National Ambulatory Medical Care Survey



Factsheet PHYSICIAN OFFICE VISITS



In 2009, there were an estimated 1 billion visits to nonfederally employed, office-based physicians in the United States. Half of the visits were made by persons 25–64 years of age.

Percent distribution of office visits by patient's age: 2009



The annual visit rate increased with age from age 15. The visit rate was highest for persons 65 years and over. Females had a higher visit rate than males.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 64%
- Medicare 25%
- Medicaid 13%
- No insurance¹ 4%
- Worker's compensation 1%

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

- New problem 34%
- Chronic problem, routine 30%
- Preventative care 19%
- Chronic problem, flare-up 8%
- Pre- or post-surgery/injury follow-up 7%

The top 5 reasons given by patients for visiting physicians were:

- General medical exam
- Progress visit
- Cough
- Postoperative visit
- Medication visit

The top 5 diagnoses were:

- Essential hypertension
- Routine infant or child health check
- Diabetes mellitus
- Acute upper respiratory infections, excluding pharyngitis
- Spinal disorders

Medications were provided or prescribed at 74 percent of office visits. The top 5 generic substances utilized were:

- Aspirin
- Lisinopril
- Simvastatin
- Levothyroxine
- Metoprolol



Physician Office Visits

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of Internal Medicine*, and *Journal of Rheumatology*. Here are just a few recent publications using NAMCS data:

Shi L, Lebrun LA, Tsai J, Zhu J. Characteristics of ambulatory care patients and services: a comparison of community health centers and physicians' offices. *J Health Care Poor Underserved*. 21(4):1169–83. Nov 2010.

Ananthakrishnan AN, McGinley EL, Saeian K. Length of office visits for gastrointestinal disease: impact of physician specialty. *Am J Gastroenterol*. 105(8):1719–25. Aug 2010.

Craig BM, Bell BA, Quinn GP, Vadaparampil ST. Prevalence of Cancer Visits by Physician Specialty, 1997–2006. *J Cancer Educ*. Mar 2010. [Epub ahead of print]

Bleich SN, Pickett-Blakely O, Cooper LA. Physician practice patterns of obesity diagnosis and weight-related counseling. *Patient Educ Couns*. Mar 2010. [Epub ahead of print]

Fang J, Keenan NL, Ayala C. Health care services provided during physician office visits for hypertension: differences by specialty. *J Clin Hypertens* (Greenwich). 12(2):89–95. Feb 2010.

Neumiller JJ, Sclar DA, Robison LM, Setter SM, Skaer TL. Rate of obesity in U.S. ambulatory patients with diabetes mellitus: A national assessment of office-based physician visits. *Prim Care Diabetes*. Jul 2009. [Epub ahead of print]

Licciardone JC, Clearfield MB, Guillory VJ. Clinical practice characteristics of osteopathic and allopathic primary care physicians at academic health centers: results from the National Ambulatory Medical Care Survey. *Acad Med.* 84(6):744–50. Jun 2009.

Valderas JM, Starfield B, Forrest CB, Sibbald B, Roland M. Ambulatory care provided by office-based specialists in the United States. *Ann Fam Med.* 7(2):104–11. Mar–Apr 2009.

Sonnenfeld N, Schappert SM, Lin SX. Racial and Ethnic Differences in Delivery of Tobacco-Cessation Services. *Am J Prev Med*. Oct 2008. [Epub ahead of print]

Housman TS, Hancox JG, Mir MR, Camacho F, Fleischer AB, Feldman SR, Williford PM. What Specialties Perform the Most Common Outpatient Cosmetic Procedures in the United States? *Dermatol Surg*. Dec 2007. [Epub ahead of print]

Morgan PA, Strand J, Ostbye T, Albanese MA. Missing in action: care by physician assistants and nurse practitioners in national health surveys. *Health Serv Res.* 42(5):2022–37. Oct 2007.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-13 (7-11)



CDC SAFER + HEALTHIER + PEOPLE^W

Factsheet



In 2009, there were an estimated 240 million visits to nonfederally employed, office-based general and family practitioners in the United States.

Percent distribution of office visits by patient's age: 2009



Patient's age in years **The annual visit rate increased with age, and females had a higher visit rate than males.**

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 62%
- Medicare 21%
- Medicaid 16%
- No insurance¹ 6%

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

- New problem 46%
- Chronic problem, routine 25%
- Preventative care 18%
- Chronic problem, flare-up 8%
- Pre- or post-surgery/injury follow-up 1%

The top 5 reasons given by patients for visiting general and family practitioners were:

- General medical exam
- Cough
- Progress visit
- Medication
- Hypertension

The top 5 diagnoses were:

- Essential hypertension
- Acute upper respiratory infections, excluding pharyngitis
- Diabetes mellitus
- Spinal disorders
- General medical exam

Medications were provided or prescribed at 82 percent of office visits. The top 5 generic substances utilized were:

- Aspirin
- Lisinopril
- Simvastatin
- Levothyroxine
- Albuterol



THE IMPORTANCE OF NAMCS DATA General/Family Practice

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of Family Medicine*, and *Journal of Family Practice*. Here are just a few recent publications using NAMCS data:

Katerndahl D, Wood R, Jaén CR. Family Medicine Outpatient Encounters are More Complex Than Those of Cardiology and Psychiatry. *J Am Board Fam Med*. 24(1):6–15. Jan–Feb 2011.

Hing E, Hooker RS, Ashman JJ. Primary Health Care in Community Health Centers and Comparison with Office-Based Practice. *J Community Health*. Nov 2010. [Epub ahead of print]

Bleich SN, Pickett-Blakely O, Cooper LA. Physician practice patterns of obesity diagnosis and weight-related counseling. *Patient Educ Couns*. Mar 2010. [Epub ahead of print]

Fang J, Keenan NL, Ayala C. Health care services provided during physician office visits for hypertension: differences by specialty. *J Clin Hypertens* (Greenwich). 12(2):89–95. Feb 2010.

Decker SL, Burt CW, Sisk JE. Trends in diabetes treatment patterns among primary care providers. *J Ambul Care Manage*. 32(4):333–341. Oct–Dec 2009.

Cohen D, Coco A. Declining trends in the provision of prenatal care visits by family physicians. *Ann Fam Med.* 7(2):128–33. Mar–Apr 2009.

Morgan PA, Strand J, Ostbye T, Albanese MA. Missing in action: care by physician assistants and nurse practitioners in national health surveys. *Health Serv Res.* 42(5):2022–37. Oct 2007.

Binns HJ, Lanier D, Pace WD, Galliher JM, Ganiats TG, Grey M, Ariza AJ, Williams R; Primary Care Network Survey (PRINS) Participants. Describing primary care encounters: the Primary Care Network Survey and the National Ambulatory Medical Care Survey. *Ann Fam Med.* 5(1):39–47. Jan–Feb 2007.

Licciardone JC, Clearfield MB, Guillory VJ. Clinical practice characteristics of osteopathic and allopathic primary care physicians at academic health centers: results from the National Ambulatory Medical Care Survey. *Acad Med.* 84(6):744–50. Jun 2009.

McAlpine DD, Wilson AR. Trends in obesity-related counseling in primary care: 1995–2004. *Med Care*. 45(4):322–9. Apr 2007.

Fiscella K, Franks P. Does the content of primary care visits differ by the racial composition of physicians' practices? *Am J Med.* 119(4):348–53. Apr 2006.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-3 (7-11)



In 2009, there were an estimated 71 million visits to nonfederally employed, office-based osteopathic physicians in the United States. More than half of the visits were made by persons 25–64 years of age.

Percent distribution of office visits by patient's age: 2009



The annual visit rate increased with age. Until 74 years of age the visit rate was not different for males and females.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 57%
- Medicare 19%
- Medicaid 16%
- No insurance¹ 5%

The major reason for visit was:

- New problem 37%
- Chronic problem, routine 32%

OSTEOPATHY

- Preventative care 17%
- Chronic problem, flare-up 9%

The top 5 reasons given by patients for visiting osteopaths were:

- General medical examinations
- Progress visit
- Medication
- Neck symptoms
- Nasal congestion

The top 4 diagnoses were:

- Spinal disorders
- Essential hypertension
- Rheumatism, excluding back
- Acute URI, excluding pharyngitis

Medications were provided or prescribed at 76 percent of office visits. The top 5 generic substances utilized were:

- Lisinopril
- Levothyroxine
- Simvastatin
- Metoprolol
- Metformin

For more information, contact the Ambulatory Care Statistics Branch at 301-458-4600 or visit our Web site at <www.cdc.gov/namcs>.

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

Osteopathy

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of Pediatric and Adolescent Medicine*, and *Journal of Family Practice*. Here are just a few recent publications using NAMCS data:

Binns HJ, Lanier D, Pace WD, Galliher JM, Ganiats TG, Grey M, Ariza AJ, Williams R, Primary Care Network Survey (PRINS) participants. Describing primary care encounters: the Primary Care Network Survey and the National Ambulatory Medical Care Survey. *Ann Fam Med.* 5(1):39–47. Jan–Feb 2007.

Hambidge SJ, Emsermann CB, Federico S, Steiner JF. Disparities in pediatric preventive care in the United States, 1993–2002. *Arch Pediatr Adolesc Med.* 161(1):30–36. Jan 2007.

Licciardone JC. A comparison of patient visits to osteopathic and allopathic general and family medicine physicians: results from the National Ambulatory Medical Care Survey, 2003–2004. *Osteopath Med Prim Care*. 1(2):1–12. Jan 2007.

McAlpine DD, Wilson AR. Trends in obesity-related counseling in primary care: 1995–2004. *Medical Care*. 45(4):322–329. April 2007.

Sciamanna CN, Rogers ML, Shenassa ED, Houston TK. Patient access to U.S. physicians who conduct Internet or E-mail consults. *J Gen Intern Med.* 22(3):378–381. Mar 2007.

Sun C, Jew S, Dasta SL. Osteopathic physicians in the United States: antibiotic prescribing practices for patients with nonspecific upper respiratory tract infections. *J Am Osteopath Assoc*. 106(8):450–455. Aug 2006.

Young SE, Mainous AG 3rd, Diaz VA, Everett CJ. Practice patterns in sildenafil prescribing. *Fam Med.* 38(2):110–115. Feb 2006.

Burt CW, Sisk JE. Which physicians and practices are using electronic medical records? *Health Aff* (Millwood). 24(5):1334–1343. Sep–Oct 2005.

Coco A, Kleinhans E. Prevalence of primary HIV infection in symptomatic ambulatory patients. *Ann Fam Med.* 3(5):400–404. Sep–Oct 2005.

Fiscella K, Franks P. Is patient HMO insurance or physician HMO participation related to racial disparities in primary care? *Am J Manag Care*. 11(6):397–402. Jun 2005.

Gottschalk A, Flocke SA. Time spent in face-to-face patient care and work outside the examination room. *Ann Fam Med.* 3(6):488–493. Nov–Dec 2005.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-10 (7-11)



INTERNAL MEDICINE



In 2009, there were an estimated 153 million visits to nonfederally employed, office-based physicians specializing in internal medicine in the United States. Eighty percent of the visits were made by persons 45 years and over.

Percent distribution of office visits by patient's age: 2009



The annual visit rate increased with age. Females had a higher visit rate than males.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 61%
- Medicare 37%
- Medicaid 10%
- No insurance¹ 3%

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

- Chronic problem, routine 38%
- New problem 34%
- Preventative care 17%
- Chronic problem, flare-up 8%
- Pre- or post-surgery/injury follow-up 2%

The top 5 reasons given by patients for visiting internists were:

- General medical exam
- Progress visit
- Hypertension
- Diabetes melitus
- Cough

The top 5 diagnoses were:

- Essential hypertension
- Diabetes mellitus
- Disorders of lipoid metabolism
- Other symptoms
- Arthropathies and related disorders

Medications were provided or prescribed at 88 percent of office visits. The top 5 generic substances utilized were:

- Aspirin
- Lisinopril
- Simvastatin
- Levothyroxine
- Metoprolol

Internal Medicine

NAMCS data are widely used in research studies published in nationally recognized medical journals, including *JAMA*, *Archives of Internal Medicine*, and *Medical Care*. Here are just a few recent publications using NAMCS data:

Ananthakrishnan AN, McGinley EL, Saeian K. Length of office visits for gastrointestinal disease: impact of physician specialty. *Am J Gastroenterol*. 105(8):1719–25. Aug 2010.

Bleich SN, Pickett-Blakely O, Cooper LA. Physician practice patterns of obesity diagnosis and weight-related counseling. *Patient Educ Couns*. Mar 2010. [Epub ahead of print]

Fang J, Keenan NL, Ayala C. Health care services provided during physician office visits for hypertension: differences by specialty. *J Clin Hypertens* (Greenwich). 12(2):89–95. Feb 2010.

Decker SL, Burt CW, Sisk JE. Trends in diabetes treatment patterns among primary care providers. *J Ambul Care Manage*. 32(4):333–341. Oct–Dec 2009.

Friedenberg FK, Hanlon A, Vanar V, Nehemia D, Mekapati J, Nelson DB, Richter JE. Trends in Gastroesophageal Reflux Disease as Measured by the National Ambulatory Medical Care Survey. *Dig Dis Sci*. Oct 2009. [Epub ahead of print]

Neumiller JJ, Sclar DA, Robison LM, Setter SM, Skaer TL. Rate of obesity in U.S. ambulatory patients with diabetes mellitus: A national assessment of office-based physician visits. *Prim Care Diabetes*. Jul 2009. [Epub ahead of print]

Valderas JM, Starfield B, Forrest CB, Sibbald B, Roland M. Ambulatory care provided by office-based specialists in the United States. *Ann Fam Med.* 7(2):104–11. Mar–Apr 2009.

Peek ME, Tang H, Alexander GC, Chin MH. National Prevalence of Lifestyle Counseling or Referral Among African-Americans and Whites with Diabetes. *J Gen Intern Med.* Aug 2008. [Epub ahead of print]

Keyhani S, Scobie JV, Hebert PL, McLaughlin MA. Gender disparities in blood pressure control and cardiovascular care in a national sample of ambulatory care visits. *Hypertension*. 51(4):1149–55. Apr 2008. [Epub Feb 2008]

McAlpine DD, Wilson AR. Trends in obesity-related counseling in primary care: 1995–2004. *Med Care*. 45(4):322–9. Apr 2007.

Steinman MA, Chren M, Landefeld CS. What's in a Name? Use of Brand Name Versus Generic Drug Names in United States Outpatient Practice. *Journal of General Internal Medicine*. 22(5):645–648. May 2007.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-5 (7-11)





In 2009, there were an estimated 127 million visits to nonfederally employed, office-based pediatricians in the United States. Half of these visits were made by children under the age of 5.

Percent distribution of office visits by patient's age: 2009



Patient's age in years

The visit rate was not different for males and females and did not differ by race.

Annual office visit rates by patients under 15: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 63%
- Medicaid 31%
- No Insurance¹ 2%

The major reason for visit was:

- New problem 50%
- Preventative care 37%
- Chronic problem, routine 7%

PEDIATRICS

• Chronic problem, flare-up — 4%

The top 5 reasons for visiting the pediatrician given by patients/ patient spokespersons were:

- General medical exam
- Well baby exam
- Cough
- Fever
- Throat symptoms

The top 5 diagnoses were:

- Routine infant or child health check
- Acute upper respiratory infections, excluding pharyngitis
- Otitis media and eustachian tube disorders
- Other infectious and parasitic diseases
- Acute pharyngitis

Medications or immunizations were provided or prescribed at 71 percent of pediatric visits. The top 5 generic substances utilized were:

- Amoxicillin
- Influenza virus vaccine, inactivated
- Albuterol
- Diphth; Pertussis; Acel; Tetanus
- Acetaminophen

For more information, contact the Ambulatory Care Statistics Branch at 301-458-4600 or visit our Web site at <www.cdc.gov/namcs>.

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

Pediatrics

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of Pediatric and Adolescent Medicine*, and *Journal of Family Practice*. Here are just a few recent publications using NAMCS data:

Shapiro DJ, Gonzales R, Cabana MD, Hersh AL. National trends in visit rates and antibiotic prescribing for children with acute sinusitis. *Pediatrics*. 127(1):28–34. Jan 2011. [Epub Dec 2010]

Patel AI, Madsen KA, Maselli JH, Cabana MD, Stafford RS, Hersh AL.Underdiagnosis of Pediatric Obesity during Outpatient Preventive Care Visits. *Acad Pediatr*. 10(6):405–409. Nov–Dec 2010.

Yawman D, Mahar P, Blumkin A, Conners G. Evaluating children with otitis media for bacteremia or urinary tract infection. *Int J Pediatr*. pii: 790167. 2010. [Epub Aug 2010]

Stevens J, Harman J, Pakalnis A, Lo W, Prescod J. Sociodemographic Differences in Diagnosis and Treatment of Pediatric Headache. *J Child Neurol*. Oct 2009. [Epub ahead of print]

Pont SJ, Grijalva CG, Griffin MR, Scott TA, Cooper WO. National Rates of Diarrhea-Associated Ambulatory Visits in Children. *J Pediatr*. Apr 2009. [Epub ahead of print]

Fortuna RJ, Ting DY, Kaelber DC, Simon SR. Characteristics of medicine-pediatrics practices: results from the national ambulatory medical care survey. *Acad Med.* 84(3):396–401. Mar 2009.

Rand CM, Shone LP, Albertin C, Auinger P, Klein JD, Szilagyi PG. National health care visit patterns of adolescents: implications for delivery of new adolescent vaccines. *Arch Pediatr Adolesc Med.* 161(3):252–9. Mar 2007.

Aparasu RR, Bhatara V. Patterns and determinants of antipsychotic prescribing in children and adolescents, 2003–2004. *Curr Med Res Opin*. 23(1):49–56. Jan 2007.

Hambidge SJ, Emsermann CB, Federico S, Steiner JF. Disparities in pediatric preventive care in the United States, 1993–2002. *Arch Pediatr Adolesc Med.* 161(1):30–6. Jan 2007.

Cooper WO, Arbogast PG, Ding H, Hickson GB, Fuchs DC, Ray WA. Trends in Prescribing of Antipsychotic Medications for US Children. *Ambul Pediatr*. 6(2):79–83. Mar–Apr 2006.

Ferris TG, Kuhlthau K, Ausiello J, Perrin J, Kahn R. Are minority children the last to benefit from a new technology? Technology diffusion and inhaled corticosteriods for asthma. *Med Care*. 44(1):81–6. Jan 2006.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-12 (7-11)



GENERAL SURGERY



In 2009, there were an estimated 24 million visits to nonfederally employed, office-based physicians specializing in general surgery in the United States. More than 60 percent of the visits were made by persons between 25–64 years of age.

Percent distribution of office visits by patient's age: 2009



The annual visit rate increased with age.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 66%
- Medicare 32%
- Medicaid 9%

The major reason for visit was:

- Pre- or post-surgery/injury follow-up 44%
- New problem 32%
- Chronic problem, routine 12%
- Chronic problem, flare-up 5%

The top 4 reasons given by patients for visiting general surgeons were:

- Postoperative visit
- Hernia of abdominal cavity
- Preoperative visit
- Stomach and abdominal pain

The top 4 diagnoses were:

- Hernia of abdominal cavity
- Malignant neoplasms
- Disorders of the breast
- Disorders of gallbladder and biliary tract

Medications or immunizations were provided or prescribed at 39 percent of the visits to general surgeons. The top 2 generic substances utilized were:

- Levothyroxine
- Metoprolol

General Surgery

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *American Journal of Public Health*, and *Medical Care*. Here are just a few recent publications using NAMCS data:

Craig BM, Bell BA, Quinn GP, Vadaparampil ST. Prevalence of Cancer Visits by Physician Specialty, 1997–2006. *J Cancer Educ*. Mar 2010. [Epub ahead of print]

Valderas JM, Starfield B, Forrest CB, Sibbald B, Roland M. Ambulatory care provided by office-based specialists in the United States. *Ann Fam Med*. 7(2):104–11. Mar–Apr 2009.

Housman TS, Hancox JG, Mir MR, Camacho F, Fleischer AB, Feldman SR, Williford PM. What Specialties Perform the Most Common Outpatient Cosmetic Procedures in the United States? *Dermatol Surg.* Dec 2007. [Epub ahead of print]

Morgan PA, Strand J, Ostbye T, Albanese MA. Missing in action: care by physician assistants and nurse practitioners in national health surveys. *Health Serv Res.* 42(5):2022–37. Oct 2007.

Warino L, Tusa M, Camacho F, Teuschler H, Fleischer AB Jr, Feldman SR. Frequency and cost of actinic keratosis treatment. *Dermatol Surg.* 32(8):1045–9. Aug 2006.

Burt CW, Sisk JE. Which physicians and practices are using electronic medical records? *Health Aff* (Millwood). 24(5):1334–43. Sep–Oct 2005.

Gonzalez HM, West B, Underwood W 3rd. PSA testing in office-based clinics: are we testing as much as we think? *J Am Coll Surg.* 201(6):906–12. Dec 2005. [Epub Oct 2005]

Feldman SR, Camacho F, Williford PM, Siegel DM, Balkrishnan R, Fleischer AB. Patients spend more time with the physician for excision of a malignant skin lesion than for excision of a benign skin lesion. *Dermatol Surg.* 30(3):351–4. Mar 2004.

Hu J, Balkrishnan R, Camacho F, Lang W, Pearce DJ, Fleischer AB, Feldman SR. The frequent use of oral retinoids in combination with other treatments for psoriasis: A retrospective analysis. *Journal of Cutaneous Medicine and Surgery.* 8(6):411–414. Dec 2004.

Feldman SR, Fleischer AB, Shaffer CL, Kiang SH, Williford PM, Lupton FA, Chen G. Coding Multiple Diagnoses for Patient Visits at Which Procedures Were Performed: No Evidence for Abuse by Physicians. *Dermatol Surg.* 29(2):150–154. Feb 2003.

Housman TS, Williford PM, Feldman SR, Teuschler HV, Fleischer AB, Goldman ND, Balkrishnan R, Chen G. Nonmelanoma Skin Cancer: An Episode of Care Management Approach. *Dermatol Surg.* 9(7):700–711. Jul 2003.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-4 (7-11)





Factsheet





In 2009, there were an estimated 78 million visits to nonfederally employed, office-based physicians specializing in obstetrics and gynecology in the United States. More than half of the visits were made by women 25–44 years of age.

Percent distribution of office visits by females according to patient's age: 2009



NOTE: Females under 15 made <1 percent of visits and are not shown.

Annual office visit rates by patient's age: 2009



Number of visits per 100 females per year

Primary expected source of payment included:

- Private insurance 76%
- Medicaid 12%
- Medicare 6%
- No insurance¹ 3%

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

- Preventative care 65%
- New problem 17%
- Chronic problem, routine 8%
- Pre- or post-surgery/injury follow-up 7%
- Chronic problem, flare-up 2%

The top 5 reasons given by patients for visiting OB/GYNs were:

- Routine prenatal examination
- Gynecological examination
- Progressive visit
- Complications of pregnancy and puerperium
- Postoperative visit

The top 4 diagnoses were:

- Normal pregnancy
- Gynecological examination
- Complications of pregnancy, childbirth, and puerperium
- Other reproduction problems

Medications were provided or prescribed at 62 percent of office visits. The top 5 generic substances utilized were:

- Ergocalciferol; Pyridoxine; Riboflavin; Thiamine; Vitamin A
- Multivitamin
- Levothyroxine
- Ethinyl estradiol with norgestimate
- Estradiol



Obstetrics/Gynecology

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, such as *JAMA*, *Archives of Family Medicine*, and *American Journal of Obstetrics and Gynecology*. Here are just a few recent publications using NAMCS data:

Sung VW, Washington B, Raker CA. Costs of ambulatory care related to female pelvic floor disorders in the United States. *Am J Obstet Gynecol*. Mar 2010. [Epub ahead of print]

Burris HH, Werler MM. U.S. Provider Reported Folic Acid or Multivitamin Ordering for Non-Pregnant Women of Childbearing Age: NAMCS and NHAMCS, 2005–2006. *Matern Child Health J.* Mar 2010. [Epub ahead of print]

Sung VW, Raker CA, Myers DL, Clark MA. Ambulatory care related to female pelvic floor disorders in the United States, 1995–2006. *Am J Obstet Gynecol*. Aug 2009. [Epub ahead of print]

Coco AS, Cohen D, Horst MA, Gambler AS. Trends in prenatal care settings: association with medical liability. *BMC Public Health*. 9:257. Jul 2009.

Coco A. How often do physicians address other medical problems while providing prenatal care? *Ann Fam Med*. 7(2):134–8. Mar–Apr 2009.

Cohen D, Coco A. Declining trends in the provision of prenatal care visits by family physicians. *Ann Fam Med.* 7(2):128–33. Mar–Apr 2009.

Hing E, Brett KM. Changes in U.S. Prescribing Patterns of Menopausal Hormone Therapy, 2001–2003. *Obstetrics & Gynecology*. 108(1):33–40. Jul 2006.

Schwarz EB, Maselli J, Gonzales R. Contraceptive counseling of diabetic women of reproductive age. *Obstet Gynecol*. 107(5):1070–4. May 2006.

Wallace AE, MacKenzie TA, Weeks WB. Women's primary care providers and breast cancer screening: who's following the guidelines? *Am J Obstet Gynecol*. 194(3):744–8. Mar 2006.

Sutton MY, Sternberg M, Zaidi A, St Louis ME, Markowitz LE. Trends in pelvic inflammatory disease hospital discharges and ambulatory visits, United States, 1985–2001. *Sex Transm Dis.* 32(12):778–84. Dec 2005.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-7 (7-11)



ORTHOPEDIC SURGERY



In 2009, there were an estimated 49 million visits to nonfederally employed, office-based physicians specializing in orthopedic surgery in the United States. More than half of the visits were made by persons aged 25–64 years.

Percent distribution of office visits by patient's age: 2009



The annual visit rate increased with age until age 74.

Annual office visit rates by patient's age: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 69%
- Medicare 26%
- Workers' compensation 10%
- Medicaid 6%

The major reason for visit was:

- New problem 35%
- Pre- or post-surgery/injury follow-up 28%
- Chronic problem, routine 20%
- Chronic problem, flare-up 15%

The top 5 reasons given by patients for visiting orthopedic surgeons were:

- Knee symptoms
- Postoperative visit
- Shoulder symptoms
- Hip symptoms
- Back symptoms

The top 5 diagnoses were:

- Arthropathies and related disorders
- Rheumatisms, excluding back
- Spinal disorders
- Sprains and strains
- Fracture of lower limb

Medications were provided or prescribed at 54 percent of office visits. The top 5 generic substances utilized were:

- Acetaminophen with hydrocodone
- Ibuprofen
- Acetaminophen with oxycodone
- Meloxicam
- Lidocaine



NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Journal of Family Practice*, and *Spine*. Here are just a few publications using NAMCS data:

Friedman BW, Chilstrom M, Bijur PE, Gallagher EJ. Diagnostic testing and treatment of low back pain in United States emergency departments: a national perspective. *Spine* (Phila Pa 1976). 35(24):E1406–11. Nov 2010.

Sacks JJ, Luo YH, Helmick CG. Prevalence of specific types of arthritis and other rheumatic conditions in the ambulatory health care system in the United States, 2001–2005. *Arthritis Care Res* (Hoboken). 62(4):460–4. Apr 2010.

Licciardone JC. The epidemiology and medical management of low back pain during ambulatory medical care visits in the United States. *Osteopath Med Prim Care*. 2(1):11. Nov 2008. [Epub ahead of print]

Avasarala J, Odonovan CA, Roach S, Camacho F, Feldman S. Analysis of NAMCS data for Multiple Sclerosis, 1998–2004. *BMC Med.* 5(1):6. Apr 2007. [Epub ahead of print]

Riddle DL, Schappert SM. Volume and characteristics of inpatient and ambulatory medical care for neck pain in the United States: data from three national surveys. *Spine*. 32(1):132–40; discussion 141. Jan 2007.

Deyo RA, Mirza SK, Martin BI. Back pain prevalence and visit rates: estimates from U.S. national surveys, 2002. *Spine*. 31(23):2724–7. Nov 2006.

Federman AD, Litke A, Morrison RS. Association of age with analgesic use for back and joint disorders in outpatient settings. *Am J Geriatr Pharmacother*. 4(4):306–15. Dec 2006.

Wofford JL, Mansfield RJ, Watkins RS. Patient characteristics and clinical management of patients with shoulder pain in U.S. primary care settings: Secondary data analysis of the National Ambulatory Medical Care Survey. *BMC Musculoskelet Disord*. 6(1):4. Feb 2005. [Epub ahead of print]

Caudill-Slosberg MA, Schwartz LM, Woloshin S. Office visits and analgesic prescriptions for musculoskeletal pain in US: 1980 vs. 2000. *Pain*. 109(3):514–9. Jun 2004.

Riddle DL, Schappert SM. Volume of Ambulatory Care Visits and Patterns of Care for Patients Diagnosed With Plantar Fasciitis: A National Study of Medical Doctors. *Foot and Ankle Int'l.* 25(5):303–310. 2004.

Freburger JK, Holmes GM, Carey TS. Physician referrals to physical therapy for the treatment of musculoskeletal conditions. *Arch Phys Med Rehabil*. 84(12):1839–49. Dec 2003.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-9 (7-11)



National Ambulatory Medical Care Survey

CARDIOVASCULAR DISEASES

Factsheet



HEALTHIER · PEOP

In 2009, there were an estimated 34 million visits to nonfederally employed, office-based physicians specializing in cardiovascular diseases in the United States. More than half of the visits were made by persons 65 years of age and over.

Percent distribution of office visits by patient's age: 2009



The visit rate was highest for persons 65 years and over. The overall rate did not differ by sex.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 63%
- Medicare 53%
- Medicaid 8%

The major reason for visit was:

- Chronic problem, routine 52%
- New problem 21%
- Chronic problem, flare-up 9%
- Preventive Care 9%
- Pre- or post-surgery/injury follow-up 6%

The top 5 reasons given by patients for visiting cardiovascular disease specialists were:

- Progress visit
- Chest pain
- Hypertension
- Ischemic heart disease
- Shortness of breath

The top 5 diagnoses were:

- Ischemic heart disease
- Heart disease, excluding ischemic
- Essential hypertension
- Chest pain
- Disorders of lipoid metabolism

Medications were provided or prescribed at 87 percent of office visits. The top 5 generic substances utilized were:

- Aspirin
- Metoprolol
- Furosemide
- Simvastatin
- Lisinopril



Cardiovascular Diseases

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Journal of the American College of Cardiology*, and *Archives of Internal Medicine*. Here are just a few recent publications using NAMCS data:

Willson MN, Neumiller JJ, Sclar DA, Robison LM, Skaer TL. Ethnicity/Race, Use of Pharmacotherapy, Scope of Physician-Ordered Cholesterol Screening, and Provision of Diet/Nutrition or Exercise Counseling during US Office-Based Visits by Patients with Hyperlipidemia. *Am J Cardiovasc Drugs*. 10(2):105–8.

Bleich SN, Pickett-Blakely O, Cooper LA. Physician practice patterns of obesity diagnosis and weight-related counseling. *Patient Educ Couns*. Mar 2010. [Epub ahead of print]

Fang J, Keenan NL, Ayala C. Health care services provided during physician office visits for hypertension: differences by specialty. *J Clin Hypertens* (Greenwich). 12(2):89–95. Feb 2010.

Neumiller JJ, Sclar DA, Robison LM, Setter SM, Skaer TL. Rate of obesity in U.S. ambulatory patients with diabetes mellitus: A national assessment of office-based physician visits. *Prim Care Diabetes*. Jul 2009. [Epub ahead of print]

Ma J, Xiao L. Assessment of body mass index and association with adolescent preventive care in U.S. outpatient settings. *J Adolesc Health*. 44(5):502–4. May 2009. [Epub Nov 2008]

Sonnenfeld N, Schappert SM, Lin SX. Racial and Ethnic Differences in Delivery of Tobacco-Cessation Services. *Am J Prev Med.* Oct 2008. [Epub ahead of print]

Aparasu RR, Aparasu A. Hypertension management in outpatient visits by diabetic patients. *Res Social Adm Pharm*. (3):284–91. Sep 2008. [Epub Aug 2008]

Keyhani S, Scobie JV, Hebert PL, McLaughlin MA. Gender disparities in blood pressure control and cardiovascular care in a national sample of ambulatory care visits. *Hypertension*. 51(4):1149–55. Apr 2008. [Epub Feb 2008]

Huebschmann AD, Bublitz C, Anderson RJ. Are hypertensive elderly patients treated differently? *Clin Interv Aging*. 1(3):289–94. 2006.

Coyne KS, Paramore C, Grandy S, Mercader M, Reynolds M, Zimetbaum P. Assessing the direct costs of treating nonvalvular atrial fibrillation in the United States. *Value Health*. 9(5):348–56. Sep–Oct 2006.

Holmes JS, Arispe IE, Moy E. Heart disease and prevention: race and age differences in heart disease prevention, treatment, and mortality. *Med Care*. 43:I-33–I-41. 2005.

The complete list of publications using NAMCS data which includes hundreds of articles and reports is available on our Web site.

NAMCS(FS)-1 (7-11)



DERMATOLOGY



In 2009, there were an estimated 34 million visits to nonfederally employed, office-based dermatologists in the United States. More than half of these visits were made by persons more than 25–64 years of age.

Percent distribution of office visits by patient's age: 2009



The visit rate was highest for persons 75 years and over. The visit rate

increased with age. The overall rate did not differ by sex.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

Private insurance — 72%
Medicare — 26%

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

- New problem 40%
- Chronic problem, routine 30%
- Chronic problem, flare-up 15%
- Preventative care 9%
- Pre- or post-surgery/injury follow-up 4%

The top 5 reasons given by patients for visiting dermatologists were:

- Acne or pimples
- Discoloration or pigmentation
- Skin rash
- Skin lesion
- Symptoms of skin moles

The top 5 diagnoses were:

- Actinic and seborrheic keratosis
- Benign neoplasm
- Acne
- Malignant neoplasms
- Contact dermatitis and other eczema

Medications were provided or prescribed at 68 percent of office visits. The top 4 generic substances utilized were:

- Clobetasol topical
- Tretinoin topical
- Triamcinolone topical
- Doxycycline



Dermatology

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Journal of the American Academy of Dermatology*, and *Archives of Dermatology*. Here are just a few recent publications using NAMCS data:

Rogers HW, Weinstock MA, Harris AR, Hinckley MR, Feldman SR, Fleischer AB, Coldiron BM. Incidence estimate of nonmelanoma skin cancer in the United States, 2006. *Arch Dermatol*. 146(3):283–7. Mar 2010.

Pallin DJ, Espinola JA, Leung DY, Hooper DC, Camargo Jr CA. Epidemiology of Dermatitis and Skin Infections in United States Physicians' Offices, 1993–2005. *Clin Infect Dis*. Aug 2009. [Epub ahead of print]

Awadalla F, Rosenbaum DA, Camacho F, Fleischer AB Jr, Feldman SR. Dermatologic disease in family medicine. *Fam Med.* 40(7):507–11. Jul–Aug 2008.

de Berker D, McGregor JM, Hughes BR; on behalf of the British Association of Dermatologists Therapy Guidelines and Audit Subcommittee. Guidelines for the management of actinic keratoses. *Br J Dermatol.* 156(2):222–30. Feb 2007.

Bivens MM, Bhosle M, Balkrishnan R, Camacho FT, Feldman SR, Fleischer AB Jr. Nonmelanoma skin cancer: is the incidence really increasing among patients younger than 40? A reexamination using 25 years of U.S. outpatient data. *Dermatol Surg.* 32(12):1473–9. Dec 2006.

Warino L, Tusa M, Camacho F, Teuschler H, Fleischer AB Jr, Feldman SR. Frequency and cost of actinic keratosis treatment. *Dermatol Surg.* 32(8):1045–9. Aug 2006.

Pearce DJ, Stealey KH, Balkrishnan R, et al. Psoriasis treatment in the United States at the end of the 20th century. *Int J Dermatol.* 45(4):370–374. Apr 2006.

Gupta A. Epidemiology of seborrheic dermatitis as observed from the National Ambulatory Medical Care Survey 1990–1999. *J Am Acad Dermatol.* 52(3):P103–P103. Suppl. S. Mar 2005.

Gupta MA, Gupta AK, Chen SJ, Johnson AM. Comorbidity of rosacea and depression: an analysis of the National Ambulatory Medical Care Survey and National Hospital Ambulatory Care Survey—Outpatient Department data collected by the U.S. National Center for Health Statistics from 1995 to 2002. *Br J Dermatol.* 153(6):1176–81. Dec 2005.

Neville JA, Housman TS, Letsinger JA, Fleischer AB Jr, Feldman SR, Williford PM. Increase in procedures performed at dermatology office visits from 1995 to 2001. *Dermatol Surg.* 32(5):771. May 2006.

Thevarajah S, Balkrishnan R, Camacho FT, Feldman SR, Fleischer AB. Trends in prescription of acne medication in the US: Shift from antibiotic to non-antibiotic treatment. *J Dermatolog Treat*. 16(4):224–8. Sep 2005.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-2 (7-11)





In 2009, there were an estimated 22 million visits to nonfederally employed, office-based urologists in the United States.

Percent distribution of office visits by patient's age: 2009



The annual visit rate increased with age. Males had a higher visit rate than females.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 67%
- Medicare 44%
- Medicaid 6%

The major reason for visit was:

• Chronic problem, routine — 42%

UROLOGY

- New problem 26%
- Pre- or post-surgery/injury follow-up 13%
- Chronic problem, flare-up 12%
- Preventative care 5%

The top 5 reasons given by patients for visiting urologists were:

- Cancer of urinary and male genital tract
- Progress visit
- Findings of blood tests
- Urinary tract diseases except cystitis
- Frequency and urgency of urination

The top 5 diagnoses were:

- Malignant neoplasms
- Hyperplasia of prostate
- Symptoms involving the urinary system (e.g., incontinence, retention, dysuria)
- Other diseases of male genital organs
- Calculus of kidney and ureter

Medications were provided or prescribed at 64 percent of office visits. The top 5 generic substances utilized were:

- Tamsulosin
- Aspirin
- Ciprofloxacin
- Lisinopril
- Simvastatin



Urology

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Journal of Urology*, and *Clinical Infectious Diseases*. Here are just a few recent publications using NAMCS data:

Hollingsworth JM, Birkmeyer JD, Zhang YS, Zhang L, Hollenbeck BK. Imaging Use Among Employed and Self-Employed Urologists. *J Urol*. Oct 2010. [Epub ahead of print]

Craig BM, Bell BA, Quinn GP, Vadaparampil ST. Prevalence of Cancer Visits by Physician Specialty, 1997–2006. *J Cancer Educ*. Mar 2010. [Epub ahead of print]

Farwell WR, Linder JA, Jha AK. Trends in prostate-specific antigen testing from 1995 through 2004. *Arch Intern Med.* 167(22):2497–2502. 2007.

Taur Y, Smith MA. Adherence to the Infectious Diseases Society of America guidelines in the treatment of uncomplicated urinary tract infection. *Clin Infect Dis.* 44(6):769–74. Mar 2007. [Epub Feb 2007]

Scales CD Jr, Curtis LH, Norris RD, Schulman KA, Albala DM, Moul JW. Prostate specific antigen testing in men older than 75 years in the United States. *J Urol.* 176(2):511–4. Aug 2006.

Kim SH, Boye M, Bhattacharyya SK, Coyne K, Dhawan R. Medical visits among adults with symptoms commonly associated with an overactive bladder. *BJU Int*. 97(3):551–4. Mar 2006.

Kallen AJ, Welch HG, Sirovich BE. Current antibiotic therapy for isolated urinary tract infections in women. *Arch Intern Med.* 166(6):635–9. Mar 2006.

Young SE, Mainous AG 3rd, Diaz VA, Everett CJ. Practice patterns in sildenafil prescribing. *Fam Med.* 38(2):110–5. Feb 2006.

Underwood W III, West B, Gonzalez H. PSA Testing Utilization by Urologists and Primary Care Physicians: Data from the 2000 National Ambulatory Medical Care Survey. *Journal of Urology*. 171(4). Supplement 130. May 2004.

Foxman B. Epidemiology of urinary tract infections: Incidence, morbidity, and economic costs. *Dis Mon.* 49(2):53–70. Feb 2003.

Huang ES, Stafford RS. National patterns in the treatment of urinary tract infections in women by ambulatory care physicians. *Arch Intern Med.* 162(1):41–7. Jan 2002.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-15 (7-11)



PSYCHIATRY



In 2009, there were an estimated 32 million visits to nonfederally employed, office-based psychiatrists in the United States. Two-thirds of the visits were made by persons 25–64 years of age.

Percent distribution of office visits by patient's age: 2009



Annual office visit rates by patient's age: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 46%
- No insurance¹ 20%
- Medicaid 19%
- Medicare 14%

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

- Chronic problem, routine 80%
- Chronic problem, flare-up 10%
- New problem 7%

The top 4 reasons given by patients for visiting psychiatrists were:

- Depression
- Anxiety and nervousness
- Medications
- Medical counseling

The top 5 diagnoses were:

- Psychoses, excluding major depressive disorder
- Major depressive disorder
- Attention deficit disorder
- Anxiety states
- Dysthymic disorder

Medications were provided or prescribed at 87 percent of office visits. The top 5 generic substances utilized were:

- Bupropion
- Clonazepam
- Aripiprazole
- Sertraline
- Quetiapine

Psychiatry

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of General Psychiatry*, and *American Journal of Psychiatry*. Here are just a few recent publications using NAMCS data:

Mojtabai R, Olfson M. National trends in psychotropic medication polypharmacy in office-based psychiatry. *Arch Gen Psychiatry*. 67(1):26–36. Jan 2010.

Aparasu RR, Jano E, Bhatara V. Concomitant antipsychotic prescribing in US outpatient settings. *Res Social Adm Pharm.* 5(3):234–41. Sep 2009. [Epub Jan 2009]

Mojtabai R, Olfson M. National trends in psychotherapy by office-based psychiatrists. *Arch Gen Psychiatry*. 65(8):962–70. Aug 2008.

Sclar DA, Robison LM, Skaer TL. Ethnicity/race and the diagnosis of depression and use of antidepressants by adults in the United States. *Int Clin Psychopharmacol.* 23(2):106–9. Mar 2008.

Blanco C, Patel SR, Liu, L et al. National Trends in Ethnic Disparities in Mental Health Care. *Med Care*. 45:1012–1019. 2007.

Aparasu RR, Bhatara V. Patterns and determinants of antipsychotic prescribing in children and adolescents, 2003–2004. *Curr Med Res Opin*. 23(1):49–56. Jan 2007.

Cooper WO, Arbogast PG, Ding H, Hickson GB, Fuchs DC, Ray WA. Trends in Prescribing of Antipsychotic Medications for US Children. *Ambul Pediatr*. 6(2):79–83. Mar–Apr 2006.

Liptak GS, Stuart T, Auinger P. Health Care Utilization and Expenditures for Children with Autism: Data from U.S. National Samples. *J Autism Dev Disord*. Jul 2006. [Epub ahead of print]

Sankaranarayanan J, Puumula SE. Antipsychotic use at adult ambulatory care visits by patients with mental health disorders in the United States, 1996–2003: National estimates and associated factors. *Clin Ther*. 29(4):723–41. Apr 2007.

Olfson M, Blanco C, Liu L, Moreno C, Laje G. National trends in the outpatient treatment of children and adolescents with antipsychotic drugs. *Arch Gen Psychiatry*. 63(6):679–85. Jun 2006.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-14 (7-11)



In 2009, there were an estimated 15 million visits to nonfederally employed, office-based neurologists in the United States. Sixty percent of visits were made by persons 25–64 years of age.

Percent distribution of office visits by patient's age: 2009



The visit rate was lower for persons 24 years of age or less compared to the four older groups. The visit rate was not different for males and females.

Annual office visit rates by patient's age and sex: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 59%
- Medicare 32%
- Medicaid 13%

The major reason for visit was:

• Chronic problem, routine — 58%

NEUROLOGY

- New problem 23%
- Chronic problem, flare-up 14%

The top 5 reasons given by patients for visiting neurologists were:

- Headache
- Convulsions
- Disturbances of sensation
- Disturbances of memory
- Dizziness

The top 4 diagnoses were:

- Migraine
- Spinal disorders
- Headache
- Cerebrovascular disease

Medications were provided or prescribed at 76 percent of office visits. The top 5 generic substances utilized were:

- Gabapentin
- Aspirin
- Topiramate
- Donepezil
- Clopidogrel

Neurology

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of Neurology*, and *Public Health*. Here are just a few recent publications using NAMCS data:

Wilper A, Woolhandler S, Himmelstein D, Nardin R. Impact of insurance status on migraine care in the United States: a population-based study. *Neurology*. 74(15):1178–83. Apr 2010.

Stevens J, Harman J, Pakalnis A, Lo W, Prescod J. Sociodemographic Differences in Diagnosis and Treatment of Pediatric Headache. *J Child Neurol*. Oct 2009. [Epub ahead of print]

Wilson RD. Analgesic prescribing for musculoskeletal complaints in the ambulatory care setting after the introduction and withdrawal of cyclooxygenase-2 inhibitors. *Arch Phys Med Rehabil*. 90(7):1147–51. Jul 2009.

Stojanovski SD, Rasu RS, Balkrishnan R, Nahata MC. Trends in medication prescribing for pediatric sleep difficulties in US outpatient settings. *Sleep*. 30(8):1013–7. Aug 2007.

Avasarala J, Odonovan CA, Roach S, Camacho F, Feldman S. Analysis of NAMCS data for Multiple Sclerosis, 1998–2004. *BMC Med.* 5(1):6. Apr 2007. [Epub ahead of print]

Liptak GS, Stuart T, Auinger P. Health Care Utilization and Expenditures for Children with Autism: Data from U.S. National Samples. *J Autism Dev Disord*. Jul 2006. [Epub ahead of print]

Sankaranarayanan J, Puumala SE, Kratochvil CJ. Diagnosis and treatment of adult attention-deficit/hyperactivity disorder at US ambulatory care visits from 1996 to 2003. *Curr Med Res Opin.* 22(8):1475–91. Aug 2006.

Morlock RJ, Tan M, Mitchell DY. Patient characteristics and patterns of drug use for sleep complaints in the United States: analysis of National Ambulatory Medical Survey data, 1997–2002. *Clin Ther*. 28(7):1044–53. Jul 2006.

Balkrishnan R, Rasu RS, Rajagopalan R. Physician and patient determinants of pharmacologic treatment of sleep difficulties in outpatient settings in the United States. *Sleep*. 28(6):715–9. Jun 2005.

Rasu RS, Shenolikar RA, Nahata MC, Balkrishnan R. Physician and patient factors associated with the prescribing of medications for sleep difficulties that are associated with high abuse potential or are expensive: An analysis of data from the National Ambulatory Medical Care Survey for 1996–2001. *Clinical Therapeutics.* 27(12):1970–1979. Dec 2005.

Tan LSM, Morlock R. Sleep complaints and diagnoses in the National Ambulatory Medical Care Survey: 1997–2002. *Value Health*. 8(3):324–324. May–Jun 2005.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-6 (7-11)



OPHTHALMOLOGY





In 2009, there were an estimated 56 million visits to nonfederally employed, office-based ophthalmologists in the United States. A majority of the visits were made by persons 45 years of age and over.

Percent distribution of office visits by patient's age: 2009



The visit rates for persons in the three oldest age groups were higher compared to each of the two youngest age groups.

Annual office visit rates by patient's age: 2009



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 69%
- Medicare 48%
- Medicaid 9%
- No insurance¹ 3%

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

- Chronic problem, routine 36%
- New problem 24%
- Preventative care 18%
- Pre- or post-surgery/injury follow-up 16%
- Chronic problem, flare-up —6%

The top 5 reasons given by patients for visiting ophthalmologists were:

- Vision dysfunctions
- Eye exam
- Postoperative visit
- Cataract
- Progressive visit

The top 5 diagnoses were:

- Glaucoma
- Cataract
- Retinal detachment and other retinal disorders
- Diabetes mellitus
- Disorders of refraction and accommodation

Medications were provided or prescribed at 59 percent of office visits. The top 3 generic substances utilized were:

- Prednisolone opthalmic
- Miscellaneous opthalmic agents
- Latanoprost opthalmic



Ophthalmology

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of Ophthalmology*, and *Ophthalmic Surgery*. Here are just a few recent publications using NAMCS data:

Valderas JM, Starfield B, Forrest CB, Sibbald B, Roland M. Ambulatory care provided by office-based specialists in the United States. *Ann Fam Med*. 7(2):104–11. Mar–Apr 2009.

McGwin G Jr. Rate of eye injury in the United States. Arch Ophthalmol. 123(7):970-6. Jul 2005.

Freed GL, Nahra TA, Wheeler JR. Which physicians are providing health care to America's children? Trends and changes during the past 20 years. *Arch Pediatr Adolesc Med.* 158(1):22–6. Jan 2004.

Chiang Y-P, Wang F, Javitt JC. Office visits to ophthalmologists and other physicians for eye care among the U.S. population, 1990. *Public Health Rep.* 110(2):147–153. Mar–Apr 1995.

Gilchrist VJ, Stange KC, Flocke SA, McCord G, Bourguet CC. A Comparison of the National Ambulatory Medical Care Survey (NAMCS) Measurement Approach With Direct Observation of Outpatient Visits. *Medical Care*. 42(3):276–280. March 2004.

Glied S, Zivin JG. How do doctors behave when some (but not all) of their patients are in managed care? *Journal of Health Economics*. 21(2):337–353. Mar 2002.

Bernstein AB, Hing E, Burt CW, Hall MJ. Trend data on medical encounters: tracking a moving target. *Health Aff* (Millwood). 20(2):58–72. Mar–Apr 2001.

Forrest CB, Whelan E. Primary care safety-net delivery sites in the United States: A comparison of community health centers, hospital outpatient departments, and physicians' offices. *JAMA*. 284:2077–2083. 2000.

Sastry SM, Chiang YP, Javitt JC. Practice patterns of the office-based ophthalmologist. *Ophthalmic Surg.* 25(2):76–81. Feb 1994.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-8 (7-11)



OTOLARYNGOLOGY



In 2009, there were an estimated 20 million visits to nonfederally employed, office-based otolaryngologists in the United States. One-fifth of the visits were made by persons under 15 years of age.

Percent distribution of office visits by patient's age: 2009



Annual office visit rates by patient's age and sex: 2009. The visit rate was not different for males and females.



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 73%
- Medicare 21%
- Medicaid 11%
- No insurance¹ 2%

The major reason for visit was:

- New Problem —35%
- Chronic problem, routine 28%
- Pre- or post-surgery/injury follow-up 17%
- Chronic problem, flare-up 15%
- Preventative care 4%

The top 5 reasons given by patients for visiting otolaryngologists were:

- Postoperative visit
- Earache or ear infection
- Hearing dysfunction
- Plugged feeling in ear
- Nasal congestion

The top 5 diagnoses were:

- Otitis media and eustachian tube disorders
- Other diseases of the respiratory system
- Other disorders of the ear and mastoid process
- Disorders of external ear
- Chronic sinusitis

Medications were provided or prescribed at 65 percent of office visits. The top 5 generic substances utilized were:

- Levothyroxine
- Omeprazole
- Aspirin
- Fluticasone nasal
- Montelukast

For more information, contact the Ambulatory Care Statistics Branch at 301-458-4600 or visit our Web site at <www.cdc.gov/namcs>.

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.



Otolaryngology

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Journal of the American Board of Family Practice*, and *Archives of Internal Medicine*. Here are just a few recent publications using NAMCS data:

Smith WM, Davidson TM, Murphy C. Regional variations in chronic rhinosinusitis, 2003–2006. *Otolaryngol Head Neck Surg.* 141(3):347–52. Sep 2009.

Valderas JM, Starfield B, Forrest CB, Sibbald B, Roland M. Ambulatory care provided by office-based specialists in the United States. *Ann Fam Med.* 7(2):104–11. Mar–Apr 2009.

Morgan PA, Strand J, Ostbye T, Albanese MA. Missing in action: care by physician assistants and nurse practitioners in national health surveys. *Health Serv Res.* 42(5):2022–37. Oct 2007.

Sharp HJ, Denman D, Puumala S, Leopold DA. Treatment of acute and chronic rhinosinusitis in the United States, 1999–2002. *Arch Otolaryngol Head Neck Surg.* 133(3):260–5. Mar 2007.

Ferris TG, Kuhlthau K, Ausiello J, Perrin J, Kahn R. Are minority children the last to benefit from a new technology? Technology diffusion and inhaled corticosteriods for asthma. *Med Care*. 44(1):81–6. Jan 2006.

Altman KW, Stephens RM, Lyttle CS. Changing Impact of Gastroesophageal Reflux in Medical and Otolaryngology Practice. *Laryngoscope*. 115(7):1145–1153. Jul 2005.

Ladd E. The use of antibiotics for viral upper respiratory tract infections: an analysis of nurse practitioner and physician prescribing practices in ambulatory care, 1997–2001. *J Am Acad Nurse Pract*. 17(10):416–24. Oct 2005.

Niemcryk SJ, Joshua-Gotlib S, Levine DS. Outpatient Experience of Patients with GERD in the United States: Analysis of the 1998–2001 National Ambulatory Medical Care Survey. *Dig Dis Sci.* 50(10):1904–8. Oct 2005.

Linder JA, Bates DW, Lee GM, Finkelstein JA. Antibiotic treatment of children with sore throat. JAMA. 294(18):2315–22. Nov 2005.

Rutschmann OT, Domino ME. Antibiotics for upper respiratory tract infections in ambulatory practice in the United States, 1997–1999: does physician specialty matter? *J Am Board Fam Pract*. 17(3):196–200. May–Jun 2004.

Leader S, Kohlhase K. Recent trends in severe respiratory syncytial virus (RSV) among US infants, 1997 to 2000. *J Pediatr*. 143(5 Suppl):S127–32. Nov 2003.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-11 (7-11)





In 2006–07, there were an estimated 15 million visits to nonfederally employed, office-based oncologists in the United States.

Percent distribution of office visits by patient's age: 2006–07



The annual visit rate increased with age, and females had a higher visit rate than males.

Annual office visit rates by patient's age and sex: 2006–07



Number of visits per 100 persons per year

Primary expected source of payment included:

- Private insurance 64%
- Medicare 44%
- Medicaid 6%
- No insurance¹ 2 %

¹ No insurance is defined as having only self-pay, no charge, or charity visits as payment sources.

The major reason for visit was:

• Chronic problem, routine — 69%

ONCOLOGY

- New problem 14%
- Chronic problem, flare-up 6%
- Preventative care 4%

The top 5 reasons given by patients for visiting oncologists were:

- Progress visit
- Chemotherapy
- Cancer, breast
- General medical exam
- Cancer, gastrointestinal tract

The top 5 diagnoses were:

- Malignant neoplasms
- Auemias
- Benign neoplasms
- Potential health hazards related to personal and family history
- Specific procedures and aftercare

Medications were provided or prescribed at 73 percent of office visits. The top 5 generic substances utilized were:

- Aspirin
- Levothyroxine
- Multivitamin
- Metroprolol
- Warfarin

THE IMPORTANCE OF NAMCS DATA Oncology

NAMCS data are widely used in research studies appearing in nationally recognized medical journals, including *JAMA*, *Archives of Family Medicine*, and *Journal of Family Practice*. Here are just a few recent publications using NAMCS data:

Saraiya M, McCaig LF, Ekwueme DU. Ambulatory care visits for Pap tests, abnormal Pap test results, and cervical cancer procedures in the United States. *Am J Manag Care*. 1;16(6):e137–44. Jun 2010.

Craig BM, Bell BA, Quinn GP, Vadaparampil ST. Prevalence of Cancer Visits by Physician Specialty, 1997–2006. *J Cancer Educ*. Mar 2010. [Epub ahead of print]

Rogers HW, Weinstock MA, Harris AR, Hinckley MR, Feldman SR, Fleischer AB, Coldiron BM. Incidence estimate of nonmelanoma skin cancer in the United States, 2006. *Arch Dermatol*. 146(3):283–7. Mar 2010.

Valderas JM, Starfield B, Forrest CB, Sibbald B, Roland M. Ambulatory care provided by office-based specialists in the United States. *Ann Fam Med*. 7(2):104–11. Mar–Apr 2009.

Sonnenfeld N, Schappert SM, Lin SX. Racial and Ethnic Differences in Delivery of Tobacco-Cessation Services. *Am J Prev Med*. Oct 2008. [Epub ahead of print]

Richardson LC, Tangka FK. Ambulatory care for cancer in the United States: results from two national surveys comparing visits to physicians' offices and hospital outpatient departments. *J Natl Med Assoc*. 99(12):1350–8. Dec 2007.

Morgan PA, Strand J, Ostbye T, Albanese MA. Missing in action: care by physician assistants and nurse practitioners in national health surveys. *Health Serv Res.* 42(5):2022-37. Oct 2007.

Lamont EB, Dias LE, Lauderdale DS. NSAIDs and Colorectal Cancer Risk: Do Administrative Data Support a Chemopreventive Effect? *J Gen Intern Med*. Jun 2007. [Epub ahead of print]

Bivens MM, Bhosle M, Balkrishnan R, Camacho FT, Feldman SR, Fleischer AB Jr. Nonmelanoma skin cancer: is the incidence really increasing among patients younger than 40? A reexamination using 25 years of U.S. outpatient data. *Dermatol Surg.* 32(12):1473–9. Dec 2006.

Wallace AE, MacKenzie TA, Weeks WB. Women's primary care providers and breast cancer screening: who's following the guidelines? *Am J Obstet Gynecol*. 194(3):744–8. Mar 2006.

Chen JG, Fleischer AB, Smith ED, Kancler C, Goldman ND, Williford PM, Feldman SR. Cost of nonmelanoma skin cancer treatment in the United States. *Dermatologic Surgery*. 27:(12)1035–1038. Dec 2001.

The complete list of publications using NAMCS data, which includes hundreds of articles and reports, is available on our Web site.

NAMCS(FS)-16 (7-11)

National Hospital Ambulatory Medical Care Survey



Factsheet

EMERGENCY DEPARTMENT

In 2009, there were an estimated 136 million visits to emergency departments (EDs) of nonfederal short-stay and general hospitals in the United States. The annual visit rate was 45.1 ED visits per 100 persons. More than one-third of the visits were made by persons under 25 years of age.

Percent distribution of ED visits by patient age: 2009



The visit rate was higher for Black or African American persons compared with White persons. There was no difference by sex.

Annual rate of ED visits by patient sex and race: 2009



Expected sources of payment:

- Private insurance (39%)
- Medicaid or Children's Health Insurance Program (29%)
- Medicare (16%)
- No insurance (16%)
- Other (3%)
- Unknown (7%)

NOTE: More than one source may be reported per visit.

Immediacy with which patient should be seen:



Common reasons for visit:

- Stomach and abdominal pain (9.6 million)
- Fever (7.4 million)
- Chest pain (7.2 million)
- Cough (4.7 million)
- Headache (4.0 million)
- Shortness of breath (3.7 million)
- Back symptoms (3.7 million)
- Pain, unspecified (2.9 million)
- Vomiting (2.8 million)
- Throat symptoms (2.6 million)

Common diagnoses:

- Acute upper respiratory infection, excluding pharyngitis (6.0 million)
- Abdominal pain (5.7 million)
- Contusion with intact skin surface (5.0 million)
- Chest pain (5.0 million)
- Open wound, excluding head (3.9 million)
- Spinal disorders (3.8 million)
- Cellulitis and abscess (3.1 million)
- Fractures, excluding lower limb (2.6 million)
- Pyrexia of unknown origin (2.6 million)
- Sprains and strains, excluding ankle and back (2.4 million)

Medications were provided or prescribed at 78 percent of ED visits for a total of 268 million drugs.

Common drug categories:

- Analgesics (94.5 million)
- Antiemetic or antivertigo agents (30.9 million)
- Minerals and electrolytes (13.7 million)
- Antihistamines (11.7 million)
- Anxiolytics, sedatives, and hypnotics (11.6 million)
- Miscellaneous respiratory agents (10.2 million)
- Bronchodilators (10.0 million)
- Cephalosporins (8.9 million)
- Penicillins (8.7 million)
- Adrenal cortical steroids (8.5 million)

Leading principal hospital discharge diagnosis groups:

- Nonischemic heart disease (1.1 million)
- Chest pain (927,000)
- Pneumonia (732,000)
- Ischemic heart disease (513,000)
- Cerebrovascular disease (477,000)

For more information, contact the Ambulatory and Hospital Care Statistics Branch at 301-458-4600 or visit our Web site at <www.cdc.gov/nhamcs>.

IMPORTANCE OF NHAMCS EMERGENCY DEPARTMENT DATA

NHAMCS data are widely used in research studies published in nationally recognized health and medical journals, including *JAMA*, *Archives of Internal Medicine*, and *American Journal of Emergency Medicine*. Here are a few examples of recent publications.

Menchine MD, Wiechmann W, Peters AL, et al. Trends in diabetes-related visits to U.S. emergency departments from 1997 to 2007. *Am J Emerg Med*. 2011 May 11. [Epub ahead of print].

Pham JC, Kirsch TD, Hill PM, et al. Seventy-two hour returns may not be a good indicator of safety in the emergency department: A national study. *Am J Emerg Med.* 2011 Apr; 18(4):390–7.

Bekmezian A, Chung PJ, Cabana MD, et al. Factors associated with prolonged emergency department length of stay for admitted children. *Pediatr Emerg Care*. 2011 Feb; 27(2):110–5.

Simon LJ, Bizamcer AN, Lidz CW, et al. Disparities in opioid prescribing for patients with psychiatric diagnoses presenting with pain to the emergency department. *Emerg Med J.* 2011 Feb 18. [Epub ahead of print].

Manthripagada AD, Zhou EH, Budnitz DS, et al. Characterization of acetaminophen overdose-related emergency department visits and hospitalizations in the United States. *Pharmacoepidemiol Drug Saf.* 2011 Feb 3. [Epub ahead of print].

Larson DB, Johnson LW, Schnell BM, et al. National trends in CT use in the emergency department, 1995–2007. *Radiology*. 2011 Jan; 258(1):164–73.

Shehab N, Sperling LS, Kegler SR, Budnitz DS. National estimates of emergency department visits for hemorrhage-related adverse events from clopidogrel plus aspirin and from warfarin. *Arch Intern Med.* 2010 Nov 22; 170(21):1926–33.

Korley FK, Pham JC, Kirsch TD. Use of advanced radiology during visits to U.S. emergency departments for injury-related conditions, 1998–2007. *JAMA*. 2010 Oct 6; 304(13):1465–71.

Pitts, SR, Carrier ER, Rich EC, Kellermann AL. Where Americans get their acute care: increasingly, it's not at their doctor's office, *Health Aff*. 2010 Sept; 29(9):1620–28.

Tang N, Stein J, Hsia RY, et al. Trends and characteristics of U.S. emergency room visits, 1997–2007. *JAMA*. Aug 11; 2010; 304(6):664–70.

NHAMCS(FS)-1 (8-11)

National Hospital Ambulatory Medical Care Survey



Factsheet

OUTPATIENT DEPARTMENT



In 2009, there were an estimated 96 million visits to outpatient departments (OPDs) of nonfederal short-stay and general hospitals in the United States. The annual visit rate was 31.9 OPD visits per 100 persons. About one-third of the visits were made by persons under 25 years of age.

Percent distribution of OPD visits by patient age: 2009



The visit rate was higher for females compared with males and for Black or African American persons compared with White persons.

Annual rate of OPD visits by patient sex and race: 2009



Expected sources of payment:

- Private insurance (43%)
- Medicaid or Children's Health Insurance Program (29%)
- Medicare (19%)
- No insurance (11%)
- Other (4%)
- Unknown (4%)

NOTE: More than one source may be reported per visit.

Common reasons for visit:

- Progress visit (9.1 million)
- General medical examination (5.8 million)
- Cough (2.6 million)
- Counseling (2.6 million)
- Prenatal examination (2.4 million)
- Medication (2.3 million)
- Throat symptoms (1.8 million)
- Back symptoms (1.6 million)
- Postoperative visit (1.6 million)
- Diabetes mellitus (1.6 million)

Common diagnoses:

- Malignant neoplasms (4.6 million)
- Hypertension (4.2 million)
- Spinal disorders (3.4 million)
- Arthropathies (3.1 million)
- Routine infant or child health check (3.1 million)
- Diabetes mellitus (3.0 million)
- Acute upper respiratory infection, excluding pharyngitis (2.9 million)
- Normal pregnancy (2.0 million)Psychoses, excluding major
- depressive disorder (1.7 million) • Rheumatism, excluding back (1.7 million)
- Rheumatism, excluding back (1.7 million)

Percent of OPD visits with selected chronic conditions: 2009



Medications were provided or prescribed at 75 percent of OPD visits for a total of 255 million drugs.

For more information, contact the Ambulatory and Hospital Care Statistics Branch at 301-458-4600 or visit our Web site at <www.cdc.gov/nhamcs>.

Common drug categories:

- Analgesics (32.5 million)
- Antidepressants (11.7 million)
- Antidiabetic agents (11.0 million)
- Antihyperlipidemic agents (10.6 million)
- Anxiolytics, sedatives, and hypnotics (9.1 million)
- Bronchodilators (8.6 million)
- Anticonvulsants (8.5 million)
- Beta-adrenergic blocking agents (7.9 million)
- Dermatological agents (7.6 million)
- Diuretics (7.4 million)

IMPORTANCE OF NHAMCS OUTPATIENT DEPARTMENT DATA

NHAMCS OPD data are widely used in research studies published in nationally recognized health and medical journals, including *Pediatrics*, *Obstetrics and Gynecology*, and *Clinical Infectious Diseases*. Here are a few examples of recent publications.

Wai-Lin Lee J, Berkowitz Z, Saraiya M. Low-risk human papillomavirus testing and other nonrecommended human papillomavirus testing practices among U.S. health care providers. *Obstet Gynecol*. 2011 July; 118(1):4–13.

Copp HL, Shapiro DJ, Hersh AL. National ambulatory antibiotic prescribing patterns for pediatric urinary tract infection, 1998–2007. *Pediatrics*. 2011 June; 127(6):1027–1033.

Young B, Dao CN, Buchacz K, et al. Increased rates of bone fracture among HIV-infected persons in the HIV Outpatient Study (HOPS) compared with the U.S. general population, 2000–2006. *Clin Infect Dis.* 2011 Apr 15; 52(8):1061–8.

Burris HH, Werler MM. U.S. provider reported folic acid or multivitamin ordering for non-pregnant women of childbearing age: NAMCS and NHAMCS, 2005–2006. *Journal of Maternal and Child Health*. 2011 Apr; 15(3):352–9.

Patel AI, Madsen KA, Maselli JH, Cabana MD, Stafford RS, Hersh AL. Underdiagnosis of pediatric obesity during outpatient preventive care visits. *Acad Pediatr*. 2010 November–December; 10(6):405–409.

Zallman L, Ma J, Xiao L, et al. Quality of U.S. primary care delivered by residents and staff physicians. *Journal of General Internal Medicine*. 2010 Nov; 25(11):1193–7.

Saraiya M, McCaig LF, Ekwueme DU. Ambulatory care visits for PAP tests, abnormal PAP tests, and cervical cancer procedures in the United States. *American Journal of Managed Care*. Jun 1, 2010; 16(6):e137–44.

Sacks JJ, Luo YH, Helmick CG. Prevalence of specific types of arthritis and other rheumatic conditions in the ambulatory health care system in the United States, 2001–2005. *Arthritis Care Res.* 2010 Apr; 62(4):460–4.

Cheung R, Mannalithara A, Singh G. Utilization and antiviral treatment in patients with chronic hepatitis C: analysis of ambulatory care visits in the U.S. *Digestive Diseases and Sciences Journal*. 2010 Mar; 51(2):149–56.

Branum AM, Lukacs SL. Food allergy among children in the United States. *Pediatrics*. 2009 Dec; 124(6):1549–55.

NHAMCS(FS)-2 (8-11)