

# **ATTACHMENT B**

## **List of NAMCS Publications**

# National Ambulatory Medical Care Survey (NAMCS) List of Publications

The list includes summary reports produced within the National Center for Health Statistics as well as journal articles and books using NAMCS and NHAMCS data. Selections are listed by topic in chronological order, beginning with the most recent in each section. Summary reports are of two kinds: ADRs/NHSRs (Advance Data reports/National Health Statistics Reports) are short summaries, generally no more than 32 pages, while Series Reports present detailed descriptive statistics.

**Notice:** Effective January 2008 *Advance Data from Vital and Health Statistics* (AD) has been renamed *National Health Statistics Reports* (NHSR).

Some overlap of topics will be apparent in certain articles. The NHAMCS was first conducted in 1992; publications summarizing these data can be found after the NAMCS listings.

## NATIONAL AMBULATORY MEDICAL CARE SURVEY

### 1. NAMCS SUMMARY REPORTS

2006 NAMCS Summary [NHSR No. 3]  
Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 2006 [NHSR, No.8]  
2005 NAMCS Summary [ADR No. 387]  
Ambulatory Medical Care Utilization Estimates for 2005 [ADR, No. 388]  
Medication Therapy in Ambulatory Medical Care: United States, 2003-04 [Series 13, No. 163]  
2004 NAMCS Summary [ADR No. 374]  
Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 2001-2002 [Series 13, No. 159]  
2003 NAMCS Summary [ADR No. 365]  
Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 1999-2000 [Series 13, No. 157]  
2002 NAMCS Summary [ADR No. 346]  
2001 NAMCS Summary [ADR No. 337]  
2000 NAMCS Summary [ADR No. 328]  
1999 NAMCS Summary [ADR No. 322]  
1998 NAMCS Summary [ADR No. 315]  
Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 1997 [Series 13, No. 143]  
1995-96 NAMCS Summary [Series 13, No. 142]  
1997 NAMCS Summary [ADR No. 305]  
1993 NAMCS Summary [Series 13, No. 136]  
Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 1996 [Series 13, No. 134]  
1996 NAMCS Summary [ADR No. 295]  
Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 1995 [Series 13, No. 129]  
1995 NAMCS Summary [ADR No. 286]  
1994 NAMCS Summary [ADR No. 273]  
1993 NAMCS Summary [ADR No. 270]

1992 NAMCS Summary [ADR No. 253]  
1991 NAMCS Summary [Series 13, No. 116]  
1991 NAMCS Summary [ADR No. 230]  
1990 NAMCS Summary [ADR No. 213]  
1989 NAMCS Summary [Series 13, No. 110]  
1989 NAMCS Summary [ADR No. 203]  
NAMCS Trends, 1975-1981 and 1985 [Series 13, No. 93]  
1985 NAMCS Summary [ADR No. 128]  
1981 NAMCS Summary [ADR No. 88]  
1980 NAMCS Summary [ADR No. 77]  
NAMCS Complement Survey, 1980 [Series 13, No. 77]  
1979 NAMCS Summary [Series 13, No. 66]  
1979 NAMCS Summary [ADR No. 66]  
1978 NAMCS Summary [ADR No. 60]  
1977 NAMCS Summary [Series 13, No. 44]  
1977 NAMCS Summary [ADR No. 48]  
1976 NAMCS Summary [ADR No. 30]  
1975 NAMCS Summary [Series 13, No. 33]  
1975 NAMCS Summary [ADR No. 12]  
1973 NAMCS Summary [Series 13, No. 21]  
NAMCS: May 1973-April 1974 [Monthly Vital Statistics Report, Vol. 24, No. 4, Supplement (2), July 14, 1975]

## **2a. PHYSICIAN SPECIALTY, PRACTICE CHARACTERISTICS - NCHS REPORTS**

Office Visits to Orthopedic Surgeons: United States, 1995-96 [ADR No. 302]  
Office Visits to Neurologists: 1991-92 [ADR No. 267]  
Office Visits to Dermatologists: 1989-90 [ADR No. 240]  
Office Visits to Psychiatrists: 1989-90 [ADR No. 237]  
Office Visits to Urologists: 1989-90 [ADR No. 234]  
Office Visits to General Surgeons: 1989-90 [ADR No. 228]  
Office Visits to Cardiovascular Disease Specialists: 1989-90 [ADR No. 226]  
Office Visits to Obstetricians and Gynecologists: 1989-90 [ADR No. 223]  
Office Visits to Otolaryngologists: 1989-90 [ADR No. 222]  
Office Visits to Internists: 1989 [ADR, No. 209]  
Office Visits to Pediatric Specialists: 1989 [ADR No. 208]  
Office Visits to Cardiovascular Disease Specialists: 1985 [ADR No. 171]  
Practice Patterns of Ophthalmologists: 1985 [ADR No. 162]  
Office Visits to Neurologists: 1985 [ADR No. 158]  
Office Visits to Psychiatrists: 1985 [Series 13, No. 94]  
Highlights of Osteopathic Office Practice, 1985 [ADR No. 138]  
Office Visits to Orthopedic Surgeons: 1980-81 [ADR No. 117]  
Patterns of Ambulatory Care in Internal Medicine: 1980-81 [Series 13, No. 80]  
Patterns of Ambulatory Care in Visits to General Surgeons: 1980-81 [Series 13, No. 79]  
Patterns of Ambulatory Care in Obstetrics and Gynecology: 1980-81 [Series 13, No. 76]  
Patterns of Ambulatory Care in Pediatrics: 1980-81 [Series 13, No. 75]  
Patterns of Ambulatory Care in General and Family Practice: 1980-81 [Series 13, No. 73]  
Office Visits for Preventive Care: 1977-78 [ADR No. 69]  
Characteristics of Visits to Female and Male Physicians: 1977 [Series 13, No. 49]  
Office Visits to Cardiovascular Disease Specialists: 1975-76 [ADR No. 42]  
Office Visits to Urologists: 1975-76 [ADR No. 39]  
Office Visits to Internists: 1975 [Series 13, No. 36]  
Office Visits to Psychiatrists: 1975-76 [ADR No. 38]



Office Visits to Dermatologists: 1975-76 [ADR No. 37]  
Office Visits to Otolaryngologists: 1975-76 [ADR No. 36]  
Office Visits to Orthopedic Surgeons: 1975-76 [ADR No. 33]  
Office Visits to Doctors of Osteopathy: 1975 [ADR No. 25]  
Office Visits to General Surgeons: 1975 [ADR No. 22]  
Office Visits to Obstetricians and Gynecologists: 1975 [ADR No. 20]  
Office Visits to Internists: 1975 [ADR, No. 16]  
Office Visits to General and Family Practitioners: 1975 [ADR No. 15]  
Ambulatory Medical Care Rendered in Pediatricians' Offices During 1975 [ADR No. 13]  
Office Visits to General and Family Physicians: 1974 [Monthly Vital Statistics Report, Vol 25, No. 2, Supplement (2), May 18, 1976]

Also:

The Treatment Practices of Black Physicians. Prepared by Koba Associates for U.S. Department of Health, Education, and Welfare, Public Health Service, Health Resources Administration, Office of Health Resources Opportunity. DHEW Publication No. (HRA) 80-628. April 1979.

## **2b. PHYSICIAN SPECIALTY, PRACTICE CHARACTERISTICS - JOURNAL ARTICLES USING NAMCS DATA**

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

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

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.* 2007 Dec 5; [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.* 2007 Oct;42(5):2022-37.

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.* 2007 Jan-Feb;5(1):39-47.

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.* 2007 Jan 12;1:2.

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.* 2006 Aug;106(8):450-5.

Serwint JR, Thoma KA, Dabrow SM, Hunt LE, Barratt MS, Shope TR, Darden PM. Comparing Patients Seen in Pediatric Resident Continuity Clinics and National Ambulatory Medical Care Survey Practices: A Study From the Continuity Research Network. *Pediatrics.* 2006 Aug 21; [Epub ahead of print]

Won JU, Dembe AE. Services provided by family physicians for patients with occupational injuries and illnesses. *Ann Fam Med.* 2006 Mar-Apr;4(2):138-47.

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



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

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

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*. 2005 Feb;31

Fang MC, McCarthy EP, Singer DE. Are patients more likely to see physicians of the same sex? Recent national trends in primary care medicine. *Am J Med*. 2004 Oct 15;117(8):575-81.

Scholle SH, Chang J, Harman J, et al. Characteristics of patients seen and services provided in primary care visits in obstetrics/gynecology: Data from NAMCS and NHAMCS. *Am J Obstet Gynecol* 190 (4): 1119-1127 Apr 2004

Stern RS. Dermatologists and office-based care of dermatologic disease in the 21st century. *J Investig Dermatol Symp Proc*. 2004 Mar;9(2):126-30.

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*. 2004 Jan; 158(1): 22-6.

Boulet JR, Gimpel JR, Errichetti AM, Meoli FG. Using National Medical Care Survey data to validate examination content on a performance-based clinical skills assessment for osteopathic physicians. *J Am Osteopath Assoc*. 2003 May;103(5):225-31.

Franks P, Bertakis KD. Physician gender, patient gender, and primary care. *J Womens Health (Larchmt)* 2003 Jan-Feb;12(1):73-80

Probst JC, Moore CG, Baxley EG, et al. Rural-urban differences in visits to primary care physicians. *Fam Med* 34 (8): 609-615 Sep 2002

Scholle SH, Chang JC, Harman J, McNeil M. Trends in women's health services by type of physician seen: data from the 1985 and 1997-98 NAMCS. *Womens Health Issues* 2002 Jul-Aug;12(4):165-77

Mojtabai R. Diagnosing depression and prescribing antidepressants by primary care physicians: the impact of practice style variations. *Ment Health Serv Res* 2002 Jun;4(2):109-18

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

Gehlbach SH, Fournier M, Bigelow C. Recognition of osteoporosis by primary care physicians. *Am J Public Health* 2002 Feb;92(2):271-3

Mills AC, McSweeney M. Nurse practitioners and physician assistants revisited: Do their practice patterns differ in ambulatory care? *J Prof Nurs* 2002 Jan-Feb;18(1):36-46

Hachmuth FA, Hootman JM. What impact on PA education? A snapshot of ambulatory care visits involving PAs. *JAAPA* 2001 Dec;14(12):22-4, 27-38; quiz 49-50

Henderson RL, Fleischer AB, Feldman SR. Dermatologists and allergists have far more experience and use more complex treatment regimens in the treatment of atopic dermatitis than other physicians. *J Cutan Med Surg* 2001 May-Jun;5(3):211-6.

Aparasu RR, Hegge M. Autonomous ambulatory care by nurse practitioners and physician assistants in officebased settings. *J Allied Health* 2001 Fall;30(3):153-9.

Feldman SR, Hollar CB, Gupta AK, Fleischer AB Jr. Women commonly seek care for rosacea: dermatologists frequently provide the care. *Cutis* 2001 Aug;68(2):156-160.

Hooker RS, McCaig LF. Use of physician assistants and nurse practitioners in primary care, 1995-1999. *Health Affairs*. 2001; 20:231-238.

Forrest CB, Reid RJ. Prevalence of health problems and primary care physicians' specialty referral decisions. *The Journal of Family Practice* May 2001; 50(5):427-432.

Henderson RL Jr, Fleischer AB Jr, Feldman SR. Allergists and dermatologists have far more expertise in caring for patients with urticaria than other specialists. *J Am Acad Dermatol* 2000 Dec;43(6):1084-1091

Dovey S, Green L, Fryer GE. Educating doctors to provide counseling and preventive care: Turning twentieth century professional values head over heels. *Education for Health* 2000;13:307-316.

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* 2000; 284:2077-2083.

Paine LL, Johnson TR, Lang JM, Gagnon D, Declercq ER, DeJoseph J, Scupholme A, Strobino D, Ross A. A comparison of visits and practices of nurse-midwives and obstetrician-gynecologists in ambulatory care settings. *J Midwifery Womens Health* 2000 Jan-Feb;45(1):37-44.

Nutting PA, Baier M, Werner JJ, Cutter G, Reed FM, Orzano AJ. Practice patterns of family physicians in practice-based research networks: a report from ASPN (Ambulatory Sentinel Practice Network) *J Am Board Fam Pract* 1999 Jul-Aug;12(4):278-84.

Thompson TT, Feldman SR, Fleischer AB Jr. Only 33% of visits for skin disease in the US in 1995 were to dermatologists: is decreasing the number of dermatologists the appropriate response? *Dermatol Online J* 1998 Oct;4(1):3

Jackson JL., Strong J, Cheng EY, Meyer G. Patients, diagnoses, and procedures in a military internal medicine clinic: comparison with civilian practices. *Mil Med* 1999 Mar; 164(3): 194-7.

Ward MM. Provision of primary care by office-based rheumatologists: results from the National Ambulatory Medical Care Surveys, 1991-1995. *Arthritis Rheum* 1999 Mar; 42(3):409-414.

Moody NB, Smith PL, Glenn LL. Client characteristics and practice patterns of nurse practitioners and physicians. *Nurse Pract* 1999 Mar; 24(3): 94-6, 99-100, 102-3.

Olfson M, Marcus SC, Pincus HA. Trends in office-based psychiatric practice. *Am J Psychiatry* 1999 Mar;156(3):451-7.

Feldman SR, Fleischer AB Jr, Chen JG. The gatekeeper model is inefficient for the delivery of dermatologic services. *J Am Acad Dermatol* 1999 Mar;40(3):426-32.

Feldman SR, Fleischer AB Jr, Young AC, Williford PM. Time-efficiency of nondermatologists compared with dermatologists in the care of skin disease. *J Am Acad Dermatol* 1999 Feb;40(2 Pt 1):194-9.



Stafford RS et al. Trends in adult visits to primary care physicians in the United States. *Arch Fam Med*. 1999; 8:26-32.

Stafford RS, Blumenthal D. Specialty differences in cardiovascular disease prevention practices. *J Am Coll Cardio* 1998 Nov; 32(5):1238-43.

Jacobs J, Chapman EH, Crothers D. Patient characteristics and practice patterns of physicians using homeopathy. *Arch Fam Med* 1998 Nov-Dec;7(6):537-40.

Fleischer A Jr, Thompson T, Feldman S. Prevalence of skin conditions is high among elderly population, but majority of care provided by non-dermatologists. *Skin & Aging* 1998; 1: 8-9

Feldman SR, Peterson SR, Fleischer AB Jr. Dermatologists meet the primary care standard for first contact management of skin disease. *J Am Acad Dermatol* 1998 Aug;39(2 Pt 1):182-186.

Smith ES, Fleischer AB Jr., Feldman SR. Nondermatologists are more likely than dermatologists to prescribe antifungal/corticosteroid products: an analysis of office visits for cutaneous fungal infections, 1990-1994. *J Am Acad Dermatol* 1998 Jul; 39(1):43-47.

Feldman SR, Fleischer AB Jr., McConnell C. Most common dermatologic problems identified by internists, 1990-1994. *Arch Intern Med* 1998;158:726-730.

Fleischer AB, Jr., Feldman SR, McConnell C. The most common dermatologic problems identified by family physicians, 1990-1994. *Fam Med* 1997; 29(9):648-652.

Franks P, Clancy CM, Nutting PA. Defining primary care. Empirical analysis of the National Ambulatory Medical Care Survey. *Med Care* 1997 Jul;35(7):655-668.

Feldman SR et al. Increasing utilization of dermatologists by managed care: an analysis of the National Ambulatory Medical Care Survey, 1990-1994. *J Am Acad Dermatol* 1997;37:784-8.

Clancy CM, Franks P. Utilization of specialty and primary care: the impact of HMO insurance and patient-related factors. *J Fam Pract* Vol. 45, No. 6 (Dec), 1997. 500-508.

Prislin MD, Morohashi D, Jabola G. Practice-based preceptor training in family practice. *Fam Med* 1996. Nov-Dec; 28(10):L 708-712.

Feldman SR, Williford PM, Fleischer AB, Jr. Lower utilization of dermatologists in managed care: despite growth in managed care, visits to dermatologists did not decrease: an analysis of National Ambulatory Medical Care Survey data, 1990-1992. *J Invest Dermatol* 1996 Dec; 107(6): 860-4.

Landry DJ, Forrest JD. Private physicians' provision of contraceptive services. *Fam Plann Perspect* 1996. Sept.-Oct; 28(5):203-9.

Stern RS. Managed care and the treatment of skin diseases: dermatologists do it less often. *Arch Dermatol* 1996 Sep; 132(9): 1039-1042.

Menken, Matthew. The ambulatory workload of office-based neurologists: implications of the National Ambulatory Medical Care Survey. *Arch Neurol* April, 1996. Volume 53: 379-381.

Rosenblatt RA, Hart LG, Gamliel S, Goldstein B, McClendon BJ. Identifying primary care disciplines by analyzing the diagnostic content of ambulatory care. *J Am Board Fam Pract* 1995 Jan-Feb; 8(1): 34-45.



Scheid D, Logue E, Gilchrist VJ, Gillanders WR, Miller RS et al. Do we practice what we preach? Comparing the patients of faculty and residents. *Fam Med* 1995;27:519-524.

Papdakis MA, Kagawa MK. Categorical medicine residents' experiential curriculum. *Am J Med* 1995 Jan; 98(1): 7-12.

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* March-April 1995, Vol. 110, No. 2, 147-153.

Leader S, Perales PJ. Provision of primary preventive health care services by obstetrician-gynecologists. *Obstet Gynecol* 1995; 85:391-5.

Krowchuk DP, Bradham DD, Fleisher AB Jr. Dermatologic services provided to children and adolescents by primary care and other physicians in the United States. *Pediatr Dermatol* 1994 Sep; 11(3) 199-203.

Blount BW, Hart G, Ehreth JL. A comparison of the content of Army family practice with nonfederal family practice. *J Am Board Fam Pract* 1994; 7:395-402.

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

Rivo ML, Saultz JW, Wartman SA, DeWitt TG. Defining the generalist physician's training. *JAMA* 1994 May 18; 271(10): 1499-504.

Fleischer AB Jr., Feldman SR, Bradham DD. Office-based physician services provided by dermatologists in the United States in 1990. *J Invest Dermatol* 1994 Jan; 102 (1):93-7.

Wartman SA, Modena W, Kahn N. The generalist health care workforce: issues and goals. *J Gen Intern Med* 1994;9, Supplement 1 (April):S7-S13.

Unger, WJ. Implications of healthcare reform for cardiologists. *Journal of Invasive Cardiology* Vol. 6, No. 2, March 1994. 36-40.

Gilchrist V, Miller RS, Gillanders WR, Scheid DC et al. Does family practice at residency teaching sites reflect community practice? *J Fam Pract* 37(6):555-563. December, 1993.

Conrad DA. Coordinating patient care services in the regional health systems: the challenge of clinical integration. *Hospital and Health Services Administration* 38(4). Winter 1993. 491-508.

Green LA, Miller RS, Reed FM, Iverson DC, Barley GE. How representative of typical practice are practice-based research networks? A report from the Ambulatory Sentinel Practice Network Inc (ASPN). *Arch Fam Med* 1993 Sep; 2(9): 939-49.

Javitt JC, Chiang YP. Preparing for managed competition: utilization of ambulatory care eye visits to ophthalmologists. *Arch Ophthalmol* Vol. 111, August 1993. 1034-1035.

Barondess JA. The future of generalism. *Ann Intern Med* 1993; 119: 153-160.

Stern RS, Nelson C. The diminishing role of the dermatologist in the office-based care of cutaneous diseases. *J Am Acad Dermatol* 1993; 29; 773-7.

Greer T, Schneeweiss R, Baldwin LM. A comparison of student clerkship experiences in community practices and residency-based clinics. *Fam Med* 1993 May. 25(5): 322-6.

Olfson M, Goldman, HH. Psychiatric outpatient practice: patterns and policies. *Am J Psychiatry* 149:11, November 1992, 1492-8.

American College of Obstetricians and Gynecologists, Department of Health Economics Analysis. Office Visits to U.S. Obstetrician-Gynecologists: 1975 and 1989. *Economic Impact* July, 1991.

Conry CM, Pace WD, Main DS. Practice style differences between family physicians and internists. *J Am Board Fam Pract* 1991 Nov-Dec; 4(6): 399-406.

Ellsburg KE et al. Content of the model teaching unit: ambulatory care training and continuity of care in six family practice residence programs. *J Fam Pract* 1987; 25:273-8.

Rosenblatt RA et al. The content of ambulatory medical care in the United States: an interspecialty comparison. *N Engl J Med* 309(15):892-7, Oct. 13, 1983.

Monson RA, Jameson JH. Similarities of a general medicine clinic in a teaching hospital to internal medicine practice. *Med Care* 21(8) 816-20, August 1983.

Fishbane M, Starfield B. Child health care in the United States: a comparison of pediatricians and general practitioners. *N Engl J Med* 305(10):552-6, Sep. 3, 1981.

Roos NP. Impact of the organization of practice on quality of care and physician productivity. *Med Care* April 1980. Vol. 18, No. 4: 347-359.

Noren J, Frazier T, Altman I, DeLozier J. Ambulatory medical care: a comparison of internists and family-general practitioners. *N Engl J Med* 302(1):11-6. Jan. 3, 1980.

Rocheleau B. Black physicians and ambulatory care. *Public Health Rep* May-June 1978, Vol. 93, No. 3: 278-282.

Anonymous. A Profile of Internists: the National Ambulatory Medical Care Survey. *Bulletin of the American College of Physicians* 17(11):16-7, Nov. 1976.

## **2c. PHYSICIAN SPECIALTY, PRACTICE CHARACTERISTICS - BOOKS USING NAMCS DATA**

King B, Chung, H. Internal Medicine Data Book. Internal Medicine Center for Advance Research and Education (IMCARE). Washington, D.C., 1992.

American Academy of Family Physicians. Facts about: Family Practice. 1992.  
(earlier years are available, too)

Rakel, Robert E., M.D. Principles of Family Practice. Philadelphia: W.B. Saunders. 1991.

## **3a. PATIENT CHARACTERISTICS - NCHS REPORTS**

Brett KM, Burt CW. Utilization of ambulatory medical care by women: United States, 1997-98. *Vital Health Stat* 13(149). 2001.

Freid VM, Makuc DM, Rooks RN. Ambulatory health care visits by children: principal diagnosis and place of visit. *Vital Health Stat* 13(137). 1998.

Visits by Adolescents, 1985 [ADR No. 196]

Visits by Hispanics: 1980-81 [ADR No. 129]

Patients 75 Years Old and Over: 1980-81 [ADR No. 110]  
Health Care of Adolescents: 1980-81 [ADR No. 99]  
Use of Health Services by Women 65 Years of Age and Over [Series 13, No. 59]  
Office Visits by Women: 1977 [Series 13, No. 45]  
Office Visits by Black Patients: 1975-76 [ADR No. 50]  
Ambulatory Care Utilization Patterns of Children and Young Adults: 1975 [Series 13, No. 39]  
Office Visits by Persons Aged 65 and Over [ADR No. 22]

### **3b. PATIENT CHARACTERISTICS - JOURNAL ARTICLES USING NAMCS DATA**

Sonnenfeld N, Schappert SM, Lin SX. Racial and Ethnic Differences in Delivery of Tobacco-Cessation Services. *Am J Prev Med.* 2008 Oct 30. [Epub ahead of print]

Aparasu RR, Aparasu A. Hypertension management in outpatient visits by diabetic patients. *Res Social Adm Pharm.* 2008 Sep;4(3):284-91. Epub 2008 Aug 8.

Peck 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.* 2008 Aug 6. [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.* 2008 Apr;51(4):1149-55. Epub 2008 Feb 7

Sciar 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.* 2008 Mar;23(2):106-9.

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

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

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.* 2007 Mar;161(3):252-9.

Lacalle E, Schechter CB, McKee MD, Fletcher J. Using NAMCS to Characterize the Urban Health Care Safety Net. *J Health Care Poor Underserved.* 2007 Feb;18(1):152-60.

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

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 corticosteroids for asthma. *Med Care.* 2006 Jan;44(1):81-6.

Miller MR, Gergen P, Honour M, Zhan C. Burden of Illness for Children and Where We Stand in Measuring the Quality of This Health Care. *Ambul Pediatr.* 2005 September-October;5(5):268-278.

Lo A, Ryder K, Shorr RI. Relationship between patient age and duration of physician visit in ambulatory setting: does one size fit all? *J Am Geriatr Soc.* 2005 Jul;53(7):1162-7.



Cayce KA, Krowchuk DP, Feldman SR, Camacho FT, Balkrishnan R, Fleischer AB. Healthcare Utilization for Acute and Chronic Diseases of Young, School-age Children in the Rural and Non-rural Setting. *Clin Pediatr (Phila)*. 2005 Jul-Aug;44(6):491-8.

Ma J, Stafford RS. Quality of US outpatient care: temporal changes and racial/ethnic disparities. *Arch Intern Med*. 2005 Jun 27;165(12):1354-61.

Ma J, Wang Y, Stafford RS. U.S. adolescents receive suboptimal preventive counseling during ambulatory care. *J Adolesc Health*. 2005 May;36(5):441.

Dembe AE, Savageau JA, Amick BC 3rd, Banks SM. Racial and ethnic variations in office-based medical care for work-related injuries and illnesses. *J Natl Med Assoc*. 2005 Apr;97(4):498-507.

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

Balkrishnan R, Feldman SR, McMichael AJ, DeHart KE, Cayce K, Fleischer AB Jr. Racial differences in the treatment of pigmentation disorders in outpatient settings: analysis of US national practice data *J Dermatolog Treat*. 2004 Jul;15(4):227-30.

Slora EJ, Wasserman TRC, Pedlow SE, Bocian AB. Representativeness of patient visits to a National Practice-Based Research Network: A comparison of pediatric research in office settings (PROS) and National Ambulatory Medical Care Survey (NAMCS) data. *PEDIATRIC RESEARCH* 55 (4): 124 Part 2 Suppl. S APR 2004.

Serwint JR, Thoma KA, Dabrow SM, Hunt LE, Barratt MS, Shope TR, Darden PM. Comparing patients seen in continuity clinics and the National Ambulatory MedicalCare Survey (NAMCS): A study from the continuity research network (CORNET) *PEDIATRIC RESEARCH* 55 (4): 123 Part 2 Suppl. S APR 2004.

Daumit GL, Pratt LA, Crum RM, Powe NR, Ford DE. Characteristics of primary care visits for individuals with severe mental illness in a national sample. *Gen Hosp Psychiatry* 2002 Nov-Dec;24(6):391-5

Lasser KE, Himmelstein DU, Woolhandler SJ, McCormick D, Bor DH. Do minorities in the United States receive fewer mental health services than whites? *Int J Health Serv* 2002;32(3):567-78

Rohrer JE, Xu KT, Bickley L. Duration of heart disease visits by elderly patients: productivity versus quality. *Health Serv Manage Res* 2002 Aug;15(3):141-6

Janumpally SR, Feldman SR, Gupta AK, Fleischer AB Jr. In the United States, blacks and Asian/Pacific Islanders are more likely than whites to seek medical care for atopic dermatitis. *Arch Dermatol* 2002 May;138(5):634-7.

Hoffman LH, Strutton DR, Stang PE, Hogue SL. Impact of smoking on respiratory illness-related outpatient visits among 50-to 75-year-olds in the United States. *Clinical Therapeutics* 24 (2): 317-324 Feb 2002

Marcell AV, Klein JD, Fischer I, Allan MJ, Kokotailo PK. Male adolescent use of health care services: Where are the boys? *Journal of Adolescent Health* 30: (1) 35-43 Jan 2002

Smith ES, Fleischer AB, Feldman SR. Demographics of aging and skin disease. *Clinics in Geriatric Medicine*:17(4) Nov. 2001.

Thorndike AN, Stafford RS, Rigotti NA. US physicians' treatment of smoking in outpatients with psychiatric diagnoses. *Nicotine Tob Res* 2001 Feb;3(1):85-91

Sloss EM, Solomon DH, Shekelle PG, Young RT, Saliba D, MacLean CH, Rubenstein LZ, Schnelle JF, Kambert JC, Wenger NS. Selecting target conditions for quality of care improvement in vulnerable older adults. *Journal of the American Geriatric Society* 2000 Apr;48(4).

Ziv A, Boulet JR, Slap GB. Utilization of physician offices by adolescents in the United States. *Pediatrics* 1999 Jul;104(1 Pt 1):35-42.

Feldman SR, Fleischer AB Jr, Williford PM. Proposed Medicare user fees add additional burden on the provision of care of elderly patients. *Skin & Aging* 1998; 10: 6-9.

Ferris TG, Saglam D, Stafford RS, Causino N, Starfield B, Culpepper, L Blumenthal D. Changes in the daily practice of primary care for children. *Arch Pediatr Adolesc Med* 1998;152:227-233.

Thorndike AN, Rigotti NA, Stafford RS, Singer DE. National patterns in the treatment of smokers by physicians. *JAMA* 1998; 279:604-608.

Franks P, Clancy CM. Referrals of adult patients from primary care: demographic disparities and their relationship to HMO insurance. *J Fam Pract* 1997 Jul;45(1):47-53.

Hurt WG. Postreproductive gynecology: Meeting the present and future needs of women. *Am J Obstet Gynecol* August 1996; 175(2):243-247.

Lawhorne LW, Wright H, Cragen D. Characteristics of non-cobalamin deficient patients who receive regular cyanocobalamin injections. *Fam Med* 1991 Sept-Oct; 23(7): 506-9.

Sloane PD. Changes in ambulatory care with patient age: is geriatric care qualitatively different? *Fam Med* 23(1) 40-3. January 1991.

Reuben DB, Robertson JB. The care of elderly patients by elderly physicians. *J Am Geriatr Soc* 35(7) 623-8. July 1987.

Yu ES, Cypress BK. Visits to physicians by Asian/Pacific Americans. *Med Care* 20(8):809-20. Aug. 1982

Verbrugge LM, Steiner RP. Physician treatment of men and women patients: sex bias or appropriate care? *Med Care* 19(6):6090-32, June 1981.

Verbrugge LM. Sex differences in complaints and diagnosis. *J Behav Med* 3(4):327-55. Dec. 1980.

### **3c. PATIENT CHARACTERISTICS - OTHER PUBLICATIONS USING NAMCS DATA**

U.S. Congress, Office of Technology Assessment, Hip Fracture Outcomes in People Age 50 and Over - Background Paper, OTA-BP-H-120 (Washington, DC: U.S. Government Printing Office, July, 1994.

### **4a. REASON FOR VISIT, DIAGNOSIS - NCHS REPORTS**

Ambulatory Care Visits for Asthma: United States, 1993-94 [ADR No. 277]

Office Visits for Glaucoma: United States, 1991-92 [ADR No. 262]

Office Visits for Otitis Media: United States, 1975-90 [ADR No. 214]

Office Visits for Diabetes Mellitus: 1989 [ADR No. 211]

Use of Health Services for Disorders of the Female Reproductive System: 1977-78 [Series 13, No. 63]

Patient's Reasons for Visiting Physicians: 1977-78 [Series 13, No. 56]



Headache as the Reason for Office Visits: 1977-78 [ADR No. 67]  
Cough as the Reason for Office Visits: 1977-78 [ADR No. 65]  
Office Visits for Male Genitourinary Conditions: 1977-78 [ADR No. 63]  
Office Visits for Diabetes Mellitus: 1977 [ADR No. 57]  
Office Visits for Diseases of the Respiratory System: 1975-76 [Series 13, No. 42]  
Office Visits for Family Planning: 1977 [ADR No. 49]  
Office Visits for Diseases of the Circulatory System: 1975-76 [Series 13, No. 40]  
Office Visits for Respiratory Conditions: 1975-76 [ADR No. 41]  
Office Visits for Hypertension: 1975-76 [ADR No. 28]

#### **4b. REASON FOR VISIT, DIAGNOSIS - JOURNAL ARTICLES USING NAMCS DATA**

Decker SL, Schappert SM, Sisk JE. Use of Medical Care for Chronic Conditions. *Health Affairs*, 28, no. 1 (2009): 26-35 doi: 10.1377/hlthaff.28.1.26

Tsui JI, Maselli J, Gonzales R. Sociodemographic Trends in National Ambulatory Care Visits for Hepatitis C Virus Infection. *Dig Dis Sci*. 2008 Dec 23. [Epub ahead of print]

Licciardone JC. The epidemiology and medical management of low back pain during ambulatory medical care visits in the United States. *Osteopath Med Prim Care*. 2008 Nov 24;2(1):11. [Epub ahead of print]

Suh DC, Lau H, Pokras SM, Choi IS, Valiyeva E. Sex differences in ambulatory visits for chronic obstructive pulmonary disease, based on the national ambulatory medical care survey and the national hospital ambulatory medical care survey from 1995 to 2004. *Respir Care*. 2008 Nov;53(11):1461-9.

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

Ma J, Stafford RS. Screening, treatment, and control of hypertension in US private physician offices, 2003-2004. *Hypertension*. 2008 May;51(5):1275-81. Epub 2008 Mar 17.

Krishnan E, Lienesch D, Kwok CK. Gout in ambulatory care settings in the United States. *J Rheumatol*. 2008 Mar;35(3):498-501. Epub 2008 Feb 1.

Eneli IU, Keast DR, Rappley MD, Camargo CA Jr. Adequacy of two ambulatory care surveillance systems for tracking childhood obesity practice patterns. *Public Health*. 2008 Feb 28 [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*. 2007 Dec;99(12):1350-8.

Fang J, Alderman MH, Keenan NL, Ayala C, Croft JB. Hypertension Control at Physicians' Offices in the United States. *Am J Hypertens*. 2008 Jan 10; [Epub ahead of print]

Sacks JJ, Helmick CG, Luo YH, Iltis NT, Bowyer S. Prevalence of and annual ambulatory health care visits for pediatric arthritis and other rheumatologic conditions in the United States in 2001-2004. *Arthritis Rheum*. 2007 Nov 29;57(8):1439-1445 [Epub ahead of print]

Moorman JE, Rudd RA, Johnson CA, King M, Minor P, Bailey C, Scalia MR, Akinbami LJ; Centers for Disease Control and Prevention (CDC). National surveillance for asthma—United States, 1980-2004. *MMWR Surveill Summ*. 2007 Oct 19;56(8):1-54.



Rasu RS, Manley HJ, Crawford T, Balkrishnan R. Undertreatment of anemia in patients with chronic kidney disease in the United States: analysis of national outpatient survey data. *Clin Ther*. 2007 Jul;29(7):1524-34.

Moreno C, Laje G, Blanco C, Jiang H, Schmidt AB, Olfson M. National trends in the outpatient diagnosis and treatment of bipolar disorder in youth. *Arch Gen Psychiatry*. 2007 Sep;64(9):1032-9.

Horii KA, Simon SD, Liu DY, Sharma V. Atopic dermatitis in children in the United States, 1997-2004: visit trends, patient and provider characteristics, and prescribing patterns. *Pediatrics*. 2007 Sep;120(3):e527-34.

Pearson WS. Ten-year comparison of estimates of overweight and obesity, diagnosed diabetes and use of office based physician services for treatment of diabetes in the United States. *Prev Med*. 2007 Jul 24; [Epub ahead of print]

Banta JE, Montgomery S. Substance abuse and dependence treatment in outpatient physician offices, 1997-2004. *Am J Drug Alcohol Abuse*. 2007;33(4):583-93.

Mansbach JM, Pelletier AJ, Camargo CA Jr. US Outpatient Office Visits for Bronchiolitis, 1993-2004. *Ambul Pediatr*. 2007 Jul;7(4):304-307.

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

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*. 2007 Mar;133(3):260-5.

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*. 2007 Feb;156(2):222-30.

Taur Y, Smith MA. Adherence to the Infectious Diseases Society of America guidelines in the treatment of uncomplicated urinary tract infection. *Clin Infect Dis*. 2007 Mar 15;44(6):769-74. Epub 2007 Feb 1.

Martin BC, Barghout V, Cerulli A. Direct medical costs of constipation in the United States. *Manag Care Interface*. 2006 Dec;19(12):43-9.

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*. 2007 Jan 1;32(1):132-40; discussion 141.

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*. 2006 Dec;32(12):1473-9.

Deyo RA, Mirza SK, Martin BI. Back pain prevalence and visit rates: estimates from U.S. national surveys, 2002. *Spine*. 2006 Nov 1;31(23):2724-7.

Fareed M, Suri K, Zhou J, et al. Circadian variation in sudden cardiac death: Data from the National Hospital Ambulatory Medical Care Survey. *CIRCULATION* 114 (18): 831-831 Suppl. S OCT 31 2006

McCaig LF, McDonald LC, Mandal S, Jernigan DB. *Staphylococcus aureus*-associated skin and soft tissue infections in ambulatory care. *Emerg Infect Dis*. 2006 Nov. <http://www.cdc.gov/ncidod/EID/vol12no11/06-0190.htm>

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*. 2006 Jul;28(7):1044-53.

- Harman JS, Veazie PJ, Lyness JM. Primary care physician office visits for depression by older Americans. *J Gen Intern Med.* 2006 Sep;21(9):926-30.
- Warino L, Tusa M, Camacho F, Teuschler H, Fleischer AB Jr, Feldman SR. Frequency and cost of actinic keratosis treatment. *Dermatol Surg.* 2006 Aug;32(8):1045-9.
- 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.* 2006 Aug;22(8):1475-91.
- 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.* 2006 Jul 20; [Epub ahead of print]
- 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.
- Kim SH, Boye M, Bhattacharyya SK, Coyne K, Dhawan R. Medical visits among adults with symptoms commonly associated with an overactive bladder. *BJU Int.* 2006 Mar;97(3):551-4.
- 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.* 2005 Dec;153(6):1176-81.
- Betz ME, Li G. Epidemiologic patterns of injuries treated in ambulatory care settings. *Ann Emerg Med.* 2005 Dec;46(6):544-51. Epub 2005 Sep 26.
- 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.* 2005 Dec;32(12):778-84.
- Coco A, Kleinhans E. Prevalence of primary HIV infection in symptomatic ambulatory patients. *Ann Fam Med.* 2005 Sep-Oct;3(5):400-4.
- 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.* 2005 Oct;50(10):1904-8.
- McGwin G Jr. Rate of eye injury in the United States. *Arch Ophthalmol.* 2005 Jul;123(7):970-6.
- 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
- 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 A. Epidemiology and treatment of onychomycosis based on the National Ambulatory Medical Care Survey, 1990-1999. *J Am Acad Dermatol* 52 (3): P125-P125 Suppl. S Mar 2005
- Gupta A. Epidemiology of dermatophytosis and pityriasis versicolor in the United States, on the National Ambulatory Medical Care Survey, 1990-1999. *J Am Acad Dermatol* 52 (3): P125-P125 Suppl. S Mar 2005
- Gupta A. Epidemiology of tinea capitis as observed from the National Ambulatory Medical Care Survey (NAMCS), 1990-1999. *J Am Acad Dermatol* 52 (3): P126-P126 Suppl. S Mar 2005



- Gupta A. Epidemiology of psoriasis as observed from the National Ambulatory Medical Care Survey, 1990-1999. *J Am Acad Dermatol* 52 (3): P184-P184 Suppl. S Mar 2005
- 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*. 2005 Feb 3;6(1):4 [Epub ahead of print]
- Stern RS. Utilization of hospital and outpatient care for adverse cutaneous reactions to medications. *Pharmacoepidemiol Drug Saf*. 2005 Jan 11; [Epub ahead of print]
- Runyan CW, Perkis D, Marshall SW, Johnson RM, Coyne-Beasley T, Waller AE, Black C, Baccaglini L. Unintentional injuries in the home in the United States Part II: Morbidity. *Am J Prev Med*. 2005 Jan;28(1):80-87.
- Molino AC, Fleischer AB Jr, Feldman SR. Patient demographics and utilization of health care services for molluscum contagiosum. *Pediatr Dermatol*. 2004 Nov-Dec;21(6):628-32.
- Mellen L, Vallee J, Feldman S, Fleischer A. Treatment of pityriasis versicolor in the United States. *J Dermatolog Treat*. 2004;15(3):189-192.
- Stevens J, Harman JS, Kelleher KJ. Ethnic and Regional Differences in Primary Care Visits for Attention-Deficit Hyperactivity Disorder. *J Dev Behav Pediatr*. 2004 Oct;25(5):318-325.
- Grant RW, Pirraglia PA, Meigs JB, Singer DE. Trends in complexity of diabetes care in the United States from 1991 to 2000. *Arch Intern Med*. 2004 May 24;164(10):1134-9.
- 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* 2004;25(5):303-310.
- Niemcryk SJ, Joshua-Gotlib S, Levine D. The outpatient experience of GERD patients in US: An analysis of the 1998-2000 National Ambulatory Medical Care Survey. *Gastroenterology* 126 (4): A173-A173 Suppl. 2 Apr 2004.
- 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*. 2004 Mar;30(3):351-4.
- Robison LM, Sclar DA, Skaer TL, Galin RS. Treatment modalities among US children diagnosed with attention-deficit hyperactivity disorder: 1995-99. *Int Clin Psychopharmacol*. 2004 Jan;19(1):17-22.
- Hancox JG, Sheridan SC, Feldman SR, Fleischer AB. Seasonal variation of dermatologic disease in the USA: a study of office visits from 1990 to 1998. *Int J Dermatol*. 2004 Jan;43(1):6-11.
- Leader S, Kohlhase K. Recent trends in severe respiratory syncytial virus (RSV) among US infants, 1997 to 2000. *J Pediatr*. 2003 Nov;143(5 Suppl):S127-32.
- 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*. 2003 Jul;29(7):700-711
- Gibbs TS, Fleischer AB, Feldman SR, Sam MC, O'Donovan CA. Health care utilization in patients with migraine: demographics and patterns of care in the ambulatory setting. *Headache* 2003 Apr;43(4):330-5.



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

Dembe AE, Savageau JA, Amick BC 3rd, Banks SM. Office-based medical care for work-related conditions: findings from the National Ambulatory Medical Care Survey, 1997-1998. *J Occup Environ Med* 2002 Dec;44(12):1106-17

Hootman JM, Helmick, CG, Schappert SM. Magnitude and characteristics of arthritis and other rheumatic conditions on ambulatory medical care visits, United States, 1997. *Arthritis Care and Research* 2002 Dec, 47(6): 571-581

Lee E, Zuckerman IH, Weiss SR. Patterns of pharmacotherapy and counseling for osteoporosis management in visits to US ambulatory care physicians by women. *Arch Intern Med* 2002 Nov 11;162(20):2362-6

Gupta AK, Cooper EA, Feldman SR, Fleischer AB Jr. A survey of office visits for actinic keratosis as reported by NAMCS, 1990-1999. National Ambulatory Medical Care Survey. *Cutis* 2002 Aug;70(2 Suppl):8-13

Mannino DM, Homa DM, Akinbami LJ, Ford ES, Redd SC. Chronic obstructive pulmonary disease surveillance- United States, 1971-2000. *Respir Care* 2002 Oct;47(10):1184-99

Kozma CM, Barghout V, Slaton T, Frech F, Reeder CE. A comparison of office-based physician visits for irritable bowel syndrome and for migraine and asthma. *Manag Care Interface* 2002 Sep;15(9):40-3, 49

Mannino DM, Homa DM, Akinbami LJ, Ford ES, Redd SC. Chronic obstructive pulmonary disease surveillance- United States, 1971-2000. *MMWR Surveill Summ* 2002 Aug 2;51(6):1-16

Shih YCT, Barghout VE, Sandler RS, Jhingran P, Sasane M, Cook S, Gibbons DC, Halpern M. Resource utilization associated with irritable bowel syndrome in the United States- 1987-1997. *Digestive Diseases and Sciences* 47 (8): 1705-1715 Aug 2002

Akinbami LJ, Schoendorf KC. Trends in childhood asthma: prevalence, health care utilization, and mortality. *Pediatrics* 2002 Aug;110(2 Pt 1):315-22

Hollowell J, Lundgren A, Johansson S. Irritable bowel syndrome- Patterns of ambulatory health care and resource use in the United States, 1993-1997. *Digestive Diseases and Sciences* 47 (5): 1115-1121 May 2002

Namen AM, Dunagan DP, Fleischer A, Tillett J, Barnett M, McCall WV, Haponik EF. Increased physician-reported sleep apnea: The National Ambulatory Medical Care Survey. *Chest* 2002 Jun;121(6):1741-7

Hambidge SJ, Davidson AJ, Gonzales R, Steiner JF. Epidemiology of pediatric injury-related primary care office visits in the United States. *Pediatrics* 109 (4): 559-565 Apr 2002

Smith ES, Fleischer AB, Feldman SR, Williford PM. Characteristics of office-based physician visits for cutaneous fungal infections. an analysis of 1990 to 1994 National Ambulatory Medical Care Survey Data. *Cutis* 2002 Mar; 69(3):191-8, 201-2.

Harman JS, Rollman BL, Hanusa BH, Lenze EJ, Shear MK. Physician office visits of adults for anxiety disorders in the United States, 1985-1998. *J General Internal Medicine* 17 (3): 165-172 Mar 2002.

Huang ES, Stafford RS. National patterns in the treatment of urinary tract infections in women by ambulatory care physicians. *Arch Intern Med* 2002 Jan 14;162(1):41-7

Harman JS, Schulberg HC, Mulsant BH, Reynolds CF 3rd. The effect of patient and visit characteristics on diagnosis of depression in primary care. *J Fam Pract* 2001 Dec;50(12):1068

Skaer TL, Sclar DA, Robison LM. Complaints of insomnia in the USA 1995-1998: prevalence, psychiatric comorbidity and pharmacologic treatment patterns. *Primary Care Psychiatry* 7;(4) 145-151 Dec 2001

Robison LM, Skaer TL, Sclar DA, Galin RS. Is attention deficit hyperactivity disorder increasing among girls in the US?: Trends in diagnosis and the prescribing of stimulants. *CNS Drugs* 2002;16(2):129-137

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

Fleischer AB Jr., Parrish CA, Glenn R, Feldman SR. Condylomata acuminata (genital warts): patient demographics and treating physicians. *Sex Transm Dis* 2001 Nov;28(11):643-647

Nicholson W, Ellison SA, Grason H, Powe NR. Patterns of ambulatory care use for gynecologic conditions: a national study. *Am J Obstet Gynecol* 2001; 184:523-30.

Skaer TL, Sclar DA, Robison LM, Galin RS. Trends in the rate of self-report and diagnosis of erectile dysfunction in the United States 1990-1998 - Was the introduction of sildenafil an influencing factor? *Disease Management & Health Outcomes*. 9:(1) 33-41 2001.

Hootman J, Helmick C, Schappert S. Characteristics of chronic arthritis and other rheumatic condition-related ambulatory care visits, United States, 1997. *Ann Epidemiol* 2000 Oct 1;10(7):454.

Ward DB, Fleischer AB Jr, Feldman SR, Krowchuk DP . Characterization of diaper dermatitis in the United States. *Arch Pediatr Adolesc Med* 2000 Sep;154(9):943-6

Stafford RS, Farhat JH, Misra B, Schoenfeld DA. National patterns of physician activities related to obesity management. *Arch Fam Med* 2000 Jul;9(7):631-8.

Hotard RS, Feldman SR, Fleischer AB Jr. Sex-specific differences in the treatment of severe psoriasis. *J Am Acad Dermatol* 2000 Apr;42(4):620-3

Nicholson W, Ellison SA. Patterns of ambulatory care use for gynecologic conditions in the United States. *Obstet Gynecol* 2000 Apr 1;95(4 Suppl 1):S27

Hoagwood K, Kelleher KJ, Feil M, Comer DM. Treatment services for children with ADHD: A national perspective. *Journal of the American Academy of Child and Adolescent Psychiatry* 2000 Feb;39(2).

Ramsey SD. Suboptimal medical therapy in COPD: Exploring the causes and consequences. *Chest* 2000 Feb;117(2).

Niedermaier MS, McCombs JS, Unger AN, Kumar A, Popovian R. Treatment cost of acute exacerbations of chronic bronchitis. *Clin Ther* 1999 Mar;21(3):576-91.

Robison LM, Sclar DA, Skaer TL, Galin RS. National trends in the prevalence of attention-deficit/hyperactivity disorder and the prescribing of methylphenidate among school-age children: 1990-1995. *Clin Pediatr* 1999 Apr;38(4):209-17.

Fleischer AB Jr, Feldman SR, Bullard CN. Patients can accurately identify when they have a dermatologic condition. *J Am Acad Dermatol* 1999; 41: 784-6.

Armstrong GL, Pinner RW. Outpatient visits for infectious diseases in the United States, 1980 through 1996. *Arch Intern Med*. 1999; 159:2531-2536.



Mead PS et al. Food-related illness and death in the United States. *Emerging Infectious Diseases* September-October 1999 5(5):607-625.

Rovi S, Johnson MS. Physician use of diagnostic codes for child and adult abuse. *Am Med Womens Assoc* 1999 Fall;54(4):211-4.

Collins MM, Stafford RS, O'Leary MP, Barry MJ. Distinguishing chronic prostatitis and benign prostatic hyperplasia symptoms: results of a national survey of physician visits. *Urology* 1999 May;53(5):921-5.

Halpern MT, Palmer CS, Seidlin M. Treatment patterns for otitis externa. *J Am Board Fam Pract* 1999 Jan-Feb;12(1):1-7

Feldman SR, Fleischer AB Jr, Williford PM, Jorizzo JL. Destructive procedures are the standard of care for treatment of actinic keratoses. *J Am Acad Dermatol* 1999 Jan;40(1):43-7.

Smith ES et al. Characteristics of office-based visits for skin cancer. Dermatologists have more experience than other physicians in managing malignant and premalignant skin conditions. *Dermatol Surg* 1998 Sep;24(9):1222-6.

Stern RS. Managed care and the treatment of skin disease, 1995. Continued growth and emerging dominance. *Arch Dermatol* 1998 Sep; 134(9): 1089-91.

Glied S. Too little time? The recognition and treatment of mental health problems in primary care. *Health Serv Res* 1998 Oct;33(4 Pt 1):891-910.

Walsh JK, Engelhardt CL. The direct economic costs of insomnia in the United States, 1995. *Sleep*. April 1998, Vol 21, Supplement, Abstracts of Original Investigations, 371.K3, p. 127.

Mannino DM, Homa DM, Pertowski CA et al. Surveillance for asthma - United States, 1960-1995. In: *CDC Surveillance Summaries*, April 24, 1998. *MMWR* 1998; 47 (No. SS-1):1-28.

Stafford RS, Blumenthal D, Pasternak RC. Cholesterol management practices in the United States. *Cardiology Review*. March 1998;15(3):29-36.

Zarin DA, Tanielian TL, Suarez AP, Marcus SC. Treatment of attention-deficit hyperactivity disorder by different physician specialties. *Psychiatr Serv* February 1998; 49(2):171.

Collins MM, Stafford RS, O'Leary MP, Barry M. How common is prostatitis? A national survey of physician visits. *J Urol* 1998; 159:1224-1228.

Fleischer AB Jr., Feldman ST, White RE, Leshin B, Byington R. Procedures for skin diseases performed by physicians in 1993 and 1994: analysis of data from the National Ambulatory Medical Care Survey. *J Am Acad Dermatol* 1997 Nov;37(5 Pt 1):719-724.

Collins MM, Stafford RS, O'Leary MP. How common is prostatitis? A national survey of physician visits. *J Urol* Vol. 157, no. 4 (supplement), April 14, 1997, p. 243.

Gillum RF, Wilson JB. The burden of stroke and its sequelae. *Dis Manage Health Outcomes* 1997 Feb;1 (2):84-94.

Glied S. The treatment of women with mental health disorders under HMO and fee-for-service insurance. *Women Health* 1997; 26(2):1-16.



Stafford RS, Blumenthal D, Pasternak, R. Variations in cholesterol management practices of US physicians. *J Am Coll Cardio* 1997; 29: 139-146.

Zoler ML. Antibiotics often given for nonbacterial prostatitis. *Internal Medicine News* November 15, 1996: 47.

Stern RS. Acne therapy: medication use and sources of care in office-based practice. *Arch Dermatol* 1996 July; 132(7): 776-780.

Hart LG, Deyo RA, Cherkin DC. Physician office visits for low back pain: frequency, clinical evaluation, and treatment patterns from a U.S. national survey. *Spine* 1995;20:11-19.

Hahn DL, Beasley JW. Diagnosed and possible undiagnosed asthma: a Wisconsin Research Network (WReN study). Wisconsin Research Network (WReN) Asthma Prevalence Study Group. *J Fam Pract* 1994 April; 38(4) 373-9.

McCaig LF, Graitcer PL. Epidemiology of injury-related visits to office-based physicians in the United States, 1991. *Journal of Safety Research* Vol. 25, No. 2., pp 77-81. 1994.

Cowie CC, Haris MI, Eberhardt MS. Frequency and determinants of screening for diabetes in the United States. *Diabetes Care* 17: 1158-63. 1994.

Kunin CM. Urinary tract infections in females. *Clin Infect Dis* 1994; 18:1-12.

Sonnenberg A, Everhart JE. Socioeconomic determinants of digestive disease. *Gastroenterol Int* 1993. 6:100-14.

Radecki SE, Brunton SA. Management of insomnia in office-based practice. National prevalence and therapeutic patterns. *Arch Fam Med* 1993 Nov; 2(11): 1129-34.

Jackson LA, Perkins BA, Wenger JD. Cat scratch disease in the United States: an analysis of three national databases. *Am J Public Health* 1993; 83: 1707-1711.

MMWR (Morbidity and Mortality Weekly Report). Asthma-United States, 1980-1990. 1992 Oct 2; 41(39): 733-5.

Murata JE, Patrick-Mace J, Strehlow A, Shuler P. Disease patterns in homeless children: a comparison with national data. *J Pediatr Nurs* 1992 June, 7(3): 196-204.

Shields T, Sloane PD. A comparison of eye problems in primary care and ophthalmology practice. *Fam Med* 1991 Sep-Oct; 23(7): 544-6.

Adelman AM, Koch H. New visits for abdominal pain in the primary care setting. *Fam Med* 1991 Feb; 23(2): 122-6.

Everhart JE, Renault PI. Irritable bowel syndrome in office-based practice in the United States. *Gastroenterology* 100: 998-1005. 1991.

Sanders RS. Epidemiology of irritable bowel syndrome in the United States. *Gastroenterology* 99(2) 409-15. August 1990.

Persky V, Davis F, Barrett R, Ruby E, Sailer C, Levy P. Recent time trends in uterine cancer. *Am J Public Health* 1990 Aug; 80(8): 935-9.

Feinleib M et al. Trends in COPD morbidity and mortality in the United States. *American Review of Respiratory Diseases* 140(3 pt. 2) S9-18. September 1989.

Sloane PD. Dizziness in primary care: results from the National Ambulatory Medical Care Survey. *J Fam Pract* 29(1) 33-8. July 1989.

Sonnenberg A, Koch TR. Epidemiology of constipation in the United States. *Dis Colon Rectum* 32(1) 1-8. January 1989.

Baum HM. Transient ischemic attacks, Parkinson's disease and epilepsy: results from the 1980 National Ambulatory Medical Care Survey. *Public Health* 100(6):368-74, Nov. 1986.

Stern, RS, Gardocki GJ. Office-based care of dermatologic disease. *J Am Acad Dermatol* 14:286-293, 1986.

Jencks SF. Recognition of mental distress and diagnosis of mental disorder in primary care. *JAMA* 253(13):1903-7, April 5, 1985.

Schurman RA, Kramer PD, Mitchell JB. The hidden mental health network: treatment of mental illness by nonpsychiatrist physicians. *Arch Gen Psychiatry* 1985; 42:89-94.

Cypress, BK. Characteristics of physician visits for back symptoms: a national perspective. *Am J Public Health* 1983; 73:389-395.

Robertson DL. Symptoms encountered during a three-year family practice residency. *J Fam Pract* 13(2):239-44, Aug. 1981.

Cutler JA and Mendeloff AI. Upper gastrointestinal bleeding. Nature and magnitude of the problem in the U.S. *Digestive Diseases and Sciences* 26(7 Suppl):90S-96S, Jul. 1981.

Geyman JP, Gordon MJ. Orthopedic problems in family practice: incidence, distribution, and curricular implications. *J Fam Pract* 8(4):759-65, Apr. 1979.

Stern RS, Johnson ML, DeLozier J. Utilization of physician services for dermatologic complaints: The United States, 1974. *Arch Dermatol* 113(8):1062-6. Aug. 1977.

#### **4c. REASON FOR VISIT, DIAGNOSIS - OTHER PUBLICATIONS USING NAMCS DATA**

Hersh AL, Chambers HF, Maselli JH, Gonzales R. National trends in ambulatory visits and antibiotic prescribing for skin and soft-tissue infections. *Arch Intern Med.* 2008 Jul 28;168(14):1585-91.

Shah ND, Chitkara DK, Locke GR, Meek PD, Talley NJ. Ambulatory Care for Constipation in the United States, 1993-2004. *Am J Gastroenterol.* 2008 Jun 12. [Epub ahead of print]

McGwin G Jr, Hall TA, Xie A, Owsley C. Trends in eye injury in the United States, 1992-2001. *Invest Ophthalmol Vis Sci.* 2006 Feb;47(2):521-7.

Harris MI, Cowie CC, Reiber G, Boyker E., Stern M., Bennett P., editors. *Diabetes in America*, 2nd edition. Washington, D.C.: U.S. Government Printing Office. 1995.

Everhard JE, editor. *Digestive diseases in the United States: epidemiology and impact* US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases. Washington, DC: US Government Printing Office, 1994; NIH publication no. 94-1447. See pp. ix-xii, 1-53, 55-82, 469-507, 647-690, 691-712, 713-752.

Sonneberg A, Everhart JE, Brown DM. The economic cost of constipation. In Kamm MA, Lennard-Jones JE, eds: *Constipation*. Petersfield, Hampshire, UK: Wrightson Biomedical Publishing; 1994. pp. 19-29.

Harris M. The public health impact of diabetes. In *Advances in Diabetes Epidemiology*, E. Eschwege, editor. Elsevier, New York, 1982.

Harris M, Hamman R. (editors). *Diabetes in America*. NIH Pub. No. 85-1468, Washington D.C.: U.S. Government Printing Office, 1985.

#### **5a. DIAGNOSTIC, SCREENING, and PREVENTIVE SERVICES, NONMEDICATION THERAPY - NCHS REPORTS**

Physiotherapy Visits: 1980-81 [ADR No. 120]  
Office Visits Involving X-Rays: 1977 [ADR No. 53]

#### **5b. DIAGNOSTIC, SCREENING, and PREVENTIVE SERVICES, NONMEDICATION THERAPY - JOURNAL ARTICLES USING NAMCS DATA**

Pollak KI, Krause KM, Yarnall KS, Gradison M, Michener JL, Ostbye T. Estimated time spent on preventive services by primary care physicians. *BMC Health Serv Res*. 2008 Dec 1;8(1):245. [Epub ahead of print]

Hoover K, Tao G. Missed opportunities for Chlamydia screening of young women in the United States. *Obstet Gynecol*. 2008 May;111(5):1097-102.

Branner CM, Koyama T, Jensen GL. Racial and ethnic differences in pediatric obesity-prevention counseling: national prevalence of clinician practices. *Obesity (Silver Spring)*. 2008 Mar;16(3):690-4. Epub 2008 Jan 17.

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

Shah SS, Nawal Lutfiyya M, McCullough JE, Henley E, Zeitz HJ, Lipsky MS. Who is providing and who is getting asthma patient education: an analysis of 2001 National Ambulatory Medical Care Survey data. *Health Educ Res*. 2007 Nov 5; [Epub ahead of print]

Mehrotra A, Zaslavsky AM, Ayanian JZ. Preventive health examinations and preventive gynecological examinations in the United States. *Arch Intern Med*. 2007 Sep 24;167(17):1876-83.

Thorndike AN, Regan S, Rigotti NA. The Treatment of Smoking by US Physicians During Ambulatory Visits: 1994-2003. *Am J Public Health*. 2007; 97:1878-1883.

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

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

Wallace AE, Sairafi NA, Weeks WB. Tobacco cessation counseling across the ages. *J Am Geriatr Soc*. 2006 Sep;54(9):1425-8.

Bhosle M, Samuel S, Vosuri V, Paskett E, Balkrishnan R. Physician and patient characteristics associated with outpatient breast cancer screening recommendations in the United States: analysis of the National Ambulatory Medical Care Survey Data 1996-2004. *Breast Cancer Res Treat*. 2006 Sep 21; [Epub ahead of print]



Ferketich AK, Khan Y, Wewers ME. Are physicians asking about tobacco use and assisting with cessation? Results from the 2001-2004 national ambulatory medical care survey (NAMCS). *Prev Med.* 2006 Aug 17; [Epub ahead of print]

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.* 2006 Aug;176(2):511-4.

Heaton PC, Frede SM. Patients' need for more counseling on diet, exercise, and smoking cessation: results from the National Ambulatory Medical Care Survey. *J Am Pharm Assoc (Wash DC).* 2006 May-Jun;46(3):364-9.

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

Merenstein D, Daumit GL, Powe NR. Use and costs of nonrecommended tests during routine preventive health exams. *Am J Prev Med.* 2006 Jun;30(6):521-7.

Steinberg MB, Akincigil A, Delnevo CD, Crystal S, Carson JL. Gender and age disparities for smoking cessation treatment. *Am J Prev Med.* 2006 May;30(5):405-12. Epub 2006 Mar 23.

Rao G. Pediatric obesity-related counseling in the outpatient setting. *Ambul Pediatr.* 2005 Nov-Dec;5(6):377-9.

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.* 2005 Dec;201(6):906-12. Epub 2005 Oct 13.

Lin SX, Larson E. Does provision of health counseling differ by patient race? *Fam Med.* 2005 Oct;37(9):650-4.

Cook S, Weitzman M, Auinger P, Barlow SE. Screening and counseling associated with obesity diagnosis in a national survey of ambulatory pediatric visits. *Pediatrics.* 2005 Jul;116(1):112-6.

Lin SX, Hyman D, Larson E. Provision of health counseling in office-based practices and hospital outpatient clinics. *Prev Med.* 2005 May;40(5):542-6.

Ma J, Urizar GG Jr, Alehegn T, Stafford RS. Diet and physical activity counseling during ambulatory care visits in the United States. *Prev Med.* 2004 Oct;39(4):815-22.

Mellen PB, Palla SL, Goff DC Jr, Bonds DE. Prevalence of nutrition and exercise counseling for patients with hypertension. *J Gen Intern Med.* 2004 Sep;19(9):917-24.

Kast D, Prochazka A, Miyoshi TJ, et al. The annual physical examination: Estimates from the National Ambulatory Medical Care Survey. *J Gen Intern Med* 19: 214-214 Suppl. 1 Apr 2004

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, May 8 2004. (#130)

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

Himelhoch S, Daumit G. To whom do psychiatrists offer smoking cessation counseling? *Am J Psychiatry.* 2003 Dec;160(12):2228-30.

Moran CM, Panzarino VM, Darden PM, Reigart JR. Preventive services: blood pressure checks at well child visits. *Clin Pediatr (Phila).* 2003 Sep;42(7):627-34.

Moran S, Thorndike AN, Armstrong K, Rigotti NA. Physicians' missed opportunities to address tobacco use during prenatal care. *Nicotine Tob Res.* 2003 Jun;5(3):363-8

Tanski SE, Klein JD, Winickoff JP, Auinger P, Weitzman M. Tobacco counseling at well-child and tobacco-influenced illness visits: opportunities for improvement. *Pediatrics* 2003 Feb;111(2):E162-7.

Daumit GL, Crum RM, Guallar E, Ford DE. Receipt of preventive medical services at psychiatric visits by patients with severe mental illness. *Psychiatr Serv* 2002 Jul;53(7):884-7.

Balkrishnan R, Hall MA, Mehrabi D, Chen GJ, Feldman SR, Fleischer AB Jr. Capitation payment, length of visit, and preventive services: evidence from a national sample of outpatient physicians. *Am J Manag Care* 2002 Apr;8(4):332-40

Housman TS, Rohrback JM, Fleischer AB, Feldman SR. Phototherapy utilization for psoriasis is declining in the United States. *J Am Acad Dermatol* 2002;46:557-9

Parnes B, Main DS, Holcomb S, Pace W. Tobacco cessation counseling among underserved patients: A report from CaReNet. *Journal of Family Practice* 51: (1) 65-69 Jan 2002

Tao G, Zhang P, Li Q. Services provided to nonpregnant women during general medical and gynecologic examinations in the United States. *Am J Prev Med* 2001 Nov;21(4):291-7.

Oliveria SA, Christos PJ, Marghoob AA, Halpern AC. Skin cancer screening and prevention in the primary care setting: National Ambulatory Medical Care Survey 1997. *J Gen Intern Med* 2001 May;16(5):297-301

Merenstein D, Green L, Fryer GE, et al. Shortchanging adolescents: room for improvement in preventive care by physicians. *Fam Med* 33: (2) 120-123 Feb 2001.

St John TM, Lipman HB, Krolak JM, Hearn TL. Improvement in physician's office laboratory practices. *Arch Pathol Lab Med* 2000 Jul;124(7):1066-73 1989-1994.

Feldman SR, Fleischer AB Jr. Skin examinations and skin cancer prevention counseling by US physicians: A long way to go. *J Am Acad Dermatol* 2000 Aug;43(2 Pt 1):234-7.

McNaughton Collins M, Stafford RS, Barry MJ. Age-specific patterns of prostate-specific antigen testing among primary care physician visits. *J Fam Pract* 2000 Feb;49(2):169-72

Meigs JB, Stafford RS. Cardiovascular disease prevention practices by U.S. physicians for patients with diabetes. *J Gen Intern Med* 2000 Apr;15(4):220-228 .

Cohen MC, Stafford RS, Misra B. Stress testing: national patterns and predictors of test ordering. *Am Heart J* 1999 Dec;138(6 Pt 1):1019-24

Thorndike AN, Ferris TG, Stafford RS, Rigotti NA. Rates of U.S. physicians counseling adolescents about smoking. *J Natl Cancer Inst* 1999 Nov 3;91(21):1857-1862.

Giles W. Missed opportunities in preventive counseling for cardiovascular disease: United States, 1995. *MMWR* February 13, 1998;47(5).

Jaen CR, Stange KC, Tumiel LM, Nutting P. Missed opportunities for prevention: smoking cessation counseling and the competing demands of practice. *J Fam Pract* 1997 Oct;45(4):348-354.



Salive ME, Guralnik JM, Brock D. Preventive services for breast and cervical cancer in U.S. office-based practices. *Prev Med* 1996. Sept-Oct; 25(5): 561-568.

Harris MI. Frequency of oral glucose tolerance testing in the U.S. *Diabetes Care* January 1995.

Harris MI, Modan M. Screening for NIDDM: why is there no national program? *Diabetes Care* 17:585-591, 1994.

Harris MI, Cowie CC, Eastman RC. Health insurance coverage for adults with diabetes in the U.S. population. *Diabetes Care* 17:585-91. 1994.

Harris MI, Eastman RC, Siebert C. The DCCT and medical care for diabetes in the U.S. *Diabetes Care* 17:761-64. 1994.

Harris MI, Cowie CC, Howie LJ. Self monitoring of blood glucose by adults with diabetes in the U.S. population. *Diabetes Care* 16:1116-23. 1993.

Harris MI. Testing for blood glucose by office-based physicians in the U.S. *Diabetes Care* Vol. 13, No. 4, April 1990.

Harris MI. Screening for undiagnosed diabetes in developed and developing nations. *Bulletin of the International Diabetes Federation* 1990.

Cypress, BK. The role of ambulatory medical care in hypertension screening. *Am J Public Health* 69:19-24, 1979.

#### **6a. MEDICATION THERAPY - NCHS REPORTS**

Medication Therapy in Ambulatory Medical Care: National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey, 1992 [ADR No. 290]

Drug Utilization in Office Practice, 1990 [ADR No. 232]

Utilization of Controlled Drugs in Ambulatory Care, 1985 [ADR No. 177]

Highlights of Drug Utilization in Office Practice: 1985 [ADR No. 134]

The Management of Chronic Pain: 1980-81 [ADR No. 123]

Use of Antimicrobial Drugs in Office Practice: 1980-81 [Series 13, No. 85]

Use of Topical Antimicrobial Drugs: 1980-81 [ADR No. 106]

The Management of New Pain in Office-based Ambulatory Care: 1980-81 [ADR No. 97]

The Utilization of Analgesic Drugs in Office-based Practice: 1980-81 [ADR No. 96]

Utilization of Psychotropic Drugs in Office-based Care: 1980-81 [ADR No. 90]

Drugs Most Frequently Used in Office Practice: 1981 [ADR, No. 89]

Drug Utilization in General and Family Practice by Characteristics of Physicians and Office Visits: 1980 [ADR, No. 87]

Medication Therapy in Office Visits for Selected Diagnoses: 1980 [Series 13, No. 71]

Drug Utilization in Office Visits to Primary Care Physicians: 1980 [ADR No. 86]

Drug Utilization in Office Practice by Age and Sex of the Patient: 1980 [ADR No. 81]

Medication Therapy in Visits for Hypertension: 1980 [ADR No. 80]

Drugs Most Frequently Used in Office-based Practice: 1980 [ADR No. 78]

Drug Utilization in Office-based Practice, A Summary of Findings: 1980 [Series 13, No. 65]

#### **6b. MEDICATION THERAPY – BOOKS USING NAMCS DRUG DATA**



Fleischer AB, Jr, Teuschler H, Chen GJ, Feldman SR: CRC Directory of Outpatient Prescribed Medications: Demographics Data Analysis 2003/2004. CRC Press-Parthenon Publishers, 2002.

#### **6c. MEDICATION THERAPY - JOURNAL ARTICLES USING NAMCS DRUG DATA**

Segars LW, Lea AR. Assessing prescriptions for statins in ambulatory diabetic patients in the United States: a national, cross-sectional study. *Clin Ther.* 2008 Nov;30(11):2159-66

Yentzer BA, Irby CE, Fleischer AB Jr, Feldman SR. Differences in acne treatment prescribing patterns of pediatricians and dermatologists: an analysis of nationally representative data. *Pediatr Dermatol.* 2008 Nov-Dec;25(6):635-9.

Strowd LC, Yentzer BA, Fleischer AB Jr, Feldman SR. Increasing use of more potent treatments for psoriasis. *J Am Acad Dermatol.* 2008 Dec 4. [Epub ahead of print]

Guerrero-Preston R, Brandt-Rauf P. Pharmaceutical residues in the drinking water supply: modeling residue concentrations in surface waters of drugs prescribed in the United States. *P R Health Sci J.* 2008 Sep;27(3):236-40.

Navaratnam P, Jayawant SS, Pedersen CA, Balkrishnan R. Asthma Pharmacotherapy Prescribing in the Ambulatory Population of the United States: Evidence of Nonadherence to National Guidelines and Implications for Elderly People. *J Am Geriatr Soc.* 2008 May 26. [Epub ahead of print]

Navaratnam P, Jayawant SS, Pedersen CA, Balkrishnan R. Physician adherence to the national asthma prescribing guidelines: evidence from national outpatient survey data in the United States. *Ann Allergy Asthma Immunol.* 2008 Mar;100(3):216-21.

Aparasu R, Baer R, Aparasu A. Clinically important potential drug-drug interactions in outpatient settings. *Res Social Adm Pharm.* 2007 Dec;3(4):426-37.

Sciar DA, Robison LM, Skaer TL. Concomitant Triptan and SSRI or SNRI Use: A Risk for Serotonin Syndrome. *Headache.* 2007 Nov 13; [Epub ahead of print]

Bhatara VS, Aparasu RR. Pharmacotherapy with Atomoxetine for US Children and Adolescents. *Ann Clin Psychiatry.* 2007 Jul-Sep;19(3):175-80.

Stojanovski SD, Rasu RS, Balkrishnan R, Nahata MC. Trends in medication prescribing for pediatric sleep difficulties in US outpatient settings. *Sleep.* 2007 Aug 1;30(8):1013-7.

Lamont EB, Dias LE, Lauderdale DS. NSAIDs and Colorectal Cancer Risk: Do Administrative Data Support a Chemopreventive Effect? *J Gen Intern Med.* 2007 Jun 19; [Epub ahead of print]

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.* May 2007;22(5):645-648.

Sankaranarayanan J, Puumala 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.* 2007 Apr;29(4):723-41.

Rowan SB, Bailey DN, Bublitz CE, Anderson RJ. Trends in anticoagulation for atrial fibrillation in the U.S.: an analysis of the national ambulatory medical care survey database. *J Am Coll Cardiol.* 2007 Apr 10;49(14):1561-5. Epub 2007 Mar 26.

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

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

Aparasu RR, Mort JR, Brandt H. Polypharmacy trends in office visits by the elderly in the United States, 1990 and 2000. *Res Social Adm Pharm.* 2005 Sep;1(3):446-59.

Skaer TL, Sclar DA, Robison LM. Trends in the prescribing of oral agents for the management of type 2 diabetes mellitus in the United States, 1990-2001: does type of insurance influence access to innovation? *Diabetes Educ.* 2006 Nov-Dec;32(6):940-53.

Pearce DJ, Camacho F, Balkrishnan R, Fleischer AB Jr, Feldman SR. Trends in on and off-label calcipotriene use. *J Dermatolog Treat.* 2006;17(5):308-13.

Grijalva CG, Poehling KA, Nuorti JP, Zhu Y, Martin SW, Edwards KM, Griffin MR. National impact of universal childhood immunization with pneumococcal conjugate vaccine on outpatient medical care visits in the United States. *Pediatrics.* 2006 Sep;118(3):865-73.

Lee E et al. National patterns of medication use during pregnancy. *Pharmacoepidemiology and Drug Safety*, 2006 August; 15, 537-545.

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

Mainous AG 3rd, Saxena S, Hueston WJ, Everett CJ, Majeed A. Ambulatory antibiotic prescribing for acute bronchitis and cough and hospital admissions for respiratory infections: time trends analysis. *J R Soc Med.* 2006 Jul;99(7):358-62.

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.* 2006 Jun;63(6):679-85.

Cipher DJ, Hooker RS, Guerra P. Prescribing trends by nurse practitioners and physician assistants in the United States. *J Am Acad Nurse Pract.* 2006 Jun;18(6):291-6.

Hare ME, Gaur AH, Somes GW, Arnold SR, Shorr RI. Does it really take longer not to prescribe antibiotics for viral respiratory tract infections in children? *Ambul Pediatr.* 2006 May-Jun;6(3):152-6.

Olsen Y, Daumit GL, Ford DE. Opioid prescriptions by u.s. Primary care physicians from 1992 to 2001. *J Pain.* 2006 Apr;7(4):225-35.

Kallen AJ, Welch HG, Sirovich BE. Current antibiotic therapy for isolated urinary tract infections in women. *Arch Intern Med.* 2006 Mar 27;166(6):635-9.

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



Steinman MA, McQuaid KR, Covinsky KE. Age and rising rates of cyclooxygenase-2 inhibitor use. *J Gen Intern Med.* 21 (3): 245-250 Mar 2006.

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

Thomas CP, Conrad P, Casler R, Goodman E. Trends in the use of psychotropic medications among adolescents, 1994 to 2001. *Psychiatr Serv.* 2006 Jan;57(1):63-9.

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.

Balkrishnan R, Rasu RS, Rajagopalan R. Physician and patient determinants of pharmacologic treatment of sleep difficulties in outpatient settings in the United States. *Sleep.* 2005 Jun 1;28(6):715-9.

Linder JA, Bates DW, Lee GM, Finkelstein JA. Antibiotic treatment of children with sore throat. *JAMA.* 2005 Nov 9;294(18):2315-22.

Stafford RS, Monti V, Ma J. Underutilization of Aspirin Persists in US Ambulatory Care for the Secondary and Primary Prevention of Cardiovascular Disease. *PLoS Med.* 2005 Nov 15;2(12):e353 [Epub ahead of print]

Schwarz EB, Maselli J, Norton M, Gonzales R. Prescription of teratogenic medications in United States ambulatory practices. *Am J Med.* 2005 Nov;118(11):1240-9.

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.* 2005 Sep;16(4):224-8.

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.

Hooker RS, Cipher DJ. Physician assistant and nurse practitioner prescribing: 1997-2002. *Journal of Rural Health* 21 (4): 355-360 FAL 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.* 2005 Oct;17(10):416-24.

Lin H, Phan K, Lin S. Trends in off-label beta-blocker use. *Journal of American Pharmacists Association.* March/April 2005.

Lin SJ, Lambert B, Tan H, Toh S. Frequency estimates from prescription drug datasets (revision of #0411-066A). *Pharmacoepidemiol Drug Saf.* 2005 Sep 1; [Epub ahead of print]

Roumie CL, Halasa NB, Grijalva CG, Edwards KM, Zhu Y, Dittus RS, Griffin MR. Trends in antibiotic prescribing for adults in the United States--1995 to 2002. *J Gen Intern Med.* 2005 Aug;20(8):697-702.

Zhan C, Arispe I, Kelley E, Ding T, Burt CW, Shinogle J, Stryer D. Ambulatory Care Visits for Treating Adverse Drug Effects in the US, 1995-2001. *Joint Commission Journal on Quality and Patient Safety.* Vol 31, No. 7, July 2005

Roumie CL, Halasa NB, Edwards KM, Zhu Y, Dittus RS, Griffin MR. Differences in antibiotic prescribing among

physicians, residents, and nonphysician clinicians. *Am J Med.* 2005 Jun;118(6):641-8.

Huang BJ, Martin SJ, Bachmann KA, et al. A nationwide survey of physician office visits found that inappropriate antibiotic prescriptions were issued for bacterial respiratory tract infections in ambulatory patients. *J Clin Epidemiol* 58 (4): 414-420 Apr 2005

Tan LSM, Morlock R. Sedative hypnotics employed to treat patients with and without insomnia complaints in the National Ambulatory Medical Care Survey: 1997-2002. *Value Health* 8 (3): 324-324 May-Jun 2005

Gupta AK, Bluhm R, Barlow JO, Fleischer AB Jr, Feldman SR. Prescribing practices for seborrheic dermatitis vary with the physician's specialty: implications for clinical practice. *J Dermatolog Treat.* 2004 Jul;15(4):208-13.

Viswanathan H, Bharmal M, Thomas J 3rd. Prevalence and correlates of potentially inappropriate prescribing among ambulatory older patients in the year 2001: comparison of three explicit criteria. *Clin Ther.* 2005 Jan;27(1):88-99.

Linder JA, Huang ES, Steinman MA, Gonzales R, Stafford RS. Fluoroquinolone prescribing in the United States: 1995 to 2002. *Am J Med.* 2005 Mar;118(3):259-68.

Balkrishnan R, Sansbury JC, Shenolikar RA, Fleischer AB Jr, Feldman SR. Prescribing patterns for topical retinoids within NAMCS data. *J Drugs Dermatol.* 2005 Mar-Apr;4(2):172-9.

Nguyen KX, Marinac JS, Sun C. Aspirin for primary prevention in patients with diabetes mellitus. *Fam Med.* 2005 Feb;37(2):112-7.

Dai C, Stafford RS, Alexander GC. National trends in cyclooxygenase-2 inhibitor use since market release: nonselective diffusion of a selectively cost-effective innovation. *Arch Intern Med.* 2005 Jan 24;165(2):171-7.

Zhan C, Correa-de-Araujo R, Bierman AS, Sangl J, Miller MR, Wickizer SW, Stryer D. Suboptimal prescribing in elderly outpatients: potentially harmful drug-drug and drug-disease combinations. *J Am Geriatr Soc.* 2005 Feb;53(2):262-7.

Linder JA, Bates DW, Platt R. Antivirals and antibiotics for influenza in the United States, 1995-2002. *Pharmacoepidemiol Drug Saf.* 2005 Jan 14; [Epub ahead of print]

Shih YC, Sleath BL. Health care provider knowledge of drug formulary status in ambulatory care settings. *Am J Health Syst Pharm.* 2004 Dec 15;61(24):2657-63.

Ciesla G, Leader S, Stoddard J. Antibiotic prescribing rates in the US ambulatory care setting for patients diagnosed with influenza, 1997-2001. *Respiratory Medicine* (2004) 98, 1093-1101.

Blanco C, Goodwin RD, Liebowitz MR, Schmidt AB, Lewis-Fernandez R, Olfson M. Use of Psychotropic Medications for Patients With Office Visits Who Receive a Diagnosis of Panic Disorder. *Med Care.* 2004 Dec;42(12):1242-1246.

Vogel CA, Balkrishnan R, Fleischer AB, Cayce KA, Feldman SR. Over-the-counter topical skin products--a common component of skin disease management. *Cutis.* 2004 Jul;74(1):55-67.

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.* 2004 May-Jun;17(3):196-200.

Pirraglia PA, Stafford RS, Singer DE. Trends in Prescribing of Selective Serotonin Reuptake Inhibitors and Other Newer Antidepressant Agents in Adult Primary Care. *Prim Care Companion J Clin Psychiatry.* 2003 Aug;5(4):153-157



Duque M, Vogel C, Fleischer A, Yosipovitch G. Over-the-counter topical antipruritic agents are commonly recommended by office-based physicians: an analysis of US practice patterns. *J Dermatolog Treat.* 2004;15(3):185-188.

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

Leader S, Ciesla G. Antibiotic prescribing during RSV-associated ambulatory care visits by children age <5 years, US, 1995-2001. *Pediatric Research.* April 2004. (# 1355)

McCaig LF, McNeil MM. Trends in prescribing for vulvovaginal candidiasis in the United States. *Pharmacoepidemiol Drug Saf.* 2004 Mar 19 [Epub ahead of print]

McCoy S, Zell E, Besser R. Antimicrobial prescribing for otitis externa in children. *Pediatric Infectious Disease Journal.* 23(2), February 2004, 181-183.

Halasa NB, Griffin MR, Zhu Y, Edwards KM. Differences in antibiotic prescribing patterns for children younger than five years in the three major outpatient settings. *J Pediatr* 2004; 144:200-5.

Goulding MR. Inappropriate medication prescribing for elderly ambulatory care patients. *Arch Intern Med.* 2004; 164:305-312.

Balkrishnan R. et al. Analysis of factors associated with prescription of a potentially inappropriate combination dermatological medication among US outpatient physicians. *Pharmacoepidemiology and Drug Safety.* Volume 13, Issue 3: 133-138, March 2004, published online 26 Mar 2003.

Fang MC, Stafford RS, Ruskin JN, Singer DE. National trends in antiarrhythmic and antithrombotic medication use in atrial fibrillation. *Arch Intern Med.* 2004 Jan 12; 164(1): 55-60.

Mainous AG 3rd, Hueston WJ, Davis MP, Pearson WS. Trends in antimicrobial prescribing for bronchitis and upper respiratory infections among adults and children. *Am J Public Health.* 2003 Nov;93(11):1910-4.

Fleischer AB Jr, Simpson JK, McMichael A, Feldman SR. Are there racial and sex differences in the use of oral isotretinoin for acne management in the United States? *J Am Acad Dermatol.* 2003 Oct;49(4):662-6.

Linder JA, Singer DE, Stafford RS. Association between antibiotic prescribing and visit duration in adults with upper respiratory tract infections. *Clin Ther.* 2003 Sep;25(9):2419-30.

Balkrishnan R, Fleischer AB Jr, Paruthi S, Feldman SR. Physicians underutilize topical retinoids in the management of acne vulgaris: analysis of U.S. National Practice Data. *J Dermatolog Treat.* 2003 Sep;14(3):172-6.

Gupta AK, Cooper EA, Feldman SR, Fleischer AB Jr, Balkrishnan R. Analysis of factors associated with increased prescription illegibility: results from the National Ambulatory Medical Care Survey, 1990-1998. *Am J Manag Care.* 2003 Aug;9(8):548-52

Van Brunt DL, Gibson PJ, Ramsey JL, Obenchain R. Outpatient use of major antipsychotic drugs in ambulatory care settings in the United States, 1997-2000. *MedGenMed.* 2003 Aug 4;5(3):16.

Burt CW, Bernstein AB. Trends in use of medications associated with women's ambulatory care visits. *Journal of Women's Health,* 12 (3), 2003.

- Steinman MA, Gonzales R, Linder JA, Landefeld CS. Changing use of antibiotics in community-based outpatient practice, 1991-1999. *Ann Intern Med* 2003 Apr 1;138(7):525-33 See also Comment on 605-6.
- McCaig LF, Besser RE, Hughes JM. Antimicrobial drug prescription in ambulatory care settings, United States, 1992-2000. *Emerg Infect Dis* 2003 Apr;9(4):432-7
- Sleath B, Tina Shih YC. Sociological influences on antidepressant prescribing. *Soc Sci Med* 2003 Mar;56(6):1335-44.
- Daumit GL, Crum RM, Guallar E, Powe NR, Primm AB, Steinwachs DM, Ford DE. Outpatient prescriptions for atypical antipsychotics for African-Americans, hispanics, and whites in the United States. *Arch Gen Psychiatry* 2003 Feb;60(2):121-8
- Steinman MA, Landefeld CS, Gonzales R. Predictors of broad-spectrum antibiotic prescribing for acute respiratory tract infections in adult primary care. *JAMA* 2003 Feb 12;289(6):719-25
- Stafford, RS, Radley DC. The underutilization of cardiac medications of proven benefit, 1990 to 2002. *J Am Coll Cardiol* 2003;41:56-61
- Luo RD, Belletti DA, Tran D, Arcona S, Salen PN. National prescribing patterns in the management of extrapyramidal symptoms among patients with schizophrenia. *Int J Psychiatry Med* 2002;32(3):261-9
- Halasa NB, Griffin MR, Zhu Y, Edwards KM. Decreased number of antibiotic prescriptions in office-based settings from 1993 to 1999 in children less than five years of age. *Pediatr Infect Dis J* 2002 Nov;21(11):1023-1028
- Nash DR, Harman J, Wald ER, Kelleher KJ. Antibiotic prescribing by primary care physicians for children with upper respiratory tract infections. *Arch Pediatr Adolesc Med* 2002 Nov;156(11):1114-9
- Sugarman JH, Fleischer AB Jr, Feldman SR. Off-label prescribing in the treatment of dermatologic disease. *J Am Acad Dermatol* 2002 Aug;47(2):217-23
- Burt CW. National trends in use of medications in office-based practice, 1985-1999. *Health Aff (Millwood)* 2002 Jul-Aug;21(4):206-14
- Blanco C, Laje G, Olfson M, Marcus SC, Pincus HA. Trends in the treatment of bipolar disorder by outpatient psychiatrists. *Am J Psychiatry* 2002 Jun;159(6):1005-10
- McCaig LF, Besser RE, Hughes JM. Trends in antimicrobial prescribing rates for children and adolescents. *JAMA* 2002 Jun 19;287(23):3096-102
- Hermann RC, Yang D, Ettner SL, Marcus SC, Yoon C, Abraham M. Prescription of antipsychotic drugs by office based physicians in the United States, 1989-1997. *Psychiatr Serv* 2002 Apr;53(4):425-30
- Huang B, Bachmann KA, He X, Chen R, McAllister JS, Wang T. Inappropriate prescriptions for the aging population of the United States: an analysis of the National Ambulatory Medical Care Survey, 1997. *Pharmacoepidemiol Drug Saf* 2002 Mar;11(2):127-34
- Zachry WM 3rd, Shepherd MD, Hinich MJ, Wilson JP, Brown CM, Lawson KA. Relationship between direct-to-consumer advertising and physician diagnosing and prescribing. *Am J Health Syst Pharm* 2002 Jan 1;59(1):42-9
- Ausiello JC, Stafford RS. Trends in medication use for osteoarthritis treatment. *J Rheumatol* 2002 May;29(5):999-1005



McCall WV, Fleischer AB, Feldman SR. Diagnostic codes associated with hypnotic medications during outpatient physician-patient encounters in the United States from 1990-1998. *Sleep* 25 (2): 221-223 MAR 15 2002

McCall W, Fleischer AB, Feldman SR. Insomnia diagnoses and hypnotic usage in the National Ambulatory Medical Care Survey from 1990-1998. *Sleep* 25: 324 Suppl. S APR 15 2002

Cantrell R, Young AF, Martin BC. Antibiotic prescribing in ambulatory care settings for adults with colds, upper respiratory tract infections, and bronchitis. *Clin Ther* 2002 Jan;24(1):170-82

Jensen PS, Bhatara VS, Vitiello B, Hoagwood K, Feil M, Burke LB. Psychoactive medication prescribing practices for U.S. children: gaps between research and clinical practice. *J Am Acad Child Adolesc Psychiatry* 1999 May;38(5):557-65.

Linder JA, Stafford RS. Antibiotic treatment of adults with sore throat by community primary care physicians: a national survey, 1989-1999. *JAMA* 2001 Sep 12;286(10):1181-1186

Gonzales R, Malone DC, Maselli JH, Sande MA. Excessive antibiotic use for acute respiratory infections in the United States. *Clin Infect Dis* 2001 Sep 15;33(6):757-762

Goodwin R, Gould MS, Blanco C, Olfson M. Prescription of psychotropic medications to youths in officebased practice. *Psychiatric Services* 52: (8) 1081-1087 Aug 2001.

Wang TJ, Stafford RS, Ausiello JC, Chaisson CE. Randomized clinical trials and recent patterns in the use of statins. *Am Heart J* 2001 Jun;141(6):957-63

Gonzales R, Maselli J. Trends in antimicrobial treatment of acute respiratory tract infections by primary care physicians, 1994-1998. *Journal of General Internal Medicine* 2001 April;16:196

Stern RS. Medication and medical service utilization for acne 1995-1998. *Journal of American Academy of Dermatology* December 2000: 1042-1048.

Hoagwood K, Jensen PS, Feil M, Vitiello B, Bhatara VS. Medication management of stimulants in pediatric practice settings: a national perspective. *J Dev Behav Pediatr* 2000 Oct;21(5):322-31

Nelson CR, Knapp DA. Trends in antihypertensive drug therapy of ambulatory patients by US officebased physicians. *Hypertension*. 2000;36:600-603

Mort JR, Aparasu RR. Prescribing potentially inappropriate psychotropic medications to the ambulatory elderly. *Arch Intern Med*. 2000;160:2825-2831.

Shaffer MP, Feldman SR, Fleischer AB Jr. Use of clotrimazole/betamethasone dipropionate by family physicians. *Fam Med* 2000 Sep;32(8):561-5.

Lipsky MS, Waters T, Sharp LK. Impact of vaginal antifungal products on utilization of health care services: evidence from physician visits. *J Am Board Fam Pract* 2000 May-Jun;13(3):178-82.

Aparasu RR, Helgeland DL. Utilization of ambulatory care services caused by adverse effects of medications in the United States. *Managed Care Interface* April 2000, 70-74.

Stafford RS. Aspirin use is low among United States outpatients with coronary artery disease. *Circulation* 2000 Mar 14;101(10):1097-101.

Feldman SR, Fleischer AB, Cooper JZ. New topical treatments change the pattern of treatment of psoriasis:

dermatologists remain the primary providers of this care. *Int J Dermatol* 2000 Jan;39(1):41-4.

Fleischer AB Jr, Feldman SR. Prescription of high-potency corticosteroid agents and clotrimazole-betamethasone dipropionate by pediatricians. *Clin Ther* 1999 Oct;21(10):1725-31

Copeland C. Prescription drug utilization and physician visits. Employee Benefit Research Institute. EBRI Notes. Vol. 20, No. 9. October 1999.

Feldman SR, Fleischer AB Jr, Chen GJ. Is prior authorization of topical tretinoin for acne cost effective? *Am J Manag Care* 1999 Apr;5(4):457-63.

Sclar DA, Robison LM, Skaer TL, Galin RS. Ethnicity and the prescribing of antidepressant pharmacotherapy: 1992-1995. *Harv Rev Psychiatry* 1999 May-Jun;7(1):29-36.

Pradel FG, Hartzema AG, Mutran EJ, Hanson-Divers C. Physician over-the-counter drug prescribing patterns: an analysis of the national ambulatory medical care survey. *Ann Pharmacother* 1999 Apr;33(4):400-5.

Aparasu RR. Visits to office-based physicians in the United States for medication-related morbidity. *J Am Pharm Assoc* 1999 May-Jun;39(3):332-7.

Ward MM. Trends in the use of disease modifying antirheumatic medications in rheumatoid arthritis, 1980-1995: results from the National Ambulatory Medical Care Surveys. *J Rheumatol* 1999 Mar; 26(3): 546-550.

Stafford RS, Robson DC, Misra B, Ruskin J, Singer DE. Rate control and sinus rhythm maintenance in atrial fibrillation: national trends in medication use, 1980-1996. *Arch Intern Med* 1998 Oct 26; 158(19):2144-8.

Wang TJ, Stafford RS. National patterns and predictors of beta-blocker use in patients with coronary artery disease. *Arch Intern Med* 1998 Sep 28; 158(17):1901-6.

Stafford RS, Saglam D, Causino N, Blumenthal D. The declining impact of race and insurance status on hormone replacement therapy. *Menopause* Vol. 5, No. 3, pp. 140-144.

Rathore SS, Mehta SS, Boyko WL Jr, Schulman KA. Prescription medication use in older Americans: a national report card on prescribing. *Fam Med* 1998 Nov-Dec;30(10):733-9.

Metlay JP, Stafford RD, Singer DE. National trends in the use of antibiotics by primary care physicians for adults patients with cough. *Arch Intern Med*. 1998;158:1813-1818.

Sclar DA, Robison LM, Skaer TL, Galin RS. What factors influence the prescribing of antidepressant pharmacotherapy? An assessment of national office-based encounters. *Int J Psychiatry Med* 1998;28(4):407-19.

Sclar DA et al. Trends in the prescribing of antidepressant pharmacotherapy: office-based visits. 1990-1995. *Clin Ther* 1998 Jul-Aug;20(4):871-84;870.

Zito JM, Safer DJ, Riddle MA, Johnson RE, Speedie SM, Fox M. Prevalence variations in psychotropic treatment of children. *J Child Adolesc Psychopharmacol* 1998;8(2):99-105.

Aparasu RR, Mort JR, Sitzman S. Psychotropic prescribing for the elderly in office-based practice. *Clin Ther* 1998 May-Jun;20(3):603-16.

Olfson M, Marcus SC, Pincus HA, Zito JM, Thompson JW, Zarin DA. Antidepressant prescribing practices of outpatient psychiatrists. *Arch Gen Psychiatry* 1998 Apr;55(4):310-316.



Stafford RS, Singer DE. Recent national patterns of warfarin use in atrial fibrillation. *Circulation*. 1998;97:1231-1233.

McConnell RC, Fleischer AB, Williford PM, Feldman SR. Most topical tretinoin treatment is for acne vulgaris through age 44 years: An analysis of the National Ambulatory Medical Care Survey, 1990-1994. *J Am Acad Dermatol* 1998;38:221-6.

Nyquist A-C, Gonzales R, Steiner JF, Sande MA. Antibiotic prescribing for children with colds, upper respiratory tract infections, and bronchitis. *JAMA* 1998;279:875-877.

Schwartz BS, Mainous AG, Marcy AM. Why do physicians prescribe antibiotics for children with upper respiratory tract infections? *JAMA* 1998; 279:881-882. [editorial accompanying Nyquist et al. and containing substantial references to NAMCS data.]

Pincus H et al. Prescribing trends in psychotropic medications. *JAMA* 1998. 279(7):526-531.

Simoni-Wastila L. Gender and psychotropic drug use. *Med Care* 1998; 36:88-94.

Stafford RS, Saglam Demet, Causino N, Blumenthal D. Low rates of hormone replacement in visits to United States primary care physicians. *Am J Obstet Gynecol* 1997; 177:381-7.

Gonzales R, Steiner JF, Sande MA. Antibiotic prescribing for adults with colds, upper respiratory tract infections, and bronchitis by ambulatory care physicians. *JAMA* 1997; 278:901-904.

Aparasu RR, Fliginger SE. Inappropriate medication prescribing for the elderly by office-based physicians. *Ann Pharmacother* 1997 Jul;31(7-8):823-829.

Nichol MB, Margolies JE, Gill MA. Factors associated with antihypertensive prescribing. *Ann Pharmacother* 1997. Feb; 31(2):154-9.

Stafford RS, Singer DE. National patterns of warfarin use in atrial fibrillation. *Arch Intern Med* 1996;156:2537-2541.

Stern RS. The pattern of topical corticosteroid prescribing in the United States, 1989-1991. *J Am Acad Dermatol* 1996 Aug; 35(2 Pt 1): 183-6.

Nichol MB, Stimmel GL, Lange SC. Factors predicting the use of multiple psychotropic medications. *J Clin Psychiatry* 1995 Feb; 56(2): 60-6.

McCaig LF, Hughes JM. Trends in antimicrobial drug prescribing among office-based physicians in the United States. *JAMA* 1995;273:214-219.

Stern, RS. Drug promotion for an unlabeled indication - the case of topical tretinoin. *N Engl J Med* Nov. 17, 1994: 1348-1349.

Carlsen MA. Prescription drug benefits: Rx for cost management. *Benefits Quarterly Third Quarter, 1993.* 81-84.  
Olfson M, Klerman GL. Trends in the prescription of psychotropic medications: the role of physician specialty. *Med Care* 31(6): 559-564, June 1993.

Olfson M, Klerman, GL. Trends in the prescription of antidepressants by office-based psychiatrists. *Am J Psychiatry* 150(94): 571-7. April 1993.

DK Wysowski, DL Kennedy, C Nelson, TP Gross. Drugs in patients 65 years and older in the United States, 1978-1990. Cardiovascular Risk Factors 1992, Vol. 2. pp. 202-207

Olfson M, Klerman GL. The treatment of depression: prescribing practices of primary care physicians and psychiatrists. J Fam Pract 35(6): 627-35, December 1992.

Broadhead WE et al. Tricyclic antidepressant prescribing for nonpsychiatric disorders. J Fam Pract 33(1) 24-32, July 1991.

Lawhorne LW. Lincomycin injection for upper respiratory tract infection: a compilation of findings in a rural clinic with analysis of a national data base. Fam Med 23(2): 112-6. February 1991.

Hohmann AA et al. Psychotropic medication prescription in U.S. ambulatory care. DICP Ann Pharmacother 1991;25;85-89.

Larson DB, Lyons JS, Hohmann AA, et al. Psychotropics prescribed to the US elderly in the early and mid 1980s: prescribing patterns of primary care practitioners, psychiatrists, and other physicians. Int J Geriatr Psychiatry 1991; 6(2):63-70.

Hohmann AA. Gender bias in psychotropic drug prescribing in primary care. Med Care 1989; 27;478-490.

Kelleher KJ, Hohmann AA, Larson DB. Prescription of psychotropics to children in office-based practice. Am J Dis Child 143(7) 855-9. July 1989.

Beardsley RS et al. Prescribing of psychotropic medication by primary care physicians and psychiatrists. Arch Gen Psychiatry 1988;45:1117-1119.

Verbrugge LM, Steiner RP. Prescribing drugs to men and women. Health Psychology 4(1):79-98, 1985.

Knapp DA et al. Drug prescribing for ambulatory patients 85 years of age and older. J Am Geriatr Soc 32(2):138-43, 1984.

#### **7a. OTHER CHARACTERISTICS OF OFFICE VISITS - NCHS REPORTS**

Characteristics of prepaid plan visits to office-based physicians: 1991 [ADR No. 269]

#### **7b. OTHER CHARACTERISTICS OF OFFICE VISITS - JOURNAL ARTICLES USING NAMCS DATA**

Abbo ED, Zhang Q, Zelder M, Huang ES. The Increasing Number of Clinical Items Addressed During the Time of Adult Primary Care Visits. J Gen Intern Med. 2008 Oct 2. [Epub ahead of print]

Gao X, Outley J, Botteman M, Spalding J, Simon JA, Pashos CL. Economic burden of endometriosis. Fertil Steril. Dec;86(6):1561-72. Epub 2006 Oct 23.

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. 2006 Sep-Oct;9(5):348-56.

Gottschalk A, Flocke SA. Time spent in face-to-face patient care and work outside the examination room. Ann Fam Med. 2005 Nov-Dec;3(6):488-93.

Coco A, Mainous AG. Relation of time spent in an encounter with the use of antibiotics in pediatric office visits for



viral respiratory infections. Arch Pediatr Adolesc Med. 2005 Dec;159(12):1145-9.

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

Venkat AP, Coldiron B, Balkrishnan R, Camacho F, Hancox JG, Fleischer AB Jr, Feldman SR. Lower adverse event and mortality rates in physician offices compared with ambulatory surgery centers: a reappraisal of Florida adverse event data. Dermatol Surg. 2004 Dec;30(12 Pt 1):1444-53.

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 2003 Feb;29(2):150-154

Hu P, Rueben DB. Effects of managed care on the length of time that elderly patients spend with physicians during ambulatory visits. Medical Care 2002 40(7):606-13  
Javitz HS, Ward MM, Farber E, Nail L, Vallow SG. The direct cost of care for psoriasis and psoriatic arthritis in the United States. J Am Acad Dermatol 2002 Jun;46(6):850-60

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

Mechanic D, McAlpine DD, Rosenthal M. Are patients' office visits with physicians getting shorter? N Engl J Med 344(3) January 18, 2001: 198-204.

Blumenthal D, Causino N, Chang YC, Culpepper L, Marder W, Saglam D, Stafford R, Starfield B. The duration of ambulatory visits to physicians. J Fam Pract 1999 Apr;48(4):264-71.

Hodgson TA, Cohen AJ. Medical care expenditures for selected circulatory diseases: opportunities for reducing national health expenditures. Med Care 1999; 37:994-1012.

Forrest CB, Reid RJ. Passing the baton: HMOs' influence on referrals to specialty care. Health Affairs 1997; 16:157-162.

### **8a. METHODOLOGY - NCHS REPORTS**

Office-based medical practices: methods and estimates from the National Ambulatory Medical Care Survey. Adv Data. 2007 Mar 12;(383):1-15.

Effects of Form Length and Item Format on Response Patterns and Estimates of Physician Office and Hospital Outpatient Department Visits--National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey, 2001. [Series 2, No. 139]

Sample Design, Sampling Variance, and Estimation Procedures [Series 2, No. 108]

The Collection and Processing of Drug Information: 1980 [Series 2, No. 90]

A Reason for Visit Classification for Ambulatory Care, 1977 [Series 2, No. 78]

Symptom Classification [Series 2, No. 63]

Background and Methodology [Series 2, No. 61]

### **8b. METHODOLOGY - JOURNAL ARTICLES USING NAMCS DATA**

Burt CW, Hing E. Making patient-level estimates from medical encounter records using a multiplicity estimator. Stat Med. 2007 Jan 15; [Epub ahead of print]

Ashish K. Jha, Timothy G. Ferris, Karen Donelan, Catherine DesRoches, Alexandra Shields, Sara Rosenbaum, and David Blumenthal. "How Common Are Electronic Health Records In The United States? A Summary Of The Evidence" *Health Affairs* 25 (2006): w496–w507.

Pearce KA, Love MM, Barron MA, Matheny SC, Mahfoud Z. How and why to study the practice content of a practice-based research network. *Ann Fam Med*. 2004 Sep-Oct;2(5):425-8.

Pace WD, Dickinson LM, Staton EW. Seasonal variation in diagnoses and visits to family physicians. *Ann Fam Med*. 2004 Sep-Oct;2(5):411-7.

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), March 2004, 276-280.

Hing E, Gousen S, Shimizu I, Burt C. Guide to Using Masked Design Variables to Estimate Standard Errors in Public Use Files of the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey. *Inquiry*. 40(4):416-415. Winter 2003/2004.

Jenkins ML. Toward national comparable nurse practitioner data: proposed data elements, rationale, and methods. *J Biomed Inform*. 2003 Oct;36(4-5):342-50.

Machlin SR, Valluzzi JL, Chevarley M, et al. Measuring ambulatory health care use in the United States: A comparison of 1996 estimates across four Federal surveys. *Journal of Economic and Social Measurement*. 2001, 27, 57-69.

Baker DW, Shapiro MF, Schur CL, Freeman H. A revised measure of symptom-specific health care use. *Soc Sci Med* 1998 Nov; 47(10):1601-9. [Uses the NAMCS Reason for Visit Classification system]

Greenhouse DL, Probst JC. After-hours telephone calls in a family practice residency: volume, seriousness, and patient satisfaction. *Fam Med* 1995; 27:525-30. [Uses the NAMCS Reason for Visit Classification system.]

Ferguson JA, Corey PM. Adjusting for clustering in survey research. *DICP* 24(3) 310-3. March 1990.

Schneeweiss R et al. Diagnosis clusters. A new tool for analyzing the content of ambulatory medical care. *Med Care* 21(1): 105-22. Jan. 1983.

Lion J, Altman S. Case-mix differences between hospital outpatient departments and private practice. *Health Care Financing Review* Volume 4, Number 1, September 1982.

Verbrugge LM. NCHS data and studies of differential morbidity and mortality. *Res Aging* 1981 Dec;3(4):429-58

DeLozier JE. The design and methods of the National Ambulatory Medical Care Survey. *Medical Group Management* January/February 1974. Vol 12. No. 2: 5-7.

### **8c. METHODOLOGY - OTHER PUBLICATIONS USING NAMCS DATA**

Health Information Technology in the United States: The Information Base for Progress." Robert Wood Johnson Foundation. Annual report. 2006. [http://www.hitadoption.org/downloads/annual\\_report\\_2006.pdf](http://www.hitadoption.org/downloads/annual_report_2006.pdf)

Jenkins ML, White T, Lin S, Choi J, Du E. Piloting Web-based NAMCS Data Collection for Nurse-managed Centers. *Proc AMIA Symp*. 2003; 880.



Burt, CW. Use of geographic contextual variables in examining survey item validity. Proceedings from the Seventh Conference on Health Survey Research Methods. Marcie L. Cynamon and Richard A Kulka, eds. (Hyattsville: NCHS 2000) DHHS Publication No. PHS 01-1013, pp 205-210.

Fetter, RB. Ambulatory Patient Related Groups. New Haven: Yale University, 1980.

#### **9a. PROVIDER CHARACTERISTICS – NCHS REPORTS**

(NOTE: This topic differs from “Section 2, Physician Specialty, Practice Characteristics” in that it focuses on data at the provider level rather than the visit level.)

Characteristics of office-based physicians and their practices: United States, 2005-06. [Series 13, No. 166]

Electronic Medical Record Use by Office-Based Physicians and Their Practices: United States, 2006 [ADR No. 393]

National Ambulatory Medical Care Survey: Terrorism Preparedness Among Office-Based Physicians, United States 2003-2004 [ADR No. 390]

Characteristics of office-based physicians and their practices: United States, 2003-04. [Series 13, No. 164]

Use of computerized clinical support systems in medical settings: United States, 2001-03 [ADR No. 353]

#### **9b. PROVIDER CHARACTERISTICS – JOURNAL ARTICLES USING NAMCS DATA**

Linder JA, Ma J, Bates DW, Middleton B, Stafford RS. Electronic health record use and the quality of ambulatory care in the United States. *Arch Intern Med.* 2007 Jul 9;167(13):1400-5.

DesRoches CM et al. Electronic Health Records in Ambulatory Care — A National Survey of Physicians. *NEJM.* 2008 Jun 18. [Epub ahead of print]

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.* 2007 Mar;22(3):378-81.