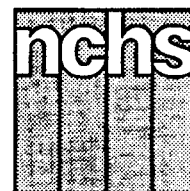# Advance Data

From Vital and Health Statistics of the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

National Hospital Ambulatory Medical Care Survey: 1992 Outpatient Department Summary

by Linda F. McCaig, M.P.H., Division of Health Care Statistics

In December 1991, the National Center for Health Statistics inaugurated the National Hospital Ambulatory Medical Care Survey (NHAMCS) to gather and disseminate information about the health care provided by hospital emergency and outpatient departments to the population of the United States. Ambulatory medical care is the predominant method of providing health care services in the United States. Since 1973, data have been collected on patient visits to physicians' offices through the National Ambulatory Medical Care Survey (NAMCS). However, visits to hospital emergency and outpatient departments, which represent a significant segment of total ambulatory medical care, are not included in the NAMCS (1). Furthermore, hospital ambulatory patients are known to differ from office patients in their demographic characteristics and are also thought to differ in medical aspects (2). Therefore, the omission of hospital ambulatory care from the ambulatory medical care database leaves a significant gap in coverage and limits the utility of the current NAMCS data. The NHAMCS fills this data gap. This survey was endorsed by the American Hospital Association, the Emergency Nurses

Association, and the American College of Emergency Physicians.

This report presents data on outpatient department (OPD) visits from the 1992 (NHAMCS), a national probability survey conducted by the Division of Health Care Statistics, National Center for Health Statistics, Centers for Disease Control and Prevention. A previously published report highlighted visits to emergency departments (3).

The estimates presented in this report are based on a sample rather than on the entire universe of hospital OPD visits. Therefore, they are subject to sampling variability. The technical notes include a brief overview of the sample design used in the 1992 NHAMCS and an explanation of sampling errors. A detailed description of the 1992 NHAMCS sample design and survey methodology will be published.

The OPD Patient Record form is used by hospitals participating in the NHAMCS to record information about patient visits. This form (figure 1) serves as a reference for readers as they review the survey findings presented in this document.

Patient characteristics

During the 12-month period from January through December 1992, an

estimated 56.6 million visits were made to OPD's of non-Federal, short-stay, or general hospitals in the United States—about 22.5 visits per 100 persons. OPD visits by patient's age, sex, and race are shown in table 1. There were no significant differences in OPD visits rates between any of the age groups. Females made 61.4 percent of all OPD visits and had a higher visit rate (26.9 visits per 100 persons) than males (17.9 visits per 100 persons).

White persons made 74.3 percent of all OPD visits, with black persons and Asian/Pacific Islanders accounting for 22.2 and 2.8 percent, respectively. The visit rate for black persons was significantly higher than for white persons overall and in all age categories except persons less than 15 years and 75 years and over.

Outpatient department visit characteristics

By region, the largest proportion of OPD visits were made in the Northeast (29.1 percent). Visit rates in the Northeast (33.0 visits per 100 persons) and the West (25.0 visits per 100 persons) were higher than in the South (13.2 visits per 100 persons).

A clinic was defined as an administrative unit of the outpatient

Department of Health and Human Services
Public Health Service, Centers for Disease Control
National Center for Health Statistics

OMB No. 0920-0278

CDC 64.54

NATIONAL HOSPITAL AMBULATORY
MEDICAL CARE SURVEY
OUTPATIENT DEPARTMENT
PATIENT RECORD

3. DATE OF VISIT

_____/_____/_____
Month Day Year

4. DATE OF BIRTH

_____/_____/_____
Month Day Year

5. SEX

1 ☐ Female
2 ☐ Male

6. RACE

1 ☐ White
2 ☐ Black
3 ☐ Asian/Pacific Islander
4 ☐ American Indian/ Eskimo/ Aleut

7. ETHNICITY

1 ☐ Hispanic
2 ☐ Not Hispanic

8. EXPECTED SOURCE(S) OF PAYMENT (Check all that apply)

1 ☐ Medicare
2 ☐ Medicaid
3 ☐ Other government
4 ☐ Private/ Commercial
5 ☐ HMO/other prepaid
6 ☐ Patient paid
7 ☐ No charge
8 ☐ Other

9. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?

1 ☐ Yes
2 ☐ No

10. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT (in patient's own words)

a. Most important: _____

b. Other: _____

c. Other: _____

11. PHYSICIAN'S DIAGNOSES

a. Principal diagnosis/ problem associated with item 10a. _____

b. Other: _____

c. Other: _____

12. HAS PATIENT BEEN SEEN IN THIS CLINIC BEFORE?

1 ☐ Yes   2 ☐ No

If yes, for the condition in item 11a?

1 ☐ Yes   2 ☐ No

13. AMBULATORY SURGICAL PROCEDURE(S)
(Record any outpatient diagnostic or therapeutic procedure. For the first, check appropriate boxes.)

a. _____

1 ☐ Scheduled   3 ☐ Local anesthesia
2 ☐ Performed   4 ☐ Regional anesthesia
             5 ☐ General anesthesia

b. _____

14. DIAGNOSTIC/SCREENING SERVICES
(Check all ordered or provided.)

1 ☐ None
2 ☐ Blood pressure
3 ☐ Urinalysis
4 ☐ EKG - resting
5 ☐ EKG - exercise
6 ☐ Mammogram
7 ☐ Chest x-ray
8 ☐ Other radiology
9 ☐ Allergy testing
10 ☐ Spirometry
11 ☐ Pap test
12 ☐ Strep throat test
13 ☐ HIV serology
14 ☐ Cholesterol measure
15 ☐ Other lab test
16 ☐ Hearing test
17 ☐ Visual acuity
18 ☐ Mental status exam
19 ☐ Other (Specify) _____

15. THERAPEUTIC SERVICES
(Check all ordered or provided. Exclude medication)

1 ☐ None

COUNSELING/EDUCATION:

2 ☐ Diet
3 ☐ Exercise
4 ☐ Cholesterol reduction
5 ☐ Weight reduction
6 ☐ Drug abuse
7 ☐ Alcohol abuse
8 ☐ Smoking cessation
9 ☐ Family/social
10 ☐ Growth/development
11 ☐ Family planning
12 ☐ Other counseling

OTHER THERAPY:

13 ☐ Psychotherapy
14 ☐ Corrective lenses
15 ☐ Hearing aid
16 ☐ Physiotherapy
17 ☐ Other therapy (Specify) _____

16. MEDICATION
(Record all new or continued medications ordered, administered, or provided on this visit. Use the same brand name or generic name on any Rx or medical record. Include immunizations and desensitizing agents.)

☐ None

NEW MEDICATION?

1. _____   1 ☐ Yes   2 ☐ No
2. _____   1 ☐ Yes   2 ☐ No
3. _____   1 ☐ Yes   2 ☐ No
4. _____   1 ☐ Yes   2 ☐ No
5. _____   1 ☐ Yes   2 ☐ No

17. DISPOSITION THIS VISIT (Check all that apply)

1 ☐ Return to clinic PRN
2 ☐ Return to clinic - appointment
3 ☐ Telephone follow-up planned
4 ☐ Return to referring physician
5 ☐ Refer to other physician/clinic
6 ☐ Admit to hospital
7 ☐ No follow-up planned
8 ☐ Other (Specify) _____

18. PROVIDERS SEEN THIS VISIT (Check all that apply)

1 ☐ Resident/Intern
2 ☐ Staff physician
3 ☐ Other physician
4 ☐ Physician assistant
5 ☐ Nurse practitioner
6 ☐ Registered nurse
7 ☐ Licensed practical nurse
8 ☐ Nurse's aide

Figure 1. Patient Record form.

Table 1. Number, percent distribution, and annual rate of outpatient department visits with corresponding standard errors by selected patient and outpatient department characteristics: United States, 1992

Characteristic	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Number of visits per 100 persons per year[1]
All visits	56,605	4,446	100.0	...	22.5
Patient characteristic					
Age:					
Under 15 years	12,713	1,633	22.5	2.0	22.5
15–24 years	7,242	588	12.8	0.7	21.1
25–44 years	16,484	1,307	29.1	1.1	20.3
45–64 years	11,295	964	20.0	0.9	23.3
65–74 years	5,031	521	8.9	0.6	27.2
75 years and over	3,840	702	6.8	0.9	31.2
Sex and age:					
Female	34,741	2,680	61.4	1.0	26.9
Under 15 years	6,148	772	10.9	1.0	22.3
15–24 years	5,222	446	9.2	0.6	30.2
25–44 years	10,682	837	18.9	0.8	25.8
45–64 years	7,130	622	12.6	0.7	28.3
65–74 years	3,137	313	5.5	0.3	30.8
75 years and over	2,423	485	4.3	0.6	31.4
Male	21,864	1,924	38.6	1.0	17.9
Under 15 years	6,565	875	11.6	1.1	22.7
15–24 years	2,020	235	3.6	0.3	11.8
25–44 years	5,802	581	10.3	0.7	14.5
45–64 years	4,165	407	7.4	0.4	17.9
65–74 years	1,894	243	3.3	0.3	22.9
75 years and over	1,417	238	2.5	0.3	30.7
Race and age:					
White	42,034	3,779	74.3	2.2	20.1
Under 15 years	9,224	1,259	16.3	1.6	20.5
15–24 years	5,329	496	9.4	0.6	19.4
25–44 years	12,280	1,076	21.7	1.0	18.1
45–64 years	8,330	785	14.7	0.8	20.0
65–74 years	3,772	425	6.7	0.5	23.0
75 years and over	3,099	668	5.5	0.9	27.8
Black	12,549	1,415	22.2	2.1	39.9
Under 15 years	3,135	570	5.5	0.9	35.0
15–24 years	1,633	184	2.9	0.3	32.0
25–44 years	3,546	465	6.3	0.7	36.2
45–64 years	2,488	325	4.4	0.5	49.9
65–74 years	1,099	203	1.9	0.3	66.8
75 years and over	650	149	1.1	0.2	66.4
All other races:					
Asian/Pacific Islander	1,609	272	2.8	0.5	---
American Indian/Eskimo/Aleut	*414	189	0.7	*0.3	---
Outpatient department characteristic					
Geographic region:					
Northeast	16,497	2,389	29.1	3.5	33.0
West	13,906	1,564	24.6	2.6	25.0
Midwest	15,049	3,176	26.6	4.1	24.5
South	11,153	1,242	19.7	2.3	13.2

[1]Based on U.S. Bureau of the Census estimates of the civilian, noninstitutionalized population of the United States as of July 1, 1992.

department where ambulatory medical care is provided under the supervision of a physician. Clinics where only ancillary services, such as radiology, renal dialysis, and pharmacy, were provided or other settings in which physician services were not typically provided were out of scope for the survey. In addition, ambulatory surgery centers were out of scope because they are included in the National Survey of Ambulatory Surgery.

Clinics were classified into six types as presented in table 2. Half of all OPD visits (49.9 percent) were made to general medicine clinics which included internal medicine and primary care clinics. Pediatric, surgery, and obstetrics and gynecology clinics accounted for 13.5 percent, 12.7 percent, and 10.1 percent of visits, respectively. The "other" clinic category included psychiatry and neurology clinics. The "substance abuse" category included all

Table 2. Number and percent distribution of outpatient department visits with corresponding standard errors by type of clinic: United States, 1992

Visit characteristic	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	. . .
Type of clinic				
General medicine	28,248	3,329	49.9	3.5
Pediatrics	7,620	1,296	13.5	2.0
Surgery.	7,187	1,164	12.7	2.0
Obstetrics and gynecology	5,740	810	10.1	1.4
Substance abuse	*818	436	*1.4	0.7
Other	6,993	1,684	12.4	2.7

Table 3. Number and percent distribution of outpatient department visits with corresponding standard errors by referral status and prior-visit status: United States, 1992

Visit characterisitc	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	. . .
Referral status				
Not referred by another physician	50,183	4,298	88.7	1.6
Referred by another physician.	6,421	936	11.3	1.6
Prior-visit status				
Old patient.	44,180	3,953	78.0	1.7
Old problem	35,635	3,014	63.0	1.5
New problem.	8,545	1,255	15.1	1.5
New patient	12,425	1,122	22.0	1.7

types of alcohol and drug abuse clinics except methadone maintenance clinics, which were specifically excluded from the survey.

Referral status and prior visit status

Approximately 11.3 percent of OPD visits were made as the result of a referral from another physician (table 3). The majority of OPD visits (78.0 percent) were made by patients who had been seen in the clinic on a previous occasion, and more than half (63.0 percent) of all visits were made by persons returning to the clinic for care of a previously treated problem. Only 22.0 percent of visits were made by new patients, that is, patients who had not been seen in that clinic before.

Reason for visit

In Item 10 of the Patient Record form, the patient's (or patient surrogate's) "complaint(s), symptom(s), or other reason(s) for this visit in the

patient's own words" is recorded. Up to three reasons for visit are coded and classified according to *A Reason for Visit Classification for Ambulatory Care* (RVC) (4). The principal reason is the problem, complaint, or reason listed first in item 10a of the OPD Patient Record form.

The RVC is divided into eight modules or groups of reasons (table 4). Approximately 42.6 percent of all visits were made for reasons classified as symptoms, with the diagnostic/screening and preventive module and the treatment module accounting for 19.4 and 16.8 percent of visits, respectively. The 20 most frequently mentioned principal reasons for visit, representing 41.5 percent of all visits, are shown in table 5. It is important to note that the rank ordering presented in this and other tables may not always be reliable because near estimates may not differ from each other due to sampling variability. "Progress visit" was the most frequently mentioned visit overall (7.4 percent), reflecting the large number

of return visits for a previously treated problem. "Cough" was the most frequently mentioned reason for visit in the symptom module (2.1 percent).

Principal diagnosis

The principal diagnosis or problem associated with the patient's most important reason for visit and any other significant current diagnoses are recorded in Item 11. Up to three diagnoses are coded and classified according to the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (5). OPD visits by principal diagnosis using the major disease categories specified by the ICD–9–CM are shown in table 6. The supplementary classifications, which describe circumstances other than a disease or injury, are recorded as diagnoses. They accounted for 21.9 percent of all OPD visits.

The 20 most frequently reported principal diagnoses are shown in table 7. These are categorized at the three-digit coding level of the ICD–9–CM and account for 35.3 percent of all OPD visits. The most commonly recorded diagnosis was "normal pregnancy," occurring at 5.9 percent of all visits.

Ambulatory surgical procedures

Hospital staff were asked to record up to two ambulatory surgical procedures that were scheduled or performed at the visit. The procedures are categorized at the three-digit coding level of the ICD–9–CM, volume 3. Ambulatory surgical procedures were reported at 7.8 percent of all OPD visits, accounting for 4.4 million procedures scheduled or performed. Due to small sample sizes, only two of the ten most frequently reported surgical procedures had estimates considered to be reliable. "Diagnostic procedure on vagina and cul-de-sac" and "other local excision or destruction of lesion or tissue of skin and subcutaneous tissue" were recorded for 220,720 visits (0.4 percent) and 189,002 visits (0.3 percent), respectively.

Table 4. Number and percent distribution of outpatient department visits with corresponding standard errors by patient's principal reason for visit: United States, 1992

Principal reason for visit and RVC code[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Symptom module .S001–S999	24,107	2,212	42.6	1.6
General symptoms .S001–S099	3,363	360	5.9	0.4
Symptoms referable to psychological/mental disorders. . . S100–S199	1,853	329	3.3	0.5
Symptoms referable to the nervous system (excluding sense organs). .S200–S259	1,249	127	2.2	0.2
Symptoms referable to the cardiovascular/lymphatic system .S260–S299	202	36	0.4	0.1
Symptoms referable to the eyes and ears .S300–S399	2,462	331	4.3	0.4
Symptoms referable to the respiratory system .S400–S499	3,996	715	7.1	0.9
Symptoms referable to the digestive system .S500–S639	2,394	245	4.2	0.3
Symptoms referable to the genitourinary system .S640–S829	2,061	210	3.6	0.3
Symptoms referable to the skin, hair, and nails .S830–S899	1,992	245	3.5	0.3
Symptoms referable to the musculoskeletal system .S900–S999	4,535	494	8.0	0.6
Disease module .D001–D999	6,045	604	10.7	0.8
Diagnostic/screening and preventive module. .X100–X599	11,001	977	19.4	1.2
Treatment module .T100–T899	9,531	1,150	16.8	1.4
Injuries and adverse effects module. .J001–J999	2,466	366	4.4	0.5
Test results module .R100–R700	840	99	1.5	0.2
Administrative module. .A100–A140	516	105	0.9	0.2
Other[2] .U990–U999	2,099	524	3.7	0.8

[1]Based on A Reason for Visit Classification for Ambulatory Care (RVC) (4).
[2]Includes problems and complaints not elsewhere classified, entries of "none," blanks, and illegible entries.

Table 5. Number and percent distribution of outpatient department visits with corresponding standard errors by the 20 principal reasons for visit most frequently mentioned by patients: United States, 1992

Reason for visit and RVC code[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Progress visit .T800	4,216	696	7.4	1.0
General medical examination .X100	3,036	403	5.4	0.5
Routine prenatal examination .X205	2,981	408	5.3	0.7
Well baby examination .X105	1,497	230	2.6	0.4
Cough .S440	1,169	332	2.1	0.5
Postoperative visit .T205	1,037	153	1.8	0.2
Stomach and abdominal pain, cramps and spasms. .S545	884	90	1.6	0.1
Earache or ear infection .S355	844	130	1.5	0.2
Symptoms referable to throat .S455	836	161	1.5	0.2
Back symptoms .S905	763	84	1.3	0.1
Medication, other and unspecified .T115	*727	242	1.3	0.4
Skin rash. .S860	687	92	1.2	0.1
Diabetes mellitus. .D205	668	172	1.2	0.3
Chest pain and related symptoms .S050	641	91	1.1	0.2
Depression .S110	639	158	1.1	0.3
Fever. .S010	638	153	1.1	0.2
Pain and related symptoms, generalized, site unspecified .S060	*632	190	1.1	0.3
Hypertension .D510	556	109	1.0	0.2
Knee symptoms .S925	535	108	0.9	0.2
Headache, pain in head .S210	496	62	0.9	0.1
All other reasons	33,124	2,619	58.5	1.3

[1]Based on A Reason for Visit Classification for Ambulatory Care (RVC) (4).

Diagnostic and screening services

Statistics on various diagnostic and screening services ordered or provided by hospital staff during an OPD visit are displayed in table 8. Approximately 70.6 percent of all OPD visits included one or more diagnostic or screening services. The most frequently mentioned diagnostic or screening service was a blood pressure check, recorded at 47.8 percent of visits. Other frequently mentioned services included other lab test (20.2 percent) and urinalysis (11.4 percent).

Readers should note that for items 8, 14, 15, 17, and 18 on the OPD Patient Record form, hospital staff were

Table 6. Number and percent distribution of outpatient department visits with corresponding standard errors by principal diagnosis: United States, 1992

Principal diagnosis and ICD–9–CM code[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Infectious and parasitic diseases ... 001–139	2,001	288	3.5	0.4
Neoplasms 140–239	3,127	559	5.5	0.9
Endocrine, nutritional and metabolic diseases and immunity disorders ... 240–279	2,184	292	3.9	0.4
Mental disorders 290–319	3,531	658	6.2	1.0
Diseases of the nervous system and sense organs 320–389	4,629	548	8.2	0.6
Diseases of the circulatory system ... 390–459	3,348	489	5.9	0.6
Diseases of the respiratory system ... 460–519	4,606	743	8.1	0.9
Diseases of the digestive system ... 520–579	1,891	221	3.3	0.3
Diseases of the genitourinary system 580–629	2,694	308	4.8	0.5
Diseases of the skin and subcutaneous tissue ... 680–709	1,898	228	3.4	0.3
Diseases of the musculoskeletal system and connective tissue ... 710–739	3,415	398	6.0	0.5
Symptoms, signs, and ill-defined conditions 780–799	3,132	314	5.5	0.4
Injury and poisoning 800–999	4,189	521	7.4	0.7
Supplementary classification ... V01–V82	12,392	1,026	21.9	1.3
All other diagnoses[2]	2,786	432	4.9	0.6
Unknown[3]	782	194	1.4	0.3

[1]Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (5).
[2]Includes diseases of the blood and blood-forming organs (280–289); complications of pregnancy, childbirth, and the puerperium (630–676); congenital anomalies (740–759); and certain conditions originating in the perinatal period (760–779).
[3]Includes blank diagnoses, uncodable diagnoses, and illegible diagnoses.

Table 7. Number and percent distribution of outpatient department visits with corresponding standard errors by the 20 principal diagnoses most frequently rendered by hospital staff: United States, 1992

Principal diagnosis and ICD–9–CM code[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Normal pregnancy V22	3,318	449	5.9	0.8
Essential hypertension ... .401	1,689	292	3.0	0.4
Health supervision of infant or child ... V20	1,678	254	3.0	0.4
General medical examination V70	1,617	216	2.9	0.3
Suppurative and unspecified otitis media ... .382	1,353	221	2.4	0.3
Diabetes mellitus ... .250	1,248	216	2.2	0.3
Other postsurgical states ... V45	1,097	159	1.9	0.3
Acute upper respiratory infections of multiple or unspecified sites ... .465	1,054	302	1.9	0.4
Special investigations and examinations ... V72	709	203	1.3	0.3
Other and unspecified disorders of back ... .724	679	121	1.2	0.2
General symptoms ... .780	646	106	1.1	0.2
Asthma ... .493	644	111	1.1	0.2
Chronic sinusitis ... .473	614	159	1.1	0.2
Neurotic disorders ... .300	608	134	1.1	0.2
Alcohol dependence syndrome ... .303	*602	309	*1.1	0.5
Symptoms involving respiratory system and other chest symptoms ... .786	534	102	0.9	0.2
Other disorders of urethra and urinary tract ... .599	465	74	0.8	0.1
Follow-up examination V67	460	83	0.8	0.1
Cataract ... .366	*453	154	*0.8	0.3
Malignant neoplasm of female breast ... .174	449	123	0.8	0.2
All other diagnoses	36,688	2,972	64.8	1.2

[1]Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (5).

asked to check all of the applicable categories for that item, with the result that multiple responses could be coded for each visit.

Therapeutic services

About a third (37.2 percent) of all OPD visits included some form of

counseling, education, or other nonmedication therapy (table 9). Diet counseling, occurring at 9.5 percent of visits, was the most frequently recorded counseling/education service ordered or provided, while psychotherapy, occurring at 3.1 percent of visits, was the most frequently mentioned other therapeutic service.

Medication therapy

Hospital staff were instructed to record all new or continued medications ordered, administered, or provided at the visit, including prescription and nonprescription preparations and immunizations and desensitizing agents. Up to five medications, or drug

Table 8. Number and percent distribution of outpatient department visits with corresponding standard errors by selected diagnostic/screening services: United States, 1992

Diagnostic/screening services ordered or provided by hospital staff[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Blood pressure	27,075	2,713	47.8	2.4
Other lab test	11,459	1,107	20.2	1.2
Urinalysis	6,430	718	11.4	1.1
Other radiology	4,322	537	7.6	0.8
Visual acuity	2,131	489	3.8	0.8
Pap test	1,971	289	3.5	0.5
Chest x ray	1,945	284	3.4	0.5
EKG — resting[2]	1,718	244	3.0	0.4
Mammogram	1,077	201	1.9	0.3
Cholesterol measure	905	166	1.6	0.3
Mental status exam	851	182	1.5	0.3
Hearing test	611	105	1.1	0.2
Strep throat test	565	151	1.0	0.2
HIV serology	245	54	0.4	0.1
EKG — exercise[2]	156	46	*0.3	0.1
Spirometry	130	38	0.2	0.1
Allergy testing	*35	18	*0.1	0.0
Other	10,036	1,648	17.7	2.0
None	16,631	1,541	29.4	2.0

[1]Numbers may exceed total number of visits because more than one service may be reported per visit.
[2]EKG is electrocardiogram.

Table 9. Number and percent distribution of outpatient department visits with corresponding standard errors by selected therapeutic services: United States, 1992

Therapeutic services ordered or provided by hospital staff[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
None	35,532	3,195	62.8	2.1
Counseling/education				
Diet	5,351	648	9.5	0.9
Exercise	2,484	339	4.4	0.6
Growth/development	1,838	252	3.2	0.4
Family/social	1,749	338	3.1	0.6
Alcohol abuse	*985	363	*1.7	0.6
Weight reduction	876	148	1.5	0.2
Family planning	835	134	1.5	0.2
Smoking cessation	823	113	1.5	0.2
Drug abuse	682	180	1.2	0.3
Cholesterol reduction	505	107	0.9	0.2
Other counseling	7,984	930	14.1	1.3
Other therapy				
Psychotherapy	1,754	392	3.1	0.6
Physiotherapy	1,418	383	2.5	0.6
Corrective lenses	214	59	0.4	0.1
Hearing aid	*19	7	*0.0	0.0
Other therapy	3,186	475	5.6	0.7

[1]Numbers may exceed total number of visits because more than one service may be reported per visit.

mentions, are coded for each visit. As used in the NHAMCS, the term "drug" is interchangeable with the term "medication," and the term "prescribing" is used broadly to mean ordering, administering, or providing any medication. The NHAMCS drug data base permits classification by a wide range of variables, including specific drug entry name, trade name, generic class, therapeutic category, prescription or nonprescription status, federally-controlled substance status, and composition status (that is, whether the drug is a single- or multiple-ingredient product). A report describing the method and instruments used to collect and process drug information has been published (6).

There was a total of 63.3 million drug mentions or an average of 1.1 drug mentions per OPD visit. The 20 medications most frequently prescribed at OPD visits are shown in table 10 by drug entry name and therapeutic classification. This classification is based on the therapeutic categories used in the *National Drug Code Directory*, 1985 edition (7). Tylenol was the medication most frequently prescribed, with 1.2 million mentions, or 2.2 percent of the total. It was followed by amoxicillin (1.7 percent), prenatal vitamins (1.5 percent), and prednisone (1.4 percent).

Expected source of payment

Expected sources of payment were most often Medicaid (31.2 percent), private/commercial insurance (23.8 percent), and Medicare (16.3 percent) (table 11). "Patient paid" and "HMO/Other prepaid" were indicated at 13.7 and 7.7 percent of OPD visits, respectively. The patient-paid category includes the patient's contribution toward "copayments" and "deductibles."

Providers seen this visit

A staff physician was seen at the majority of OPD visits (62.9 percent). Registered nurses were seen at 38.3 percent of visits and residents and/or interns were seen at 32.4 percent of visits (table 12).

Disposition of this visit

The majority of OPD visits (65.0 percent) resulted in another appointment to return to the clinic. This and the previously mentioned finding that most OPD patients had been seen in the clinic before are indications of the continuous nature of care provided in the OPD setting. For 17.2 percent of visits, the disposition was "return to clinic PRN" (table 13). Only 1.2 percent

Table 10. Number and percent distribution for the 20 drugs most frequently prescribed at outpatient department visits with corresponding standard errors, by entry name of drug: United States, 1992

Entry name of drug[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Therapeutic classification[2]
All drug mentions	63,299	6,813	100.0	...	...
Tylenol	1,241	193	2.2	0.3	General analgesics
Amoxicillin	990	135	1.7	0.2	Penicillins
Prenatal vitamins	836	172	1.5	0.3	Vitamins, minerals
Prednisone	784	151	1.4	0.2	Adrenal corticosteroids
Motrin	780	97	1.4	0.2	Antiarthritics
Diphtheria & tetanus toxoids with pertussis vaccine	697	112	1.2	0.2	Vaccines and antiserums
Amoxil	*649	356	*1.1	0.6	Penicillins
Premarin	646	106	1.1	0.2	Estrogens and progestins
Poliovirus vaccine	637	111	1.1	0.2	Vaccines and antiserums
Ferrous sulfate	615	123	1.1	0.2	Agents used to treat deficiency anemias
Lasix	592	85	1.0	0.1	Diuretics
Zantac	564	77	1.0	0.1	Agents used in disorders of upper GI tract
Vasotec	514	94	0.9	0.1	Antihypertensive agents
Proventil	508	116	0.9	0.2	Bronchodilators, antiasthmatics
Insulin	501	113	0.9	0.2	Blood glucose regulators
Tylenol with codeine	496	75	0.9	0.1	General anesthetics
Naprosyn	489	73	0.9	0.1	Antiarthritics
Procardia	470	100	0.8	0.1	Antianginal agents
Haemophilus B conjugate vaccine	455	83	0.8	0.1	Vaccines and antiserums
Synthroid	*447	148	0.8	0.2	Agents used to treat thyroid disease

[1]The entry made by the hospital staff on the prescription or other medical records. This may be a trade name, generic name, or desired therapeutic effect.
[2]Therapeutic classification is based on the National Drug Code Directory, 1985 edition (7). In cases where a drug had more than one therapeutic classification, it was listed in the category for which it was most frequently prescribed.

Table 11. Number and percent distribution of outpatient department visits with corresponding standard errors by patient's expected source of payment: United States, 1992

Expected source of payment[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Expected payment source				
Medicaid	17,647	1,614	31.2	2.1
Private or commercial	13,478	2,230	23.8	2.7
Medicare	9,240	1,160	16.3	1.2
Patient-paid	7,747	1,027	13.7	1.3
HMO/other prepaid[2]	4,364	671	7.7	1.1
Other government	3,684	522	6.5	0.8
No charge	1,640	450	2.9	0.8
Other	3,116	394	5.5	0.7
Unknown	*1,712	680	*3.0	1.1

[1]Numbers may exceed total because more than one source of payment may be coded for each visit.
[2]HMO is health maintenance organization.

Table 12. Number and percent distribution of outpatient department visits with correponding standard errors, by type of provider seen: United States, 1992

Type of provider[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Staff physician	35,614	3,582	62.9	2.4
Registered nurse	21,704	2,025	38.3	2.9
Resident/Intern	18,365	1,797	32.4	2.5
Nurse's aide	7,390	1,062	13.1	1.6
Licensed practical nurse	6,788	972	12.0	1.6
Nurse practitioner	2,975	452	5.3	0.7
Other physician	2,855	519	5.0	1.0
Physician assistant	*1,841	580	3.3	0.9

[1]Numbers may exceed total because more than one provider may be reported per visit.

of OPD visits resulted in hospital admission.

Additional reports that utilize 1992 NHAMCS data will be published. In addition, survey data will be available on computer tape from the National Technical Information Service at a nominal cost in the summer of 1994. Questions regarding this report, future reports, or the NHAMCS may be directed to the Ambulatory Care Statistics Branch by calling (301) 436–7132.

References

1. Bryant E, Shimizu I. Sample design, sampling variance, and estimation procedures for the National Ambulatory Medical Care Survey. Vital Health Stat 2(108). 1988.

2. Loft JD, Sheatsley PB, Frankel MR. Comparison report on the hospital ambulatory medical care evaluation study. Contract No. 282–82-2111. Chicago, Illinois: National Opinion Research Center. 1985.

3. McCaig LF. National Hospital Ambulatory Medical Care Survey: 1992 Emergency Department Summary. Advance data from vital and health statistics; no. 245. Hyattsville, Maryland: National Center for Health Statistics. 1994.

Table 13. Number and percent distribution of outpatient department visits with corresponding standard errors by disposition of visit: United States, 1992

Disposition[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	56,605	4,446	100.0	...
Return to clinic - appointment	36,776	3,066	65.0	2.3
Return to clinic PRN[2]	9,720	1,384	17.2	1.6
Return to other physician/clinic	3,899	458	6.9	0.7
Return to referring physician	3,417	962	6.0	1.7
No followup planned	2,287	381	4.0	0.6
Telephone followup planned	1,408	203	2.5	0.3
Admit to hospital	705	141	1.2	0.2
Other	2,736	462	4.8	0.7

[1]Numbers may exceed total number of visits because more than one disposition may be reported per visit.
[2]PRN is as needed.

Symbols

- - - Data not available.

... Category not applicable

- Quantity zero

0.0 Quantity more than zero but less than 0.05

Z Quantity more than zero but less than 500 where numbers are rounded to thousands

* Figure does not meet standard of reliability or precision (more than 30-percent relative standard error in numerator of percent or rate)

4. Schneider D, Appleton L, McLemore T. A reason for visit classification for ambulatory care. National Center for Health Statistics. Vital Health Stat 2(78). 1979.
5. Public Health Service and Health Care Financing Administration. International classification of diseases, 9th revision, clinical modification. Washington: Public Health Service. 1991.
6. Koch H, Campbell W. The collection and processing of drug information. National Ambulatory Medical Care Survey, 1980. National Center for Health Statistics. Vital Health Stat 2(90). 1982.
7. Food and Drug Administration. National drug code directory, 1985 Edition. Washington: Public Health Service, 1985.
8. Shah BV, Barnwell BG, Hunt PN, La Vange LM. SUDAAN user's manual release 5.50. Research Triangle Park, North Carolina: Research Triangle Institute. 1991.

Technical notes

Source of data and sample design

The information presented in this report is based on data collected in the 1992 National Hospital Ambulatory Medical Care Survey (NHAMCS) from December 2, 1991, through December 27, 1992. The data were adjusted to produce annual estimates. The target universe of the NHAMCS includes visits made in the United States by patients to emergency departments (ED's) and outpatient departments (OPD's) of non-Federal, short-stay, or general hospitals. Telephone contacts are excluded.

A four-stage probability sample design is used in the NHAMCS, involving samples of primary sampling units (PSU's), hospitals with ED's and/or OPD's within PSU's, ED's within hospitals and/or clinics within OPD's, and patient visits within ED's and/or clinics. For 1992, a sample of 524 non-Federal, short-stay or general hospitals was selected from the SMG Hospital Market Database. Of this group, 474 hospitals were in scope, or eligible to participate in the survey. The hospital response rate for the NHAMCS during this period was 93 percent. Based on the induction interview, 314 of the sample hospitals had OPD's. Hospital staff were asked to complete Patient Record forms (figure 1) for a systematic random sample of patient visits occurring during a randomly assigned 4-week reporting period. The number of Patient Record forms completed for OPD's was 35,114.

Characteristics of the hospital, such as ownership and expected number of OPD visits, were obtained from the hospital administrator during an induction interview. The U.S. Bureau of the Census, Housing Surveys Branch, was responsible for the survey's data collection. Data processing operations and medical coding were performed by the National Center for Health Statistics, Health Care Surveys Section, Research Triangle Park, North Carolina.

Sampling errors

The standard error is primarily a measure of the sampling variability that occurs by chance when only a sample, rather than an entire universe, is surveyed. The standard error also reflects part of the measurement error, but does not measure any systematic biases in the data. The chances are 95 out of 100 that an estimate from the sample differs from the value that would be obtained from a complete census by less than twice the standard error.

The standard errors used in this report were approximated using SUDAAN software. SUDAAN computes standard errors by using a first-order Taylor approximation of the deviation of estimates from their expected values. A description of the software and the approach it uses has been published (8). Exact standard error estimates were used in tests of significance in this report. Standard errors for all estimates are presented in each table. Standard errors for rates can be calculated using the relative standard errors (RSE) for the number of visits (i.e., multiply the rate by the RSE for the estimate of interest).

Adjustments for hospital nonresponse

Estimates from NHAMCS data were adjusted to account for sample hospitals that were in scope but did not participate in the study. This adjustment was calculated to minimize the impact of nonresponse on final estimates by imputing to nonresponding hospitals data from visits to similar hospitals. For this purpose, hospitals were judged similar if they were in the same region, ownership control group, and metropolitan statistical area control group.

Adjustments for ED and/or clinic nonresponse

Estimates from NHAMCS data were adjusted to account for ED's and sample clinics which were in scope but did not participate in the study. This adjustment was calculated to minimize the impact of nonresponse on final estimates by imputing to nonresponding ED's or clinics' data from visits to similar ED's or clinics. For this purpose, ED's or clinics were judged similar if they were in the same ED or clinic group.

Test of significance and rounding

The determination of statistical inference is based on the t-test. The Bonferroni inequality was used to establish the critical value for statistically significant differences (0.05 level of confidence). Terms relating to differences such as "higher than" indicate that the difference is statistically significant. A lack of comment regarding the difference between any two estimates does not mean that the difference was tested and found to be not significant.

In the tables, estimates of OPD visits have been rounded to the nearest thousand. Consequently, estimates will not always add to totals. Rates and percents were calculated from original unrounded figures and do not necessarily agree with percents calculated from rounded data.

Definition of terms

Patient—An individual seeking personal health services who is not currently admitted to any health care institution on the premises.

Hospital—All hospitals with an average length of stay for all patients of less than 30 days (short-stay) or hospitals whose specialty is general (medical or surgical) or children's general. Federal hospitals and hospital units of institutions and hospitals with fewer than six beds staffed for patient use are excluded.

Emergency department—Hospital facility for the provision of unscheduled outpatient services to patients whose conditions require immediate care and which is staffed 24 hours a day. If an ED provided emergency services in different areas of the hospital, then all of these areas were selected with certainty into the sample. Off-site emergency departments open less than 24 hours are included if staffed by the hospital's emergency department.

Outpatient department—Hospital facility where non-urgent ambulatory medical care is provided under the supervision of a physician.

Clinic—An administrative unit of the outpatient department where

ambulatory medical care is provided
under the supervision of a physician.
The following are examples of the types
of clinics excluded from the NHAMCS:
ambulatory surgical centers,
chemotherapy, employee health service,
renal dialysis, methadone maintenance,
and radiology.

Visit—A direct personal exchange
between a patient and a physician or
other health care provider working
under the physician's supervision, for
the purpose of seeking care and
receiving personal health services.

Trade name disclaimer

The use of trade names is for identification only and does not imply endorsement by the Public Health Service, U.S. Department of Health and Human Services.

Suggested citation

McCaig LF. Outpatient Department Summary: National Hospital Ambulatory Medical Care Survey, 1992. Advance data from vital and health statistics; no 248. Hyattsville, Maryland: National Center for Health Statistics. 1994.

Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

National Center for Health Statistics

Director
Manning Feinleib, M.D., Dr. P.H.

Deputy Director
Jack R. Anderson

*U.S. Government Printing Office: 1994 — 301-050/80021

U.S. DEPARTMENT OF HEALTH AND
  HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

To receive this publication regularly, contact the National Center for Health Statistics by calling 301-436-8500

BULK RATE
POSTAGE & FEES PAID
PHS/NCHS
PERMIT NO. G-281