

National Health Care Surveys

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Subcommittee on Population Health
National Committee on Vital and Health Statistics
February 9, 2010



Division of Health Care Statistics

Mission

To collect, analyze, and disseminate data on

- the use, access, quality, and cost of health care provided in the United States and
- the health-care organizations and professionals who deliver that care

National Health Care Surveys: Ambulatory and Hospital Care

- **National Ambulatory Medical Care Survey**
visits to physicians in offices and clinicians in community health centers
- **National Hospital Ambulatory Medical Care Survey**
visits to hospital emergency and outpatient departments, ambulatory surgery centers
- **National Hospital Discharge Survey**
discharges from hospital inpatient departments

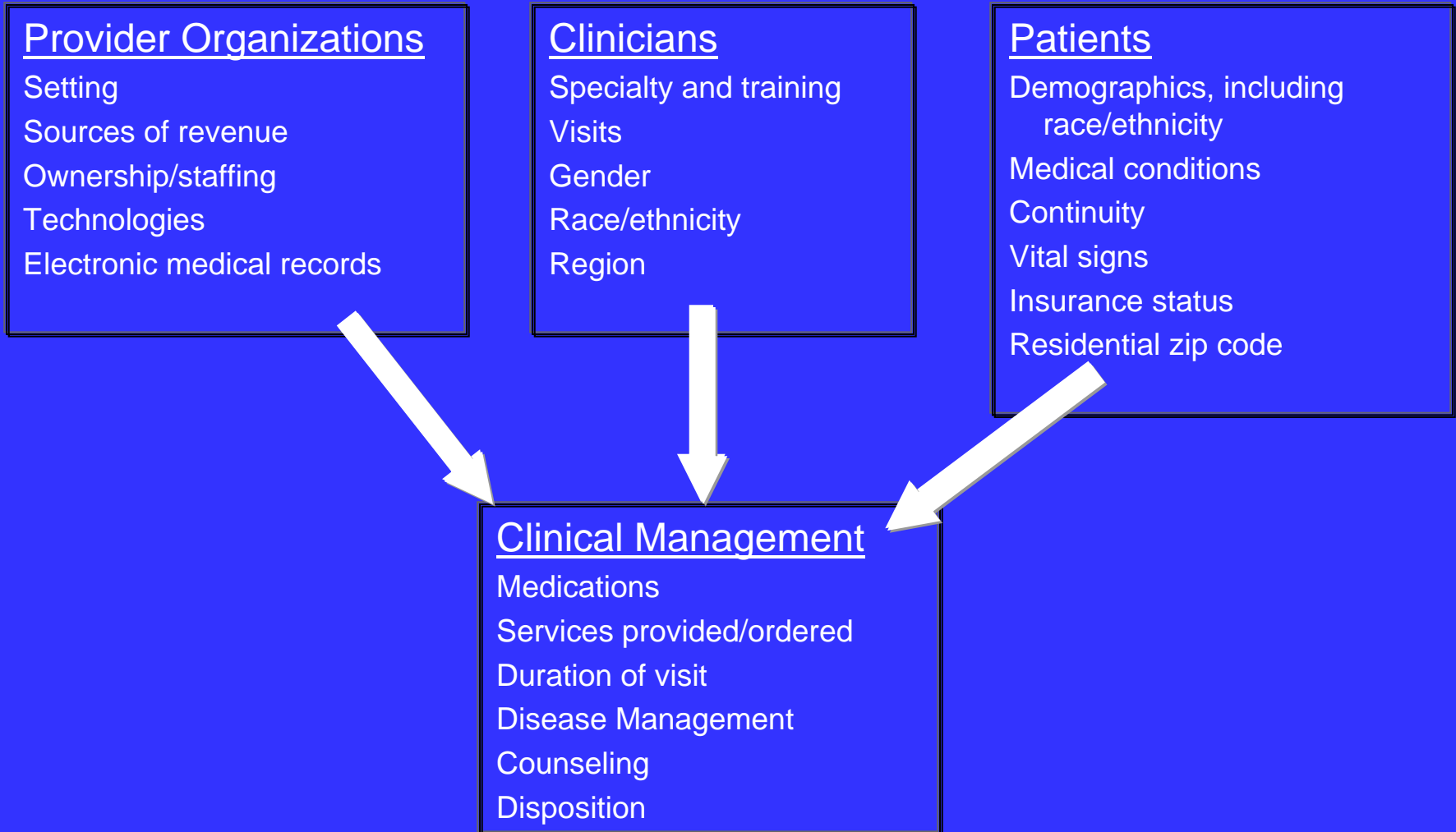
National Health Care Surveys: Long-Term Care Surveys

- **National Nursing Home Survey**
care for current residents
supplement on nursing assistants, 2004
- **National Home and Hospice Care Survey**
current home health care patient
discharged hospice patients
supplement on home health aides, 2007
- **National Survey of Residential Care Facilities**
current residents

Data Uses

- Assessment of quality and disparities
- Comparative effectiveness research
- Epidemiology of specific conditions
- Management of medical conditions
- Use and financing of services
- Diffusion of health-care technologies
- Effects of policy changes
- Monitoring changes over time

Examples of Provider-Based Data



Current Data Collection Methods

- In-person interviews for facilities and clinicians
- Abstractions from medical records for encounter-level data
- CAPI/CATI for long-term care survey data
- Redesigned NHDS to use laptop tools, computer-assisted data entry (CADE)
- NAMCS, NHAMCS, and NHDS now using paper forms
- Mail state-level survey of physicians' adoption of EMRs/EHRs

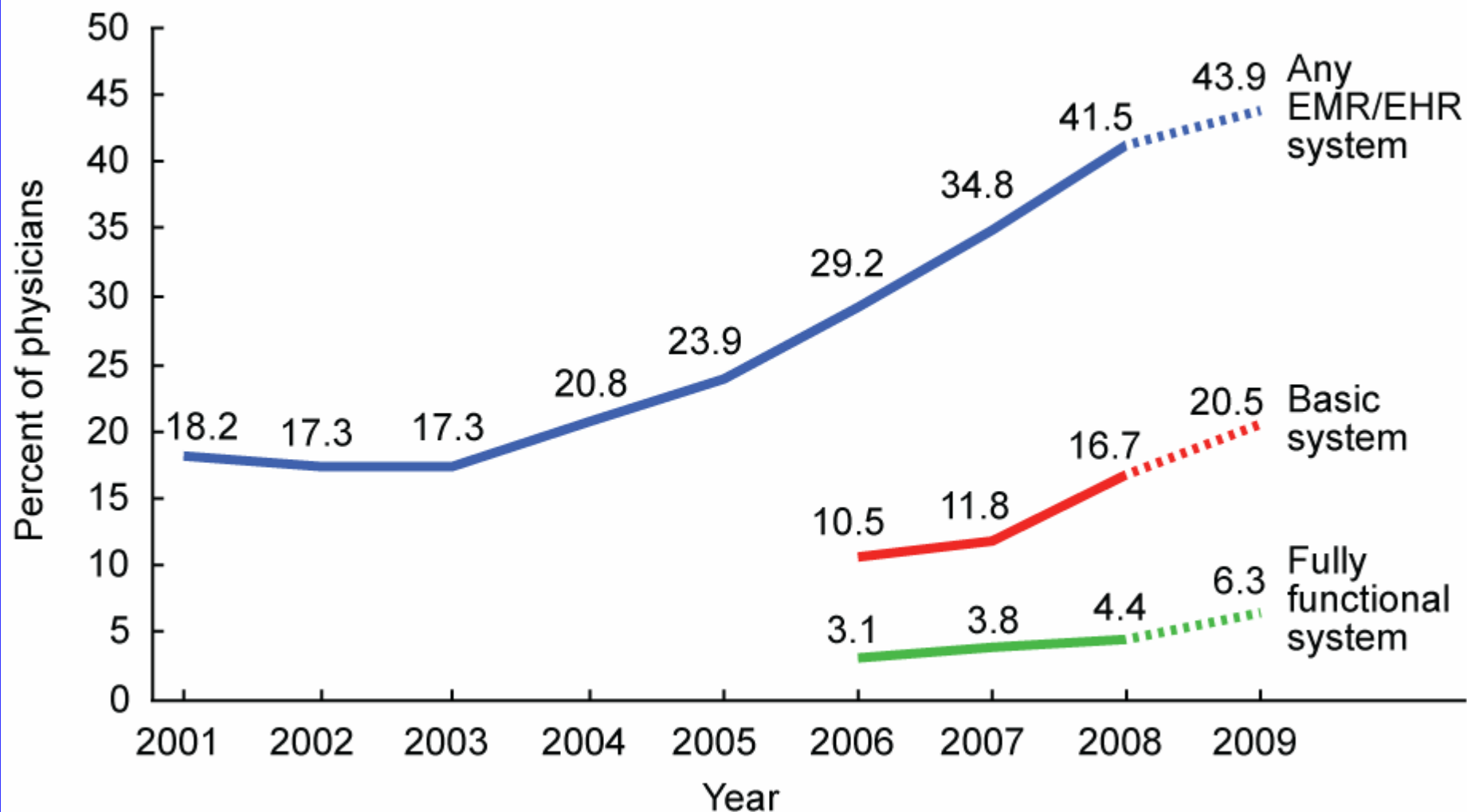
Data Linkages

- National Nursing Home Survey resident and facility data linked to Medicare data for 2004
- National Home and Hospice Care Survey to be linked to Medicare data for 2007
- Redesigned National Hospital Discharge Survey to be linked to National Death Index

Improvements Underway

- More facility/practice characteristics
- Free-standing and hospital-based ambulatory surgery centers included in NHAMCS
- Selected laboratory results collected in NAMCS and in 2011 in NHAMCS
- Redesigned National Hospital Discharge Survey medications, test results, observation patients, actual payments, better race data

Figure. Percentage of office-based physicians using electronic medical records/electronic health records (EMRs/EHRs): United States, 2001–2008 and preliminary 2009



NOTES: Any EMR/EHR is a medical or health record system that is either all or partially electronic (excluding systems solely for billing). The 2009 data are preliminary estimates (as shown on dashed lines), based only on the mail survey. Estimates of basic and fully functional systems prior to 2006 could not be computed because some items were not collected in the survey. Starting in 2007, the skip pattern after the all or partial EMR/EHR systems question was removed. Includes nonfederal, office-based physicians. Excludes radiologists, anesthesiologists, and pathologists.
SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

Potential of Electronic Data Collection

- Faster data release for NAMCS, NHAMCS, and NHDS, especially at facility and clinician levels
- May be more accurate and complete, if errors and missings from paper data collection
- Once set up, less burden for hospitals

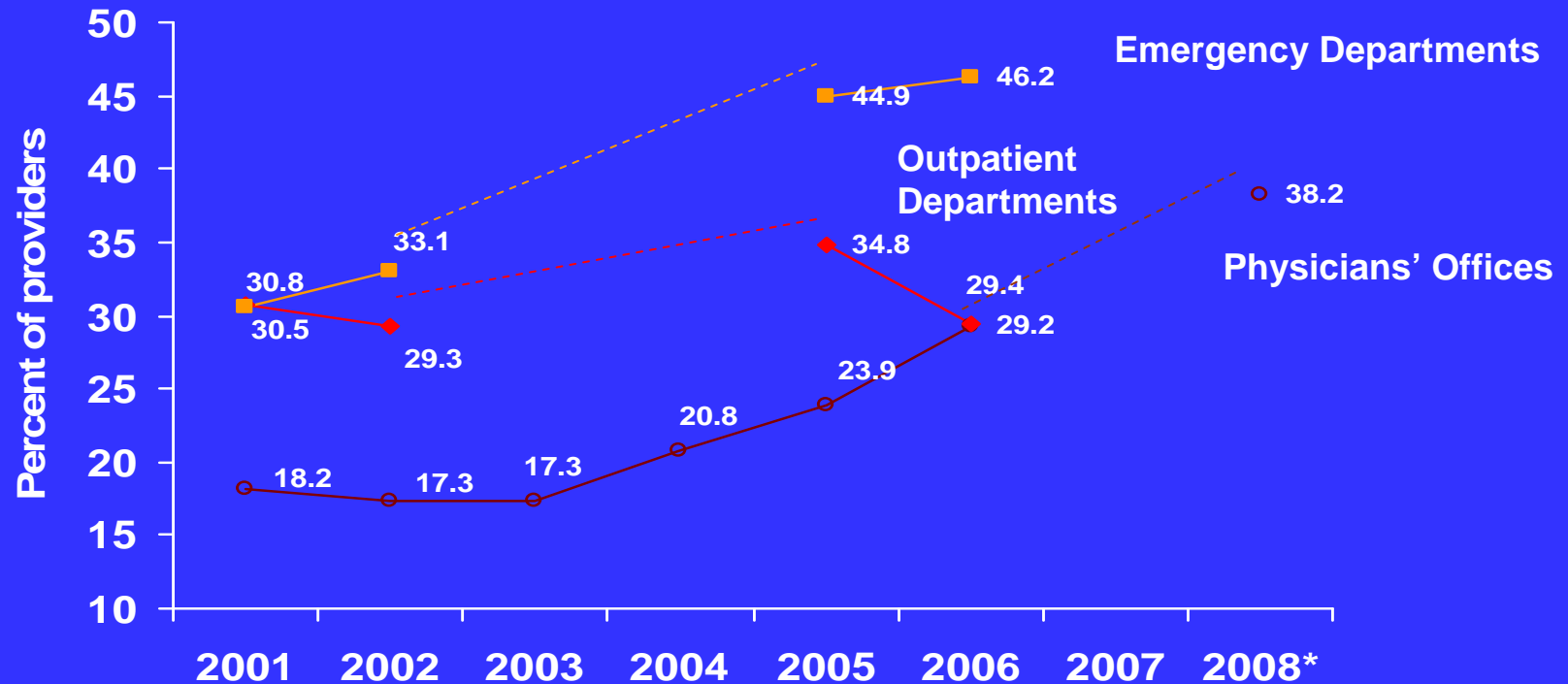
Challenges of EMRs/EHRs as Data Sources

- Not pervasive enough to support nationally-representative surveys
- Mixed modes of data collection necessary during transition
- Technical issues of data extraction
- Lack of interoperability of systems within same provider
- Willingness of providers to participate
- Funding to support developmental work and set up by providers

Next Steps, 2010-2015

- Recruiting informatics service fellow
- Arrange developmental work with providers with EHR systems and with HIEs
 - To receive encounter-specific data electronically and extract key data elements
 - To evaluate resulting data quality, procedures, and costs
- Pretest obtaining data from sampled providers with EHR systems, starting with EDs
- Monitor development of HIEs as option
- Transition to electronic data collection from sampled providers with EHR systems

Electronic Medical Record Adoption Ambulatory Care, 2001-2008



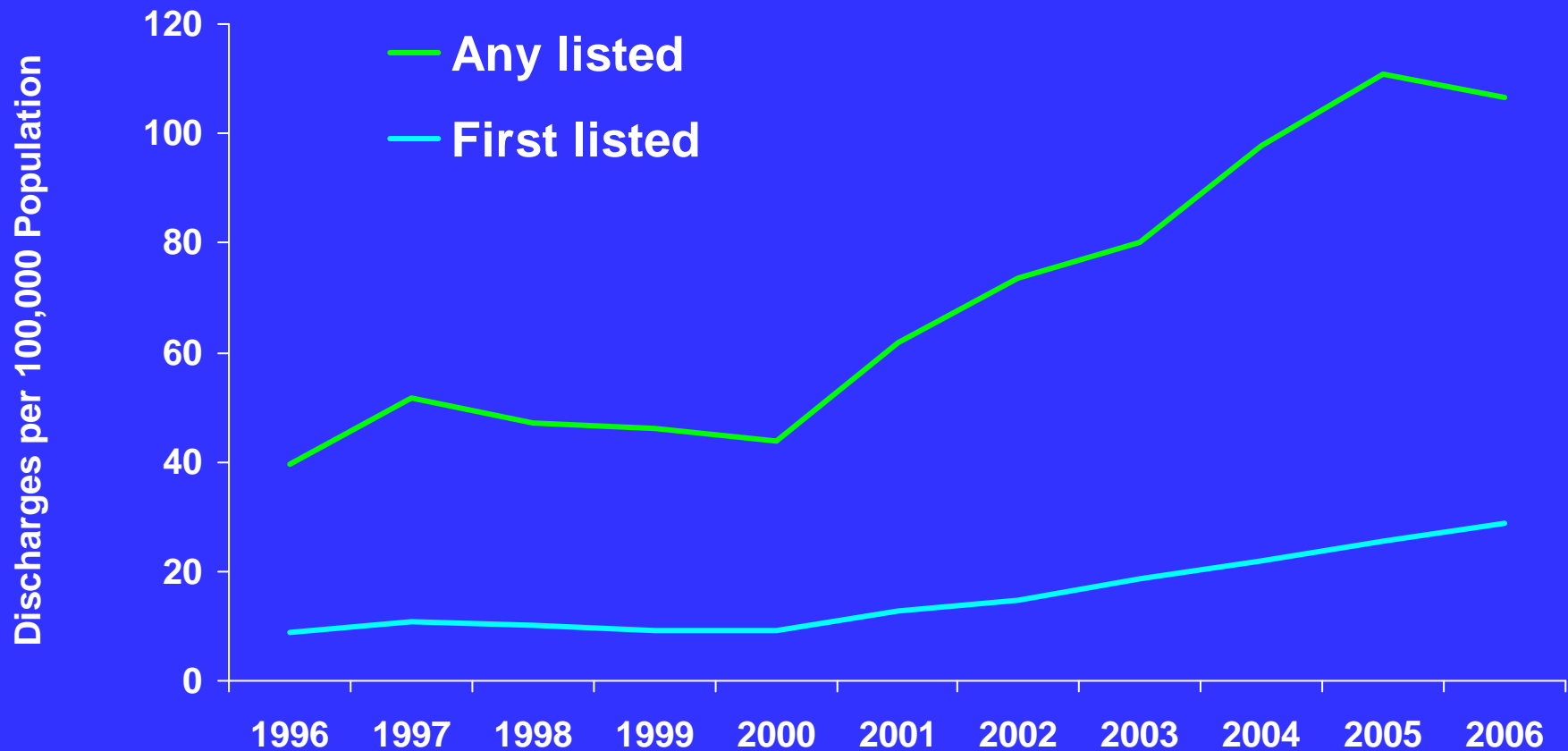
***2008 preliminary estimate**

Office-based physician and hospital emergency department trends significant ($p < .05$).

Sources: National Ambulatory Medical Care Survey and National Hospital Ambulatory Care Survey

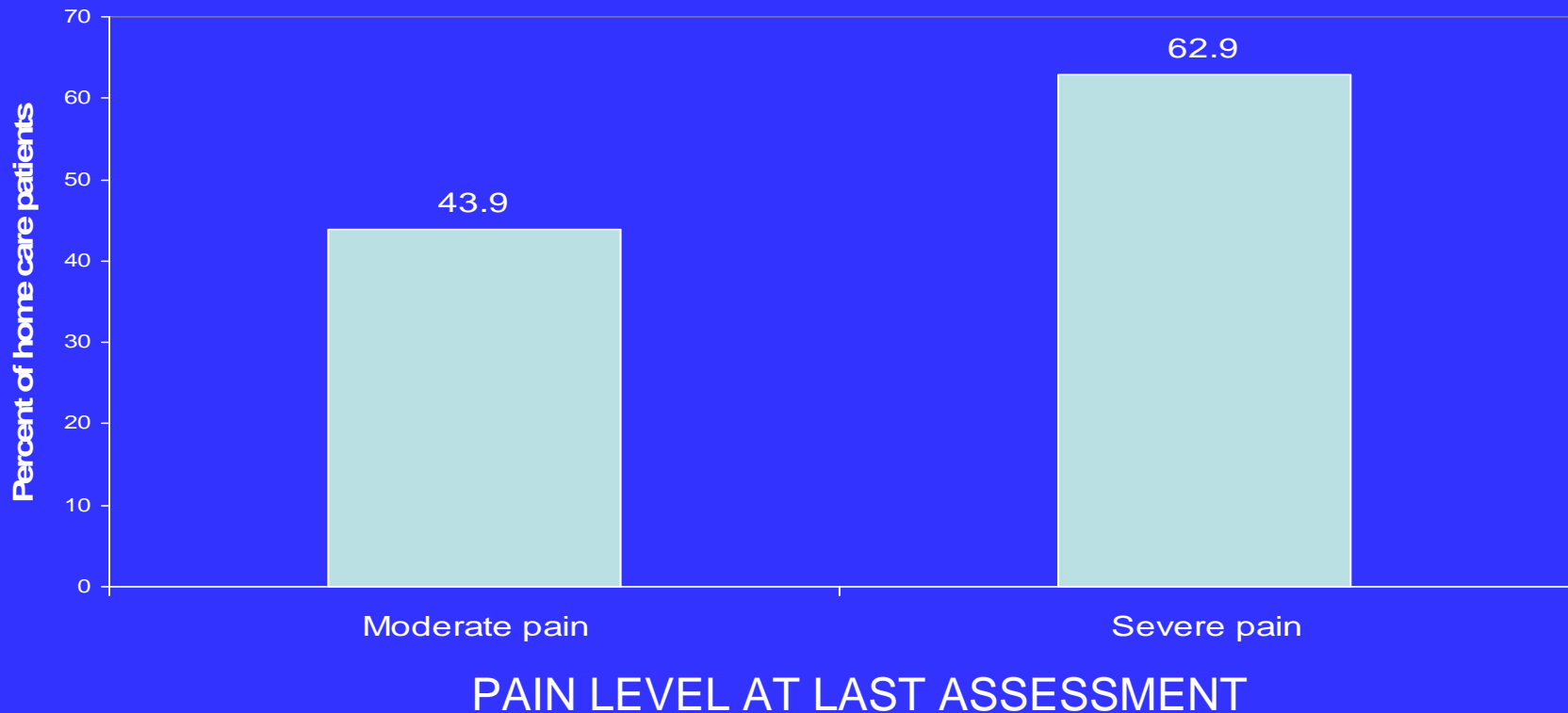
Clostridium difficile

Inpatient Discharges, 1996-2006



Source: National Hospital Discharge Survey. Citation: McDonald LC, et al. Emerg Infect Dis. 2006;12(3): 410-5.

Standing Orders* for Pain Management Home Health Care Patients, 2007

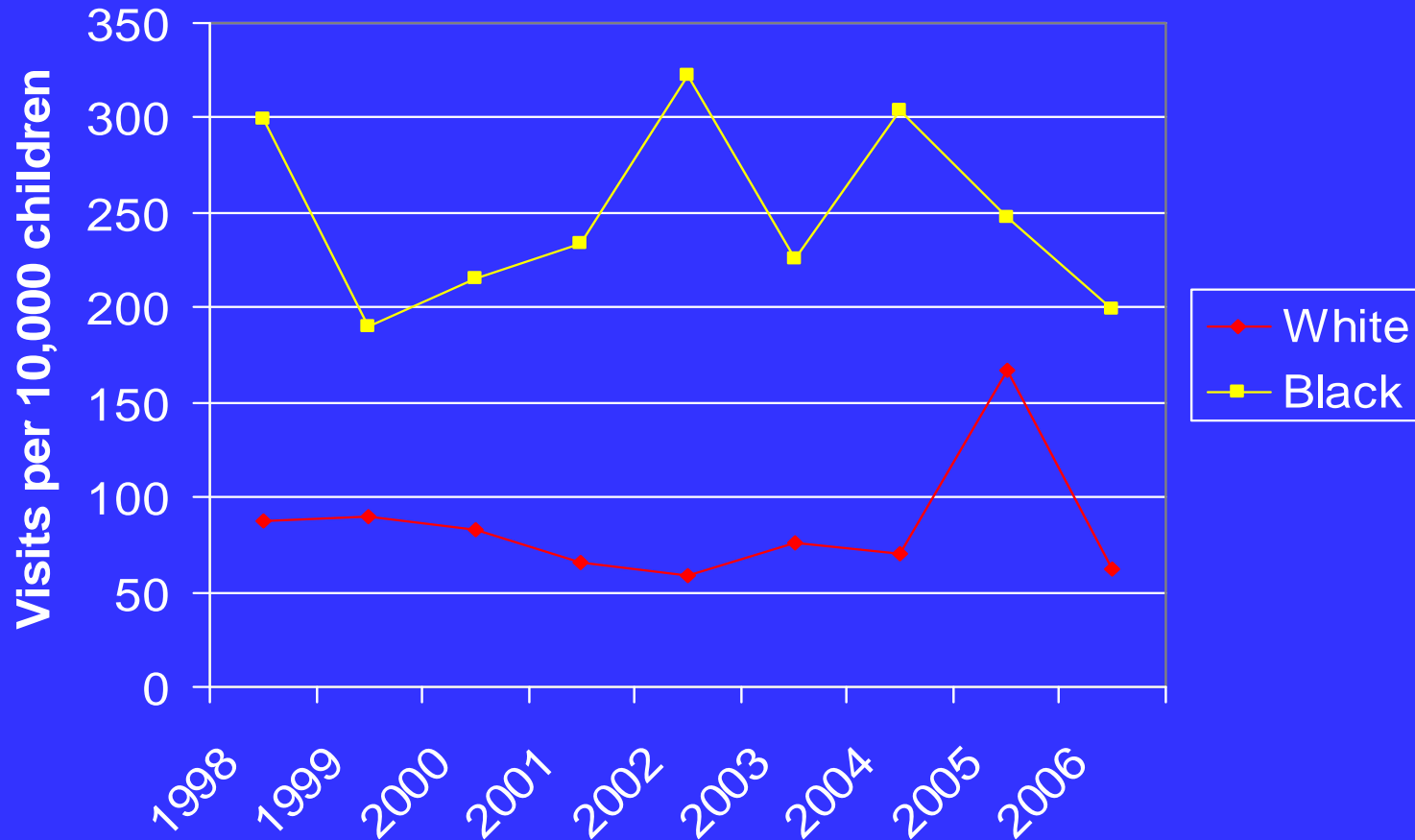


*Standing order alone or in combination

Source: National Home and Hospice Care Survey, 2007

Citation: Caffrey C., *et al.*, in progress

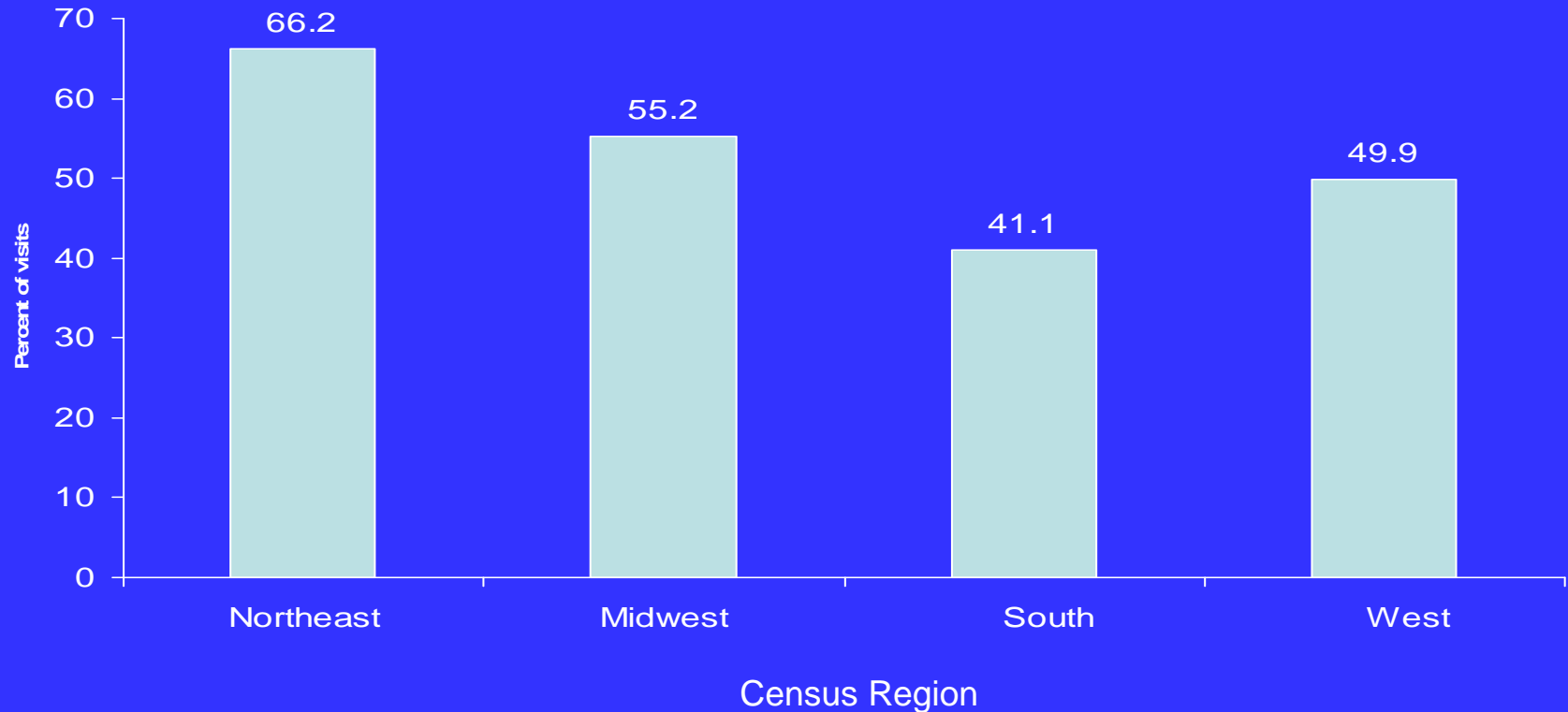
Emergency Department Visits for Childhood Asthma, 1998-2006



*Statistically significant $p < .05$

Source: National Hospital Ambulatory Medical Care Survey
Children < 18 years of age

Warfarin Prescribing for Atrial Fibrillation Ambulatory Care, 2001-2006

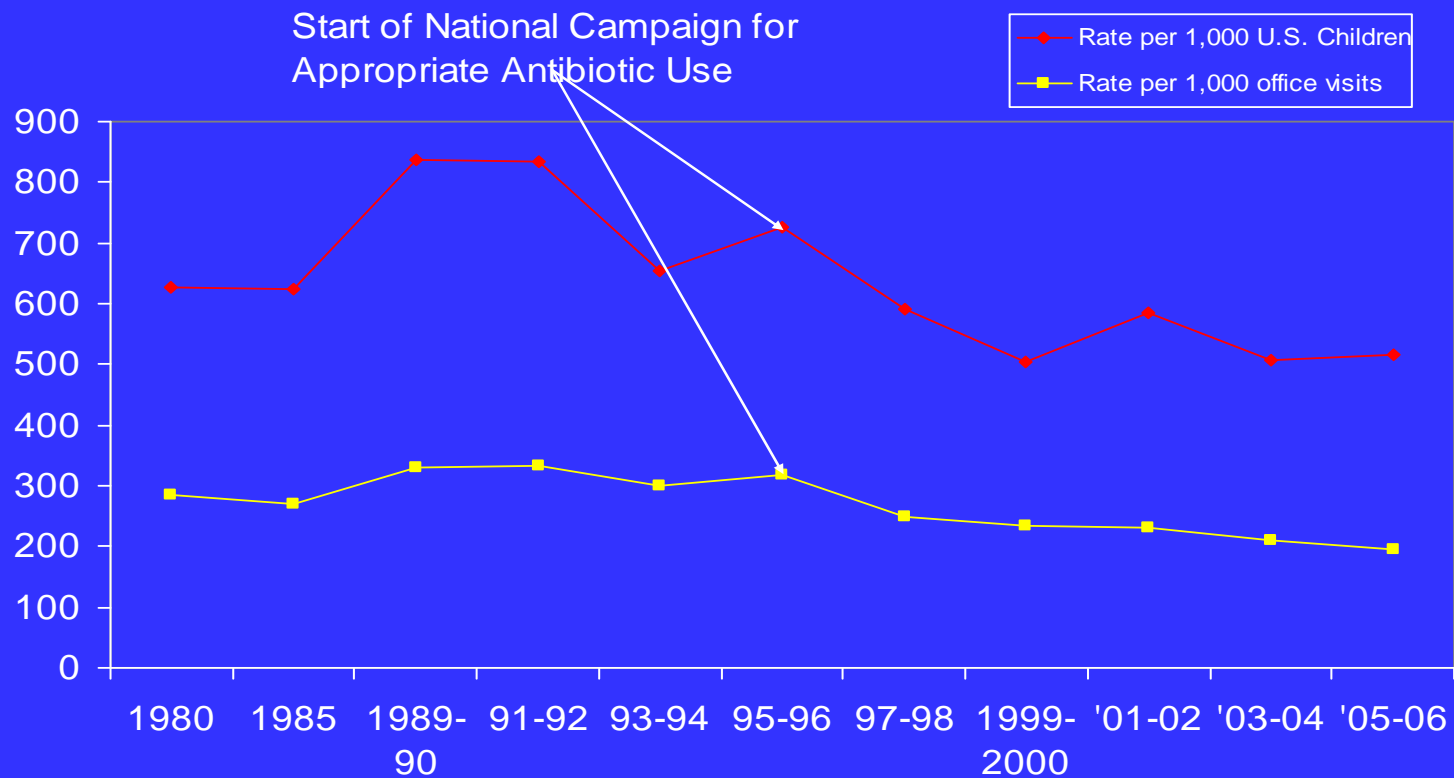


Visits by adults 20 years and older with atrial fibrillation and no recorded contraindications to treatment to physician offices and outpatient departments.

Source: National Ambulatory Medical Care Survey, 2001-2006

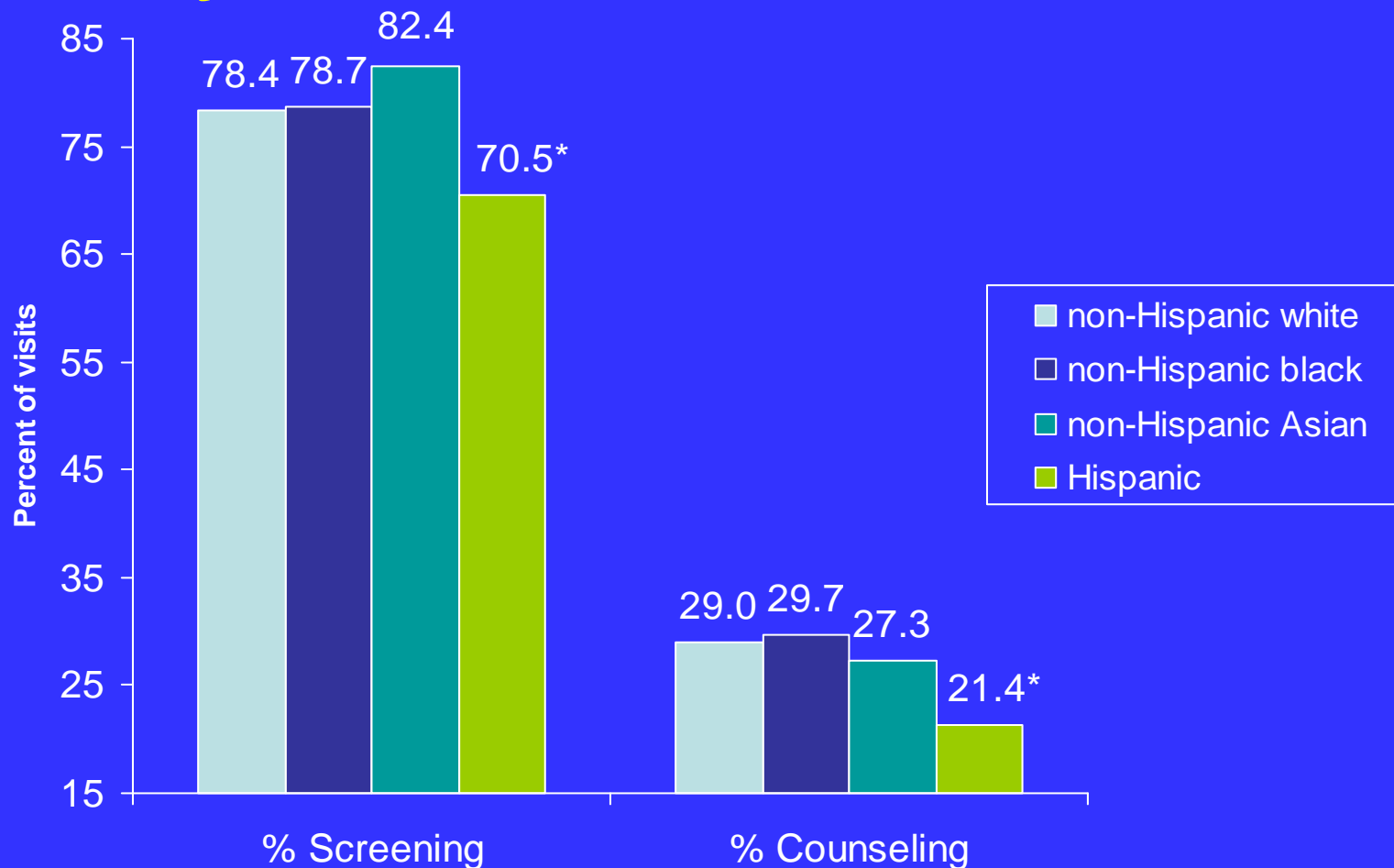
Citation: Niska R, Han B. J Am Board Fam Med. 2009 May-Jun;22(3):299-306.

Antibiotic Prescribing for Children Physician Office Visits, 1980-2006



Source: National Ambulatory Medical Care Survey, 1980-2006

Tobacco Screening and Counseling, Physician Office Visits, 2001-2005




Source: National Ambulatory Medical Care Survey. * Statistically significant $p < .05$

Citation: Sonnenfeld N, Schappert SM, Lin SX. Am J Prev Med 2009;36(1):21-28.

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<http://www.cdc.gov/nchs/nhcs.htm>

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What are the National Health Care Surveys?

The National Health Care Surveys are a family of provider-based surveys designed to meet the need for objective, reliable information about the organizations and providers that supply health care, the services rendered, and the patients they serve. ([Read more](#))

Health care surveys conducted by NCHS

Data from the National Health Care Surveys are organized around the settings in which health care is delivered. To get survey descriptions and links to data, documentation, and reports, select a survey. [Survey Overview](#)

Ambulatory and hospital care

- Physician offices
[National Ambulatory Medical Care Survey \(NAMCS\)](#)
- Emergency and outpatient hospital departments
[National Hospital Ambulatory Hospital Medical Survey \(NHAMCS\)](#)
- Ambulatory surgery facilities
[National Survey of Ambulatory Surgery \(NSAS\)](#)
- Inpatient hospital departments
[National Hospital Discharge Survey \(NHDS\)](#)

Long-term care

- Nursing homes
[National Nursing Home Survey \(NNHS\)](#)
- Home and hospice care providers
[National Home and Hospice Care Survey \(NHHCS\)](#)

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