference is made to an "overall" average or experience, it will refer to the characteristics of the 567.6 million visits made in 1975 to all physicians (M.D.'s and D.O.'s) within the NAMCS scope. Overall estimates for 1975 are available in an earlier report.[2]

Table 1 describes office visits to osteopathic physicians in terms of age, sex, and prior visit

[1]This report prepared by Hugo Koch, Division of Health Resources Utilization Statistics.

[2]National Center for Health Statistics: Ambulatory medical care rendered in physicians' offices, United States, 1975, by Hugo K. Koch and Norma Jean Dennison. *Advance Data From Vital and Health Statistics*, No. 12. DHEW Pub. No. (HRA) 77-1250. Health Resources Administration. Hyattsville, Md. Oct. 12, 1977.

Table 1. Number and percent distributions of office visits to osteopathic physicians by age, sex, and prior visit status of patient: United States, January-December 1975

Age, sex, and prior visit status of patient	Number of visits in thousands	Percent distribution
All visits	46,872	100.0
Age		
Under 15 years	5,246	11.2
15-24 years	6,621	14.1
25-44 years	11,465	24.5
45-64 years	14,795	31.6
65 years and over	8,745	18.7
Sex		
Female	27,551	58.8
Male	19,322	41.2
Prior visit status		
New patient	5,535	11.8
Old patient, new problem	11,251	24.0
Old patient, old problem	30,087	64.2

status of patients. Total visits by females outnumbered visits by males in a ratio of 6 to 4, a finding that agrees closely with the overall ratio. Underscoring the generalist nature of their office practice, D.O.'s treated patients of all ages. An estimated 51 percent of visits, however, were made by patients over 44 years of age. In overall office-based practice, about 42 percent of visits fell in this age category. The data on prior visit status show that few patients were visiting the osteopathic physician for the first time; about 88 percent of visits were made by patients who had visited the office before. Not only did the D.O.'s office practice chiefly involve encounters with continuing patients, the largest proportion of visits (almost two-thirds) required the treatment of continuing problems as well. New problems were encountered in about 1 of every 3 visits. For the average new problem presented to the D.O., there were roughly 1.8 return visits in the course of the year.

Table 2 lists by rank the 15 most common patient problems, complaints, or symptoms that the osteopathic physician encountered in office practice. Symptoms and code numbers appear in a symptom classification developed for use in NAMCS.[3] This information represents the reason for seeking care expressed as nearly as possible in the patient's own words. The data offer distinct evidence of the functional specialization associated with osteopathic medicine. For example, in a substantial 17 percent of office visits, patients presented problems of the face or neck, the back, or the extremities. Back problems clearly exceeded all other patient complaints. The data also testify to the generalist nature of osteopathic office practice in that D.O.'s shared 11 of the 15 most common problems encountered in the overall 567.6 million visits. Further supportive of their generalist role is a marked diffuseness of clinical range, evident from the finding that, though a substantial 15 most common problems are listed, they still account for only about one-half of all the D.O.'s

[3]National Center for Health Statistics: The national ambulatory medical care survey: symptom classification, United States, by Sue Meads and Thomas McLemore. *Vital and Health Statistics.* Series 2-No. 63. DHEW Pub. No. (HRA) 74-1337. Health Resources Administration. Washington. U.S. Government Printing Office, May 1974.

Table 2. Number, percent, and cumulative percent of office visits to osteopathic physicians, by the 15 most common patient problems, complaints, or symptoms: United States, January-December 1975

[Symptom titles and code numbers come from a symptom classification developed for use in the NAMCS]

Rank	15 most common patient problems, complaints, or symptoms	Number of visits in thousands	Percent of visits	Cumulative percent of visits
1	Pain, swelling, injury of back region 415	3,919	8.4	8.4
2	Physical examination 900,901	2,080	4.4	12.8
3	Fatigue 004	1,775	3.8	16.6
4	Flu 313	1,680	3.6	20.2
5	Pain, swelling, injury of lower extremity 400	1,599	3.4	23.6
6	Weight gain 010	1,442	3.1	26.7
7	Pain, swelling, injury of upper extremity 405	1,422	3.0	29.7
8	Sore throat 520	1,383	3.0	32.7
9	Headache 056	1,221	2.6	35.3
10	Pain, swelling, injury of face and neck region 410	1,175	2.5	37.8
11	Abdominal pain 540	1,153	2.5	40.3
12	Visit for medication 910	1,170	2.5	42.8
13	Cough 311	1,140	2.4	45.2
14	Allergic skin reaction 112	1,044	2.2	47.4
15	Wounds of skin 116	911	1.9	49.3

Table 3. Number and percent distribution of office visits to osteopathic physicians by principal diagnosis classified by major ICDA groups: United States, January-December 1975

[Diagnostic groups and code number inclusions are based on the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*]

Principal diagnosis classified by major ICDA groups		Number of visits in thousands	Percent distribution
All principal diagnoses		46,872	100.0
Infective and parasitic diseases	000-136	1,404	3.0
Endocrine, nutritional, and metabolic diseases	240-279	3,830	8.2
Diseases of the blood and blood-forming organs	280-289	820	1.8
Mental disorders	290-315	1,529	3.3
Diseases of the nervous system and sense organs	320-389	2,057	4.4
Diseases of the circulatory system	390-458	4,955	10.6
Diseases of the respiratory system	460-519	8,238	17.6
Diseases of the digestive system	520-577	1,418	3.0
Diseases of the genitourinary system	580-629	3,122	6.7
Diseases of the skin and subcutaneous tissue	680-709	1,861	4.0
Diseases of the musculoskeletal system and connective tissue	710-738	5,432	11.6
Symptoms and ill-defined conditions	780-796	1,147	2.5
Accidents, poisonings, and violence	800-999	4,840	10.3
Special conditions and examinations without sickness	Y00-Y13	5,103	10.9
Residual		1,116	2.1

office visits. Problems presented to office-based D.O.'s were about equally divided between the acute and the chronic, i.e., persisting problems with an onset of 3 months or more before the current visit. Overall visit experience showed a dominance of acute problems (in 55 percent of visits) over chronic (in 45 percent).

Tables 3 and 4 present data on the diagnosis associated with each office visit to an osteopathic physician. Table 3 uses broad diagnostic classes to express the D.O.'s total diagnostic effort. Table 4 offers more specific diagnostic information by listing the 15 diagnoses most commonly rendered by the physician. Diagnos-

Table 4. Number, percent, and cumulative percent of office visits to osteopathic physicians, by the 15 most common principal diagnoses rendered: United States, January-December 1975

[Diagnoses and codes are based on the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*]

Rank	15 most common principal diagnoses		Number of visits in thousands	Percent of visits	Cumulative percent of visits
1	Essential benign hypertension	401	2,642	5.6	5.6
2	Influenza, unqualified	470	2,381	5.1	10.7
3	Medical or special examination	Y00	2,163	4.6	15.3
4	Arthritis	713-715	1,993	4.3	19.6
5	Obesity not specified as of endocrine origin	277	1,857	4.0	23.6
6	Acute upper respiratory injection, multiple and unspecified sites	465	1,630	3.5	27.1
7	Other nonarticular rheumatism	717	1,356	2.9	30.0
8	Medical and surgical aftercare	Y10	1,297	2.8	32.8
9	Sprains and strains of sacroiliac region	846	1,162	2.5	35.3
10	Diabetes mellitus	250	1,151	2.5	37.8
11	Other eczema and dermatitis	692	1,048	2.2	40.0
12	Neuroses	300	973	2.1	42.1
13	Sprains and strains of other and unspecified parts of back	847	946	2.0	44.1
14	Prophylactic inoculation and vaccination	Y02	836	1.8	45.9
15	Cystitis	595	749	1.6	47.5

tic groups and code number inclusions are based on the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States.*

The data in the tables are in relatively close agreement with the most common reasons for visits expressed by patients (table 2). The generalist nature of osteopathic office practice is evident from the range and diversity of the diagnoses that the D.O. rendered. It requires 14 major diagnostic classes to express the breadth and variety of the D.O.'s clinical activity (table 3). On the other hand, the functional specialization expected of the D.O. is evident in the finding that the 15 specific conditions most frequently diagnosed prominently include arthritic conditions, rheumatism, and sprains or strains of the back region (table 4).

Table 5 shows that, as with all office-based physicians, the diagnostic procedures most favored in osteopathic office practice were the limited examination, blood pressure check, and laboratory test. The three therapeutic procedures that the D.O. most often ordered or provided were treatment by prescription drug, treatment by injection, and treatment by manipulative therapy. The D.O.'s reliance on drug therapy—in 54 percent of visits—exceeded the overall average by 10 percent. Perhaps more noteworthy was the 34 percent of visits in which the D.O. used injection therapy—a usage that exceeded the overall average by 20 percent.

Table 5 also presents data on the severity of patient problems. These data express the doctor's judgment of the extent of impairment that might result if no care were available. Clearly, most osteopathic practice centered on the treatment of problems which ranged in severity from slightly serious to not serious. The D.O. agreed with the average office-based physician in judging only about 1 in 5 problems as serious or very serious in prognosis.

Data on disposition (table 5) show that scheduled followup is the rule with office-based D.O.'s, as it is with all office-based practitioners. D.O.'s also shared the tendency of other generalist practitioners to provide most of the care that their patients required; less than 2 percent of visits to D.O.'s resulted in referral to another physician. Admission to the hospital was also a rare event in the D.O.'s office practice; it occurred in only 1 percent of visits.

The duration of visit (the portion of an office visit that involves face-to-face contact between patient and doctor) was under 16 minutes for 2 out of 3 office visits to D.O.'s. Agreeing closely with the average for all office-based practitioners, the average face-to-face encounter between D.O. and patient was estimated at about 15 minutes in duration.

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[4]National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the United States.* PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

Table 5. Number and percent of office visits to osteopathic physicians by services ordered or provided, seriousness of problem, disposition, and duration of visit: United States, January-December 1975

Service ordered or provided, seriousness of problem, disposition, and duration of visit	Number of visits in thousands	Percent of visits
Service ordered or provided		
No service	810	1.7
Diagnostic service:[1]		
Limited history and/or examination	21,603	46.1
General history and/or examination	4,673	10.0
Clinical laboratory test	6,358	13.6
X-ray	2,051	4.4
Blood pressure check	14,761	31.5
EKG	559	1.2
Hearing and/or vision test	952	2.1
Endoscopy	447	1.0
Therapeutic service:[1]		
Drug prescribed	25,217	53.8
Injection	15,705	33.5
Immunization and/or desensitization	799	1.7
Office surgery	2,581	5.5
Physiotherapy	4,954	10.6
Medical counseling	4,944	10.6
Psychotherapy and/or therapeutic listening	3,580	7.6
Other services	4,689	10.0
Seriousness of problem		
Serious or very serious	8,791	18.8
Slightly serious	18,692	39.9
Not serious	19,388	41.4
Disposition (selected actions)[1]		
No followup	5,083	10.8
Return at a specified time	24,593	52.5
Return if needed	16,653	35.5
Telephone followup	1,326	2.8
Referred to other physician or/agency	831	1.8
Admitted to hospital	491	1.1
Duration of visit		
Less than 1 minute (no face-to-face contact with physician)	383	0.8
1-5 minutes	6,680	14.3
6-10 minutes	12,909	27.5
11-15 minutes	12,028	25.7
16-30 minutes	13,677	29.2
31 minutes or more	1,196	2.5

[1]Since more than one service and disposition were possible per visit, estimates will not add to total number of visits (46,872,000).

TECHNICAL NOTES

SOURCE OF DATA: Data presented in this report were obtained during 1975 through the National Ambulatory Medical Care Survey (NAMCS). The target population of NAMCS encompasses office visits within the conterminous United States made by ambulatory patients to physicians who are principally engaged in office practice.

SAMPLE DESIGN: The 1975 NAMCS utilized a multistage probability design that involved samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within practices. Within the 87 PSU's composing the first stage of selection, a sample of approximately 3,500 physicians was selected from master files maintained by the American Medical Association and the American Osteopathic Association. Sampled physicians, randomly assigned to 1 of the 52 weeks in the survey year, were requested to complete Patient Records (brief encounter forms) for a systematic random sample of office visits taking place within their practice during the assigned reporting period. (A facsimile of the Patient Record used is shown in a previous issue of *Advance Data From Vital and Health Statistics,* No. 12, October 12, 1977.) Additional data concerning physician practice characteristics such as primary specialty and type of practice were obtained during an induction interview.

A complete description of the survey's background and development has been presented in an earlier publication in Series 2 of *Vital and Health Statistics* (No. 61. DHEW Pub. No. (HRA) 76-1335. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1974). A detailed description of the 1975 NAMCS design and procedures will be presented in future publications.

SAMPLING ERRORS: Since the estimates for this report are based on a sample rather than the entire universe, they are subject to sampling variability. The standard error is primarily a measure of sampling variability. 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 percent of the estimate. Relative standard errors of selected aggregate statistics are shown in table I. The standard errors appropriate for the estimated percentages of office visits are shown in table II.

ROUNDING: Aggregate estimates of office visits presented in the tables are rounded to the nearest thousand. The rates and percents, however, were calculated on the basis of original, unrounded figures. Due to rounding of percents, the sum of percentages may not equal 100.0 percent.

Table I. Approximate relative standard errors of estimated numbers of office visits

Estimate in thousands	Relative standard error in percentage points
500	30.1
1,000	21.4
2,000	15.3
5,000	10.0
10,000	7.5
30,000	5.1
100,000	4.0
550,000	3.5

Example of use of table: An aggregate of 80,000,000 has a relative standard error of 4.3 percent or a standard error of 3,440,000 (4.3 percent of 80,000,000).

Table II. Approximate standard errors of percentages for estimated numbers of office visits

Base of percentage (number of visits in thousands)	Estimated percentage					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
1,000	2.1	4.6	6.3	8.5	9.7	10.6
3,000	1.2	2.7	3.7	4.9	5.6	6.1
5,000	0.9	2.1	2.8	3.8	4.3	4.7
10,000	0.7	1.5	2.0	2.7	3.1	3.3
50,000	0.3	0.7	0.9	1.2	1.4	1.5
100,000	0.2	0.5	0.6	0.8	1.0	1.1
500,000	0.1	0.2	0.3	0.4	0.4	0.5

Example of use of table: An estimate of 30 percent based on an aggregate of 75,000,000 has a standard error of 1.2 percent. The relative standard error of 30 percent is 4.0 percent (1.2 percent÷30 percent).

DEFINITIONS: An *ambulatory patient* is an individual presenting himself for personal health services who is neither bedridden nor currently admitted to any health care institution on the premises.

An *office* is a place that the physician identifies as a location for his ambulatory practice. Responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than an institution.

A *visit* is a direct personal exchange between an ambulatory patient and a physician or a staff member working under the physician's supervision for the purpose of seeking care and rendering health services.

A *physician* is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) currently in practice who spends time in caring for ambulatory patients at an office location. Excluded from NAMCS are physicians who specialize in anesthesiology, pathology, radiology; physicians who are federally employed; physicians who treat only institutionalized patients; physicians employed full time by an institution; and physicians who spend no time seeing ambulatory patients.

SYMBOLS

Data not available	---
Category not applicable	...
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

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FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ▪ Public Health Service | Number 26 ▪ April 6, 1978

Contraceptive Efficacy Among Married Women 15-44 Years of Age in the United States, 1970-73[1]

In the 3-year period 1970-73, 7.3 percent of U.S. married women who sought to delay their next wanted child became unintentionally pregnant while using contraception within 1 year following initiation of use (table 1). Only 3.7 percent of those who had decided to terminate childbearing failed to achieve that goal during the first year of contraception after deciding to prevent future births. While these rates may imply acute problems for the individuals who did experience contraceptive failure, they are an indicator of the high degree of effectiveness of contraceptive use considered in the aggregate.

The data presented here are extracted from a forthcoming report on contraceptive use effectiveness in the United States. They are based on Cycle I of the National Survey of Family Growth (NSFG), conducted by the National Center for Health Statistics. The NSFG was designed to provide information about fertility, family planning intentions and activity, and other aspects of maternal and child health which are closely related to childbearing. Data on each of these topics were collected in personal interviews with approximately 9,800 women aged 15-44 years who had ever been married or who had children of their own living in the household. Interviews were conducted between July 1973 and February 1974; the midpoint was September 13, 1973. Respondents were selected by a multistage, area probability, cross-sectional sample of households in the conterminous United States. It should be emphasized that the statistics reported here do not pertain to a sample of all contraceptors but rather to a sample of women who were both married and contraceptive users for at least 1 month during the 3-year period, July 1, 1970, through July 1, 1973.

Table 1. First year contraceptive failure rates per 100 married women aged 15-44 years, by whether contraception was intended to prevent or delay pregnancy, with corresponding standard errors: United States, 1970-73

Intention of contraception	Failure rate per 100 women	Standard error[1]
Prevent	3.7	0.5
Delay	7.3	0.7

[1]These are provisional estimates of standard errors. See Technical Notes.

The contraceptive failure rates for the various methods reported here are the probabilities of a contraceptive failure during the first year a method was used. They were computed using a multiple-increment, multiple-decrement life table procedure. A contraceptive failure occurred if the onset of pregnancy was reported as occurring prior to the termination of contraception. For the calculation of use effectiveness during the 3-year period prior to the survey, all intervals of contraceptive use (including sterilization) occurring during a continuous marriage were considered. It should be kept in mind that these rates of use effectiveness of contraceptive methods reflect patient misuse as well as method failure.

[1]This report was prepared by Kathleen Ford, Ph.D., *Division of Vital Statistics*. The information in this report was extracted from the report "Contraceptive Efficacy Among Married Women in the United States, 1970-1973," by Barbara Vaughan, James Trussell, Jane Menken, and Elise F. Jones, which will be published in Series 23 the *Vital and Health Statistics* series.

The particular method of contraception has long been observed to affect failure rates. Sterilization was by far the most successful method, with no failures recorded (table 2). The failure rate for the pill was 2.0, representing 2.0 failures per 100 women in the first year of use. Failure rates for the IUD (4.2), condom (10.1), and diaphragm (13.1) follow in order of decreasing use effectiveness.

These rates are standardized by the intention of use (those seeking to delay their next wanted birth and those seeking to prevent any further births). Since intention has been found to influence success with a method and different methods attract varying proportions of couples seeking to delay or prevent the next pregnancy, such standardization was necessary for proper comparison of method failure rates.

Table 2. First year contraceptive failure rates per 100 married women aged 15-44 years standardized by intention of contraception, by type of contraceptive used, with corresponding standard errors: United States, 1970-73

Type of contraceptive used	Failure rate per 100 women	Standard error[1]
Sterilization	0.0	-
Pill	2.0	0.4
IUD	4.2	1.2
Condom	10.1	1.7
Foam, cream, or jelly	14.9	2.1
Diaphragm	13.1	3.8
Rhythm	19.1	4.0
All other methods	10.8	2.9

[1]These are provisional estimates of standard errors. See Technical Notes.

TECHNICAL NOTES

DESIGN OF THE SURVEY: The National Survey of Family Growth (NSFG), initiated in 1971, was designed to provide data on fertility, family planning, and related aspects of maternal and child health. Fieldwork for Cycle I was carried out by the National Opinion Research Center in 1973 and early 1974, with September 13, 1973, as the midpoint of the interviewing.

A multistage probability sample of women in the noninstitutional population of the conterminous United States was used. Approximately 33,000 households were screened to identify the sample of women who would be eligible for the NSFG, i.e., women aged 15-44 years who were either currently married, previously married, or never married but with natural children presently living in the household. In households with more than one eligible woman, a random procedure was used to select only one to be interviewed. Since the interviews were always conducted with the sample person, the term "respondent" is used throughout this report as synonymous with sample person. Interviews were completed for 3,856 black women and for 5,941 women of other races. A detailed description of the sample design is presented in "National Survey of Family Growth, Cycle I: Sample Design, Estimation Procedures, and Variance Estimation," Series 2, No. 76 in the *Vital and Health Statistics* series.

The interviews were highly focused on the respondents' marital and pregnancy histories, on their use of contraception and the planning status of each pregnancy, on their intentions regarding the number and spacing of future births, on maternity and family planning services, and on a broad range of social and economic characteristics. While the interviews varied greatly in the time required for their completion, they averaged about 70 minutes. Quality control procedures were applied at all stages of the survey. These included a verification of listing completeness with unlisted dwelling units being brought into the sample, a preliminary field review of completed questionnaires for possible missing data or inaccurate administration, a 10-percent sample recheck of all households screened in the survey, observation of interviews in the field, and an independent recoding of a 5-percent subsample of completed interviews.

RELIABILITY OF ESTIMATES: Since the statistics presented in this report are based on a sample, they may differ somewhat from the figures that would have been obtained if a com-

plete census had been taken using the same questionnaires, instructions, interviewing personnel, and field procedures. This chance difference between sample results and a complete count is referred to as sampling error. In addition, the results are subject to nonsampling error due to respondent misreporting, data processing mistakes, and nonresponse. It is very difficult, if not impossible, to obtain accurate measures of nonsampling errors. These types of error were kept to a minimum by the quality control procedures and other methods incorporated into the survey design and administration.

Sampling error, or the extent to which samples may differ by chance from a complete count, is measured by a statistic called the standard error of the estimate. The standard errors presented in this report are provisional estimates based on variances calculated for other life table estimates from this survey.

The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the differences between the sample estimate and a complete count would be less than twice the standard error.

DEFINITIONS OF TERMS

Contraceptive use effectiveness.—In this report, use effectiveness is defined as the effectiveness of a method when it is being used. *Contraceptive failure,* the type of method termination which was the focus of this study, occurred if the date of stopping contraception came after the month a pregnancy began, and the respondent said she had not stopped at the time she became pregnant. Periods of time when the respondent was not married as well as periods of time when the respondent was married but reported that she was not having intercourse were excluded from the calculations.

Intention.—A method use interval was classified as a *delay* interval if the woman's motive for using a contraceptive was to delay her next pregnancy. If her intentions were to have no more children, the interval was classified as a *prevent* interval.

SYMBOLS

Data not available	---
Category not applicable	...
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

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FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ▪ Public Health Service | Number 27 ▪ April 14, 1978

Health Characteristics of Minority Groups, United States, 1976[1]

There is increasing interest in the health characteristics of the minority groups in the population of the United States, especially those of the two largest minority groups, the black population and the population of Spanish origin.

Since its inception in 1957, the Division of Health Interview Statistics, by means of the Health Interview Survey (HIS), has collected data on the race of respondents in order to present estimates of health variables by racial group. Beginning in 1976, information on respondents' national origin or ancestry has been obtained in the HIS, primarily in an effort to identify persons of Spanish background. This report presents statistics on several health characteristics for four population groups: the total United States civilian noninstitutionalized population, those of Spanish origin, the black population, and all others. "Spanish origin" refers to those persons aged 17 years and over who, regardless of race, were reported as being of Central or South American ancestry, Chicano, Cuban, Mexican, Mexicano, Mexican-American, Puerto Rican, or other Spanish origin. Data for children under the age of 17 are stated in accordance with the race and reported origin of their parents. (See Technical Notes.) The approximately 495,000 persons reported to be of Spanish origin and classified as black by the interviewer were counted in both of these minority categories.

The tables present data for the four population groups by age and income. The age distributions of the four population groups are quite different, with larger proportions of the Spanish and black groups than of the total population being under the age of 17. Approximately 41.3 percent of the Spanish population was under 17 years of age, 37.0 percent of the black population was under 17, and only 28.9 percent of the total U.S. population was under 17 years of age. Because of these differences in the age distributions, comparisons should be made within age groups or by using age-adjusted percentages. Table 1 shows the crude rates and the age-adjusted (by the direct method) rates for the various health characteristics that are presented in detail in tables 2-5. The age-adjusted data can be compared directly since the rates assume identical age distributions of all groups. However, the unadjusted percentages are the actual ones, and any quotation of percentages and age-specific rates should be of the crude rates rather than of the adjusted data.

Statistics for six health characteristics and population figures are shown in tables 2-5. The total population for the four population groups and the percent of the population with limitation of activity are shown in table 2. Table 3 presents the proportion of the population with a doctor visit in the year preceding the interview and the proportion with a short-stay hospital episode during the year before the interview. In table 4, the number of days of restricted activity and days of bed disability per person per year are shown. The number of currently employed persons aged 17 years and over and the number of days lost from work per person per year are shown in table 5.

[1] This report prepared by Claudia S. Moy and Charles S. Wilder, Division of Health Interview Statistics.

Table 1. Unadjusted and age-adjusted percentages or rates of selected health characteristics, by national origin or race and family income: United States, 1976

Characteristics and family income	Total population	Spanish origin[1]	Black[1]	Other	Total population	Spanish origin[1]	Black[1]	Other
	Unadjusted percentage or rate				Age-adjusted[2] percentage or rate			
Limitation of activity due to chronic conditions								
All incomes[3]	14.3	9.5	14.8	14.6	14.3	13.5	17.4	14.0
Less than $5,000	28.8	17.2	24.9	31.3	23.1	19.7	24.9	23.0
$5,000-$9,999	17.1	9.5	12.3	19.0	16.3	13.4	16.0	16.6
$10,000-$14,999	11.3	6.6	9.7	11.8	13.2	12.3	13.3	13.3
$15,000 or more	8.8	6.1	7.1	9.0	10.8	*12.1	10.4	10.8
Doctor visit in past year								
All incomes[3]	75.5	69.5	73.5	76.2	75.5	70.4	74.2	76.2
Less than $5,000	76.7	70.6	75.7	77.8	76.0	70.7	76.5	77.0
$5,000-$9,999	73.8	67.7	70.1	75.3	73.6	68.8	71.7	74.8
$10,000-$14,999	75.1	70.2	74.4	75.5	75.5	72.2	75.5	75.8
$15,000 or more	77.3	73.1	78.5	77.4	77.6	73.8	78.2	77.7
Short-stay hospital episode in past year								
All incomes[3]	10.6	9.3	10.0	10.8	10.6	10.4	10.6	10.6
Less than $5,000	14.0	11.1	12.7	14.7	12.8	11.7	13.7	12.6
$5,000-$9,999	11.9	10.2	9.0	12.7	11.7	11.4	9.9	12.0
$10,000-$14,999	10.4	8.5	9.4	10.7	11.0	*9.8	10.6	11.1
$15,000 or more	9.1	7.6	9.0	9.1	9.7	*9.1	9.0	9.7
Days of restricted activity per person per year								
All incomes[3]	18.2	17.1	20.6	18.0	18.2	20.3	23.3	17.6
Less than $5,000	32.5	26.5	30.7	33.8	28.4	29.2	31.2	28.1
$5,000-$9,999	20.3	18.4	17.4	21.1	19.8	21.0	21.2	19.7
$10,000-$14,999	15.7	14.8	15.4	15.8	16.8	19.0	17.6	16.7
$15,000 or more	12.8	10.0	13.7	12.9	13.9	*13.2	14.9	13.8
Days of bed disability per person per year								
All incomes[3]	7.1	8.4	9.0	6.8	7.1	9.3	9.9	6.6
Less than $5,000	12.1	14.9	12.3	11.7	11.0	16.3	12.8	10.1
$5,000-$9,999	8.2	8.1	7.7	8.4	8.0	8.8	9.2	7.8
$10,000-$14,999	5.9	7.0	5.9	5.9	6.3	*6.4	5.9	6.2
$15,000 or more	5.1	4.8	7.5	4.9	5.7	*4.2	*8.5	5.5
Days lost from work per currently employed person per year								
All incomes[3]	5.3	4.9	7.4	5.1	5.3	5.0	7.4	5.1
Less than $5,000	5.8	*5.7	7.4	5.5	5.9	*	7.2	5.5
$5,000-$9,999	6.1	5.1	7.1	6.0	6.2	*5.4	7.1	6.1
$10,000-$14,999	5.5	5.9	6.2	5.4	5.5	*5.6	*6.0	5.4
$15,000 or more	4.7	3.6	8.4	4.5	4.6	*	8.2	4.4

[1] Persons reported as both of Spanish origin and black are included in both categories.
[2] Adjusted by the direct method to the age distribution of the civilian noninstitutionalized population or that of the currently employed population.
[3] Includes unknown income.

Table 2. Population and percent of population with limitation of activity due to chronic conditions, by national origin or race, family income, and age: United States, 1976

Family income and age	Total population	Spanish origin[1]	Black[1]	Other	Total population	Spanish origin[1]	Black[1]	Other
	Number of persons in thousands				Percent of population with limitation of activity			
All incomes[2]								
All ages	210,643	12,218	24,863	174,057	14.3	9.5	14.8	14.6
Under 17 years	60,891	5,041	9,206	46,945	3.7	2.8	3.7	3.9
17-44 years	84,701	4,970	9,666	70,199	8.9	7.7	10.5	8.7
45-64 years	43,253	1,669	4,110	37,519	24.3	23.5	32.3	23.4
65 years and over	21,799	538	1,882	19,394	45.4	45.9	52.8	44.6
Less than $5,000								
All ages	28,987	2,206	6,841	20,099	28.8	17.2	24.9	31.3
Under 17 years	6,547	841	2,436	3,366	5.3	6.3	4.8	5.7
17-44 years	9,789	851	2,213	6,764	14.9	13.6	16.7	14.5
45-64 years	4,876	303	1,138	3,455	49.0	37.3	51.8	49.0
65 years and over	7,775	211	1,054	6,514	53.4	46.0	59.4	52.7
$5,000-$9,999								
All ages	42,543	3,614	6,698	32,324	17.1	9.5	12.3	19.0
Under 17 years	12,202	1,447	2,722	8,090	4.1	*2.0	4.1	4.5
17-44 years	16,363	1,491	2,641	12,261	10.4	7.0	10.0	10.8
45-64 years	7,842	504	983	6,361	31.3	27.6	29.1	31.9
65 years and over	6,136	173	353	5,612	43.1	42.2	46.5	42.9
$10,000-$14,999								
All ages	44,471	2,744	4,216	37,615	11.3	6.6	9.7	11.8
Under 17 years	14,125	1,213	1,560	11,423	3.6	*2.1	2.8	3.9
17-44 years	19,533	1,141	1,841	16,574	8.6	6.4	8.1	8.8
45-64 years	8,506	330	697	7,488	22.5	14.8	24.4	22.6
65 years and over	2,308	60	119	2,130	39.6	58.3	41.2	39.0
$15,000 or more								
All ages	75,797	2,486	4,092	69,307	8.8	6.1	7.1	9.0
Under 17 years	22,511	1,006	1,368	20,176	3.3	*2.0	2.8	3.4
17-44 years	33,202	1,100	1,925	30,213	6.5	4.9	6.1	6.6
45-64 years	17,443	345	714	16,395	15.7	16.5	14.3	15.8
65 years and over	2,641	35	86	2,524	38.7	*60.0	40.7	38.2

[1]Persons reported as both of Spanish origin and black are included in both categories.
[2]Includes unknown income.

NOTE: For official population estimates for more general use, see U.S. Bureau of the Census reports on the civilian population of the United States in *Current Population Reports*, Series P-20, P-25, and P-60.

Table 3. Percent of population with a doctor visit or short-stay hospital episode in the past year, by national origin or race, family income, and age: United States, 1976

Family income and age	Total population	Spanish origin[1]	Black[1]	Other	Total population	Spanish origin[1]	Black[1]	Other
	Percent of population with a doctor visit in past year				Percent of population with a short-stay hospital episode in past year			
All incomes[2]								
All ages	75.5	69.5	73.5	76.2	10.6	9.3	10.0	10.8
Under 17 years	74.2	67.6	67.6	76.2	5.5	5.4	4.7	5.7
17-44 years	75.4	69.8	76.9	75.6	11.4	12.0	13.5	11.0
45-64 years	75.2	71.2	76.1	75.2	12.5	10.8	12.0	12.6
65 years and over	80.0	79.4	78.8	80.2	18.3	17.1	12.9	18.8
Less than $5,000								
All ages	76.7	70.6	75.7	77.8	14.0	11.1	12.7	14.7
Under 17 years	71.6	69.6	68.2	74.7	6.7	6.5	6.3	7.1
17-44 years	78.3	70.3	80.6	78.7	13.7	13.3	18.5	12.2
45-64 years	75.8	69.6	78.2	75.6	16.6	13.9	14.8	17.5
65 years and over	79.7	77.7	80.3	79.7	18.9	*16.1	13.3	19.9
$5,000-$9,999								
All ages	73.8	67.7	70.1	75.3	11.9	10.2	9.0	12.7
Under 17 years	69.7	66.0	62.3	72.9	5.9	5.4	4.3	6.6
17-44 years	75.0	66.9	75.6	75.8	13.0	13.1	12.3	13.1
45-64 years	72.7	69.8	73.4	72.8	13.7	12.9	11.2	14.2
65 years and over	80.6	82.1	79.9	80.6	18.4	*18.5	13.9	18.7
$10,000-$14,999								
All ages	75.1	70.2	74.4	75.5	10.4	8.5	9.4	10.7
Under 17 years	74.3	64.2	68.5	76.0	6.3	5.4	4.9	6.5
17-44 years	75.8	75.4	79.3	75.4	11.7	11.1	12.1	11.7
45-64 years	73.5	72.4	73.3	73.5	12.3	*9.1	10.2	12.6
65 years and over	81.2	81.7	84.9	81.1	18.6	*18.3	*21.8	18.5
$15,000 or more								
All ages	77.3	73.1	78.5	77.4	9.1	7.6	9.0	9.1
Under 17 years	78.0	73.6	77.9	78.2	4.7	3.7	2.9	4.9
17-44 years	76.1	71.8	78.3	76.1	9.9	10.3	12.6	9.7
45-64 years	78.3	75.1	81.0	78.3	11.5	*8.7	11.1	11.6
65 years and over	81.2	*80.0	73.3	81.5	19.2	*20.0	*8.1	19.6

[1] Persons reported as both of Spanish origin and black are included in both categories.
[2] Includes unknown income.

Table 4. Days of restricted activity or bed disability per person per year, by national origin or race, family income, and age: United States, 1976

Family income and age	Total population	Spanish origin[1]	Black[1]	Other	Total population	Spanish origin[1]	Black[1]	Other
	Days of restricted activity per person per year				Days of bed disability per person per year			
All incomes[2]								
All ages	18.2	17.1	20.6	18.0	7.1	8.4	9.0	6.8
Under 17 years	11.0	14.3	7.5	11.3	5.1	7.8	3.9	5.0
17-44 years	14.2	12.9	19.1	13.6	5.6	7.0	8.5	5.1
45-64 years	25.4	26.5	39.1	23.8	8.9	10.5	16.9	8.0
65 years and over	40.0	53.1	52.5	38.4	15.1	20.5	18.5	14.6
Less than $5,000								
All ages	32.5	26.5	30.7	33.8	12.1	14.9	12.3	11.7
Under 17 years	12.2	16.4	8.5	13.7	6.5	10.3	5.0	6.7
17-44 years	21.6	19.1	25.7	20.8	8.6	10.2	11.7	7.5
45-64 years	53.6	49.5	57.7	52.5	18.9	27.8	22.3	16.9
65 years and over	50.3	64.2	63.3	47.8	16.9	33.5	19.7	15.9
$5,000-$9,999								
All ages	20.3	18.4	17.4	21.1	8.2	8.1	7.7	8.4
Under 17 years	11.2	15.6	6.7	11.9	5.1	7.1	3.5	5.3
17-44 years	16.1	13.5	17.7	16.1	6.5	7.3	7.5	6.1
45-64 years	30.6	34.0	36.7	29.4	11.8	*10.0	15.4	11.4
65 years and over	36.4	39.2	44.4	35.8	14.6	*17.4	19.7	14.2
$10,000-$14,999								
All ages	15.7	14.8	15.4	15.8	5.9	7.0	5.9	5.9
Under 17 years	11.0	13.2	8.2	11.1	4.6	6.8	3.5	4.5
17-44 years	14.4	13.1	16.8	14.3	5.5	7.6	6.5	5.3
45-64 years	22.3	17.9	25.5	22.2	7.6	*6.2	10.6	7.3
65 years and over	31.5	*60.7	*31.4	30.7	11.4	*0.8	*0.9	12.3
$15,000 or more								
All ages	12.8	10.0	13.7	12.9	5.1	4.8	7.5	4.9
Under 17 years	10.5	10.7	5.5	10.8	4.9	6.6	*3.8	4.8
17-44 years	10.8	8.2	15.8	10.6	4.2	*3.4	7.2	4.0
45-64 years	17.5	*9.7	22.7	17.4	5.8	*4.4	14.3	5.4
65 years and over	28.0	*46.2	*21.9	27.9	13.1	*-	*14.8	13.2

[1] Persons reported as both of Spanish origin and black are included in both categories.
[2] Includes unknown income.

Table 5. Currently employed population 17 years and over and days lost from work per currently employed person per year, by national origin or race, family income, and age: United States, 1976

Family income and age	Population	Spanish origin[1]	Black[1]	Other	Population	Spanish origin[1]	Black[1]	Other
	Currently employed persons in thousands				Days lost from work per currently employed person per year			
All incomes[2]								
All ages, 17 years and over	87,119	3,976	8,394	74,838	5.3	4.9	7.4	5.1
17-44 years	57,268	2,977	5,689	48,661	5.0	4.6	7.7	4.8
45-64 years	26,974	939	2,423	23,630	6.1	6.1	7.2	6.0
65 years and over	2,887	60	282	2,547	4.0	*3.7	*4.0	4.0
Less than $5,000								
All ages, 17 years and over	6,891	493	1,279	5,137	5.8	*5.7	7.4	5.5
17-44 years	4,631	364	756	3,523	5.0	*4.8	6.3	4.8
45-64 years	1,603	105	406	1,097	7.6	*9.6	8.9	6.9
65 years and over	657	*23	117	517	7.5	*2.0	*9.6	7.3
$5,000-$9,999								
All ages, 17 years and over	15,603	1,118	2,268	12,239	6.1	5.1	7.1	6.0
17-44 years	10,491	826	1,578	8,105	5.9	4.3	6.9	5.9
45-64 years	4,234	274	619	3,345	7.2	*7.3	8.4	6.9
65 years and over	878	*18	71	790	*3.6	*9.9	*-	3.8
$10,000-$14,999								
All ages, 17 years and over	19,748	987	1,796	16,986	5.5	5.9	6.2	5.4
17-44 years	13,734	763	1,279	11,704	5.6	6.2	7.1	5.4
45-64 years	5,625	217	489	4,929	5.6	*5.0	*4.3	5.8
65 years and over	389	*8	*28	353	*1.9	*-	*-	*2.1
$15,000 or more								
All ages, 17 years and over	38,212	1,064	2,075	35,101	4.7	3.6	8.4	4.5
17-44 years	24,860	814	1,483	22,581	4.2	*3.0	8.5	3.9
45-64 years	12,785	248	571	11,973	5.8	*5.8	8.6	5.7
65 years and over	567	*2	*20	546	*0.8	*-	*-	*0.8

[1]Persons reported as both of Spanish origin and black are included in both categories.
[2]Includes unknown income.

NOTE: For official population estimates for more general use, see U.S. Bureau of the Census reports on the civilian population of the United States in *Current Population Reports*, Series P-20, P-25, and P-60; and U.S. Bureau of Labor Statistics monthly report, *Employment and Earnings*.

SYMBOLS

Data not available	- - -
Category not applicable	. . .
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

TECHNICAL NOTES

SOURCE OF DATA: The data presented in all tables in this report were derived from household interviews of the Health Interview Survey. These interviews were conducted in a probability sample of the civilian noninstitutionalized population of the United States. During 1976 approximately 113,000 persons living in a total of 40,000 households were included in the sample. A more detailed description of the sample design and a copy of the questionnaire used in collecting the information are shown in "Current Estimates From the Health Interview Survey: United States, 1976," *Vital and Health Statistics,* Series 10, No. 119. The health characteristics presented are defined there also. Other definitions are presented in Series 1, No. 11 of *Vital and Health Statistics.*

SAMPLE: Since the estimates shown are based on a sample of the population, they are subject to sampling error. Table I shows the standard errors of aggregates of persons and disability days, and table II shows standard errors of percentages of persons.

Table I. Standard errors of estimates of aggregates

Size of estimate in thousands	Standard error in thousands		
	Population	Restricted-activity and bed-disability days	Work-loss days
70	15	...	...
100	18	...	...
500	40	...	...
1,000	57	695	551
5,000	125	1,554	1,233
10,000	174	2,199	1,745
20,000	237	3,113	2,472
50,000	325	4,935	3,929
100,000	550	7,009	5,603
200,000	...	9,998	8,054
500,000	...	16,205	...
1,000,000	...	24,000	...
2,000,000	...	36,000	...

Table II. Standard errors, expressed in percentage points, of estimated percentages for population estimates

Base of percentages shown in thousands	Estimated percentages				
	2 or 98	5 or 95	10 or 90	25 or 75	50
500	1.1	1.8	2.4	3.5	4.0
1,000	0.8	1.2	1.7	2.5	2.9
2,000	0.6	0.9	1.2	1.8	2.0
5,000	0.4	0.6	0.8	1.1	1.3
10,000	0.3	0.4	0.5	0.8	0.9
20,000	0.2	0.3	0.4	0.6	0.6
30,000	0.1	0.2	0.3	0.5	0.5
50,000	0.1	0.2	0.2	0.4	0.4
100,000	0.0	0.1	0.2	0.2	0.3

National Origin of Persons Under 17 Years of Age

If both parents were of the same origin, this origin was assigned to the children.

If origin of parents differed and one was of Spanish origin, the Spanish origin was assigned to the children; if neither parent was of Spanish origin, the origin of the mother was assigned to the children.

If only one parent or other relative was in the household, the origin of that person was assigned to the children.

In other cases, unknown origin was assigned.

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Office Visits for Hypertension, National Ambulatory Medical Care Survey: United States, January 1975-December 1976[a]

According to data collected in the National Ambulatory Medical Care Survey (NAMCS), an estimated 46.1 million visits with a principal diagnosis of essential benign hypertension (EBH) were made to office-based physicians during the two-year period January 1975 through December 1976.

NAMCS is a sample survey conducted annually by the Division of Health Resources Utilization Statistics in the National Center for Health Statistics. The estimates in this report are based on information recorded by participating physicians on the "Patient Record" during sampled office encounters. A facsimile of this encounter form may be found in an earlier report.[1] A brief description of the sample design and an explanation of the sampling errors associated with selected aggregate statistics may be found in the Technical Notes of this report.

Visits for which EBH was the principal, or first-listed, diagnosis comprised 4 percent of the over 1.1 billion estimated visits made in calendar years 1975 and 1976 and ranked first among visits for all morbidity related principal diagnoses. While many of the estimates presented in this report deal chiefly with visits for which EBH was the principal diagnosis, it is important to note that for an additional 28.6 million visits, EBH was the diagnosis listed second or third in order of importance at that encounter. In addition, there were clearly more visits in which EBH was a disabling factor than are reflected by the visits in which EBH was a listed diagnosis. For example, of the 26 million visits reported for chronic ischemic heart disease that are not included in this report, over one-third were recorded by the physician as chronic ischemic heart disease *with* hypertensive disease. Moreover, another 1.6 million visits for some cardiovascular sequelae of EBH, such as hypertensive heart disease and angina pectoris with hypertensive disease, are not included in this report although hypertension is clearly a factor in these diagnoses. Therefore the estimates only reflect visits wherein the organic consequences of prolonged or untreated hypertension, for example, hypertensive heart disease, had not yet manifested themselves to the degree that the principal diagnosis of hypertension was superseded by its cardiovascular or cerebrovascular sequelae.

The coexistence of EBH with obesity, diabetes mellitus, neuroses, osteoarthritis, arthritis, arteriosclerosis, bronchitis, emphysema, and asthma is suggested by the visit data. Table 1 indicates the frequency of coincidence of these diseases listed as second or third diagnoses when EBH was listed first by the physician, and the frequency of their assignment to principal diagnosis when EBH was the diagnosis listed second or third. In both cases, these diseases appeared as the most frequent in combination with EBH. For example, obesity was the diagnosis listed second or third in over 10 percent of all visits where EBH was listed as the principal diagnosis. On the other hand, obesity was the primary diagnosis in 5 percent of all visits where EBH was listed as a second or third diagnosis. Diabetes mellitus figured as an additional diagnosis in about 5 percent of all EBH visits. When EBH was a condition listed second or third, a striking

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[a]This report was prepared by Beulah K. Cypress, Ph.D., Division of Health Resources Utilization Statistics.

Table 1. Number and percent of office visits for essential benign hypertension listed as principal and second or third diagnosis, by other most frequent diagnosis: United States, January 1975-December 1976

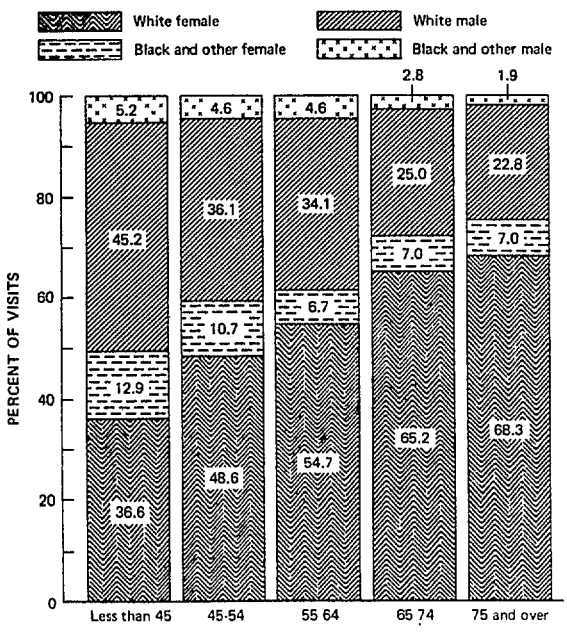
Diagnosis and ICDA code[1]	Hypertension as principal diagnosis		Hypertension as second or third diagnosis	
	Number of visits in thousands for second or third diagnosis	Percent of visits[2]	Number of visits in thousands for principal diagnosis	Percent of visits[3]
Obesity....277	4,674	10.1	1,425	5.0
Diabetes mellitus....250	2,054	4.5	4,038	14.1
Neuroses....300	1,380	3.0	1,125	3.9
Arthritis, unspecified....715	992	2.2	1,017	3.6
Osteoarthritis and allied conditions....713	845	1.8	1,328	4.7
Arteriosclerosis....440	649	1.4	*343	*1.2
Bronchitis, emphysema, asthma....490-493	576	1.3	943	3.3

[1] Based on *Eighth Revision International Classification of Diseases, Adapted for Use in the United States* (ICDA).
[2] Percents based on total number of visits where hypertension was listed as the principal diagnosis, 46,128,000.
[3] Percents based on total number of visits where hypertension was listed as second or third diagnosis, 28,590,000.

14 percent of those visits were diagnosed primarily as diabetes mellitus.

Figure 1 reveals the dramatic differences in proportions of visits with a principal diagnosis of EBH by race and sex within selected age groups.

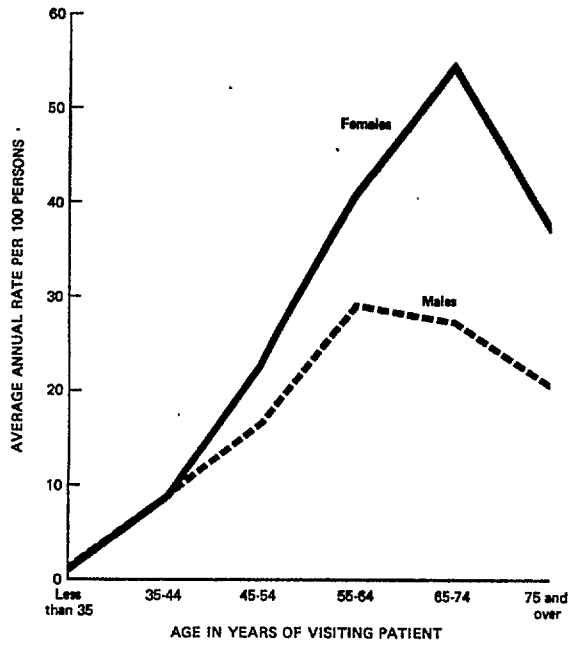
Figure 1. PERCENT OF OFFICE VISITS FOR HYPERTENSION, BY SEX, RACE, AND AGE: UNITED STATES, JANUARY 1975-DECEMBER 1976



Visits by white females dominated other race and sex combinations in all age groups over 45 years, with visits by white males second. The reader is cautioned that the frequency of visits for members of the black race is comparatively small, and therefore sampling error is increased. Furthermore, there is evidence that members of the black race avail themselves of ambulatory medical care rendered in hospital clinics and emergency rooms, settings not included in NAMCS, at a higher rate than do members of the white race. According to data from the Health Interview Survey (HIS), about 9 percent of ambulatory medical care visits by white persons were to hospital clinics or emergency rooms, whereas 21 percent of visits by members of other races were in similar settings.[2]

Visit rates for both sexes by age are illustrated in figure 2. There is a marked difference in visit rate by sex beginning at about age 44, with the female rate peaking in age group 65 to 74 years, about 10 years later than the highest rate for males. The Health and Nutrition Examination Survey (HANES) revealed that hypertension was more prevalent among women aged 65 to 74 years than among men of the same age.[3] Data from HIS indicate that females 65 years of age and older were the highest proportion of hypertensives in the population.[4] The higher female visit rate in NAMCS is therefore consistent with the higher EBH prevalence rate among females.

Figure 2. VISIT RATE PER 100 PERSONS FOR ESSENTIAL BENIGN HYPERTENSION, BY SEX AND AGE: UNITED STATES, JANUARY 1975-DECEMBER 1976



The advanced female age at visits as opposed to the younger male age at visits may be related to greater susceptibility of males to other cardiovascular diseases which preempt EBH as primary diagnosis. The Framingham Study demonstrated that for persons with definite hypertension the incidence rates of diseases such as coronary heart disease, myocardial infarction, and congestive heart failure were substantially higher for males than for females of the same age.[5] Therefore, while the diagnosis may remain EBH as females age, a principal diagnosis of EBH for male visits may have been supplanted earlier by other diagnoses.

The results of HIS and HANES studies in conjunction with visit data from NAMCS provide some insight into the utilization of ambulatory medical care resources by those in need of treatment. According to the findings of HANES, an estimated 23.2 million adults aged 18-74 years had definite hypertension, 23.4 million had borderline hypertension, and 81.4 million were normotensive. However, HANES also showed that of the borderline and normotensive groups 8 9 percent and 2.0 percent, respectively, took regular medication for high blood pressure, leading to an assumption in the HANES report that an additional 3.7 million adults had controlled hypertension, or a total EBH prevalence of 26.9 million. NAMCS estimates for 1975 and 1976 show 74.7 million visits by patients aged 18 to 74 years with EBH as a diagnosis listed first, second, or third, that is, EBH was a recognized and diagnosed condition regardless of the principal reason for the visit. If 37.3 million (one-half of 74.7 million), the average yearly visits in which EBH was a diagnosis is divided by the HANES EBH prevalence of 26.9 million, there was an estimated average minimum visit rate of 1.4 visits to office-based physicians per year for each person aged 18 to 74 years in the population who has hypertension. This utilization rate provides a model and a benchmark for estimating and evaluating utilization of physician resources by the segment of the population needing treatment for EBH. One reason for the low rate of utilization may well be due to the fact, shown in HANES, that 55 percent of the population estimated to have definite hypertension were *never diagnosed* as hypertensive. As consumer education reduces this number, the rate of utilization may increase.

Since EBH is a chronic condition requiring continuous care and maintenance therapy, it is not surprising that over 89 percent of visits were made by returning patients with EBH as a principal and recurring problem. Nor is it unexpected, in view of the high proportion of return visits, that in responding to the item on the Patient Record which calls for the chief complaint as nearly as possible in the patient's own words, 40 percent of all EBH visits were designated as "progress visits"[b] and an additional 27 percent as abnormally high blood pressure (table 2). Both of these reasons given by the patient are an indication of his prior awareness of the condition. Headache, vertigo, and fatigue, which are sometimes symptomatic of EBH, motivated another 14 percent of visits for EBH.

[b] According to the symptom classification developed for use in NAMCS, "progress visit" was the appropriate category if the patient stated that the reason for visit was "hypertension check" or "blood pressure check." It does not necessarily represent all followup visits which may be otherwise coded.

Table 2. Number and percent distribution of hypertension diagnosed office visits by patient's principal problem, complaint, or symptom: United States, January 1975-December 1976

Patient's principal problem, complaint, or symptom and NAMCS code[1]	Number of visits in thousands	Percent of visits
All principal problems	46,128	100.0
Progress visits[2] 980,985	18,336	39.8
Abnormally high blood pressure 205	12,582	27.3
Headache 056	2,759	6.0
Vertigo-dizziness 069	2,471	5.4
Fatigue 004	1,216	2.6
General medical exam 900	973	2.1
Nervousness 810	696	1.5
All other problems[3]	7,096	15.4

[1]Based on a symptom classification developed for use in NAMCS.
[2]Category 980, progress visit-specified condition includes "check for hypertension"; Category 985, progress visit-unspecified condition, includes "blood pressure check." These categories do not necessarily reflect the total number of followup visits for hypertension, which may be otherwise coded.
[3]Includes 1.3 million visits coded "none" or "unknown."

Table 3. Number and percent of office visits for principal diagnosis of essential benign hypertension, by diagnostic and therapeutic services ordered or provided: United States, January 1975-December 1976

Diagnostic and therapeutic service	Number of visits in thousands	Percent of visits
All visits[1]	46,128	100.0
Diagnostic services		
Limited history-exam	25,301	54.9
General history-exam	5,919	12.8
Clinical laboratory test	9,483	20.6
X-ray	2,167	4.7
Blood pressure check	36,861	79.9
Electrocardiogram	3,540	7.7
Therapeutic services		
Drug administered or prescribed[2]	28,141	61.0
Injection	3,691	8.0
Immunization	834	1.8
Medical counseling	6,747	14.6
Psychotherapy or therapeutic listening	901	2.0
Other services provided	1,931	4.2

[1]Figures will not add to totals, since more than one service might be provided.
[2]Includes prescription and nonprescription drugs.

Periodic blood pressure measurement is important both in treating EBH and as a screening device for hypertension detection and control.[6] The degree to which this diagnostic technique was used, as well as the number of types of diagnostic and therapeutic services rendered during EBH visits, are shown in table 3. About 80 percent of EBH visits included a blood pressure check. This may be an underestimate due in part to measurement error in that visits for hypertension often include a limited or general examination in which blood pressure is routinely measured but not separately recorded. Drugs were the most frequent form of therapy (61 percent of EBH visits), while medical counseling was an aspect of treatment in almost 15 percent of EBH visits.

Since detection of hypertension as early as possible is crucial to its control, investigation of the use of the sphygmomanometer or other measuring device during visits for conditions other than EBH is revealing. According to the data given in table 4, one-third of all physician visits included blood pressure checks. However, as a proportion of EBH visits only, blood pressure checks increased considerably, as would be expected. It is interesting to note that in those specialties that treated few or no cases of hypertension, such as neurology, urological surgery, and ophthalmology, blood pressure checks were made in a fair percentage of visits. It is not unexpected to find that specialists in cardiovascular diseases made more frequent use of the blood pressure check (72 percent of visits) than did any other specialist. Blood pressure was also measured in about 60 percent of visits to both internists and obstetrician-gynecologists.

Table 5 lists number and percents of visits for principal diagnosis EBH by visit status, seriousness of the patient's principal problem, and disposition. Because most visits for EBH were return visits and because EBH is so often asymptomatic, it is reasonable that although EBH is a condition requiring continuous medical care, only 22 percent of visits were judged "serious" or "very serious" by the physician. The highest

Table 4. Number and percent of blood pressure checks made during office visits for all diagnoses and for visits with hypertension as first, second, or third diagnosis, by selected specialties: United States, January 1975-December 1976

Specialty	All diagnoses		Hypertension diagnosis	
	Blood pressure checks in thousands	Percent of visits	Blood pressure checks in thousands	Percent of hypertension visits
All blood pressure checks	383,359	33.2	58,665	78.5
General and family practice	190,139	41.3	34,431	79.6
Internal medicine	77,859	59.7	16,674	80.5
General surgery	17,732	23.0	2,618	73.8
Obstetrics-gynecology	57,920	59.7	973	74.9
Cardiovascular diseases	9,679	71.6	1,840	82.7
Pediatrics	9,712	9.1	*	*
Orthopedic surgery	690	1.5	*	*
Urological surgery	2,797	13.5	*	*
Psychiatry	1,639	5.4	*	*
Neurology	848	22.4	*	*
Ophthalmology	1,094	2.0	*	*
Otolaryngology	496	1.8	*	*
All other specialties	12,754	7.4	1,406	66.6

Table 5. Number, percent distributions, and mean duration in minutes and standard error of mean duration of hypertension diagnosed office visits by visit status, seriousness of problem, and disposition: United States, January 1975-December 1976

Visit status, degree of seriousness, and disposition	Number of visits in thousands	Percent distributions of visits	Mean duration in minutes	Standard error of mean duration
All visits	46,128	100.0	14.3	.29
Visit status				
New patient	2,254	4.9	24.0	1.62
Returning patient:				
New problem	2,709	5.9	18.7	1.12
Recurring problem	41,165	89.2	13.5	.29
Degree of seriousness				
Very serious	765	1.7	17.8	1.84
Serious	9,479	20.6	14.9	.42
Slightly serious	21,373	46.3	14.0	.43
Not serious	14,510	31.5	14.3	.42
Disposition[1]				
No followup planned	1,189	2.6	...	...
Return visit:				
Specified time	39,708	86.1	...	...
If needed	4,734	10.3	...	...
Referral to another physician or agency	832	1.8	...	...
Other[2]	1,161	2.5	...	...

[1] Figures will not add to totals because more than one disposition was possible.
[2] Includes telephone followup, returned to referring physician, and admitted to hospital.

proportion (46 percent) were considered "slightly serious," with 32 percent assigned to the "not serious" category.

While the average visit for EBH lasted about 14 minutes, which is about the same as the average duration of all physician visits in NAMCS, duration of EBH visits was affected by the status of the problem. When EBH was presented as a new problem to the physician, either during an initial encounter or by a patient the physician had seen before, the visit lasted longer (24.0 minutes and 18.7 minutes, respectively) than did visits involving returning patients with EBH as a recurring problem (13.5 minutes). The duration of the new patient encounter was significantly longer than that of the returning patient with a new problem. This may be due to the need for more intensive workup in new patient visits. For example, 57 percent of all initial visits for EBH included a general examination as opposed to 23 percent of return visits for a new problem and only 10 percent of visits for an old problem. Seriousness did not significantly affect visit duration.

The instruction by the physician to return at a specified time, which was given in 86 percent of EBH visits, was no doubt heeded by the patient, since it very closely reflects the proportion of return visits made. An additional 10 percent were told to return if needed, and 2 percent were referred to another physician. In only 3 percent of EBH visits was no followup planned, and most of these visits were "not serious." Attesting to the chronic and asymptomatic nature of most EBH visits, the disposition of very few visits was admittance to a hospital.

Most EBH visits (87 percent) took place in the office of either the general and family practitioner or the internist, with the remaining 13 percent distributed among the practices of specialists in cardiovascular diseases, general surgery, and other diseases (figure 3).

Table 6 displays EBH visits by region, location, and type of practice. While office-based physicians in the least populated West Region had the fewest visits for hypertension, visit rates were substantially alike for all regions. Division of visits for EBH by metropolitan or nonmetropolitan areas was parallel to the average for all NAMCS visits.

Hypertension patients tended to visit physicians in solo practice more frequently than did patients presenting all diagnoses combined (70 percent of hypertension visits were to physicians in solo practice as opposed to 60 percent for all other diagnoses).

Figure 3. PERCENT DISTRIBUTION OF OFFICE VISITS FOR ESSENTIAL BENIGN HYPERTENSION BY SPECIALTY VISITED: UNITED STATES, JANUARY 1975-DECEMBER 1976

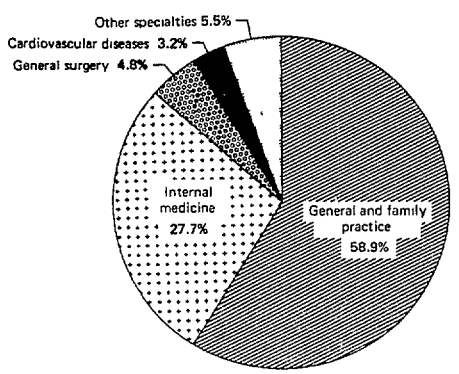


Table 6. Number of office visits and percent distributions and average annual visit rate for essential benign hypertension by location and type of practice: United States, January 1975-December 1976

Location and type of practice	Number of visits in thousands	Percent of visits	Annual rate per 100 persons[1]
All visits	46,128	100.0	11.1
LOCATION OF PRACTICE			
Region			
Northeast	12,456	27.0	12.8
North Central	13,376	29.0	11.8
South	12,894	28.0	9.7
West	7,402	16.1	10.2
Type of area			
Metropolitan	33,079	71.7	11.7
Nonmetropolitan	13,049	28.3	9.8
TYPE OF PRACTICE			
Solo	32,170	69.7	. . .
Other[2]	13,957	30.3	. . .

[1]The base populations used in computing the rates are national estimates published by the U.S. Bureau of the Census for the civilian noninstitutionalized population as of July 1, 1975, in Series P-25, No. 614, and as of July 1, 1976, in Series P-25, Nos. 643 and 646, of *Current Population Reports.*

[2]Includes partnerships and group practices.

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SYMBOLS

Data not available	---
Category not applicable	...
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

TECHNICAL NOTES

SOURCE OF DATA: The information presented in this report is based on data collected in the National Ambulatory Medical Care Survey (NAMCS) during 1975 and 1976. The target population of NAMCS encompasses office visits within the conterminous United States made by ambulatory patients to physicians who are principally engaged in office practice.

SAMPLE DESIGN: NAMCS utilized a multistage probability design that involves samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within practices. Each year a sample of practicing physicians is selected from master files maintained by the American Medical Association and the American Osteopathic Association. These physicians are requested to complete Patient Records (brief encounter forms) for a systematic random sample of office visits taking place within their practice during a randomly assigned weekly reporting period. (A facsimile of the Patient Record used is shown in a previous issue of *Advance Data From Vital and Health Statistics,* No. 12, October 12, 1977.) Characteristics of the physician's practice, such as primary specialty and type of practice, are obtained during an induction interview. A detailed description of the NAMCS design and procedures has been in Series 13, Number 33, of *Vital and Health Statistics.*

SAMPLING ERRORS: Since the estimates for this report are based on a sample rather than the entire universe, they are subject to sampling variability. The standard error is primarily a measure of sampling variability. 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 percent of the estimate. Relative standard errors of selected aggregate statistics are shown in table I. The standard errors appropriate for the estimated percentages of office visits are shown in table II.

ROUNDING: Aggregate estimates of office visits presented in the tables are rounded to the nearest thousand. The rates and percents, however,

Table I. Approximate relative standard error of estimated numbers of office visits, NAMCS 1975-76

Estimate in thousands	Relative standard error in percentage points
600	30.2
1,000	23.5
2,000	16.7
4,000	12.0
10,000	8.0
40,000	4.8
200,000	3.4
1,000,000	3.1

Example of use of table: An aggregate estimate of 25,000,000 visits has a relative standard error of 6.4 percent or a standard error of 1,600,000 visits (6.4 percent of 25,000,000).

Table II. Approximate standard errors of percentages for estimated numbers of office visits, NAMCS 1975-76

Base of percentage (number of visits in thousands)	Estimated percentage					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
	Standard error in percentage points					
600	3.0	6.5	9.0	12.0	13.8	15.0
1,000	2.3	5.1	7.0	9.3	10.7	11.6
2,000	1.6	3.6	4.9	6.6	7.5	8.2
4,000	1.2	2.5	3.5	4.7	5.3	5.8
10,000	0.7	1.6	2.2	2.9	3.4	3.7
40,000	0.4	0.8	1.1	1.5	1.7	1.8
200,000	0.2	0.4	0.5	0.7	0.8	0.8
1,000,000	0.1	0.2	0.2	0.3	0.3	0.4

Example of use of table: An estimate of 20 percent based on an aggregate estimate of 80,000,000 visits has a standard error of 1.3 percent. The relative standard error of 20 percent is 6.5 (1.3 percent ÷ 20 percent)

were calculated on the basis of original, unrounded figures. Due to rounding of percents, the sum of percentages may not equal 100.0 percent.

DEFINITIONS: An *ambulatory patient* is an individual presenting himself for personal health services who is neither bedridden nor currently admitted to any health care institution on the premises.

An *office* is a place that the physician identifies as a location for his ambulatory practice. Responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than an institution.

A *visit* is a direct personal exchange between an ambulatory patient and a physician or a staff member working under the physician's supervision for the purpose of seeking care and rendering health services.

A *physician* is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) currently in practice who spends time in caring for ambulatory patients at an office location. Excluded from NAMCS are physicians who specialize in anesthesiology, pathology, radiology; physicians who are federally employed; physicians who treat only institutionalized patients; physicians employed full time by an institution; and physicians who spend no time seeing ambulatory patients.

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FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ▪ Public Health Service | Number 29 ▪ May 17 1978

A Comparison of Nursing Home Residents and Discharges from the 1977 National Nursing Home Survey: United States[1]

This report, comparing nursing home residents and discharges, presents provisional estimates from the 1977 National Nursing Home Survey (NNHS) conducted by the National Center for the Health Statistics. It is a nationwide sample survey of nursing homes describing the facilities and their costs and the characteristics of the residents, the discharges, and the staff.

The survey is the second in an ongoing NNHS system. The first survey was conducted between August 1973 and April 1974. The data for the 1977 NNHS were collected from May through December 1977 with a midpoint of August 1977. The estimates are provisional, since they are based on a subsample of about 340 of the 1,700 facilities in the national survey. Nursing homes included in the survey were nursing care homes, personal care homes (with and without nursing), and domiciliary care homes as classified by the 1973 Master Facility Inventory.[2] In addition, all nursing homes that opened for business between 1973 and December 1976 were included. Another *Advance Data* presenting provisional estimates of facility and staff characteristics will be published shortly.

Data presented in this report include a demographic description of the resident and discharged populations and a discussion of selected health status measures. The data also include a discussion of selected measures related to the utilization of nursing homes such as prior living arrangements, length of stay, living arrangements after discharge, source of payment, and charges for care. The resident data are based on a sample of all residents on the nursing home's roster the night before the data collection began. Consequently, they may be considered a "snapshot" of nursing home residents on any given day between May and December 1977. Similar data were collected in the 1973-74 NNHS.

The discharge data, in contrast, are based on a sample of all discharges from the facility during the calendar year 1976. Discharge data not collected in the earlier survey were added to the NNHS design to provide information on duration of stay in nursing homes and on the characteristics of persons who spend a relatively short time in the facility.

The discharge data therefore differ from the resident data in several major areas. First, the universe is all discharges from the facility during the entire year 1976, while the universe for the residents is all persons on the roster for a single night during the data collection period (May through December 1977). Second, the discharge data represent 1976 characteristics, in contrast to the resident data which represent 1977 characteristics. Moreover, the discharge data were, of necessity, limited to information recorded in the medical record, whereas the resident data include personal knowledge of a caregiver when the information was not available in the record. Finally, there is a theoretical difference in the universe, since the discharge sample could have included the same person more than once if he or she was discharged more than once from a

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[1] This report was prepared by Esther Hing and Aurora Zappolo, Division of Health Resources Utilization Statistics.

[2] National Center for Health Statistics: Inpatient health facilities as reported from the 1973 MFI Survey, by A. Sirrocco. *Vital and Health Statistics.* Series 14-No. 16. DHEW Pub. No. (HRA) 76-1811. Health Resources Administration. Washington. U.S. Government Printing Office, May 1976.

nursing home during 1976, while the resident sample precludes any chance of persons falling into the sample more than once.

For this report's purposes, *residents* refers to persons residing in the nursing home at the time of the survey (May to December 1977), and *discharges* refers to persons formally discharged from the nursing home during 1976. Both terms characterize the same pool of *patients* receiving care in nursing homes measured at different points in time.

Information on sampling variability is presented in the Technical Notes.

DEMOGRAPHIC CHARACTERISTICS

On any given day during the period May through December 1977, there were about 1,287,400 nursing home residents in 18,300 nursing homes. This provisional estimate is a 20-percent increase over the 1,075,800 residents estimated by the 1973-74 NNHS. This increase is slightly exaggerated, since the 1977 NNHS included nursing and personal care facilities, whereas the 1973-74 NNHS included only facilities providing some level of nursing care. The number of residents in facilities that provide no nursing care, however, is small. According to the 1973 Master Facility Inventory, about 1 percent of all nursing home residents were in such facilities.[3] An increase in the *number* of persons in nursing homes is expected, since the elderly population in the United States is increasing. For example, between 1970 and 1980 the number of persons 65 years and over in the population is projected to increase by 22 percent.[4] Nevertheless, the 1,097,900 residents 65 years of age and over represent the same *proportion* of the United States population aged 65 and over as was found in the 1973-74 NNHS—about 5 percent.

[3]National Center for Health Statistics: *The Nation's Use of Health Resources*, 1976 Edition. DHEW Pub. No. (HRA) 77-1240. Health Resources Administration. Washington. U.S. Government Printing Office, 1977. p. 73.

[4]U.S. Bureau fo the Census: Demographic Aspects of Aging and the Older Population in the United States. *Current Population Reports*. Special Studies. Series P-23, No. 59. Washington. U.S. Government Printing Office, May 1976.

The survey found that the estimated number of persons discharged from nursing homes during 1976 was about 973,100. Because the methodology to count discharges differed from that used in earlier surveys, comparisons of figures are not valid, and therefore trend statements are not presented.

Table 1 shows that in 1977 nursing home residents were elderly (median age 80), primarily female (71 percent), widowed (58 percent), and white (92 percent). Table 2 shows that discharges in 1976 were also elderly (median age 80) and primarily female (64 percent). The distribution on the basis of marital status, on the other hand, shows a greater proportion of discharges who were married (20 percent compared to 13 percent of the residents) and fewer who

Table 1. Provisional number and percent distribution of nursing home residents by age, sex, race, marital status, and median length of stay: United States, 1977

Selected resident characteristics	Nursing home residents	
	Number	Percent distribution
All residents	1,287,400	100.0
Age		
Under 65 years	189,500	14.7
65-74 years	202,000	15.7
75-84 years	470,600	36.6
85 years and over	425,300	33.0
Sex		
Male	369,400	28.7
Female	918,000	71.3
Race		
White[1]	1,180,300	91.7
All other races or ethnicities	107,100	8.3
Current marital status		
Married	160,800	12.5
Widowed	743,700	57.8
Divorced or separated	87,600	6.8
Never married	265,900	20.7
Unknown	*	*
Median length of stay		
Number of days	582	---

[1]Excludes Spanish-American.

Table 2. Provisional number of discharges from nursing homes and percent discharged alive by age, sex, and marital status: United States, 1976

Selected characteristics of discharges	Discharges from nursing homes	
	Number	Percent discharged alive
All residents	973,100	74.2
Age		
Under 65 years	135,400	89.9
65-74 years	161,200	73.4
75-84 years	381,800	75.9
85 years and over	294,700	65.3
Sex		
Male	349,700	74.8
Female	623,400	73.9
Marital status at discharge		
Married	192,100	80.1
Widowed	552,300	71.8
Divorced or separated	84,700	86.2
Never married	106,300	69.4
Unknown	37,700	*

were never married (11 percent compared to 21 percent of the residents). However, the proportions of discharges who had other marital statuses were not statistically different from those for residents.

Ultimately, the outcome of nursing home care may be characterized by whether the discharge is alive or dead. Overall, about 3 out of 4 (74 percent) of the discharges were alive (table 2). Age was related to whether a discharge was alive or dead. Younger discharges were more likely to be discharged alive; 90 percent of those under 65 years of age were discharged alive compared to 75 percent of those 65-84 years of age and 65 percent of those 85 years and older. Sex, on the other hand, had no bearing on outcome. The proportion of females discharged alive (74 percent) was similar to that of males (75 percent).

HEALTH STATUS

For this report, the health status measures selected were primary diagnosis and the ability to perform activities for daily living. The resident's primary diagnosis was that provided by the physician at the time of the last, i.e., most recent, examination. In order to examine the relationship between eventual outcome and health status at admission the primary diagnosis for discharged persons was the diagnosis made at the time of admission. Any comparisons between the diagnoses of residents and of discharges should take into account the difference in the time of measurement (most recent examination versus admission) as well as the potential differences in the quality of the diagnoses at each of these points.

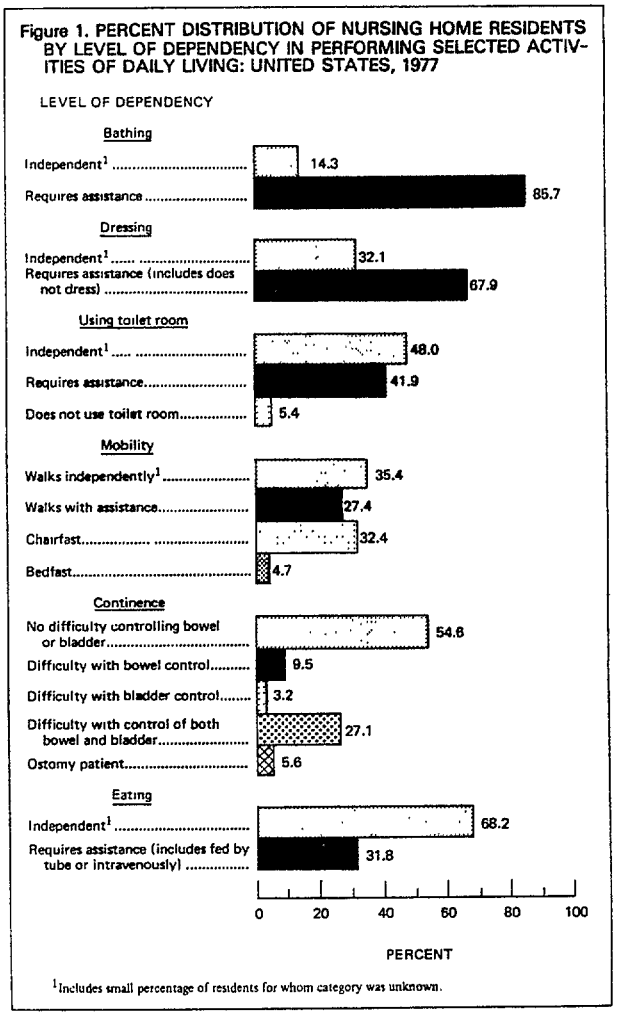
Table 3 shows the most recent primary diagnosis for residents, with about 37 percent having diseases of the circulatory system, 22 per-

Table 3. Provisional number of nursing home residents and rate per 1,000 residents by primary diagnoses at last examination: United States, 1977

Primary diagnosis at last examination	Nursing home residents	
	Number	Rate per 1,000 residents
All residents	1,287,400	1,000.0
Diseases of the circulatory system	477,400	370.8
Congestive heart failure	57,100	44.4
Arteriosclerosis	235,600	183.0
Hypertension	45,300	35.2
Stroke	102,300	79.5
Other diseases of the circulatory system	37,000	28.8
Mental disorders and senility without psychosis	287,600	223.4
Psychosis, including senile	85,000	66.1
Chronic brain syndrome	91,600	71.2
Senility without psychosis	*	*
Mental retardation	59,500	46.2
Neurosis, alcoholism, drug addiction, and other mental disorders	*	*
Other diagnoses	486,200	377.7
Diabetes	77,200	60.0
Fractures	40,900	31.8
Diseases of the nervous system	60,700	47.1
Arthritis or rheumatism	57,100	44.3
Cancer	*	*
Other or unknown	226,100	175.6

Table 4. Provisional number of discharges from nursing homes and percent discharged alive by selected primary diagnoses at admission: United States, 1976

Selected primary diagnosis at admission	Discharges from nursing homes	
	Number	Percent discharged alive
All discharges	973,100	74.2
Diseases of the circulatory system	428,300	72.4
Congestive heart failure	53,500	*
Arteriosclerosis	191,400	73.0
Stroke	115,600	71.1
Mental disorders and senility without psychosis	118,300	73.5
Chronic brain syndrome	51,600	56.9
Other diagnoses	426,500	76.3
Diabetes	49,800	80.5
Fractures	71,500	84.6
Cancer	75,800	60.7



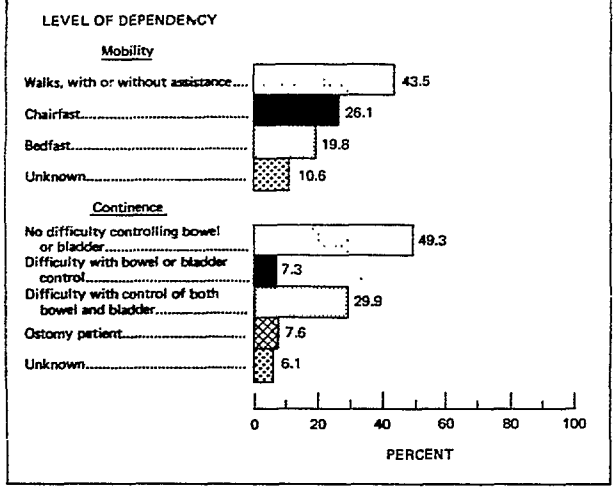
cent having a mental disorder or senility without psychosis, and 38 percent having some other problem. Within each of these groups, only the larger categories of diagnoses are shown. For example, the most frequent (18 percent of the residents) primary diagnosis was arteriosclerosis, which is the "Diseases of the circulatory system" group.

Table 4 shows the primary admitting diagnosis by outcome for the sample of discharges. Preliminary analysis suggests that discharges admitted with diagnoses requiring short-term or recuperative care were more likely to be discharged alive than those admitted with diagnoses which can usually only be controlled or monitored. For example, discharges admitted with fractures were more likely to be discharged alive (85 percent) than those admitted for chronic brain syndrome (57 percent) or cancer (61 percent).

Figure 1 shows the ability of residents to perform selected activities for daily living. A large majority (86 percent) required assistance in bathing, usually on the part of another person rather than by the use of special equipment. Fewer, but still a majority (68 percent), required some assistance in dressing or did not dress. Less than half, on the other hand, required assistance with either using the toilet (42 percent) or eating (32 percent).

Information on activities for daily living for discharges is limited to those activities , mobility and continence, which are described in the medical record. Figure 2 shows the proportion of discharges who had problems with mobility or continence. A far greater proportion of discharges than residents (figure 1) were bedfast: Twenty percent of the discharges were bedfast, compared to only 5 percent of the residents. The proportions of residents and discharges having any difficulty with continence, however, were the same (45 percent). These and other

Figure 2. PERCENT DISTRIBUTION OF DISCHARGES FROM NURSING HOMES BY LEVEL OF DEPENDENCY IN PERFORMING SELECTED ACTIVITIES OF DAILY LIVING: UNITED STATES, 1976



comparisons in health status from the full national sample will be explored in future reports in Series 13 of *Vital and Health Statistics.*

UTILIZATION OF NURSING HOMES

This section presents a brief profile of the process of nursing home utilization in terms of the primary reason for admission and living arrangements prior to admission; length of stay and charges for care; and the place to which a live discharge was transferred.

Poor physical health was cited for 76 percent of nursing home residents as the primary reason for being in the facility. In contrast, lack of social or economic resources, disruptive behavior, or other reasons were cited as reasons for 12 percent of the residents, mental illness was cited for 7 percent, and mental retardation for only 5 percent of the residents.

The poor physical health of the majority of residents was reflected in their living arrangements prior to admission. About half (54 percent) of the residents were admitted from a health facility. This group was composed mainly of those admitted from a general or short-stay hospital (32 percent) and those transferred from another nursing home (13 percent). Forty-one percent, however, had moved from a private or semiprivate residence, where they had usually lived with others. (table 5).

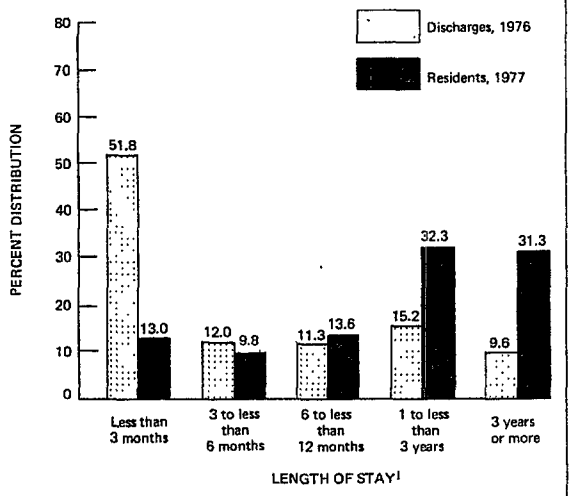
Table 5. Provisional number and percent distribution of nursing home residents by living arrangements prior to admission and primary reason for care: United States, 1977

Living arrangement prior to admission and primary reason for care	Nursing home residents	
	Number	Percent distribution
Living arrangement prior to admission		
All residents	1,287,400	100.0
Private or semiprivate residence	529,100	41.1
With others	325,000	25.2
Alone	154,100	12.0
Unknown if with others	49,900	3.9
Another health facility[1]	694,800	54.0
Another nursing home	164,600	12.8
General or short-stay hospital	405,700	31.5
Mental hospital	80,000	6.2
Other health facility or unknown type	44,500	3.5
Unknown or other arrangement	63,500	4.9
Primary reason for care		
All residents	1,287,400	100.0
Poor physical health	983,100	76.4
Mental illness	91,000	7.1
Mental retardation	64,400	5.0
Social, economic, behavioral, or other reason	148,800	11.6

[1] 347,300 of these residents, admitted from another health facility, had gone to that facility from a private or semiprivate residence.

Table 1 shows that the median length of stay for residents—the time interval between the last admission date and the survey date—was 582 days, or 1.6 years. Figure 3 shows that nearly a third of the residents (32 percent) had been in the facility for 1 to 3 years with another third (31 percent) being in the facility for 3 years or more. The survey methodology for residents has the capacity only to measure the time the resident has been in the facility, not the length of time that would ultimately be spent in the facility. Such information on the entire *duration of stay* in the facility is one of the unique features of the discharge data. Since the median length of stay for residents was 1.6 years, the entire dura-

Figure 3. PERCENT DISTRIBUTION OF NURSING HOME RESIDENTS IN 1977 AND DISCHARGES DURING 1976 BY LENGTH OF STAY: UNITED STATES



[1] For residents in 1977 time interval between admission date for each resident and survey date.

tion of stay for discharges might be expected to be considerably longer. However, this was not the case. Rather than a longer stay, the discharge sample had significantly shorter median duration—84 days or 12 weeks. Fifty-two percent of the discharges had been in the facility for less than 3 months in contrast to only 13 percent of the residents (figure 3).

The disparity between the residents' and the discharges' length of time in the facility suggests that there are two separate groups of persons who use nursing homes: those admitted for relatively long periods of time because there is little chance of their chronic problems improving, and those admitted for relatively short periods of time because recuperative care is needed. The resident and discharge samples included both types of users. The resident sample, however, was more likely to include the long-term users, since the resident sample included only residents in the nursing home *on the night before the survey.* The discharge sample, in contrast, included a larger proportion of the short-term users, since it included all discharges *during calendar year 1976.*

An important example of the short-term user of nursing home care is the Medicare recipient. Medicare provides skilled nursing care for a maximum of 100 days following hospitalization, but the length of stay for recipients was far under the limit. In 1976, the median time spent in the facility by discharges using Medicare for their primary payment source was 24 days (table 6); 12 percent of the discharges relied primarily on Medicare for payment of care.

Discharges receiving skilled nursing care under Medicaid (17 percent) and those receiving intermediate care under Medicaid (19 percent) tended to have longer stays than those using other sources of payment. The median stays for discharges who had received skilled or intermediate care paid for by Medicaid were 176 and 220 days, respectively, compared to median stays of 24-85 days for the remaining payment sources (table 6). Nevertheless, the median stay for both Medicaid discharge groups for 1976 were still significantly shorter than the median stay for residents in 1977 (582 days).

The effect of the difference in the health status between the discharged and the resident

Table 6. Provisional number and percent distribution of discharges from nursing homes, median duration of stay, and average total monthly charge by primary source of payment: United States, 1976

Primary source of payment	Number of discharges from nursing homes	Percent distribution of discharges	Median duration of stay in days	Average total monthly charge
All primary sources of payment	973,100	100.0	84	$816
Own income or family support	402,100	41.3	59	848
Medicare	119,800	12.3	24	1,292
Medicaid:				
Skilled care	166,000	17.1	176	845
Intermediate care	185,700	19.1	220	598
All other sources	99,500	10.2	85	461

populations can also be seen in the comparison of the average monthly charge. Overall, the average charge for residents in 1977 ($669) and for discharges in 1976 ($816) were each significantly higher than monthly charges for residents reported in previous surveys of nursing homes; the average charge for residents was $186 in 1964, $328 in 1969, and $479 in 1973-74. The average charge for discharges in 1976 ($816), however, was significantly higher than the average charge for residents in 1977 ($669). This difference in charges is related to the differences in care received by the resident and discharge populations. The poor health of many in the discharged population is reflected in the findings that 25 percent of *all* discharges died in the nursing home and 45 percent of all *live* discharges were transferred to a general or short-stay hospital, presumably to receive more intensive care (table 7). Residents, in contrast, tended to require less intensive care. For example, only 5 percent of the residents were bedfast compared to 20 percent of the discharged population.

Resident's average total monthly charge

1977	$669
1973-74	$479
1969	$328
1964	$186

Information on the places to which live discharges were transferred shows that they were more likely to receive continued care after discharge than to return to a private or semiprivate residence. The proportion of live discharges sent to another health facility (62 percent) was higher than that sent to a private or semiprivate residence (33 percent). Thus the high proportion of live discharges was not necessarily due to improved health status; some persons were discharged to another facility because of deterioration of health and the need for more intensive care. This is further reflected in the proportion of discharges to another health facility who were known to have subsequently died in that facility. Of the 448,100 persons discharged to another health facility, 19 percent died there.

Further analysis of the nursing home utilization process, from the inital admission into the facility through eventual outcome, will be presented in subsequent reports.

Table 7. Provisional number and percent distribution of live discharges from nursing homes by living arrangements after discharge: United States, 1976

Living arrangement after discharge	Discharges from nursing homes	
	Number	Percent distribution
All arrangements for live discharges	722,400	100.0
Private or semiprivate residence	240,800	33.3
Another health facility	[1]448,100	62.0
Another nursing home	96,200	13.3
General or short-stay hospital	322,700	44.7
Mental hospital	*	*
Other health facility or unknown type	*	*
Unknown or other arrangement	*	*

[1]19.0 percent were known to have died here.

TECHNICAL NOTES

Since the statistics presented in this report are based on a sample, they will differ somewhat from figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and procedures. The standard error is primarily a measure of the variability that occurs by chance because only a sample, rather than the entire universe, is surveyed. The standard error also reflects part of the measurement error, but it does not measure any systematic biases in the data. The chances are about 95 out of 100 that an estimate from the sample differs from the value which would be obtained from a complete census by less than twice the standard error. Provisional estimates of standard errors for percentages of residents and discharges are provided in table I; the provisional standard errors for average monthly charges are provided in table II.

The relative standard error of an estimate is the standard error of the estimate divided by the estimate itself and is expressed as a percentage of the estimate. In this report, an asterisk is shown for any estimate with more than a 25-percent relative standard error.

In this report, terms such as "similar" and "the same" mean that any observed difference between two estimates being compared is *not*

Table I. Provisional standard errors of percentages of residents and discharges

Number of residents, discharges (base of percent)	Estimated percent					
	1 or 99	5 or 95	10 or 90	20 or 80	40 or 60	50
	Standard error in percentage points					
50,000	2.03	4.44	6.12	8.16	9.99	10.19
100,000	1.43	3.14	4.33	5.77	7.06	7.21
200,000	1.01	2.22	3.06	4.08	4.99	5.10
400,000	0.72	1.57	2.16	2.88	3.53	3.60
800,000	0.51	1.11	1.53	2.04	2.50	2.55
1,000,000	0.45	0.99	1.37	1.82	2.23	2.28
1,200,000	0.41	0.91	1.25	1.66	2.04	2.08

Table II. Provisional standard errors of average monthly charges

Number of residents, discharges (base of ratio)	Average monthly charge						
	$400	$500	$600	$700	$800	$900	$1,000
	Standard error in dollars						
90,000	84	100	116	131	147	162	178
100,000	80	95	110	124	139	154	168
200,000	56	67	77	88	98	109	119
400,000	40	47	55	62	69	76	84
600,000	32	38	44	50	56	62	68
800,000	28	33	38	43	49	54	59
1,000,000	25	30	34	39	43	48	52
1,200,000	23	27	31	35	39	43	48

statistically significant. Terms such as "greater," "less," "larger," and "smaller," indicate that any observed difference is statistically significant. The normal deviate test with a 0.5 level of significance was used to test all comparisons. Since all observed differences were not tested, lack of comment in the text does not mean that the difference was not statistically significant.

SYMBOLS

Data not available	---
Category not applicable	...
Quantity zero	-
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FROM VITAL & HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ▪ Public Health Service | Number 30 ▪ July 13, 1978

1976 Summary: National Ambulatory Medical Care Survey[1]

The estimates in this report highlight the findings of the 1976 National Ambulatory Medical Care Survey (NAMCS), a sample survey designed to explore the provision and utilization of ambulatory care in the physician's office—the setting where most Americans seek health care. The survey is conducted yearly in the coterminous United States by the Division of Health Resources Utilization Statistics. The survey sample is selected from doctors of medicine and osteopathy who are principally engaged in office-based, patient-care practice. In its current scope, NAMCS excludes physicians practicing in Alaska and Hawaii; physicians whose specialty is anesthesiology, pathology, or radiology; physicians in Federal service.

Figure 1 is a facsimile of the Patient Record used by participating physicians to record information about their office visits in both the 1975 and 1976 survey years. The reader may find it useful to refer to figure 1 as selected aspects of the survey findings are presented.

Since the estimates presented in this report are based on a sample rather than the entire universe of office-based, patient-care physicians, they are subject to sampling variability. See "Technical Notes" at the end of this report for an explanation and for guidelines in judging the relative precision of the estimates presented.

[1]This report was prepared by Hugo Koch, Raymond O. Gagnon, and Trena Ezzati, Division of Health Resources Utilization Statistics.

DATA HIGHLIGHTS

Physician Characteristics

Among the 12 most visited specialists, primary care providers led the other specialists in the provision of office-based, ambulatory care; two of these providers, general/family physicians and internists, accounted for one-half of all visits. In a ratio of about 3 to 2, visits to solo practitioners clearly outnumbered visits to physicians in multiple-member practice. (See table 1.)

Patient Characteristics

Number of office visits per person per year generally increased in a direct parallel to advancing age; the rate for persons aged 65 years and over was more than double the rate for persons under 15 years. Females reported more visits to the physician's office than males did; for every 2 visits made by males, there were about 3 visits by females. This 2-to-3 ratio also prevailed for annual visit rates between the sexes. The data in table 2 reveal that visits by females outnumbered visits by males in every age interval above 14 years of age.

Clinical Characteristics

Reason for visit.—The information in item 5 of the Patient Record represents the reasons for visiting the physician's office as expressed by

patients in their own words. The terms and codes applied to the patient's symptoms, complaints, or other problems come from a symptom classification developed for use in NAMCS.[2] Table 3 confines itself to "symptomatic" reasons for the visit, listing in rank order the 25 complaints or symptoms most frequently presented. "Nonsymptomatic" reasons such as physical examinations and visits for medication are excluded from the tabulation.

Principal diagnosis.—Table 4 lists the 25 most common principal diagnoses that were provisionally or finally assigned to office visits by the physician. Table 5 shows the classification of all principal diagnoses by the major diagnostic groups. The diagnostic terms and codes are those established in the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States, 1968* (ICDA). The considerable effort that office-based physicians devote to preventive and maintenance care—as opposed to care that is primarily morbidity related—is evident in the finding that 18 percent of visits center on examinations without illness and on such special conditions as immunizations, prenatal and postnatal care, and medical and surgical aftercare (table 5).

Diagnostic and therapeutic services.—The limited examination was the diagnostic tool most frequently used in office-based practice; drug therapy was the most frequent form of treatment. The finding that blood pressure was taken in about one-third of visits may cast some doubt on the general employment of this procedure as a routine detection mechanism. "Counseling" was checked by the physician only when it constituted a major part of the treatment provided during the visit. The overall use of such an intangible service is almost impossible to quantify. Certainly, the finding that counseling was prominent in only 14 percent of visits understates the actual extent of this important aspect of the physician's office practice.

[2] National Center for Health Statistics: The National Ambulatory Medical Care Survey: Symptom Classification, United States. *Vital and Health Statistics.* Series 2-No. 63. DHEW Pub. No. (HRA) 74-1337. Health Resources Administration. Washington. U.S. Government Printing Office, May 1974.

Other Visit Characteristics

Data about prior-visit status (table 7) reveal that the average office-based physician dealt chiefly with patients that he had seen before ("old" patients). New patients accounted for only 1 of every 7 visits. Furthermore, the physician dealt chiefly with problems for which he previously had treated the patient ("old" problems). Only about 1 of every 4 visits by an old patient concerned a new problem. *New problem encounters* (i.e., any problem presented by a new patient or a new problem presented by an old patient) accounted for about 37 percent of all visits. The remaining visits (i.e., old problems presented by old patients) offer a rough estimate of the average number of return visits made during the year for any given new problem. Thus, for a typical new problem presented in 1976, there was an average of 1.7 return visits in the course of that year.

Data on seriousness (table 7) express the physician's judgment as to the extent of impairment that might result if no care were available for the given problem. Office-based ambulatory care does not center on the treatment of problems that bear a "serious and very serious" prognosis. Only about 1 of every 5 visits belonged in this category. The largest proportion of visits (an estimated 48 percent) was given a "not serious" evaluation. This is due in large degree to the substantial amount of preventive care and routine maintenance care provided in the physician's office, and to the relatively high prevalence of acute, self-limiting conditions encountered there.

Some form of scheduled followup was the rule in office-based practice (see findings on disposition, table 7). In about 61 percent of visits the patient was directed to return at a specified time. Only 2 percent of visits resulted in hospital admission, a finding that reflects the nonserious character of most visits made to office-based physicians.

Duration of visits (table 7) is based on the estimated time spent in face-to-face encounter between patient and physician. The average encounter lasted about 15 minutes. Visits of 0-minute duration are those where there was no contact between physician and patient. These chiefly involved visits during which the patient was provided care by a member of the physician's staff.

Figure 1. PATIENT RECORD

ASSURANCE OF CONFIDENTIALITY - All information, which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey and will not be disclosed or released to others persons or used for any other purpose.

C532201

1. DATE OF VISIT Mo / Day / Yr

PATIENT RECORD
NATIONAL AMBULATORY MEDICAL CARE SURVEY

2. DATE OF BIRTH Mo / Day / Yr

3. SEX
1 ☐ FEMALE
2 ☐ MALE

4. COLOR OR RACE
1 ☐ WHITE
2 ☐ NEGRO/BLACK
3 ☐ OTHER
4 ☐ UNKNOWN

5. PATIENT'S PRINCIPAL PROBLEM(S) COMPLAINT(S), OR SYMPTOM(S) THIS VISIT *(In patient's own words)*
a MOST IMPORTANT_____
b OTHER_____

6. SERIOUSNESS OF PROBLEM IN ITEM 5a *(Check one)*
1 ☐ VERY SERIOUS
2 ☐ SERIOUS
3 ☐ SLIGHTLY SERIOUS
4 ☐ NOT SERIOUS

7. HAVE YOU EVER SEEN THIS PATIENT BEFORE?
☐ YES 2 ☐ NO
↓
If YES, for the problem indicated in ITEM 5a?
☐ YES 2 ☐ NO

8. MAJOR REASON(S) FOR THIS VISIT *(Check all major reasons)*

1 ☐ ACUTE PROBLEM
2 ☐ ACUTE PROBLEM, FOLLOW-UP
3 ☐ CHRONIC PROBLEM, ROUTINE
4 ☐ CHRONIC PROBLEM, FLARE-UP
5 ☐ PRENATAL CARE
6 ☐ POSTNATAL CARE
7 ☐ POSTOPERATIVE CARE →
(Operative procedure)
8 ☐ WELL ADULT/CHILD EXAM
9 ☐ FAMILY PLANNING
10 ☐ COUNSELING ADVICE
11 ☐ IMMUNIZATION
12 ☐ REFERRED BY OTHER PHYS/AGENCY
13 ☐ ADMINISTRATIVE PURPOSE
14 ☐ OTHER (Specify)

9. PHYSICIAN'S PRINCIPAL DIAGNOSIS THIS VISIT
a DIAGNOSIS ASSOCIATED WITH ITEM 5a ENTRY
_____
_____
b OTHER SIGNIFICANT CURRENT DIAGNOSES *(In order of importance)*
_____
_____

10. DIAGNOSTIC/THERAPEUTIC SERVICES ORDERED/PROVIDED THIS VISIT *(Check all that apply)*

01 ☐ NONE
02 ☐ LIMITED HISTORY/EXAM
03 ☐ GENERAL HISTORY/EXAM
04 ☐ CLINICAL LAB. TEST
05 ☐ BLOOD PRESSURE CHECK
06 ☐ EKG
07 ☐ HEARING TEST
08 ☐ VISION TEST
09 ☐ ENDOSCOPY
10 ☐ OFFICE SURGERY
11 ☐ DRUG PRESCRIBED
12 ☐ X-RAY
13 ☐ INJECTION
14 ☐ IMMUNIZATION/DESENSITIZATION
15 ☐ PHYSIOTHERAPY
16 ☐ MEDICAL COUNSELING
17 ☐ PSYCHOTHERAPY/THERAPEUTIC LISTENING
18 ☐ OTHER (Specify)_____
_____

11. 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/AGENCY
6 ☐ RETURNED TO REFERRING PHYSICIAN
7 ☐ ADMIT TO HOSPITAL
8 ☐ OTHER (Specify)_____

12. DURATION OF THIS VISIT *(Time actually spent with physician)*
_____MINUTES

HRA-34-4
REV. 6-75

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH RESOURCES ADMINISTRATION
NATIONAL CENTER FOR HEALTH STATISTICS

O.M.B. #68-S72106

Table 1. Number and percent distribution of office visits and mean number of office visits per week, by selected physician characteristics: United States, January-December 1976

Physician characteristic	Number of visits in thousands	Percent distribution	Mean number of office visits per week[1]
All visits	588,300	100.0	78
Specialty			
General and family practice	225,637	38.4	111
Internal medicine	68,249	11.6	62
Pediatrics	60,400	10.3	113
Obstetrics and gynecology	48,994	8.3	74
General surgery	35,967	6.1	46
Ophthalmology	29,302	5.0	86
Orthopedic surgery	27,837	4.7	64
Dermatology	21,627	3.7	140
Psychiatry	15,811	2.7	29
Otolaryngology	10,837	1.8	77
Urology	9,896	1.7	53
Cardiovascular disease	5,961	1.0	39
All other specialties	27,782	4.7	. . .
Type of practice			
Solo	353,854	60.2	78
Other[2]	234,446	39.8	77

[1] Applies only to sampled physicians who actively treated patients during the week of their participation.
[2] Includes partnership and group practice.

Table 2. Number and percent distribution of office visits and number of visits per person per year, by patient's age and sex: United States, January-December 1976

Age and sex of patient	Number of visits in thousands	Percent distribution	Number of visits per person per year
All visits	588,300	100.0	2.8
Age			
Under 15 years	109,995	18.7	2.1
15-24 years	88,403	15.0	2.3
25-44 years	151,107	25.7	2.8
45-64 years	144,708	24.6	3.4
65 years and over	94,087	16.0	4.3
Sex and age			
Female	354,831	60.3	3.3
Under 15 years	52,240	8.9	2.0
15-24 years	57,768	9.8	2.9
25-44 years	99,367	16.9	3.6
45-64 years	86,794	14.8	3.9
65 years and over	58,661	10.0	4.6
Male	233,470	39.7	2.3
Under 15 years	57,756	9.8	2.2
15-24 years	30,635	5.2	1.6
25-44 years	51,740	8.8	2.0
45-64 years	57,913	9.8	2.8
65 years and over	35,426	6.0	4.0

NOTE: Rates are based on the civilian noninstitutionalized population, excluding Alaska and Hawaii.

Table 3. Number and percent of office visits, by most common complaints or symptoms classified by NAMCS code in rank order: United States, January-December 1976

Rank	Most common symptom or complaint expressed by patient and NAMCS code	Number of visits in thousands	Percent of visits
1	Pain, swelling, injury—lower extremity.....400	21,178	3.6
2	Pain, swelling, injury—back region.....415	16,932	2.9
3	Sore throat.....520	16,168	2.8
4	Pain, swelling, injury—upper extremity.....405	15,902	2.7
5	Abdominal pain.....540	14,590	2.5
6	Cough.....311	13,099	2.2
7	Cold.....312	10,844	1.8
8	Allergic skin reactions.....112	10,679	1.8
9	Headache.....056	9,908	1.7
10	Pain in chest.....322	9,564	1.6
11	Fatigue.....004	9,468	1.6
12	Pain, swelling, injury—face and neck.....410	9,122	1.6
13	Vision dysfunction, except blindness.....701	8,569	1.5
14	Fever.....002	8,535	1.5
15	Wounds of skin.....116	8,492	1.4
16	Abnormally high blood pressure.....205	7,518	1.3
17	Earache.....735	7,487	1.3
18	Weight gain.....010	6,956	1.2
19	Vertigo.....069	6,703	1.1
20	Nasal congestion.....301	6,488	1.1
21	Acne or pimples.....100	6,310	1.1
22	Swelling or mass of skin.....115	5,855	1.0
23	Shortness of breath.....306	5,843	1.0
24	Depression.....807	4,377	0.7
25	Vaginal discharge.....662	4,377	0.7

Table 4. Number and percent of office visits, by most common principal diagnoses classified by ICDA code in rank order: United States, January-December 1976

Rank	Most common principal diagnosis and ICDA code	Number of visits in thousands	Percent of visits
1	Medical or special examination Y00	44,736	7.6
2	Medical and surgical examination Y10	29,598	5.0
3	Essential benign hypertension 401	23,303	4.0
4	Prenatal care Y06	21,425	3.6
5	Acute upper respiratory infection 465	18,641	3.2
6	Chronic ischemic heart disease 412	13,507	2.3
7	Neuroses 300	12,058	2.1
8	Otitis media 381	10,715	1.8
9	Other eczema and dermatitis 692	9,744	1.7
10	Diabetes mellitus 250	9,605	1.6
11	Hay fever 507	9,337	1.6
12	Refractive errors 370	9,052	1.5
13	Acute pharyngitis 462	8,883	1.5
14	Diseases of sebaceous gland 706	8,719	1.5
15	Obesity 277	8,288	1.4
16	Bronchitis, unqualified 490	7,248	1.2
17	Osteoarthritis and allied conditions 713	7,012	1.2
18	Sprains and strains of other and unspecified parts of back 847	6,520	1.1
19	Asthma 493	6,319	1.1
20	Acute tonsillitis 463	6,168	1.1
21	Synovitis, bursitis, tenosynovitis 731	5,661	1.0
22	Other viral diseases 079	5,659	1.0
23	Diarrheal diseases 009	5,443	0.9
24	Arthritis, unqualified 715	4,781	0.8
25	Observation, without need for further medical care 793	4,353	0.7

Table 5. Number and percent distribution of office visits, by principal diagnosis classified by major ICDA group: United States, January-December 1976

Principal diagnosis classified by major diagnostic group and ICDA code	Number of visits in thousands	Percent distribution
All principal diagnoses	588,300	100.0
Infective and parasitic diseases 000-136	25,327	4.3
Neoplasms 140-239	12,346	2.1
Endocrine, nutritional, and metabolic diseases 240-279	24,724	4.2
Mental disorders 290-315	23,446	4.0
Diseases of the nervous system and sense organs 320-389	49,220	8.4
Diseases of the circulatory system 390-458	54,259	9.2
Diseases of the respiratory system 460-519	83,276	14.2
Diseases of the digestive system 520-577	18,235	3.1
Diseases of the genitourinary system 580-629	34,143	5.8
Diseases of the skin and subcutaneous tissue 680-709	33,088	5.6
Diseases of the musculoskeletal system 710-738	33,151	5.6
Symptoms and ill-defined conditions 780-796	27,549	4.7
Accidents, poisonings, and violence 800-999	43,985	7.5
Special conditions and examinations without sickness V00-V13	108,578	18.5
Residual	16,973	2.9

Table 6. Number and percent of office visits, by diagnostic and therapeutic services provided: United States, January-December 1976

Diagnostic and therapeutic services provided (selected procedures)	Number of visits in thousands	Percent of visits
Diagnostic services		
Limited history or examination	305,231	51.9
General history or examination	99,309	16.9
Clinical lab test	133,598	22.7
X-ray	45,527	7.7
Blood pressure check	195,179	33.2
EKG	19,370	3.3
Hearing test	7,873	1.3
Vision test	30,684	5.2
Endoscopy	6,809	1.2
Therapeutic services		
Drug prescribed	251,970	42.8
Injection	73,309	12.5
Immunization or desensitization	31,287	5.3
Office surgery	41,497	7.1
Physiotherapy	17,590	3.0
Medical counseling	79,920	13.6
ychotherapy and therapeutic stening	24,249	4.1

Table 7. Number and percent distribution of office visits, by selected visit characteristics: United States, January-December 1976

Selected visit characteristic	Number of visits in thousands	Percent distribution
All visits	588,300	100.0
Prior-visit status		
New patient	83,606	14.2
Old patient, new problem	135,107	23.0
Old patient, old problem	369,587	62.8
Seriousness of problem		
Serious and very serious	114,909	19.5
Slightly serious	189,886	32.3
Not serious	283,506	48.2
Dispositon[1]		
No followup	67,599	11.5
Return at specified time	361,149	61.4
Return if needed	126,283	21.5
Telephone followup	19,142	3.3
Referred to other physician or agency	16,281	2.8
Returned to referring physician	4,800	0.8
Admit to hospital	12,222	2.1
Duration of visit		
0 minute (no face-to-face encounter with physician)	13,560	2.3
1-5 minutes	83,106	14.1
6-10 minutes	186,802	31.8
11-15 minutes	154,994	26.4
16-30 minutes	117,894	20.0
31 minutes or more	31,943	5.4

[1]Will not add to totals since more than one disposition was possible.

TECHNICAL NOTES

SOURCE OF DATA: Data presented in this report were obtained during 1976 through the National Ambulatory Medical Care Survey (NAMCS). The target population of NAMCS encompasses office visits within the coterminous United States made to physicians who are principally engaged in office practice.

SAMPLE DESIGN: The 1976 NAMCS utilized a multistage probability design that involved samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within practices. Within the 87 PSU'S composing the first stage of selection, a sample of approximately 3,000 physicians was selected from master files maintained by the American Medical Association and the American Osteopathic Association. Sampled physicians, randomly assigned to 1 of the 52 weeks in the survey year, were requested to complete Patient Records (figure 1) for a systematic random sample of office visits taking place within their practice during the assigned reporting period. Additional data concerning physician practice characteristics such as primary specialty and type of practice were obtained during an induction interview.

A complete description of the survey's background and development has been published in Series 2, No. 61, of *Vital and Health Statistics*, DHEW Pub. No. (HRA) 76-1335, Health Resources Administration, Washington, U.S. Government Printing Office, Apr. 1974.

SAMPLING ERRORS: Since the estimates for this report are based on a sample rather than the entire universe, they are subject to sampling variability. The standard error is primarily a measure of sampling variability. 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 percent of the estimate. Relative standard errors of selected aggregate statistics are shown in table I. The standard errors appropriate for the estimated percent of office visits are shown in table II.

ROUNDING: Aggregate estimates of office visits presented in the tables are rounded to the nearest thousand. The rates and percents, however, were calculated on the basis of original, unrounded figures. Due to rounding of percents, the sum of percentages may not equal 100.0.

Table I. Approximate relative standard errors of estimated numbers of office visits

Estimate in thousands	Relative standard error in percentages points
500	30.1
1,000	21.4
2,000	15.3
5,000	10.0
10,000	7.5
30,000	5.1
100,000	4.0
550,000	3.5

Example of use of table: An aggregate of 80,000,000 has a relative standard error of 4.3 percent or a standard error of 3,440,000 (4.3 percent of 80,000,000).

Table II. Approximate standard errors of percents for estimated numbers of office visits

Base of percent (number of 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					
1,000	2.1	4.6	6.3	8.5	9.7	10.6
3,000	1.2	2.7	3.7	4.9	5.6	6.1
5,000	0.9	2.1	2.8	3.8	4.3	4.7
10,000	0.7	1.5	2.0	2.7	3.1	3.3
50,000	0.3	0.7	0.9	1.2	1.4	1.5
100,000	0.2	0.5	0.6	0.8	1.0	1.1
500,000	0.1	0.2	0.3	0.4	0.4	0.5

Example of use of table: An estimate of 30 percent based on an aggregate of 75,000,000 has a standard error of 1.2 percent. The relative standard error of 30 percent is 4.0 percent (1.2 percent÷30 percent).

DEFINITIONS: An *ambulatory patient* is an individual presenting himself for personal health services who is neither bedridden nor currently admitted to any health care institution on the premises.

An *office* is a place that the physician identifies as a location for his ambulatory practice. Responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than an institution.

A *visit* is a direct personal exchange between an ambulatory patient and a physician or a staff member working under the physician's supervision for the purpose of seeking care and rendering health services.

A *physician* is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) currently in practice who spends time in caring for ambulatory patients at an office location. Excluded from NAMCS are physicians practicing in Alaska and Hawaii; physicians who specialize in anesthesiology, pathology, or radiology; physicians who are federally employed; physicians who treat only institutionalized patients; physicians employed full time by an institution; and physicians who spend no time seeing ambulatory patients.

SYMBOLS

Data not available	---
Category not applicable	...
Quantity zero	-
Quantity more than 0 but less than 0.05	0.0
Figure does not meet standards of reliability or precision	*

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