



The U. S. National Health Care Surveys: Tools for Health Care Policy

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September 22, 2008

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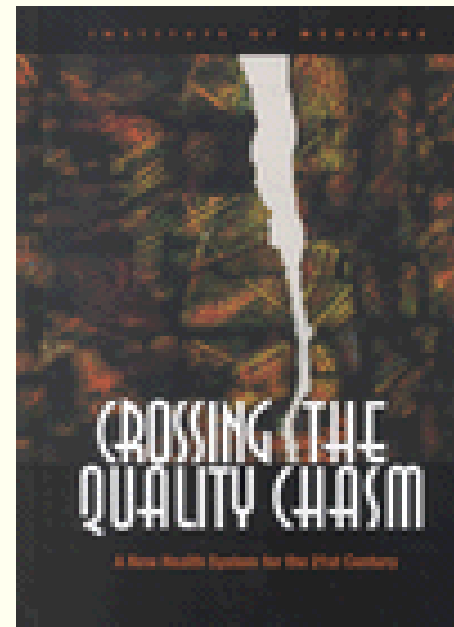


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Quality Goals: U.S. Health Care System

- **Effective**
- **Equitable**
- **Timely**
- **Efficient**
- **Safe**
- **Personalized**

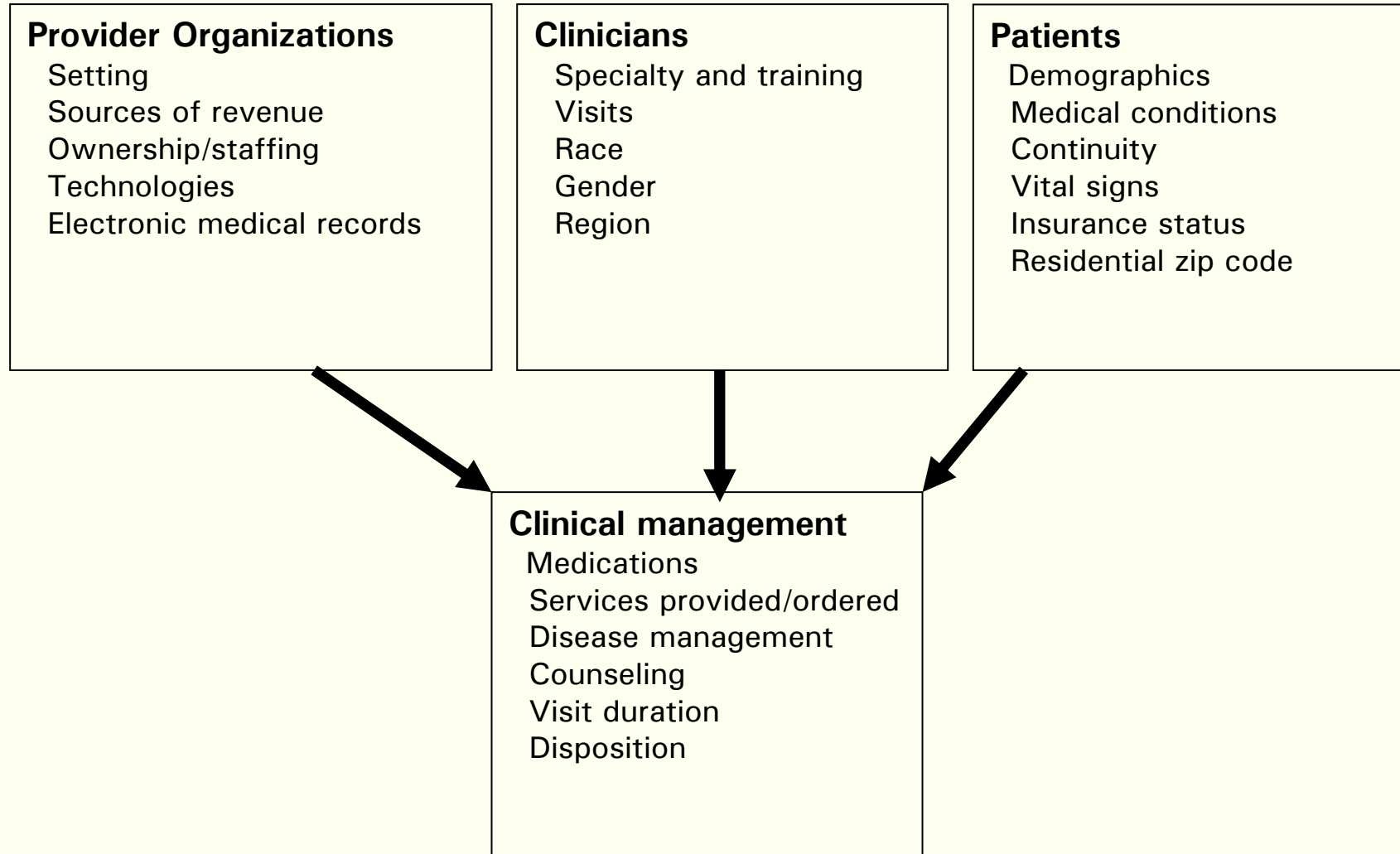


Source: Institute of Medicine. "Crossing the Quality Chasm: A New Health System for the 21st Century", 2001. <http://www.iom.edu/?id=12736>

The National Health Care Surveys

- Physicians in offices
- Hospital emergency and outpatient departments
- Ambulatory surgery facilities
- Hospital inpatient departments
- Nursing homes
- Home and hospice care agencies
- Residential care facilities

Examples of Data



Quality of US Outpatient Care

Purpose:

- enhance the range of indicators available for monitoring quality in ambulatory care
- construct process measures
 - pharmacological management of chronic diseases (10 measures)
 - appropriate antibiotic use (3 measures)
 - preventive counseling (5 measures)
 - screening tests (4 measures)
 - inappropriate prescribing in elderly (1 measure)
- examine changes over time and differences across racial and ethnic groups

Citation: Ma J, Stafford RS. Quality of US outpatient care: temporal changes and racial/ethnic disparities. Arch Intern Med 2005;165:1354-1361.

Quality of US Outpatient Care

Data Used

- Sampled visits to physician offices [National Ambulatory Medical Care Survey (NAMCS)] and hospital outpatient departments [National Hospital Ambulatory Medical Survey (NHAMCS)], 1995-2002
- Data obtained on up to 3 diagnoses, 6 medications, check boxes for selected diagnostic and screening services, counseling services
- Additional variables in analysis: age, sex, race/ethnicity, setting

Citation: Ma J, Stafford RS. Quality of US outpatient care: temporal changes and racial/ethnic disparities. Arch Intern Med 2005;165:1354-1361.

Quality of US Outpatient Care

Example Indicator

Appropriate* Therapy for Adult Visits with Atrial Fibrillation (AF)

Measure	Denominator	Numerator	Prominent Exclusions
Antithrombotic therapy abuse	AF visits	AF visits with warfarin, dicumarol, anisindione, or aspirin	AF visits with GI bleeding, duodenitis, alcoholism, drug abuse, Alzheimer's, gait abnormality, cerebral hemorrhage, seizure disorder, CNS tumors, renal insufficiency, or thrombocytopenia

*Guidelines from American Society of Cardiology/American Heart Association/European Society of Cardiology

Citation: Ma J, Stafford RS. Quality of US outpatient care: temporal changes and racial/ethnic disparities. Arch Intern Med 2005;165:1354-1361.

Quality of US Outpatient Care

Pharmacological Management of Chronic Diseases, 1992 and 2002

Measure	PERCENT OF VISITS	
	1992	2002
No benzodiazepine for depression	87	86
Antithrombotic therapy for AF	42	60
Diuretic + β -blocker, HTN	51	58
IC, asthma, adults	25§	42§
ACE inhibitor, CHF	27	39
IC, asthma, children		11§
36§		
β -blocker, CAD	22	31

§significant differences ($p < .05$)

AF = atrial fibrillation

HTN = hypertension

ACE = angiotensin converting enzyme

CHF = congestive heart failure

CAD = coronary artery disease

IC = inhaled corticosteroid

Data Sources: NAMCS/NHAMCS, 1995-2002

Citation: Ma J, Stafford RS. Quality of US outpatient care: temporal changes and racial/ethnic disparities. Arch Intern Med 2005;165:1354-1361.

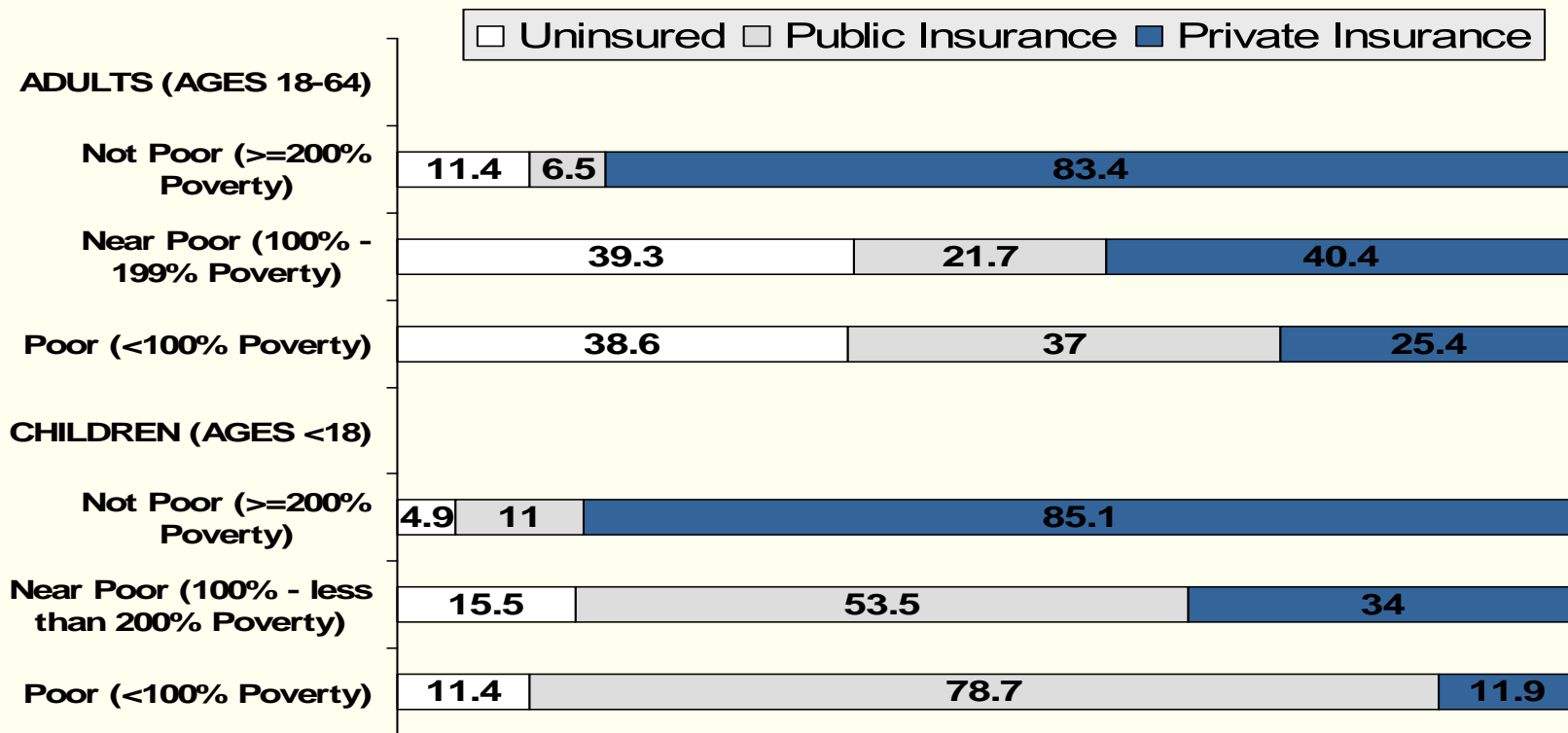
Medicaid Payment Policy

Research Question:

Does the amount physicians are paid for Medicaid services affect duration of services delivered to Medicaid recipients?

Citation: Decker SL. Medicaid physician fees and the quality of medical care of Medicaid patients in the USA. *Rev Econ Household* 2007(5);95-112.

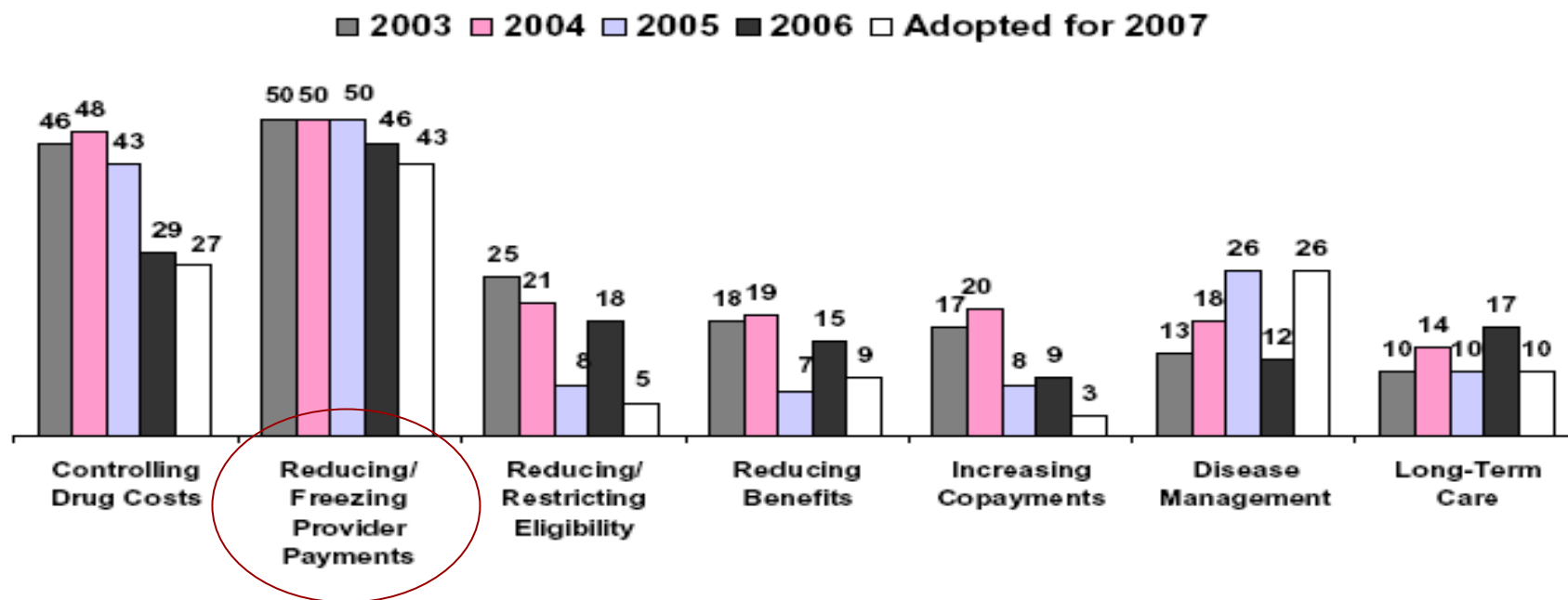
U.S. Insurance Coverage, 2007 Children and Working-Age Adults



Source: National Health Interview Survey, 2007

Citation: Cohen RA, Martinez ME, Free HL. Health insurance coverage: Early release of estimates from the National Health Interview Survey, 2007. June 2008. <http://www.cdc.gov/nchs/nhis.htm>;
Slide courtesy of S. Decker

New Medicaid Cost Containment Strategies in States, FY 2003 – FY 2007



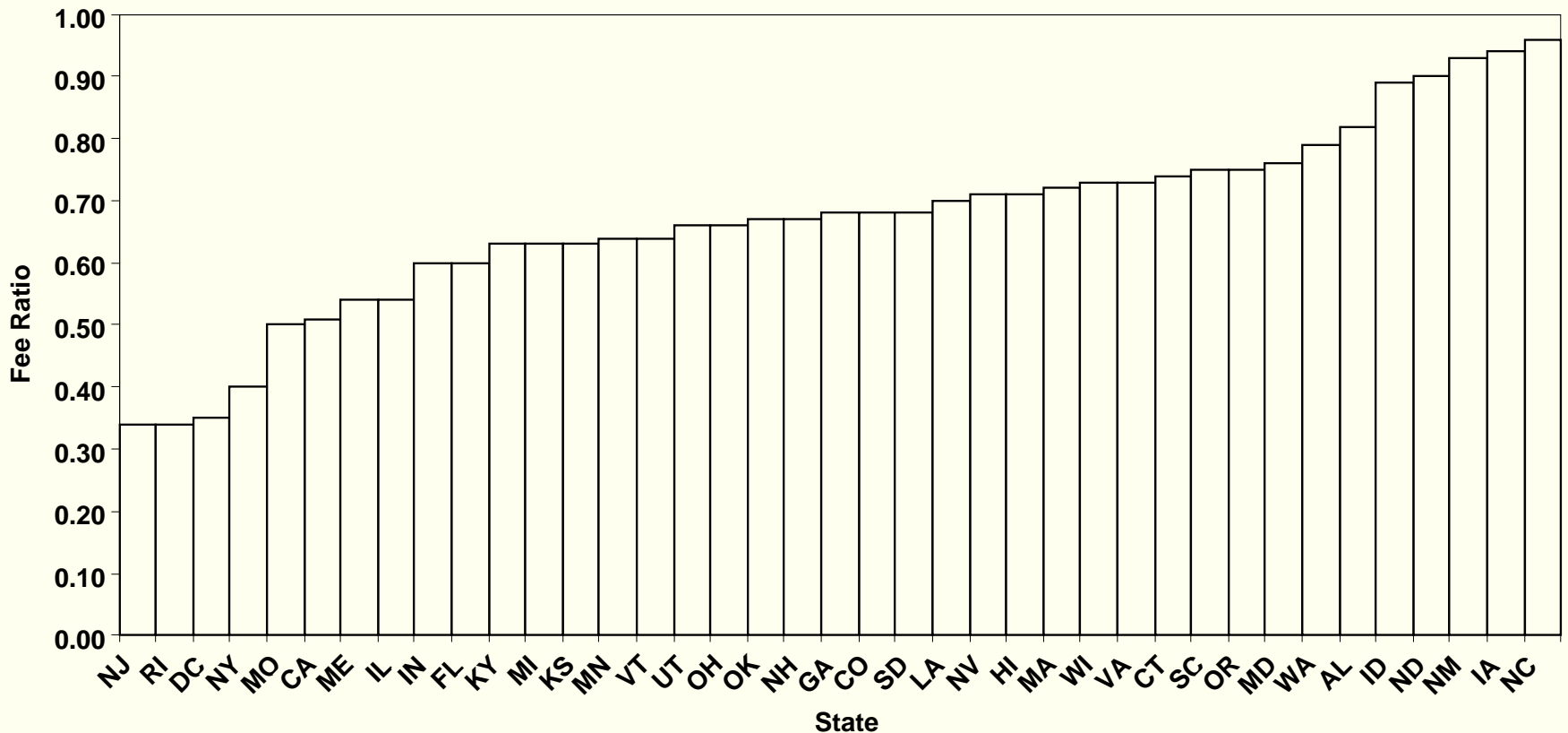
NOTE: Past survey results indicate not all adopted actions are implemented.

SOURCE: KCMU survey of Medicaid officials in 50 states and DC conducted by Health Management Associates, September and December 2003, October 2004, October 2005, October 2006

**KAISER COMMISSION ON
Medicaid and the Uninsured**

Citation: "State Fiscal Conditions and Medicaid", Kaiser Commission on Medicaid and the Uninsured.
<http://www.allhealth.org/BriefingMaterials/Kaiser-StateFiscalConditionsandMedicaid-632.pdf>

Medicaid to Medicare Fee Ratios, 2003



Source: Zuckerman, S., J. McFeeters, J. Cunningham, and L. Nichols. Changes in Medicaid Physician Fees, 1998-2003. Health Affairs 2004;W4: 374-384. Slide Courtesy of Sandra L. Decker

Medicaid Payment Policy

NAMCS Data

Included: 84,220 visits to physician offices:
1989, 1993, 1998, 2003, patients under 65
years of age

Outcome variable: Visit duration

Other NAMCS variables: expected source of
payment, visit diagnoses, patient age, sex,
race, ethnicity, non-metropolitan county,
state*, year

Citation: Decker SL. Medicaid physician fees and the quality of medical care of Medicaid patients in the USA. Rev Econ Household 2007(5):95-112.
To prevent disclosure of patients and physicians, state is not included in public use files.

Medicaid Payment Policy

Other Data Sources

State Medicaid fees

- Zuckerman *et al.* Health Affairs 2004
- Norton S. Urban Institute 1999
- Physician Payment Review Commission 1989

Physicians per 1,000 population

- Health Resources and Services Administration, Area Resource File

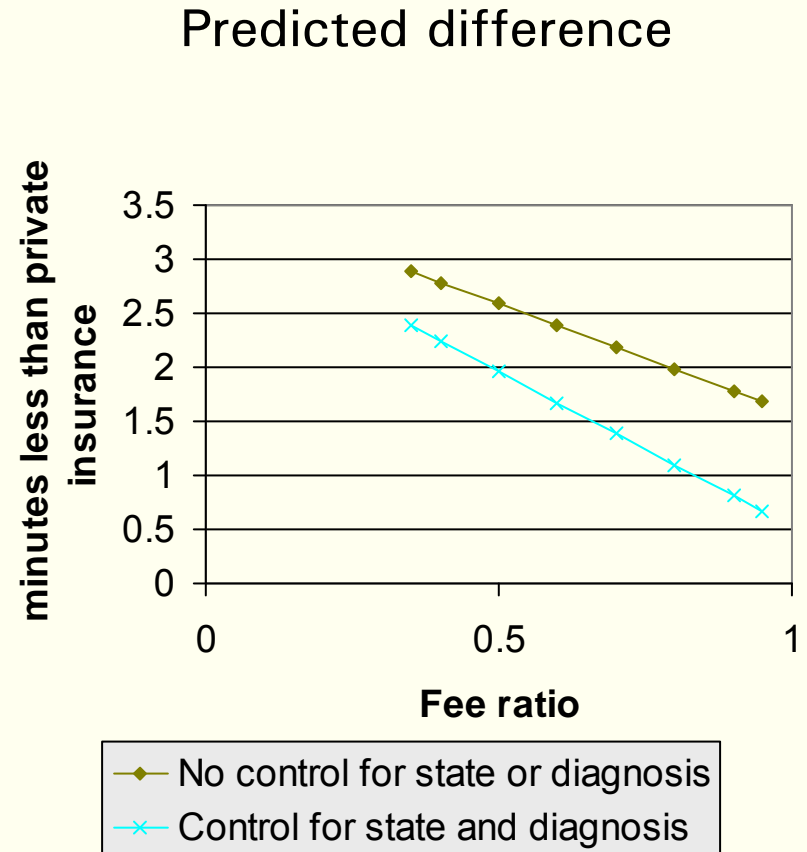
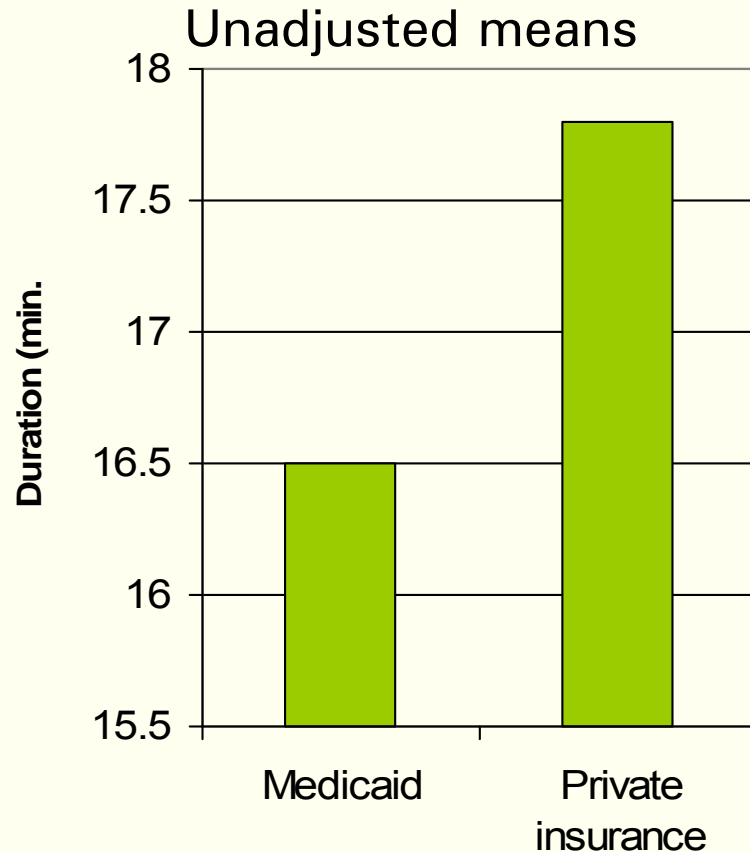
State non-elderly on Medicaid

- U.S. Census Bureau, Current Population Survey

Citation: Decker SL. Medicaid physician fees and the quality of medical care of Medicaid patients in the USA. Rev Econ Household 2007(5);95-112.

Results

Fee Ratio and Duration of Visit



Source: National Ambulatory Medical Care Survey, 1989, 1993, 1998, 2003

Citation: Decker SL. Medicaid physician fees and the quality of medical care of Medicaid patients in the USA. Rev Econ Household 2007(5);95-112.

Emergency Care Waits Found to Be on Rise

By CHRISTOPHER LEE
Washington Post Staff Writer

Patients are waiting longer for care in the nation's emergency rooms, a potentially deadly result of the shrinking number of emergency departments and rising demand for emergency services, according to a new study by researchers at Harvard Medical School.

Half of all emergency room patients waited 30 minutes or more before being examined by a doctor in 2004, a 36 percent increase from a median wait time of 22 minutes in 1997, according to the study, published today in the journal *Health Affairs*.

Even those experiencing a heart attack are not assured speedy treat-

Still Waiting

It is taking longer for patients to see a physician in the nation's emergency rooms.

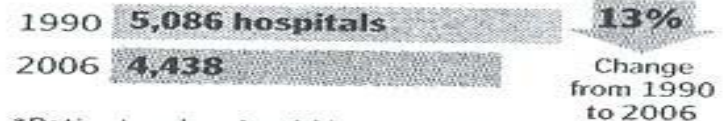
Median wait times in minutes in 1997 and 2004, by group



The number of visits to emergency rooms is rising, according to the most recent data available . . .



. . . while the number of hospitals operating 24-hour emergency departments fell by 13 percent during the same time period.



*Patients who should be seen in less than 15 minutes.

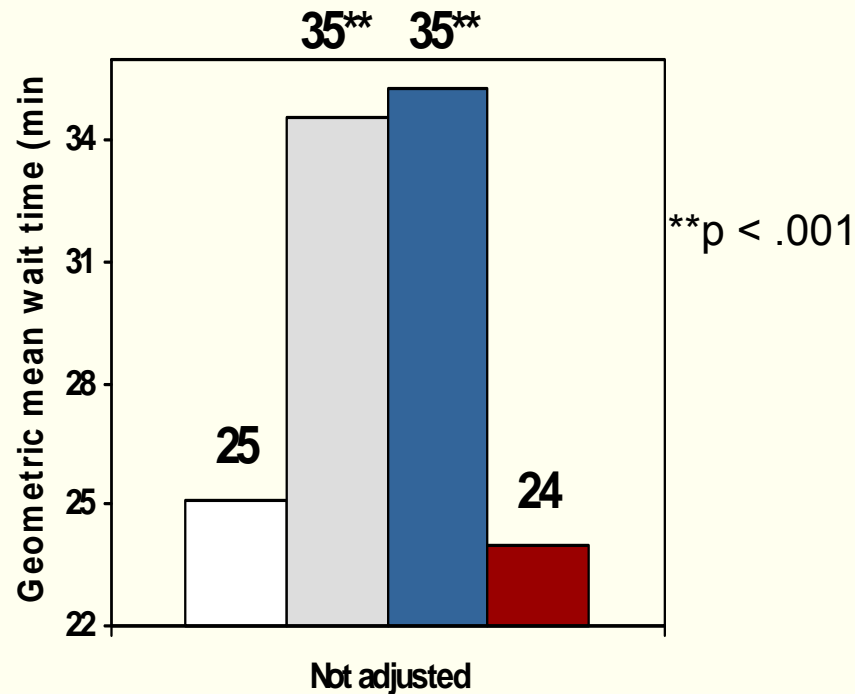
SOURCES: *Health Affairs*, Jan. 15, 2008; American Hospital Association

Source: National Hospital Ambulatory Medical Care Survey, 1997-2004.

Citation: Wilper AP, et al. Waits to see an emergency department physician: U.S. trends and predictors, 1997-2004. *Health Aff (Millwood)*. 2008 Mar-Apr;27(2):w84-95.

Visits by Hispanic and non-Hispanic Black Patients Less Timely

PRELIMINARY RESULTS



Unadjusted

Visits by non-Hispanic black and Hispanic take

10 minutes longer to see a physician

□ Non-Hispanic white
■ Hispanic

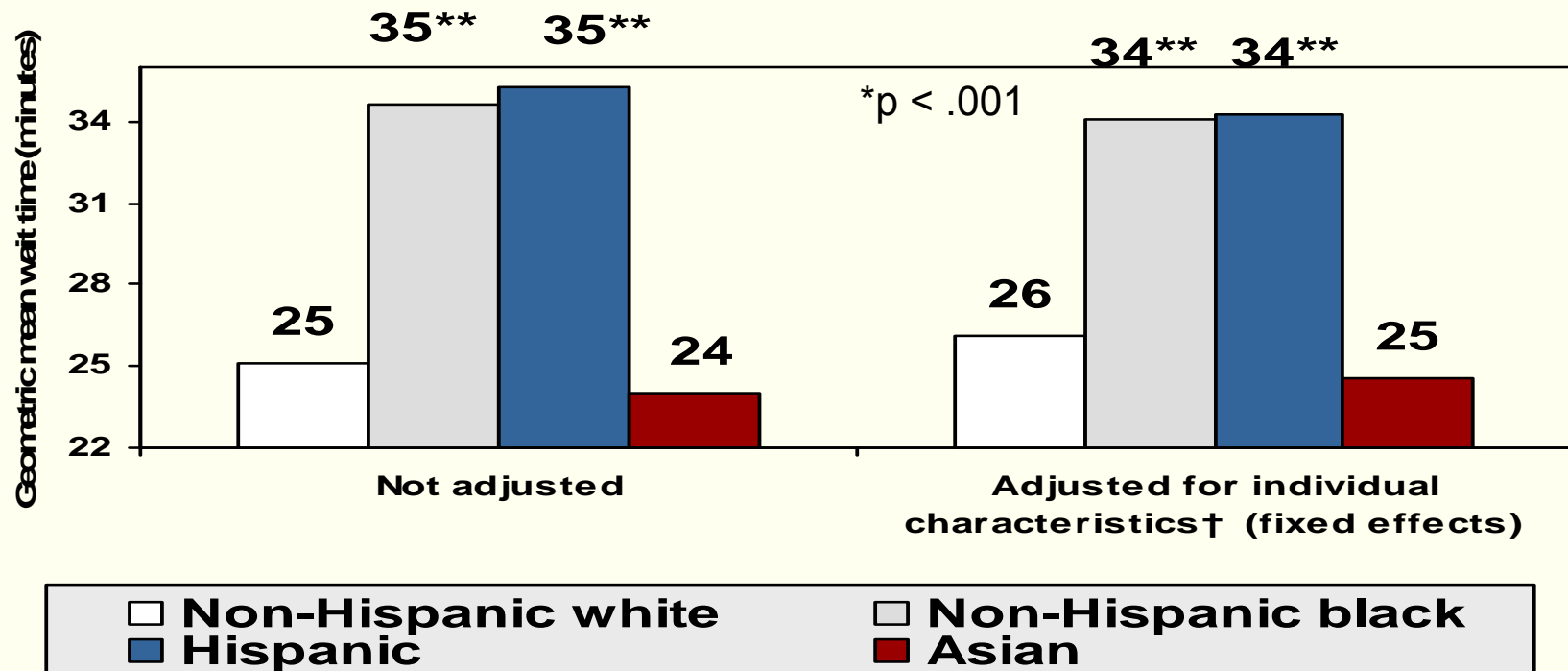
□ Non-Hispanic black
■ Asian

Source: National Hospital Ambulatory Medical Care Survey, 2005-06

Citation: Sonnenfeld *et al.* In progress

Adjusted for Visit/patient Characteristics

PRELIMINARY RESULTS



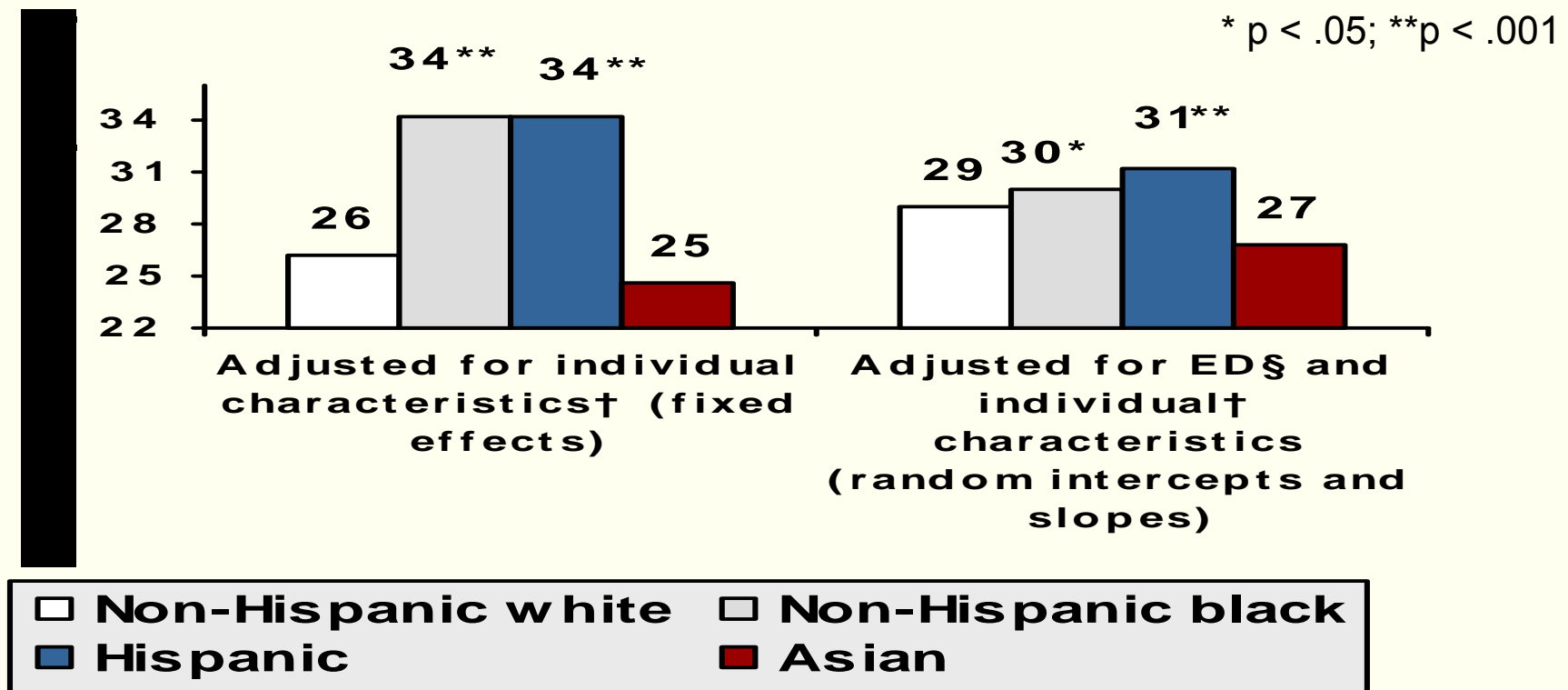
†Age, gender, triage assessment, time of day visited, and expected source of payment

Source: National Hospital Ambulatory Medical Care Survey, 2005-06

Citation: Sonnenfeld *et al.* In progress

EDs have Different Average Waiting Times

PRELIMINARY RESULTS



†Age, gender, triage assessment, time of day, and expected source of payment
§ED volume, metropolitan county, high poverty in hospital zip code, teaching hospital

Source: National Hospital Ambulatory Medical Care Survey, 2005-06

Citation: Sonnenfeld *et al.* In progress

What Affects ED Differences?

PRELIMINARY RESULTS

- Intercept (wait for average visit at average hospital)
 - High volume hospitals ↑
 - ED located in urban county ↑
 - ED located in high poverty zip code ↑
- Non-emergencies compared with emergencies
 - Teaching hospitals ↑

Source: National Hospital Ambulatory Medical Care Survey, 2005-06

Citation: Sonnenfeld *et al.* In progress

Use of Non-recommended Tests, 1997-2002

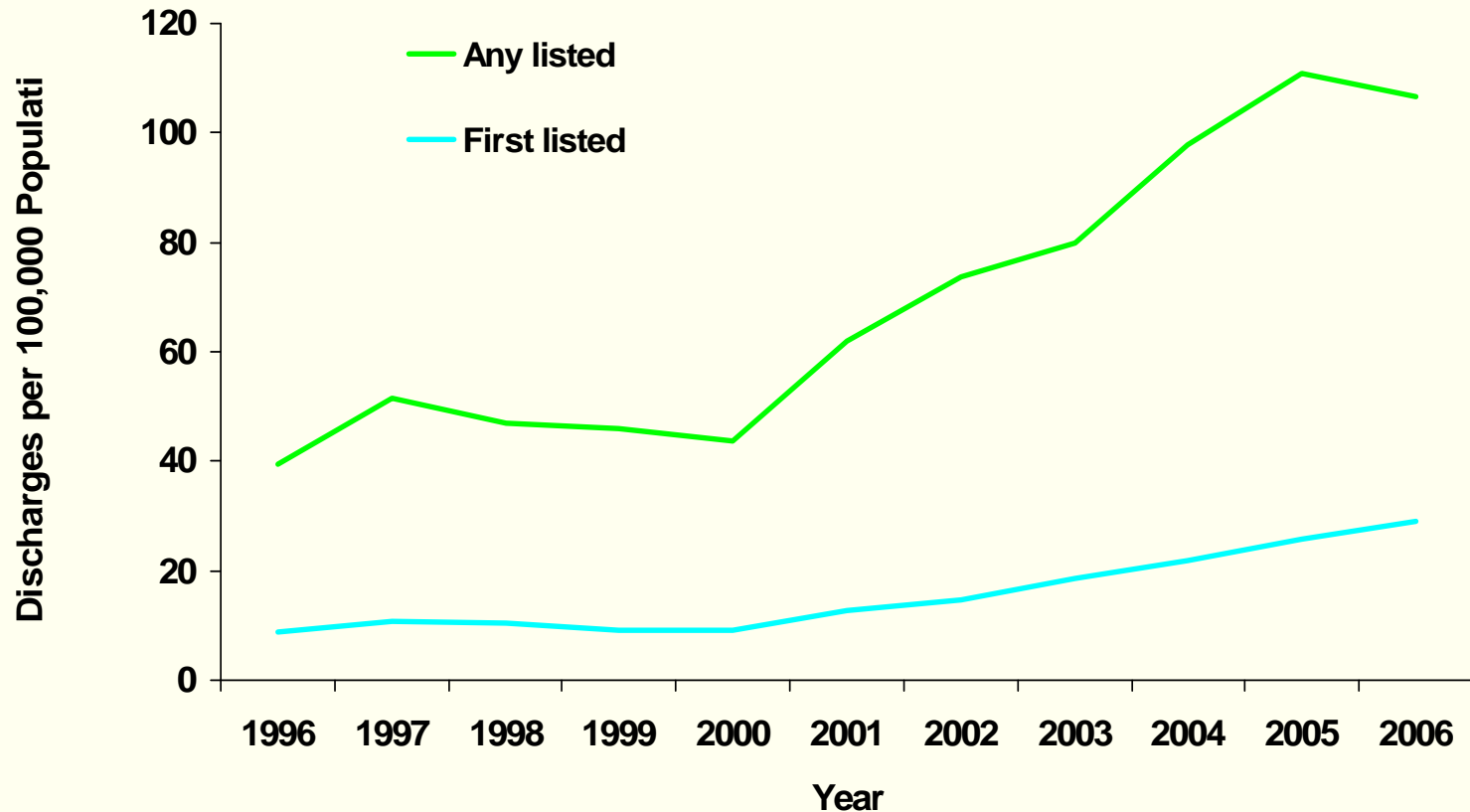
<u>Test/Procedure</u>	<u>% of preventive visits</u>
Complete Blood Count (CBC)	27
Hematocrit	17
Urinalysis	37
X-ray	8
Electrocardiogram	9

Preventive visit defined as patient's reason for visit is general examination, physician reported reason for visit is preventive care, and physician's only diagnosis is general examination.

Source: National Ambulatory Medical Care Survey

Citation: 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.

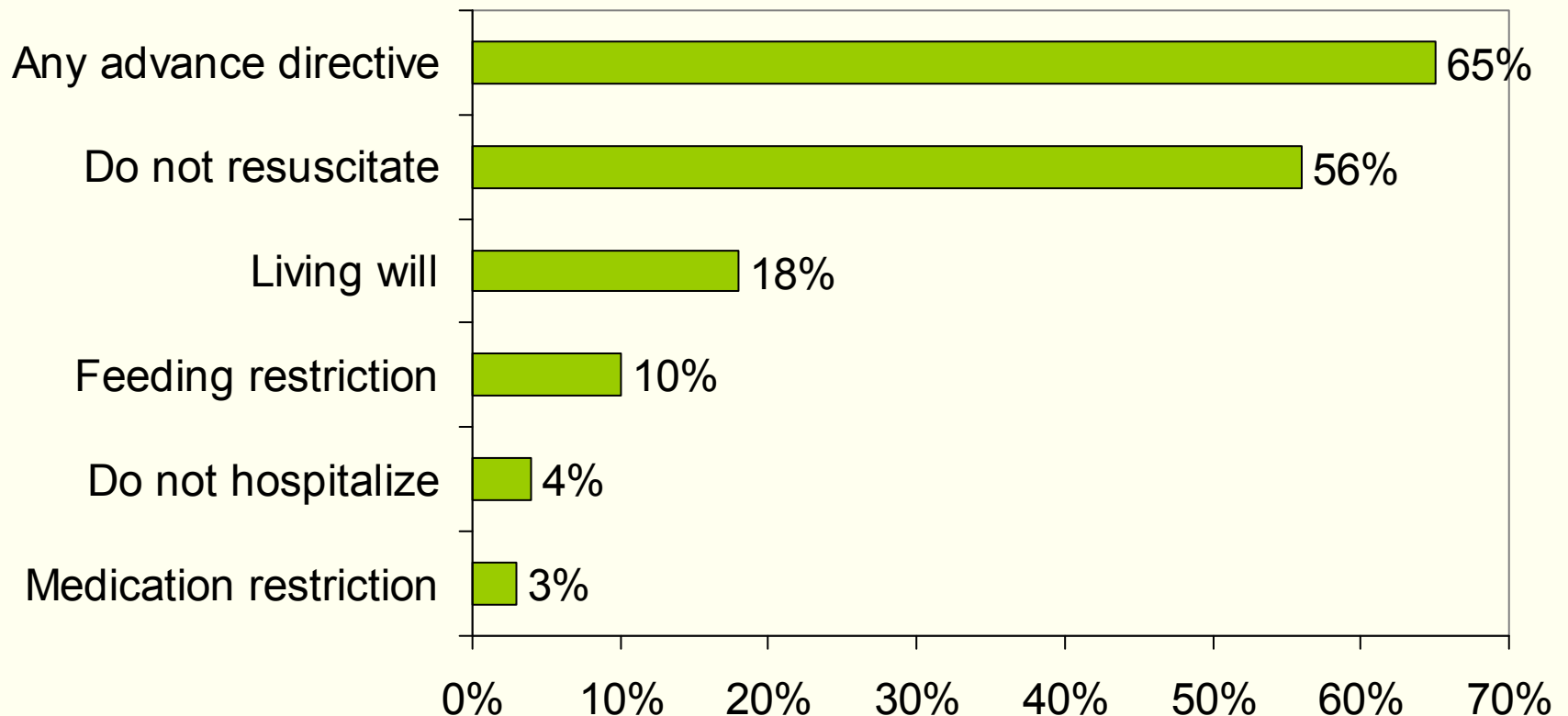
Inpatient Hospitalization Rates with *Clostridium difficile* First and Any Listed Diagnosis, 1996-2006



Source: National Hospital Discharge Survey, 1996-2006

Citation: McDonald LC, Owings M, Jernigan DB. *Clostridium difficile* infection in patients discharged from US short-stay hospitals, 1996-2003. *Emerg Infect Dis.* 2006 Mar;12(3):409-15.

Nursing Home Residents with Advance Directives, 2004



Source: National Nursing Home Survey, 2004

Citation: http://www.cdc.gov/nchs/data/nnhsd/Estimates/Estimates_QualityOfLife_Tables.pdf#Table20

Recent Improvements

- **Increase sample size**
 - Community Health Centers, NAMCS from 2006
 - Oncologists, NAMCS 2006-07
- **Expand providers covered**
 - Ambulatory surgery facilities, 2006
- **Add information on providers, patients, and care**
 - Electronic medical records, more detail, NAMCS/NHAMCS, from 2005
 - Screening for cervical cancer, NAMCS/NHAMCS 2006-10
 - Prior contacts, NAMCS/NHAMCS-OPD from 2001, NHAMCS-ED from 2006
 - Cancer stage, radiation therapy, NAMCS 2006-07
- **Link to external data sets**
 - National Nursing Home Survey linked to Medicare MDS files, 2004
 - Patient ZIP linked to Census data on income, education, poverty levels, NAMCS/NHAMCS from 2006

Improvements Underway

- Laboratory results to be pilot tested, NAMCS, 2009
- Routine coverage of ambulatory surgery in NHAMCS
 - Hospital-based facilities, from 2009
 - Free-standing facilities, from 2010
- Redesigned National Hospital Discharge Survey, 2010
 - Clinical depth (medications, tests)
 - Resource use/billings/payments
 - Added facility characteristics
 - Better race data
 - Prior and later admissions
 - Link to National Death Index
- National Survey of Residential Care Facilities, 2010
- Update samples, NAMCS/NHAMCS, 2011
- National Nursing Home Survey, 2011

For More Information

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

National Health Care Surveys - Windows Internet Explorer

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

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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 Medical Care 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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