

# Increasing the sample: How can state-based estimates help monitor healthcare reform?

2012 National Conference on Health Statistics  
Monitoring Health Care Reform through Provider-  
based Surveys: New Initiatives from the NAMCS &  
NHAMCS

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*Farida A. Bhuiya, MPH*  
*National Center for Health Statistics*  
*Ambulatory and Hospital Care Statistics Branch*



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# Overview

- Survey goals
- NHAMCS
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- NAMCS
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# Survey Goals

- Produce national statistics on ambulatory care utilization
- Provide data for health policy formulation
- Provide comparative data for medical practice management

# Ability to monitor changes in ...

- The performance of the U.S. health care system
- Care for the rapidly aging population
- Changes in health insurance coverage
- The introduction of new medical technologies
- The adoption of electronic health records

# **National Hospital Ambulatory Medical Care Survey (NHAMCS)**

# NHAMCS History

- 1992-present
- Patient visits to:
  - Emergency departments (EDs)
  - Outpatient departments (OPDs)
  - Ambulatory surgery locations (ASLs)
- 600 hospitals and 246 freestanding ASCs distributed over a 16-month panel
  - Non-institutional general and short-stay
  - Non Federal, military, or Veterans Administration facilities

# NHAMCS & Healthcare Reform

- Sponsor – DHHS, Assistant Secretary for Preparedness and Response
- Purpose – To monitor role of ED care as it relates to health care reform
  - Establish baseline of information about the status of ED care
  - Support state activities to monitor the effects of the expansion of Medicaid programs on ED crowding

# Obtaining State Estimates

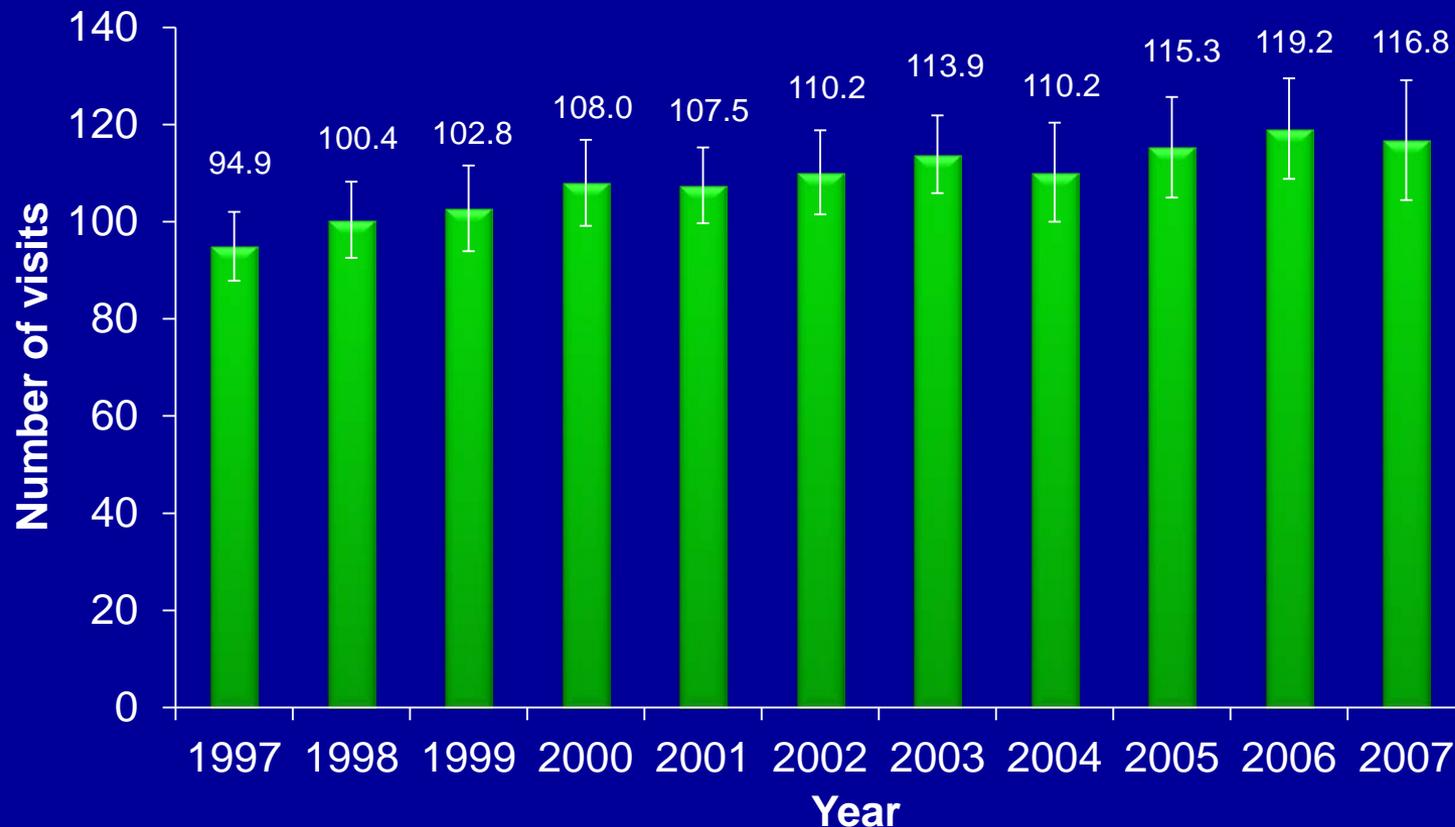
- Increase sample to add 167 hospitals
- Collect data from the ED of new hospitals
- Focus on the 5 most populous states:
  - California
  - Florida
  - Illinois
  - New York
  - Texas

# Specific Measures

1. Length of visit: Median length of visit among all patients seen in ED
2. Visits per population: Number of visits per population in each state
3. Wait time: Among patients who are seen by a physician, the median wait time to see a physician
4. Visits by payer: Number of visits by payer (private, Medicare, Medicaid, uninsured)
5. Admission: Median length of visit for patients admitted to the hospital through the ED

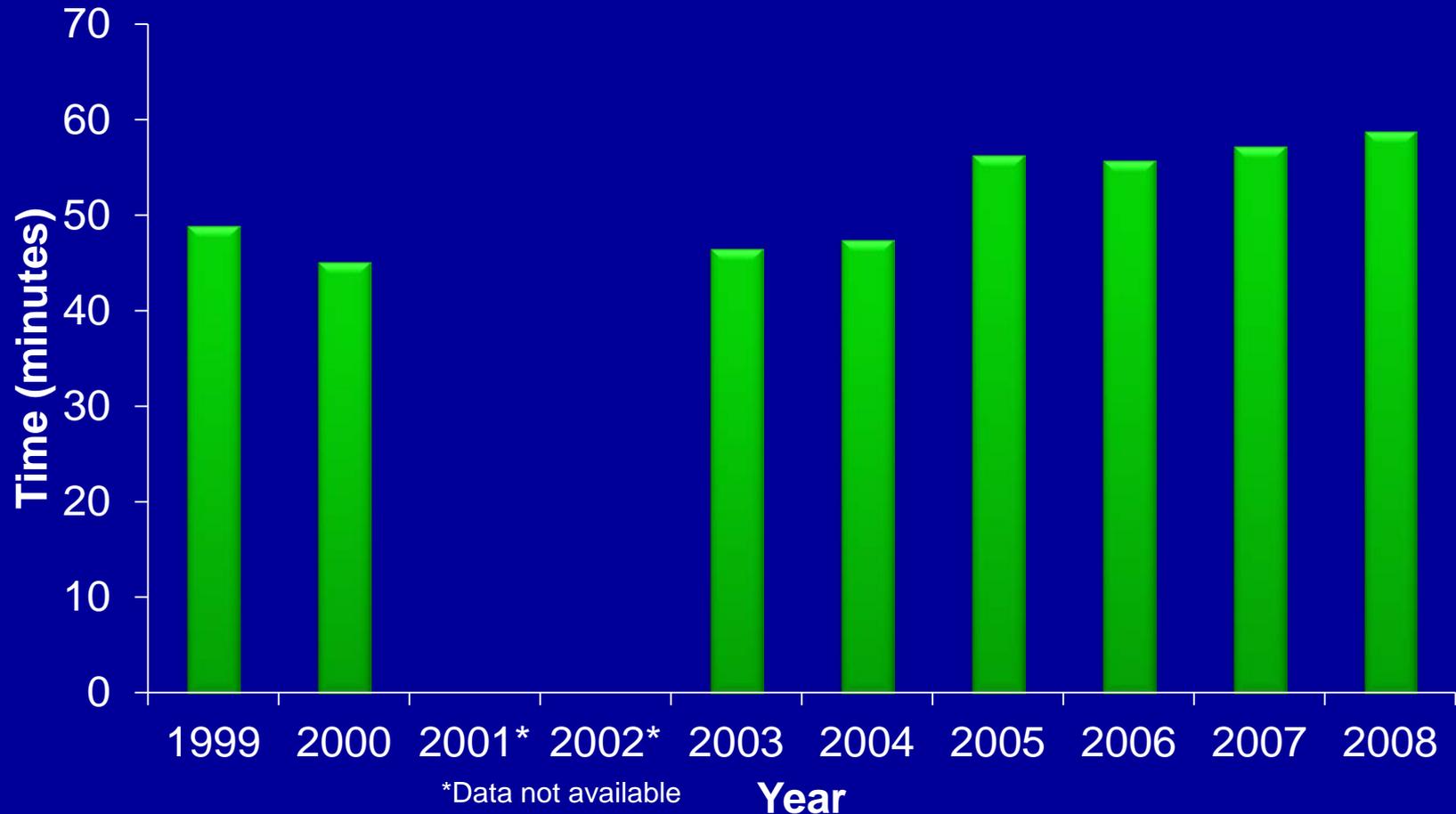
# Examples of NHAMCS Estimates

Figure 1. Annual number of ED visits, with 95% confidence intervals: United States, 1997-2007



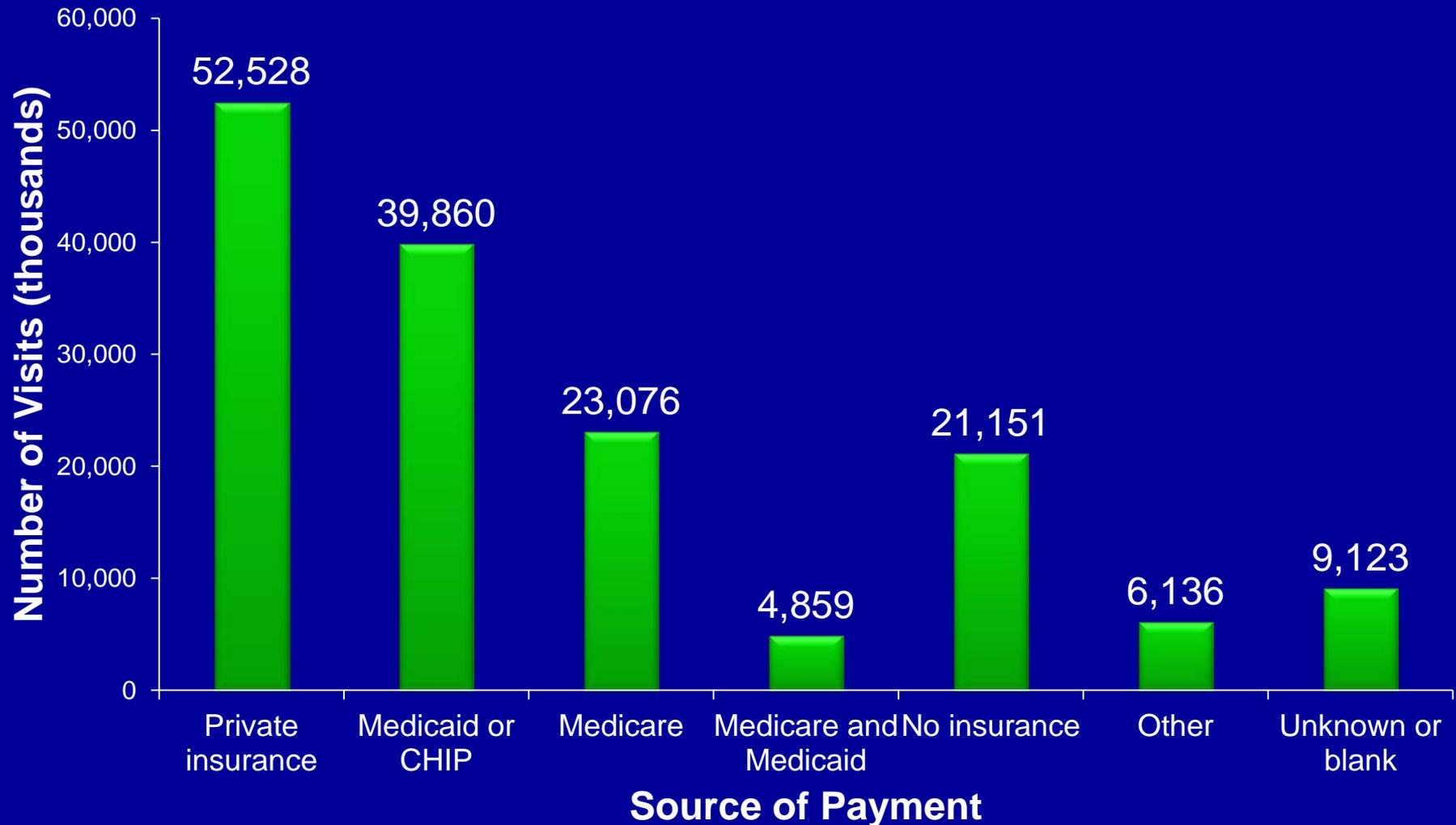
Source: CDC/NCHS, National Hospital Ambulatory Medical Care Survey

Figure 2. Average time spent waiting to be seen at ED: United States, 1999-2008



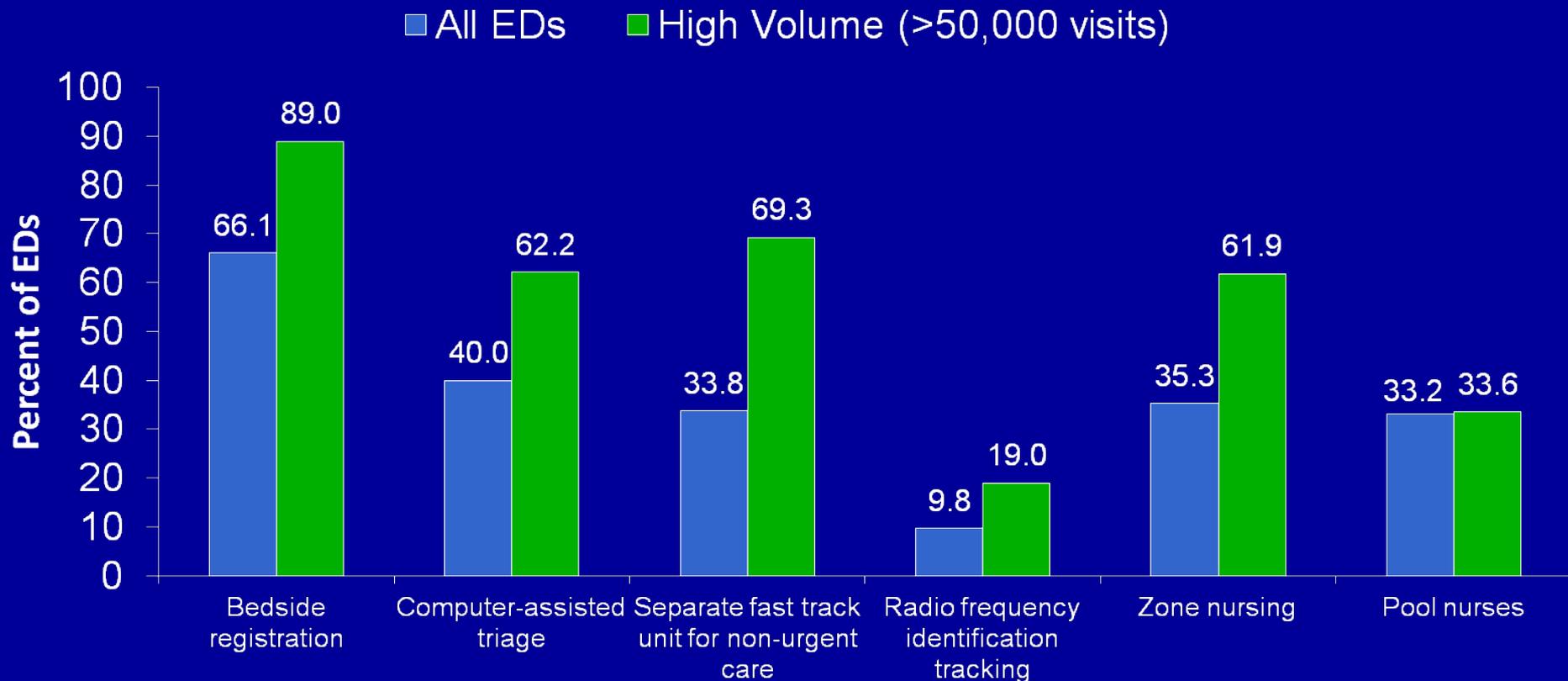
SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 1999-2008.

# Figure 3. Distribution of ambulatory visits by source of payment: United States, 2009



Source: National Hospital Ambulatory Medical Care Survey, 2009

# Figure 4. Emergency department strategies to reduce crowding: United States, 2007



Citation: McCaig LF *et al.* "Estimates of Emergency Department Capacity: United States, 2007, NCHS Health E-Stat 2009, [http://www.cdc.gov/nchs/data/hestat/ed\\_capacity/ED\\_capacity.htm](http://www.cdc.gov/nchs/data/hestat/ed_capacity/ED_capacity.htm)

# National Ambulatory Medical Care Survey (NAMCS)

# NAMCS History

- 1973-present
- Patient visits to:
  - Office-based physicians
  - Community health centers (CHCs)
- Sample
  - 3,000 non-federal office-based physicians
  - 104 community health centers (CHCs)
    - With up to 3 physicians and mid-level providers within each

# NAMCS & Healthcare Reform

- Sponsor – CDC
  - Funding from Patient Protection and Affordable Care Act 2010
- Purpose
  - Monitor the effect of expanded health coverage on the use of appropriate preventive services
  - Allow states to compare visits to their physician offices and CHCs against national estimates

# Obtaining State Estimates

- State-based estimates for the 34 most populous states
- Increase sample size
  - Physicians - ~20,000 (5-fold increase)
  - CHCs - ~2,000 service delivery sites
    - ~6,000 providers
- Modify NAMCS sampling methodology
  - Stratified list sample

# State-based Estimates

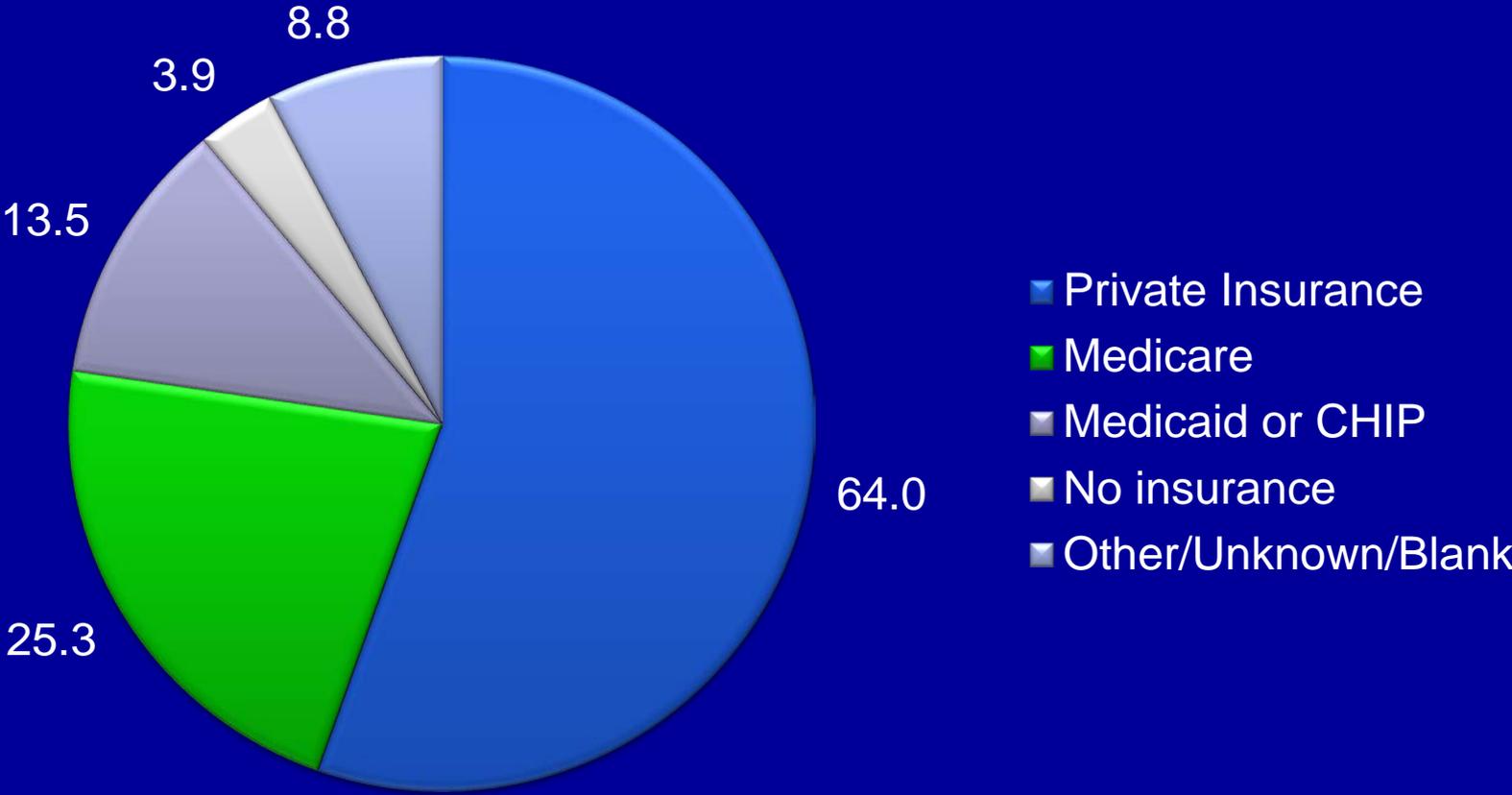
Alaska	Iowa	Missouri	Pennsylvania
Alabama	Illinois	Mississippi	South Carolina
Arkansas	Indiana	North Carolina	Tennessee
Arizona	Kansas	New Jersey	Texas
California	Kentucky	New York	Utah
Colorado	Massachusetts	Ohio	Virginia
Connecticut	Maryland	Oklahoma	Washington
Florida	Michigan	Oregon	Wisconsin
Georgia	Minnesota		

# Specific Measures

- Payment status
- Reason for visit
- Continuity of care
- Services/tests ordered or performed
- Medications prescribed

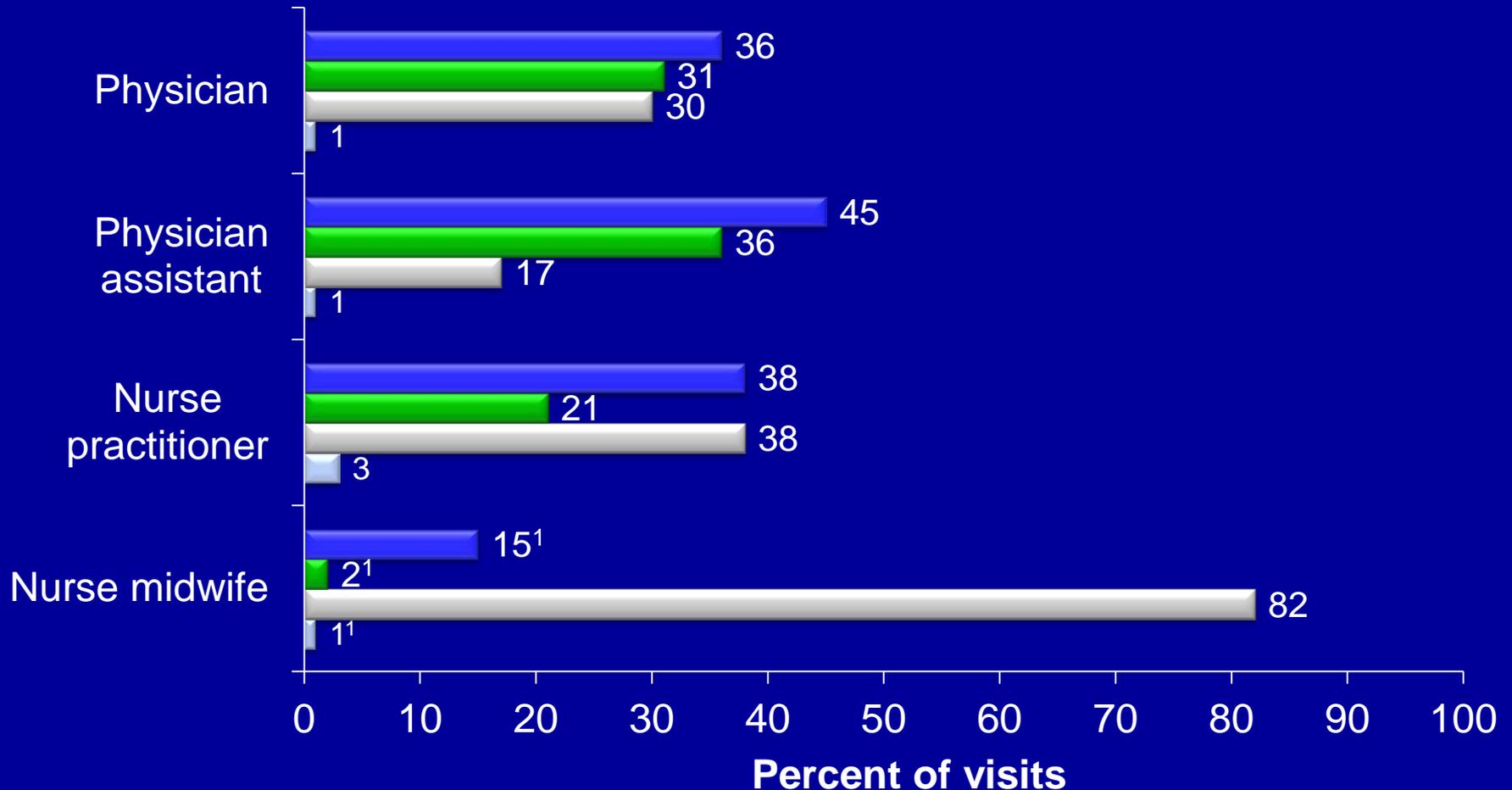
# Examples of NAMCS Estimates

Figure 5. Expected sources of payment at physician office visits: United States, 2009



# Figure 6. Major reason for CHC visit by type of provider: United States, 2006-2008

■ New problem ■ Chronic problem ■ Preventive care ■ Other or unknown



NOTE: Data are from the 2006-08 NAMCS. <sup>1</sup> Estimate does not meet standard of reliability or precision.

# Table 1. Selected services ordered or provided by primary care setting: United States, 2008

Services ordered or provided	Physician offices	Community health centers	Outpatient departments
	Age-adjusted percentage of visits		
Drug or immunization mentioned	80	83	81
Lab and other tests	50	49	52
Health education service	39	40	46
Any imaging	14	11	18
Nonmedication treatment	10	10	16

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

# Summary

- NHAMCS estimates will allow states to monitor the effects of expansion of Medicaid programs on crowding in emergency departments
- NAMCS estimates will allow CDC and its state health department partners to monitor the effect of expanded health coverage on the use of appropriate preventive services.

# Contact Information

Farida A. Bhuiya, MPH

National Center for Health Statistics  
Ambulatory & Hospital Care Statistics Branch  
3311 Toledo Road, Room 3329  
Hyattsville, Maryland 20782

Phone: 301-458-4801

Email: [fbhuiya@cdc.gov](mailto:fbhuiya@cdc.gov)

NAMCS & NHAMCS website: <http://www.cdc.gov/nchs/ahcd.htm>