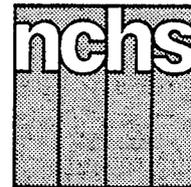


Advance Data



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

Office Visits to Obstetricians and Gynecologists: United States, 1989–90

by Susan M. Schappert, M.A., Division of Health Care Statistics

Introduction

Over the 2-year period 1989–90, there were approximately 119.6 million visits made to nonfederally employed, office-based physicians in the United States who specialized in the practice of obstetrics and gynecology—an average of about 59.8 million visits per year. This report summarizes data pertaining to these visits in terms of patient characteristics, physician practice characteristics, and visit characteristics. Other reports are available that present data on office visits to obstetricians and gynecologists for previous years (1–3). Some of the findings from these reports will be discussed in light of current survey data.

The information presented in this report is based on data obtained from the National Ambulatory Medical Care Survey (NAMCS), a national probability sample survey conducted by the Division of Health Care Statistics of the National Center for Health Statistics, Centers for Disease Control and Prevention. This survey was conducted annually from 1973 through 1981, and again in 1985. It

resumed an annual schedule with the 1989 survey.

The 1989 and 1990 NAMCS shared identical survey instruments, definitions, and procedures. The resulting two years of data have been combined to provide more reliable estimates, and the reader should be aware that the estimates, percent distributions, and rates presented in this report, unless otherwise indicated, reflect average annual estimates for 1989 and 1990 based on the combined data. The Patient Record, the survey instrument utilized by participating physicians to record information about their patients' office visits, is shown in figure 1.

The reader should keep in mind that the estimates presented in this report are based on a sample, rather than on the entire universe of office visits, and are subject to sampling variability. The sample design, sampling errors, and guidelines for judging the precision of NAMCS estimates are discussed in the technical notes. Several publications are available that discuss overall findings from the 1989 and 1990 NAMCS (4–6), and reports on special

topics are also available (7–10). Additional reports on visits made during 1989 and 1990 to other physician specialties are forthcoming.

Data Highlights

Patient characteristics

Approximately 99.4 percent of visits to obstetricians and gynecologists were made by females,^a and, of these, 85.7 percent were made by females between the ages of 15 and 44 years. These percentages reflect the principal reason for visits to this specialty: routine prenatal examination. Visits by females according to age and race are shown in table 1.

^aThis report focuses primarily on visits made to obstetricians and gynecologists by females (an average of 59,475,000 visits per year for 1989 and 1990). The estimated number of visits by males (an average of 337,000 per year for 1989 and 1990) is too small to be statistically reliable and thus does not permit meaningful analysis. A general discussion of visits made by males to what is essentially a specialty dealing with women's reproductive health issues can be found in an earlier publication (2).



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



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 other persons or used for any other purpose.		Department of Health and Human Services Centers for Disease Control Public Health Service National Center for Health Statistics		B																																			
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* U.S. GOVERNMENT PRINTING OFFICE:1989-226-197

Figure 1. 1989 National Ambulatory Medical Care Survey Patient Record

The age distribution of visits by females to obstetricians and gynecologists has shifted over the years. While 32.7 percent of these visits were made by patients 15–24 years of age in 1975–76, only 21.4 percent were made by patients in this age group in 1989–90. Correspondingly, females aged 25–44 years comprised 51.7 percent of the total in 1975–76, but had increased their share to 64.3 percent by 1989–90 (figure 2).

However, visit rates appeared not to have changed significantly over the years within any of the five age groups analyzed (figure 3). Females in the age group 25–44 years had the highest rate of visits to obstetricians and gynecologists (94.5 visits per 100 females in 1989–90), followed by females aged 15–24 years (71.6 visits per 100). Females under age 15 were the least likely to visit this specialty, with only 1.3 visits per 100 females.

White females made 84.7 percent of all female visits to obstetricians and gynecologists during 1989–90, while black females accounted for 8.6 percent, and Asian/Pacific Islanders accounted for 3 percent. The visit rate for white females was higher (47.7 visits per 100) than the corresponding rate for black females (31.8 visits per 100). Visit rates for white females did not appear to change significantly during the years

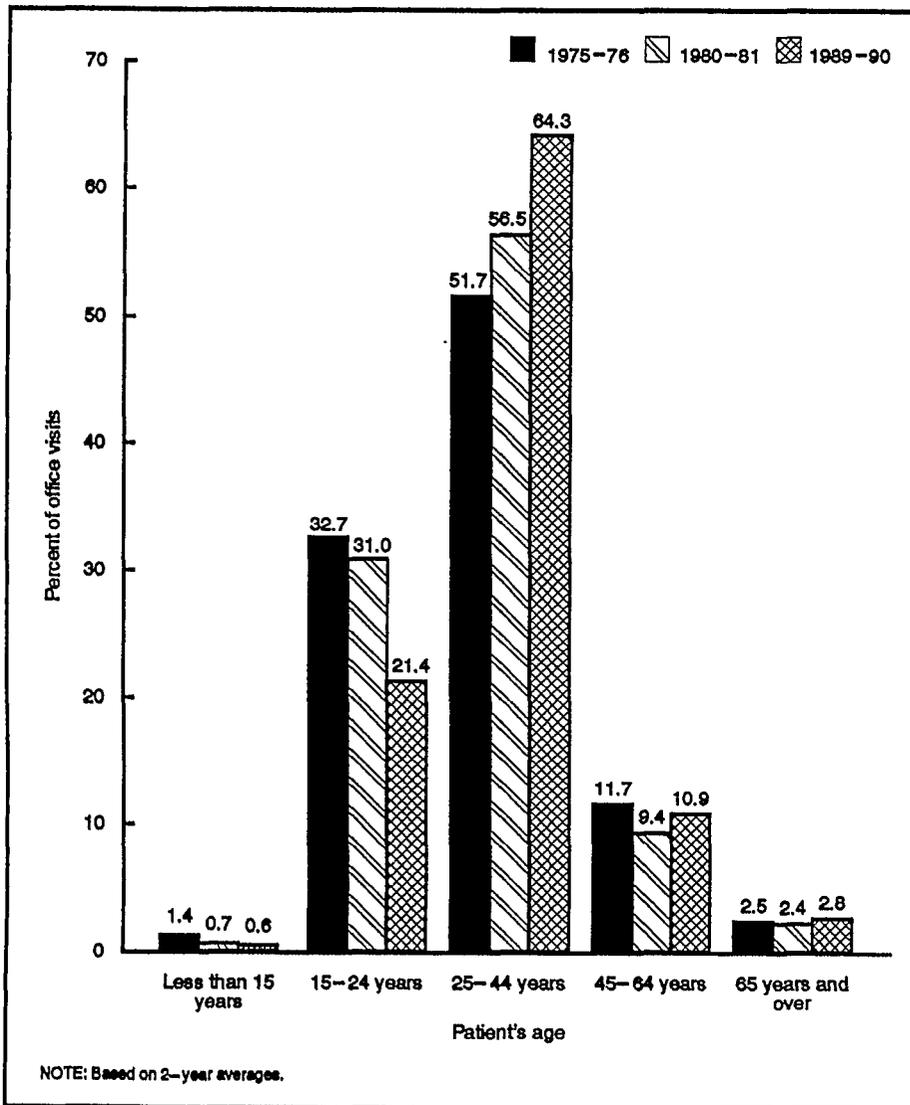


Figure 2. Change in age distribution of office visits by females to obstetricians and gynecologists: United States 1975-90

analyzed. Moreover, no significant differences were found in visit rates for black females in 1975-76 compared with 1989-90, although a somewhat lower visit rate was noted in 1980-81.

Physician practice characteristics

Obstetrics and gynecology was the fourth most visited physician specialty after general and family practice, internal medicine, and pediatrics, and accounted for an average of 8.6 percent of all office visits for 1989 and 1990 (table 2). This percentage did not differ appreciably from figures reported in 1975 and 1980-81.

Of the average number of office visits made by women during 1989 and 1990 to all specialties, about 14.1 percent were made to obstetricians and gynecologists. However, among women aged 15-44 years, this share was 29.1 percent (figure 4). General and family practice physicians received 30.4 percent of the total for this age group, with other specialties receiving significantly smaller percentages.

Visit characteristics

More than two-thirds of all visits made by females to obstetricians and gynecologists (69.6 percent) were made by patients who had seen the physician previously and were returning for care of their condition.

This reflects, to some extent, the ongoing character of prenatal care. Only 4.7 percent of visits were the result of a referral from another physician (table 3).

Private insurance (including commercial insurance and Blue Cross/Blue Shield) was listed as an expected source of payment at nearly half (48.1 percent) of all visits (table 4). Self-payment was the expected source of payment at 26.7 percent of visits, followed by HMO/prepaid plan (14.4 percent). It should be noted that, physicians were allowed to list more than one expected source of payment per visit.

The patient's principal reason for visit is shown in tables 5 and 6. Data in table 5 are categorized according to the eight reason for visit modules, or groups of reasons, outlined in *A Reason for Visit Classification for Ambulatory Care (RVC)* (10). The 15 most frequently mentioned principal reasons for visiting obstetricians and gynecologists are listed in table 6.

The principal reason for visit (item 9a on the Patient Record) is the patient's most important complaint(s), symptom(s), or other reason(s) for this visit expressed in the patient's own words. Up to three reasons per visit may be coded based upon the classification system found in the RVC.

More than half (59.6 percent) of all visits by females to obstetricians and gynecologists were classified within the diagnostic, screening, and preventive module, reflecting the large percentage of visits (32.8 percent) made for the specific reason of routine prenatal examination. Visits made because of a symptomatic problem or complaint accounted for 23.7 percent of the total; symptomatic problems or complaints were most often related to the genitourinary system.

Diagnostic services ordered or provided at the visit are shown in table 7. The vast majority of visits included some type of diagnostic service (94.4 percent), and 36.5 percent of visits included four or more diagnostic services, a significantly higher percentage than

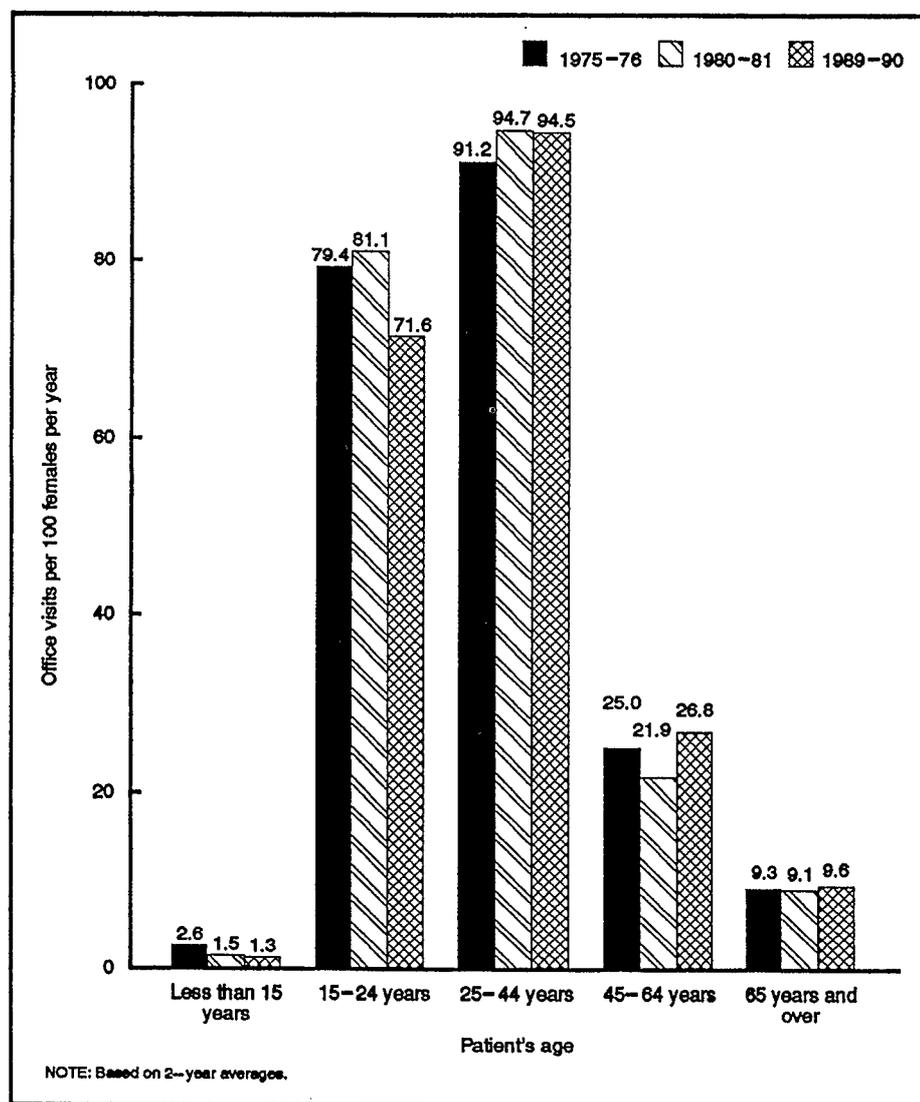


Figure 3. Annual visit rates for females to obstetricians and gynecologists by patient's age: United States, 1975-90

that found at visits to all other specialties.

The most frequently performed service was a blood pressure check (72.7 percent of visits), followed by pelvic exam (58.5 percent), urinalysis (45.4 percent), pap test (34.7 percent), and breast palpation (32.1 percent).

Data on principal diagnoses rendered at visits to obstetricians and gynecologists are shown in table 8. Item 10a of the Patient Record requests that the physician record the principal diagnosis associated with the patient's most important reason for visit. Diagnoses are classified and coded according to the *International Classification of Diseases, 9th Revision Clinical Modification*, (ICD-9-CM)

(12). They are shown according to major ICD-9 coding classes in table 8 and by the 15 most frequently mentioned principal diagnoses in table 9.

Paralleling the principal reason for visit data, the majority (55.6 percent) of visits reported a principal diagnosis in the supplementary classification (ICD-9-CM codes V01-V82), which includes all diagnoses that are not related to illness or injury. About 22.2 percent of visits reported diagnoses classified as diseases of the genitourinary tract (ICD-9-CM codes 580-629).

Normal pregnancy was the most frequently reported principal diagnosis, listed at 31.3 percent of

visits. The most frequently reported morbidity-related principal diagnosis was menopausal and postmenopausal disorders, listed at 3.6 percent of visits. (Morbidity-related diagnoses are those referable to illness or injury.)

Therapeutic services ordered or provided by the physician are shown in table 10. Less than half of the visits (47.3 percent) included some form of counseling or advice by the physician; breast self-exam was the specific type of counseling reported most frequently, occurring at 10.6 percent of visits. However, 35.1 percent of visits included a reference to "other" counseling, which may include various forms of medical, social, and family counseling. More detailed data in this area have been collected in the 1991 NAMCS.

Less than half (44.0 percent) of visits to obstetricians and gynecologists included a mention of medication therapy, compared with 61.7 percent of visits to all other specialties, again reflecting the predominance of visits made for reasons other than illness and injury. As used in the NAMCS, the term "drug" is interchangeable with the term "medication" and includes all new or continued medications ordered or provided at the visit, including both prescription and nonprescription preparations, immunizing agents, and desensitizing agents. An earlier report is available that describes the method and instruments used in collecting and processing NAMCS drug data (13).

The number of drug mentions by therapeutic classification is shown in table 11. The classification system used here was adapted from the therapeutic categories found in the National Drug Code Directory, 1985 (14). In cases where a particular drug was classifiable to more than one therapeutic category, it was listed under the category for which it was most frequently prescribed.

"Drug mentions" refer to the total number of medications listed in item 15 of the Patient Record. Physicians may record multiple medications per visit, so that the total

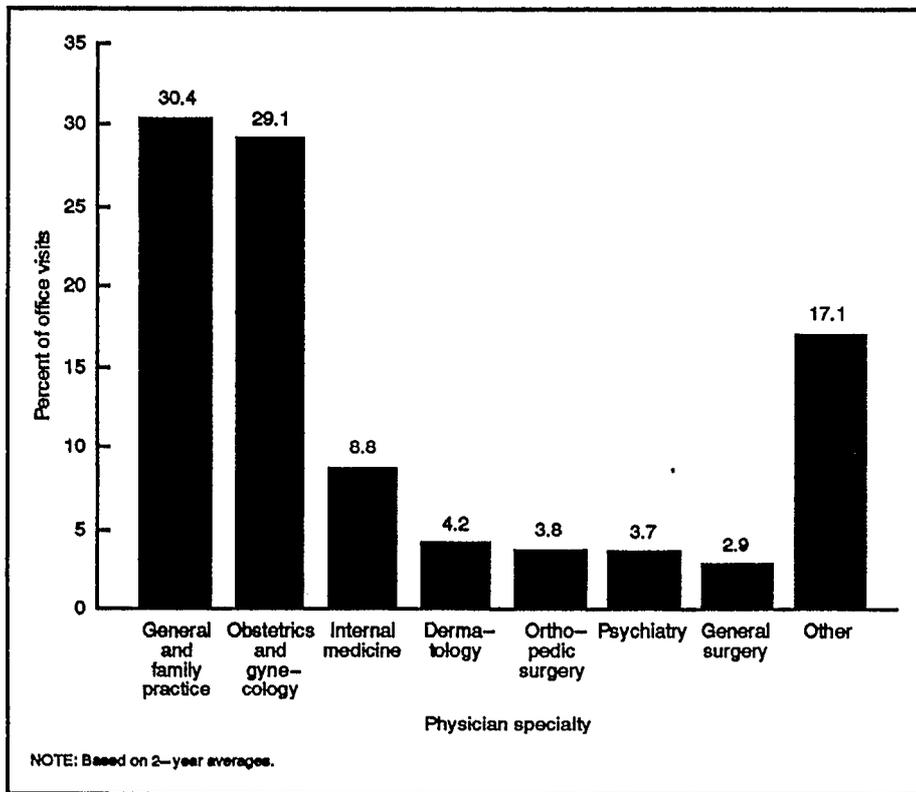


Figure 4. Percent distribution of office visits by females 15-44 years, according to physician specialty: United States, 1989-90.

number of drug mentions may exceed the total number of visits. This was not the case for visits to obstetricians and gynecologists, however, where only about 1.3 drugs were prescribed per drug visit, and where just 6 mentions of medication were made for every 10 visits in general. "Drug visit" refers to visits with at least one mention of medication ordered or provided by the physician.

Of the average yearly estimate of 34.7 million drug mentions at visits to obstetricians and gynecologists for 1989 and 1990, the largest percentage of mentions (34.8 percent) was for hormones and agents affecting hormonal mechanisms. This was followed by metabolic and nutrient agents, which accounted for 23.5 percent of all drug mentions.

The 20 most frequently used generic substances occurring in drug mentions by obstetricians and gynecologists are listed in table 12. The most frequently mentioned generic substance was estradiol, listed as an ingredient in 15.5 percent of drug mentions. (It is important to

note that the rank ordering presented in this and other tables in this report may not always be reliable because near estimates may not be significantly different from each other due to sampling variability.) Among the top 20 generic substances were 5 hormonal agents, and 10 metabolic and nutrient agents. The 10 most frequently mentioned medications according to the entry name of the drug, that is, the actual reference made to it by the physician on the Patient Record, whether by brand name, generic name, or therapeutic effect, is shown in table 13.

Data on disposition of visit are displayed in table 14. Most visits to obstetricians and gynecologists by females included an instruction to return at a specified time (76.7 percent).

Duration of visit is shown in table 15. More than half of all visits by females (69.3 percent) lasted 15 minutes or less. Average duration of physician-patient contact (excluding visits of zero minutes duration in which no direct face-to-face contact

between physician and patient occurred) was 15.5 minutes for visits to obstetricians and gynecologists.

Selected visit characteristics for obstetricians and gynecologists as compared with all other specialties are shown in tables 16 and 17. Visits to obstetricians and gynecologists were more likely to be made by female patients and by patients aged 15-44 years than were visits to all other specialties (table 16). Other areas of difference involve the greater likelihood of private insurance as an expected source of payment at visits to this specialty, the predominance of diagnostic, screening, and preventive reasons for visit as opposed to symptomatic complaints, the greater likelihood of nonillness and noninjury diagnoses, the higher number as well as the type of diagnostic services performed, the greater likelihood of counseling for breast self-examination, the lower percentage of visits at which medication therapy was mentioned, and the higher proportion of visits at which a return visit was scheduled.

Data in table 17 represent the distribution of visits by physician specialty for 10 reasons for visit and 10 diagnoses selected from those reported most often at visits to obstetricians and gynecologists. Obstetricians and gynecologists received 79.1 percent of all visits for routine prenatal examination compared with 19.1 percent for general and family practitioners. On the other hand, general and family practitioners received about half (50.1 percent) of all visits made for the reason of having a pap smear, which is not significantly different than the proportion made to obstetricians and gynecologists (41.3 percent).

For the 10 diagnoses listed in table 17, obstetricians and gynecologists received a significantly greater proportion of visits for each diagnosis listed, with two exceptions—visits having a diagnosis of candidiasis and visits with a diagnosis of inflammatory disease of the cervix, vagina, and vulva. General

and family practitioners received a substantial proportion of visits with these diagnoses (35.9 percent and 40.6 percent, respectively).

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Table 1. Annual number, percent distribution, and rate of office visits by females to obstetricians and gynecologists, by patient's age and race, averaged over a 2-year period: United States, 1989-90

Patient characteristic	Number of visits in thousands	Percent distribution	Visit rate per 100 females ¹
All visits	59,475	100.0	47.2
Age			
Less than 15 years	349	0.6	1.3
15-24 years	12,749	21.4	71.6
25-44 years	38,247	64.3	94.5
45-64 years	6,476	10.9	26.8
65 years and over	1,655	2.8	9.6
Race			
White	50,403	84.7	47.7
Less than 15 years	264	0.4	1.2
15-24 years	10,485	17.6	72.8
25-44 years	32,349	54.4	95.9
45-64 years	5,783	9.7	27.8
65 years and over	1,523	2.6	9.8
Black	5,113	8.6	31.8
Less than 15 years	*64	*0.1	*1.5
15-24 years	1,496	2.5	55.6
25-44 years	3,173	5.3	62.0
45-64 years	324	0.5	12.3
65 years and over	*54	*0.1	*3.7
Asian/Pacific Islander	1,763	3.0	.
American Indian/Alaskan Native	152	0.3	.
Unspecified	2,046	3.4	.

¹Visit rates are based on U.S. Bureau of the Census estimates of the civilian, noninstitutionalized U.S. female population for July 1 of 1989 and 1990, averaged over the 2-year period.

Table 2. Annual number, percent distribution, and rate of office visits by physician specialty, averaged over a 2-year period: United States, 1989-90

Physician specialty	Number of visits in thousands	Percent distribution	Visit rate per 100 persons ¹
All visits	698,653	100.0	285.4
General and family practice	208,045	29.8	85.0
Internal medicine	87,719	12.6	35.8
Pediatrics	84,280	12.1	34.4
Obstetrics and gynecology	59,812	8.6	247.2
Ophthalmology	41,302	5.9	16.9
Orthopedic surgery	34,033	4.9	13.9
Dermatology	25,165	3.6	10.3
General surgery	23,891	3.4	9.8
Psychiatry	18,790	2.7	7.7
Otolaryngology	16,958	2.4	6.9
Cardiovascular diseases	11,040	1.6	4.5
Urological surgery	9,852	1.4	4.0
Neurology	6,167	0.9	2.5
Other	71,603	10.2	29.2

¹Visit rates are based on U.S. Bureau of the Census estimates of the civilian, noninstitutionalized population of the United States for July 1 of 1989 and 1990, averaged over the 2-year period.

²Rate based on female visits and female population. Females made 99.4 percent of all visits to this specialty during 1989-90, for an average annual estimate of 69,475,000 visits.

Table 3. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by patient's referral status and prior-visit status, averaged over a 2-year period: United States, 1989-90

Visit characteristic	Number of visits in thousands	Percent distribution
All visits	59,475	100.0
Patient's referral status		
Patient was referred to this visit by another physician	2,818	4.7
Patient was not referred to this visit by another physician	56,657	95.3
Patient's prior-visit status		
New patient	7,725	13.0
Old patient, new problem	10,352	17.4
Old patient, old problem	41,398	69.6

Table 4. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by patient's expected source of payment, averaged over a 2-year period: United States, 1989-90

Expected source of payment ¹	Number of visits in thousands	Percent distribution
All visits	59,475	100.0
Commercial insurance	20,357	34.2
Self-pay	15,852	26.7
HMO/Prepaid plan	8,568	14.4
Blue Cross/Blue Shield	8,254	13.9
Medicaid	4,579	7.7
No charge	1,963	3.3
Medicare	1,411	2.4
Other	1,439	2.4
Unknown	2,423	4.1

¹Number may not add to totals because more than one source of payment may be coded for each visit.

Table 5. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by patient's principal reason for visit, averaged over a 2-year period: United States, 1989-90

<i>Principal reason for visit and RVC code¹</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All visits	59,475	100.0
Symptom module;S001-S999	14,125	23.7
Symptoms referable to the genitourinary system .S640-S829	9,741	16.4
Disease moduleD001-D999	1,645	2.8
Diagnostic, screening, and preventive module . .X100-X599	35,473	59.6
Treatment moduleT100-T899	4,236	7.1
Injury and adverse effects moduleJ001-J999	*57	*0.1
Test results moduleR100-R700	1,884	3.2
Administrative moduleA100-A140	*38	*0.1
Other ²U990-U999	2,019	3.4

¹Based on "A Reason for Visit Classification for Ambulatory Care," (RVC), Vital Health Stat 2(78), Feb. 1979.

²Includes blanks, problems, and complaints not elsewhere classified, entries of "none," and illegible entries.

Table 6. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by the 15 most frequently mentioned principal reasons for visit, averaged over a 2-year period: United States, 1989-90

<i>Principal reason for visit and RVC code¹</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All visits	59,475	100.0
Routine prenatal examinationX205	19,530	32.8
General medical examinationX100	6,971	11.7
Postoperative visitT205	2,363	4.0
Postpartum examinationX215	2,051	3.4
Pap smear.X365	1,749	2.9
For cytology findingsR300	1,573	2.6
Gynecological examinationX225	1,990	3.3
Other vaginal symptomsS765	1,264	2.1
Family planning, not otherwise specifiedX500	1,031	1.7
Absence of menstruationS730	843	1.4
Stomach pain, cramps, and spasmsS545	817	1.4
Uterine and vaginal bleedingS755	791	1.3
Problems of pregnancy and the postpartum period . .S790	735	1.2
Menopausal symptoms.S750	716	1.2
Pelvic symptoms.S775	714	1.2
All other reasons	16,342	27.5

¹Based on "A Reason for Visit Classification for Ambulatory Care," (RVC), Vital Health Stat 2(78), Feb. 1979.

Table 7. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by diagnostic service, averaged over a 2-year period: United States, 1989-90

<i>Diagnostic and screening service</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All visits	59,475	100.0
Number of diagnostic services performed at visit		
0	3,326	5.6
1	10,157	17.1
2	13,203	22.2
3	11,029	18.5
4	7,431	12.5
5	5,296	8.9
More than 5	9,033	15.1

Diagnostic and screening services performed at visit¹

Blood pressure check . . .	43,234	72.7
Pelvic exam	34,796	58.5
Urinalysis	27,060	45.4
Pap test.	20,642	34.7
Breast palpation.	19,114	32.1
Other blood test.	8,853	14.9
Digital-rectal exam	7,660	12.9
Mammogram.	3,932	6.6
Cholesterol measure	2,268	3.8
Stool blood exam.	2,223	3.7
Oral glucose tolerance. . .	939	1.6
HIV serology ²	273	0.5
Chest x ray	207	0.3
Visual acuity	190	0.3
Proctoscopy/ sigmoidoscopy.	*71	*0.1
Other diagnostic service. . .	17,366	29.2

¹Number may not add to totals because more than one diagnostic service may be performed at each visit.

²HIV is human immunodeficiency virus.

Table 8. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by principal diagnosis, averaged over a 2-year period: United States, 1989-90

Principal diagnosis and ICD-9-CM code ¹	Number of visits in thousands	Percent distribution
All visits	59,475	100.0
Infectious and parasitic diseases001-139	1,864	3.1
Neoplasm140-239	1,161	2.0
Endocrine, nutritional, and metabolic diseases and immunity disorders240-279	732	1.2
Mental disorders290-319	171	0.3
Diseases of the nervous system and sense organs320-389	174	0.3
Diseases of the circulatory system390-459	336	0.6
Diseases of the respiratory system460-519	526	0.9
Diseases of the digestive system520-579	342	0.6
Diseases of the genitourinary system580-629	13,180	22.2
Diseases of the skin and subcutaneous tissue680-709	315	0.5
Diseases of the musculoskeletal system and connective tissue710-739	150	0.3
Symptoms, signs, and ill-defined conditions780-799	1,478	2.5
Injury and poisoning800-999	188	0.3
Supplementary classificationV01-V82	33,060	55.6
All other diagnoses ²	3,764	6.3
Unknown ³	2,036	3.4

¹Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).
²Includes 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 (760-799).
³Includes blank diagnoses, uncodable diagnoses, and illegible diagnoses.

Table 10. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by therapeutic service ordered or provided, averaged over a 2-year period: United States, 1989-90

Therapeutic service ordered or provided ¹	Number of visits in thousands	Percent distribution
All visits	59,475	100.0
New or continuing medication	26,148	44.0
Counseling/advice		
None	31,351	52.7
Weight reduction	2,876	4.8
Cholesterol reduction	1,014	1.7
Smoking cessation	1,137	1.9
HIV transmission	*134	*0.2
Breast self-exam	6,294	10.6
Other	20,900	35.1
Other non-medication therapy		
None	54,587	91.8
Psychotherapy	201	0.3
Ambulatory surgery	821	1.4
Physiotherapy	*114	*0.2
Other	3,784	6.4

¹Numbers may not add to totals because more than one type of therapy may be ordered or provided at each visit.

Table 9. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by the 15 most frequently mentioned principal diagnoses, averaged over a 2-year period: United States, 1989-90

Principal diagnosis and ICD-9-CM code ¹	Number of visits in thousands	Percent distribution
All visits	59,475	100.0
Normal pregnancyV22	18,701	31.3
General medical examinationV70	4,999	7.4
Menopausal and postmenopausal disorders627	2,126	3.6
Disorders of menstruation and other abnormalities626	2,062	3.4
Contraceptive managementV25	2,015	3.4
Special investigations and examinationsV72	1,764	2.9
Postpartum care and examinationV24	1,688	2.8
Inflammatory disease of cervix, vagina, and vulva616	1,643	2.7
Pain and other symptoms associated with female genital organs625	1,416	2.4
Noninflammatory disorders of cervix622	1,109	1.9
Other postsurgical statesV45	930	1.6
Candidiasis112	814	1.4
Female infertility628	797	1.3
Observation and evaluation for suspected conditionsV71	747	1.2
Nonspecific abnormal histological and immunological findings795	700	1.2
All other diagnoses	18,570	31.5

¹Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).

Table 11. Annual number and percent distribution of drug mentions at office visits by females to obstetricians and gynecologists by therapeutic classification, averaged over a 2-year period: United States, 1989-90

Therapeutic classification ¹	Number of drug mentions in thousands	Percent distribution
All mentions	34,738	100.0
Hormones and agents affecting hormonal mechanisms	12,088	34.8
Contraceptive agents	6,243	18.0
Estrogens and progestins	4,709	13.6
Metabolic and nutrient agents	8,167	23.5
Vitamins, minerals	7,946	22.9
Antimicrobial	4,334	12.5
Tetracyclines	1,063	3.1
Penicillins	761	2.2
Skin/mucous membrane	2,989	8.6
Dermatologics	2,736	7.9
Pain relief	1,934	5.6
Antiarthritics	1,148	3.3
Hematologic	1,154	3.3
Agents used to treat deficiency anemias	1,127	3.2
Respiratory tract	752	2.2
Cardiovascular-renal	437	1.3
Psychopharmacologic	437	1.3
Gastrointestinal	312	0.9
Immunologic	123	0.4
Neurologic	*65	*0.2
Ophthalmic	*40	*0.1
Other and unclassified ²	1,908	5.5

¹Therapeutic classification is based on the standard drug classification used in the National Drug Code Directory, 1985 Edition.

²Includes anesthetics, oncology, ophthalmic drugs, antiparasitic agents, and other unclassified and miscellaneous agents.

Table 12. Annual number, percent distribution, and therapeutic classification of drug mentions at office visits by females to obstetricians and gynecologists by the 20 most frequently used generic substances, averaged over a 2-year period: United States, 1989–90

<i>Generic substance</i>	<i>Number of drug mentions in thousands¹</i>	<i>Percent distribution</i>	<i>Therapeutic classification²</i>
All mentions	34,738	100.0	...
Estradiol	5,370	15.5	Contraceptive agents
Ergocalciferol	5,287	15.2	Vitamins, minerals
Vitamin A	5,272	15.2	Vitamins, minerals
Riboflavin	4,660	13.4	Vitamins, minerals
Pyridoxine	4,642	13.4	Vitamins, minerals
Thiamine	4,031	11.6	Vitamins, minerals
Norethindrone	3,157	9.1	Contraceptive agents
Iron preparations	2,997	8.6	Vitamins, minerals
Estrogens	2,445	7.0	Estrogens and progestins
Medroxyprogesterone	1,673	4.8	Estrogens and progestins
Calcium ion	1,644	4.7	Vitamins, minerals
Thimerosal	1,498	4.3	Vitamins, minerals
Vitamin C	1,080	3.1	Vitamins, minerals
Norgestrel	1,038	3.0	Contraceptive agents
Vitamin E	978	2.8	Vitamins, minerals
Terconazole	665	1.9	Dermatologics
Miconazole	647	1.9	Dermatologics
Doxycycline	636	1.8	Tetracyclines
Metronidazole	631	1.8	Miscellaneous antibacterial agents
Naproxen	599	1.7	Antiarthritics

¹Frequency of mention combines single-ingredient agents with mentions of the agent as an ingredient in a combination drug.

²Therapeutic classification is based on the standard drug classification used in the National Drug Code Directory, 1985 Edition. In cases where a generic substance had more than one therapeutic classification, it was listed in the classification for which it was most frequently used.

Table 13. Annual number, percent distribution, and therapeutic classification of the 10 drugs most frequently prescribed at visits by females to obstetricians and gynecologists by entry name of drug, averaged over a 2-year period: United States, 1989–90

<i>Entry name of drug¹</i>	<i>Number of drug mentions in thousands</i>	<i>Percent distribution</i>	<i>Therapeutic classification²</i>
Total mentions	34,738	100.0	...
Premarin	2,296	6.6	Estrogens and progestins
Prenatal vitamins	2,085	5.9	Vitamins, minerals
Ortho-novum	2,053	5.9	Contraceptive agents
Prenatal formula (vitamins)	1,796	5.2	Vitamins, minerals
Materna	1,644	4.7	Vitamins, minerals
Provera	1,563	4.5	Estrogens and progestins
Contraceptive agent	725	2.1	Contraceptive agents
Terazol	665	1.9	Dermatologics
Natalins	588	1.7	Vitamins, minerals
Anaprox	554	1.6	Antiarthritics

¹The trade or generic name used by the physician on the prescription or other medical records.

²Therapeutic classification is based on the standard drug classification used in the National Drug Code Directory, 1982 Edition. In cases where a drug had more than one therapeutic classification, it was listed in the classification for which it was most frequently used.

Table 14. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by disposition of visit, averaged over a 2-year period: United States, 1989–90

<i>Disposition of visit¹</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All visits	59,475	100.0
No followup planned	2,808	4.7
Return at specified time	45,641	76.7
Return if needed	9,307	15.6
Telephone followup planned	1,479	2.5
Refer to other physician	1,463	2.5
Return to referring physician	306	0.5
Admit to hospital	766	1.3
Other disposition	1,063	1.8

¹Number may not add to totals because more than one disposition may be coded for each visit.

Table 15. Annual number and percent distribution of office visits by females to obstetricians and gynecologists by duration of visit, averaged over a 2-year period: United States, 1989–90

<i>Duration of visit</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All visits	59,475	100.0
0 minutes ¹	399	0.7
1–5 minutes	6,563	11.0
6–10 minutes	16,269	27.4
11–15 minutes	17,962	30.2
16–30 minutes	15,599	26.2
31–60 minutes	2,627	4.4
More than 60 minutes	*57	*0.1

¹Visits of zero minutes duration are those in which there was no face-to-face contact between the physician and the patient.

Table 16. Annual number and percent of office visits to obstetricians and gynecologists and to all other physician specialties by selected visit characteristics, averaged over a 2-year period: United States, 1989-90

Selected visit characteristic	Obstetricians and gynecologists	All other specialties
	Number of visits in thousands	
All visits	59,812	638,841
	Percent	
Female patients	99.4	56.8
Patients 15-44 years of age	85.5	32.9
Patients returning for care of previously treated condition	69.5	60.3
Private insurance as expected pay source (Includes commercial insurance and Blue Cross/ Blue Shield)	47.9	33.2
Principal reason for visit in symptom module . . .	24.0	60.0
Principal reason for visit in diagnostic, screening, and preventive module	59.4	11.6
Principal reason for visit of routine prenatal exam.	32.7	0.8
Principal diagnosis in diseases of the genitourinary system	22.1	4.2
Principal diagnosis in supplementary classification	55.3	11.3
Principal diagnosis of normal pregnancy	31.3	0.8
Three or more diagnostic services performed . . .	54.9	10.4
Blood pressure check	72.6	33.4
Pelvic exam	58.2	2.6
Urinalysis	45.3	9.7
Pap test	34.5	2.0
Breast palpation	32.0	3.1
Mammogram	6.6	1.1
Counseling for breast self-exam	10.5	1.5
Drug visits	44.1	61.7
Return visit scheduled	76.6	60.3

Table 17. Annual number and percent distribution of office visits by physician specialty according to selected principal reasons for visit and principal diagnoses, averaged over a 2-year period: United States, 1989-90

Principal reason for visit and principal diagnosis	Number of visits in thousands	Total	Percent distribution		
			Obstetrics and gynecology	General and family practice	All other specialties
All visits	422,324	100.0	14.1	30.0	55.9
Principal reason for visit and RVC code ¹					
Routine prenatal examination. X205	24,663	100.0	79.1	19.1	1.8
Stomach pains, cramps, and spasms S545	8,311	100.0	9.8	38.1	52.1
Pap smear X365	4,233	100.0	41.3	50.1	8.6
Other vaginal symptoms S765	2,689	100.0	47.0	37.0	16.0
Postpartum examination. X215	2,315	100.0	88.6	*9.7	*1.7
For cytology findings. R300	2,209	100.0	71.2	17.5	*11.3
Gynecological examination X225	2,008	100.0	74.2	13.6	*12.2
Family planning, not otherwise specified X500	1,362	100.0	75.7	*16.0	*8.3
Uterine and vaginal bleeding. S755	1,333	100.0	59.3	27.6	*13.1
Absence of menstruation S730	1,048	100.0	80.4	*14.5	*5.1
Principal diagnosis and ICD-9-CM code ²					
Normal pregnancy V22	23,570	100.0	79.3	19.1	1.6
Menopausal and postmenopausal disorders 627	3,719	100.0	57.2	30.1	12.7
Inflammatory disease of cervix, vagina, and vulva 616	3,554	100.0	46.2	40.6	13.2
Disorders of menstruation and other abnormalities 626	3,012	100.0	68.5	24.4	*7.1
Contraceptive management V25	2,816	100.0	71.6	19.8	*8.6
Pain and other symptoms associated with female genital organs 625	2,194	100.0	64.5	16.5	19.0
Postpartum care and examination V24	2,022	100.0	83.5	14.2	*2.3
Candidiasis 112	2,017	100.0	39.6	35.9	24.5
Noninflammatory disorders of cervix 622	1,519	100.0	73.0	*13.3	*13.7
Female infertility. 628	987	100.0	80.7	*9.8	*9.5

¹Based on "A Reason for Visit Classification for Ambulatory Care," (RVC), Vital Health Stat 2(78), Feb. 1979.²Based on the International Classification of Diseases, 9th Revision, Clinical Modification, ICD-9-CM.

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
-

Technical Notes

Source of data and sample design

The information in this report is based on data collected through the National Ambulatory Medical Care Survey (NAMCS) over the 2-year period 1989–90. The target universe of NAMCS includes office visits made in the United States by ambulatory patients to nonfederally employed physicians who are principally engaged in office practice, but not in the specialties of anesthesiology, pathology, or radiology. Telephone contacts and nonoffice visits are excluded.

A multistage probability sample design is used in NAMCS, involving samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within physician practices. Physicians were stratified into 15 specialty groups during the second stage of the survey design. Detailed descriptions of the 1989 and 1990 NAMCS survey design have been published (5,15,16), and the reader is urged to consult these sources for further technical information.

The 1989 NAMCS physician sample included 2,535 physicians who were selected from master files maintained by the American Medical Association and the American Osteopathic Association; 164 of these were obstetricians and gynecologists. Physicians were screened at the time of the survey to ensure that they were eligible for survey participation, based upon a set of design criteria. Of those screened, 608 physicians, including 31 obstetricians and gynecologists, were ruled ineligible (out-of-scope) due to reasons such as being retired or employed primarily in teaching, research, or administration. Of the remaining 1,927 physicians, 74 percent responded to the survey, including 133 obstetricians and gynecologists, or 71 percent of those surveyed.

Sample physicians were asked to complete Patient Records (see figure 1) for a systematic random sample of their office visits occurring

during a randomly assigned 1-week reporting period. Responding physicians completed 38,384 Patient Records, including 2,504 forms completed by obstetricians and gynecologists.

For 1990, a sample of 3,063 non-Federal, office-based physicians was selected from master files maintained by the American Medical Association and American Osteopathic Association. Of this number, 197 were obstetricians and gynecologists. The overall response rate for the 2,269 in-scope physicians was 74 percent; the rate was 73 percent for the 157 in-scope obstetricians and gynecologists. Responding physicians completed 43,469 Patient Records, including 2,969 forms from obstetricians and gynecologists.

Characteristics of the physician's practice, such as primary specialty and type of practice, were obtained from the physicians during an induction interview. The U.S. Bureau of the Census, Housing Surveys Branch, was responsible for collecting the survey data. Processing operations and medical coding were performed by the National Center for Health Statistics, Hospital Discharge and Ambulatory Care Survey Section, Research Triangle Park, North Carolina.

The 1989 and 1990 NAMCS were identical in terms of survey instruments, definitions, and procedures. The resulting two years of data have been combined to provide more reliable estimates. All estimates, percent distributions, and rates, unless otherwise noted, reflect 1989 and 1990 data that were averaged over the 2-year period.

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 relative standard error of an estimate is obtained by dividing the standard error by the estimate. The result is then expressed as a percent of the estimate. Relative standard errors for

estimated numbers of total office visits to obstetricians and gynecologists in 1989–90 are shown in table I, and relative standard errors for estimated numbers of drug mentions are shown in table II. Readers wishing to utilize these tables should keep in mind that the numbers refer to combined years of data rather than average annual estimates. Standard errors for

Table I. Relative standard errors for estimated numbers of office visits by selected physician specialties: National Ambulatory Medical Care Survey, 1989–90

Estimated numbers of office visits in thousands	Physician specialty		
	All ¹	Obstetrics and gynecology ²	General and family practice ³
Relative standard error in percent			
100	72.7	49.2	61.4
200	51.5	35.3	43.7
500	32.6	23.3	28.1
1,000	23.2	17.6	20.5
2,000	16.5	13.9	15.2
5,000	10.7	11.1	11.0
10,000	7.9	9.9	9.1
20,000	6.0	9.3	6.0
50,000	4.5	9.0	7.3
100,000	3.9	8.8	7.0
200,000	3.5	8.8	6.9
500,000	3.9	8.7	6.8
1,000,000	3.2	8.7	6.8
1,400,000	3.2	8.7	6.8

¹For all specialties, the smallest reliable estimate is 593,000 visits. Estimates below this figure have a relative standard error greater than 30 percent.

²For obstetrics and gynecology, the smallest reliable estimate is 285,000 visits.

³For general and family practice, the smallest reliable estimate is 437,000 visits.

Example of use of table: An aggregate estimate of 1 million visits to obstetricians and gynecologists has a relative standard error of 17.6 percent or a standard error of 176,000 visits (17.6 percent of 1 million).

Table II. Relative standard errors for estimated numbers of drug mentions at visits to obstetricians and gynecologists: National Ambulatory Medical Care Survey, 1989–90

Estimated number of drug mentions in thousands ¹	Relative standard error in percent
100	36.1
200	27.0
500	19.7
1,000	16.6
2,000	14.7
5,000	13.5
10,000	13.1
20,000	12.9
50,000	12.8
100,000	12.7
1,000,000	12.7

¹The smallest reliable estimate is 155,000 mentions. Estimates below this figure have a relative standard error greater than 30 percent.

Example of use of table: An aggregate estimate of 10 million drug mentions has a relative standard error of 13.1 percent or a standard error of 1,310,000 mentions (13.1 percent of 10 million).

estimated percents of visits are shown in table III.

Alternatively, relative standard errors for aggregate estimates may be calculated using the following general formula, where x is the aggregate of interest in thousands, and A and B are the appropriate coefficients from table IV.

$$RSE(x) = \sqrt{A + \frac{B}{x}} \cdot 100.0$$

Similarly, relative standard errors for percents may be calculated using the following general formula, where p is the percent of interest and x is the denominator of the percent in

thousands, using the appropriate coefficient from table IV.

$$RSE(p) = \sqrt{\frac{B \cdot (1-p)}{p \cdot x}} \cdot 100.0$$

Adjustments for non-response

Estimates from NAMCS data were adjusted to account for sample physicians who were in scope but did not participate in the study. This adjustment was calculated to minimize the impact of response on final estimates by imputing to nonresponding physicians data from visits to similar physicians. For this

purpose, physicians were judged similar if they had the same specialty designation and practiced in the same PSU.

Test of significance and rounding

In this report, 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 "greater than" or "less than" indicate that the difference is statistically significant. No comment about 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 office 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

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

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

Office—An office is the space physicians identify as a location for their ambulatory practice. Offices customarily include consultation,

Table III. Standard errors for percents of estimated numbers of office visits to obstetricians and gynecologists: National Ambulatory Medical Care Survey, 1989–90

Base of percent (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						
100	4.8	10.6	14.5	19.4	22.2	24.2
200	3.4	7.5	10.3	13.7	15.7	17.1
500	2.2	4.7	6.5	8.7	9.9	10.8
1,000	1.5	3.3	4.6	6.1	7.0	7.7
2,000	1.1	2.4	3.3	4.3	5.0	5.4
5,000	0.7	1.5	2.1	2.7	3.1	3.4
10,000	0.5	1.1	1.5	1.9	2.2	2.4
20,000	0.3	0.8	1.0	1.4	1.6	1.7
50,000	0.2	0.5	0.7	0.9	1.0	1.1
100,000	0.2	0.3	0.5	0.6	0.7	0.8
200,000	0.1	0.2	0.3	0.4	0.5	0.5
500,000	0.1	0.2	0.2	0.3	0.3	0.3
1,000,000	0.1	0.1	0.1	0.2	0.2	0.2

Example of use of table: An estimate of 20 percent based on an aggregate estimate of 5 million visits has a standard error of 2.7 percent or a relative standard error of 13.5 percent (2.7 percent divided by 20 percent).

Table IV. Coefficients appropriate for determining relative standard errors by type of estimate and physician groups: National Ambulatory Medical Care Survey, 1989–90

Type of estimate and physician group	Coefficient	
	A	B
Visits		
Overall totals	0.00097549	52.77952184
General and family practice, internal medicine	0.00456412	37.27953208
Pediatrics, obstetrics and gynecology	0.00755165	23.43030623
Doctors of osteopathy, general surgery, orthopedic surgery, cardiovascular disease, psychiatry, urological surgery, dermatology, neurology, ophthalmology, otolaryngology	0.01236777	8.46452955
All other	0.01169917	39.38793804
Drug mentions		
Overall totals	0.00157151	81.47054833
General and family practice, internal medicine	0.00589721	59.72807201
Psychiatry	0.0296738	30.9506771
Doctors of osteopathy, general surgery, orthopedic surgery, cardiovascular disease, urological surgery, dermatology, neurology, ophthalmology, otolaryngology, obstetrics and gynecology, pediatrics	0.01603845	11.42009384
All other	0.01877082	70.35063675

examination, or treatment spaces that patients associate with the particular physician.

Visit—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 personal health services.

Drug mention—A drug mention is the physician's entry of a pharmaceutical agent—by any route of administration—for prevention, diagnosis, or treatment. Generic as well as brand-name drugs are included, as are nonprescription and prescription drugs. Along with all new drugs, the physician also records continued medications if the patient was specifically instructed during the visit to continue the medication.

Drug visit—A drug visit is a visit in which medication was prescribed or provided by the physician.

Obstetrics and gynecology—The physician practice specialty of obstetrics and gynecology includes physicians who report a specialty to the American Medical Association in any of the following areas—gynecology, gynecological oncology, maternal and fetal medicine, obstetrics, obstetrics and gynecology, and reproductive endocrinology.

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