

# **COMMISSION ON A HIGH PERFORMANCE HEALTH SYSTEM**

# National Scorecard on U.S. Health System Performance: Complete Chartpack

Cathy Schoen and Sabrina K. H. How

# The Commonwealth Fund Commission on a High Performance Health System

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# The Commonwealth Fund

The Commonwealth Fund, among the first private foundations started by a woman philanthropist—Anna M. Harkness—was established in 1918 with the broad charge to enhance the common good.

The mission of The Commonwealth Fund is to promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, minority Americans, young children, and elderly adults.

The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. An international program in health policy is designed to stimulate innovative policies and practices in the United States and other industrialized countries.

#### NATIONAL SCORECARD: COMPLETE CHARTPACK

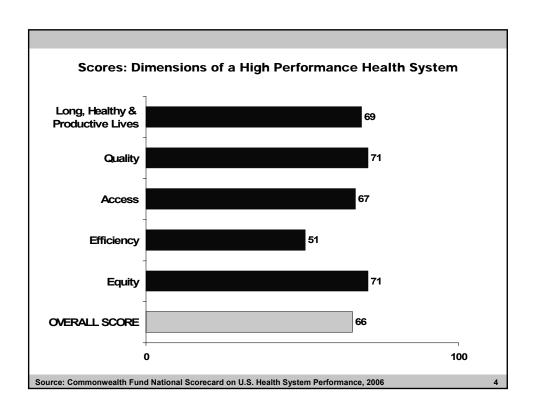
This *Chartpack* presents data for all indicators scored in the *National Scorecard on U.S. Health System Performance*. Charts display average performance for the U.S. as a whole and the range of performance found within the U.S or compared to other countries.

The charts accompany the *Health Affairs* article, "U.S. Health System Performance, A National Scorecard," and the *Technical Report* published by The Commonwealth Fund, which together provide detailed information on scoring and results:

- C. Schoen, K. Davis, S. K. H. How, and S. C. Schoenbaum,
   "U.S. Health System Performance: A National Scorecard,"
   Health Affairs Web Exclusive (Sept. 20, 2006):w457–w475.
- C. Schoen and S. K. H. How, National Scorecard on U.S. Health System Performance: Technical Report (New York: The Commonwealth Fund, Sept. 2006).

In addition to the Chartpack, the *Technical Appendix* includes full descriptions of performance indicators and data sources.

See the last page for a list of Scorecard-related publications that are available for download.



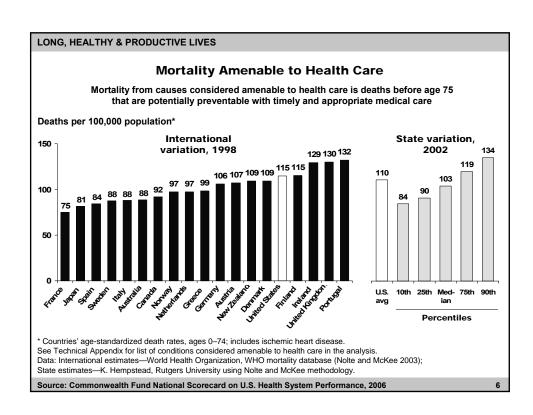
# LONG, HEALTHY & PRODUCTIVE LIVES

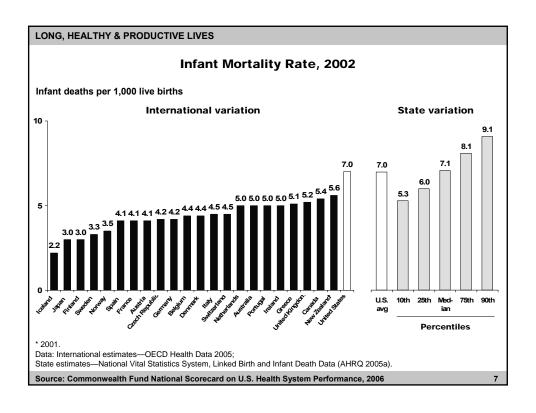
# **SECTION 1. LONG, HEALTHY, AND PRODUCTIVE LIVES**

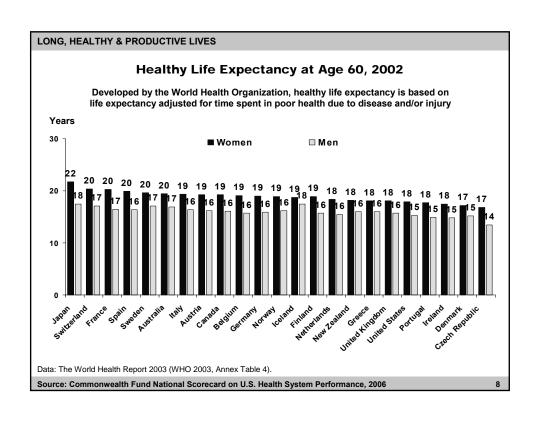
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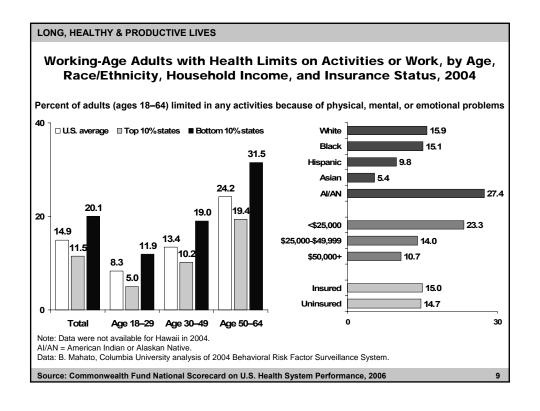
- 1. Mortality amenable to health care
- 2. Infant mortality rate
- 3. Healthy life expectancy at age 60
- 4. Adults under 65 limited in any activities because of health problems
- 5. Children who missed 11 or more days of school due to illness or injury

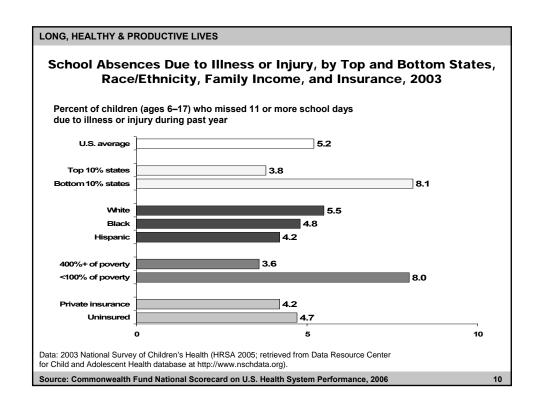
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006











#### QUALITY

### **SECTION 2. QUALITY**

Quality includes indicators organized into four groups:

- The right care
- Coordinated care
- Safe care
- Patient-centered, timely care

The Scorecard scores each group of indicators separately, and then averages the four scores to create the overall score for Quality.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

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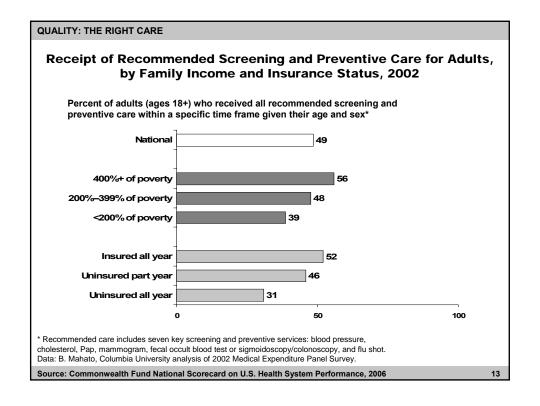
# QUALITY: THE RIGHT CARE

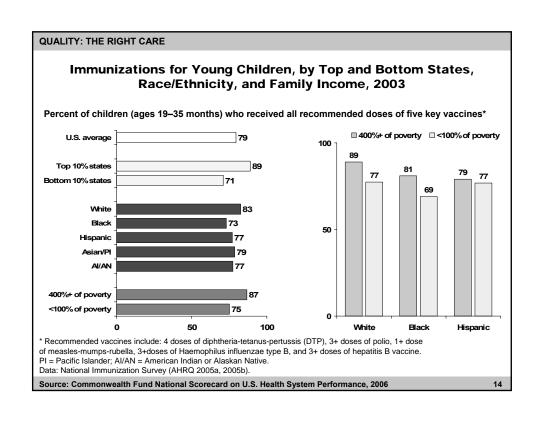
# The Right Care

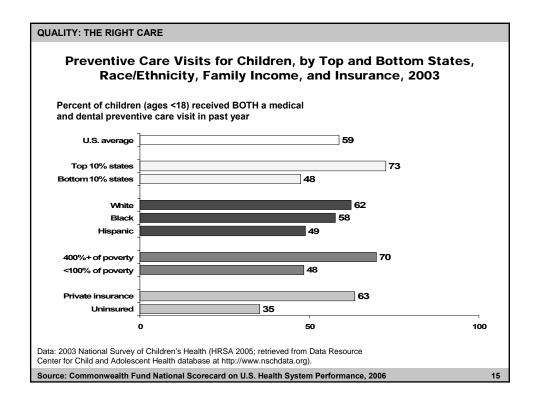
## **Scored Indicators:**

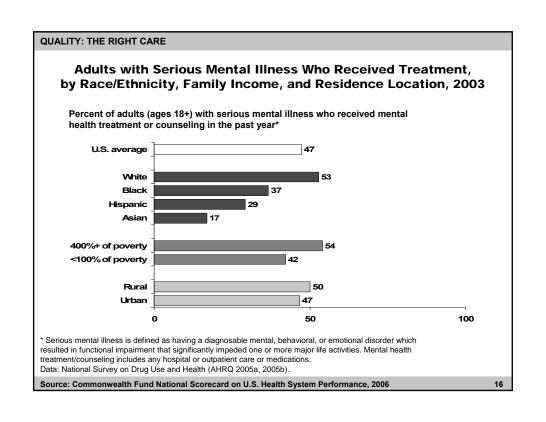
- 1. Adults received recommended screening and preventive care
- 2. Children received recommended immunizations and preventive care
  - Received all recommended doses of five key vaccines
  - Received both medical and dental preventive care visits
- 3. Needed mental health care and received treatment
  - Adults
  - Children
- 4. Chronic disease under control
  - Adults with diabetes whose HbA1c level <9%</li>
  - Adults with hypertension whose blood pressure <140/90 mmHg</li>
- Hospitalized patients receive recommended care for AMI, CHF, and pneumonia

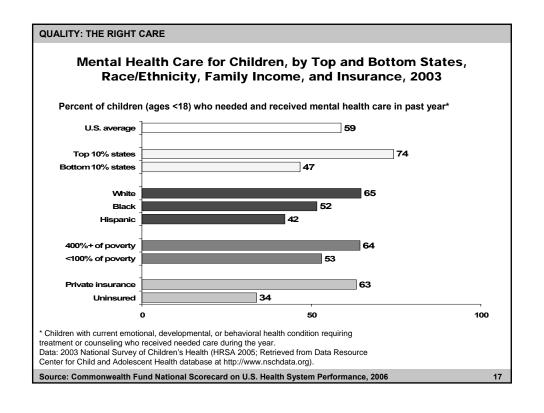
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

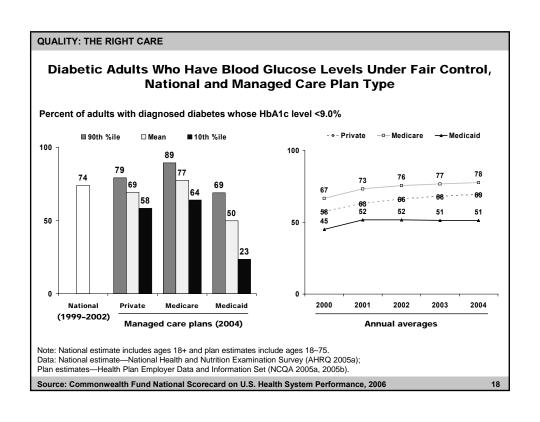


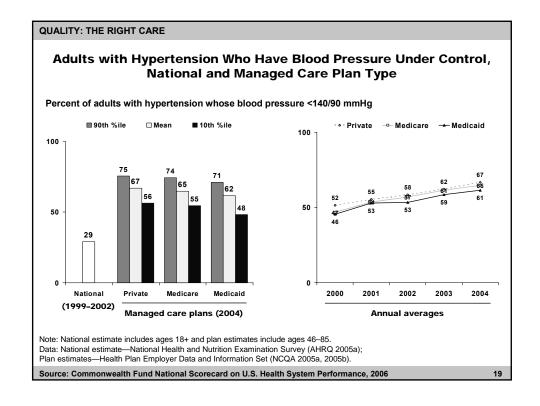


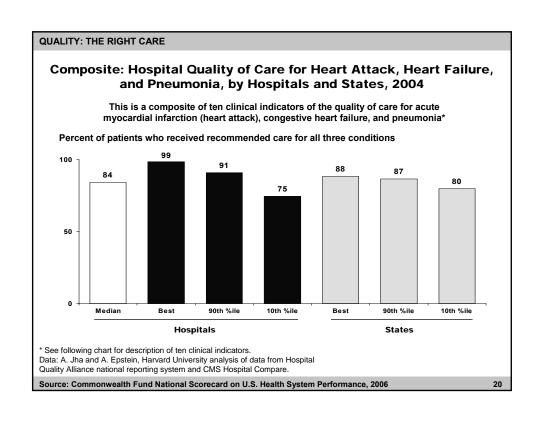












#### **QUALITY: THE RIGHT CARE**

# Hospital Quality of Care for Heart Attack, Heart Failure, and Pneumonia, by Hospitals and States, 2004

	HOSPITALS				STATES			
Percent of patients who received recommended care:	Median	Best	90th percentile	10th percentile	Best	90th percentile	10th percentile	
Acute myocardial infarction (AMI) (5 indicators)	92	100	98	80	97	96	89	
Congestive heart failure (CHF) (2 indicators)	83	100	94	62	91	89	79	
Pneumonia (3 indicators)	78	99	88	66	82	79	69	
COMPOSITE OF 10 INDICATORS	84	99	91	75	88	87	80	

AMI—aspirin within 24 hours before or after arrival at the hospital and at discharge, beta-blocker within 24 hours after arrival and at discharge, and angiotensin-converting enzyme (ACE) inhibitor for left ventricular systolic dysfunction; CHF—assessment of left ventricular function and ACE inhibitor for left ventricular dysfunction; Pneumonia—timing of initial antibiotic therapy, pneumococcal vaccination, and assessment of oxygenation.

Data: A. Jha and A. Epstein, Harvard University analysis of data from Hospital Quality Alliance national reporting system and CMS Hospital Compare.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

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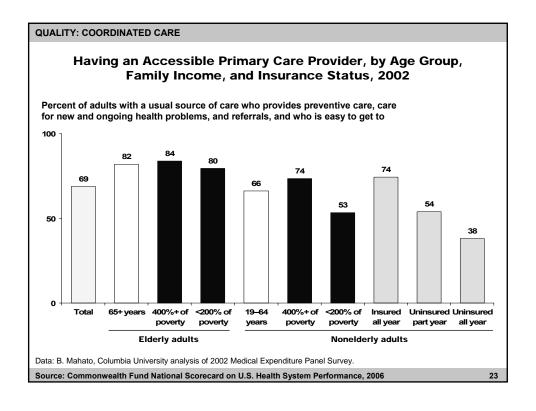
# QUALITY: COORDINATED CARE

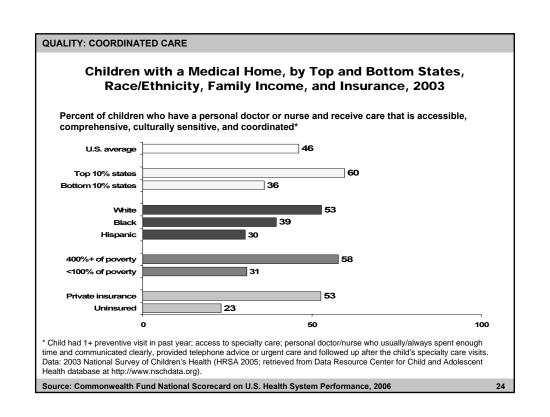
# **Coordinated Care**

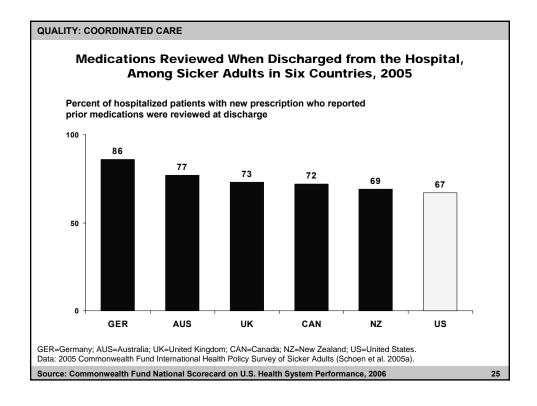
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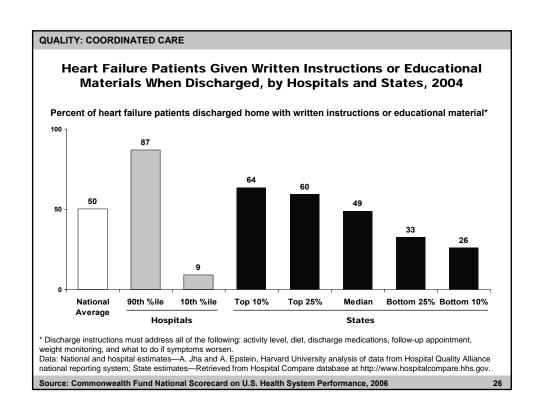
- 1. Adults under 65 with an accessible primary care provider
- 2. Children with a medical home
- 3. Care coordination at hospital discharge
  - Hospitalized patients with new Rx: Medications were reviewed at discharge
  - Heart failure patients received written instructions at discharge
  - Follow-up within 30 days after hospitalization for mental health disorder
- 4. Nursing homes: hospital admissions and readmissions among residents
- 5. Home health: hospital admissions

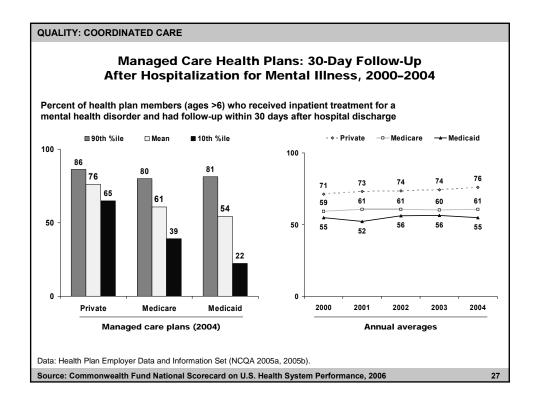
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

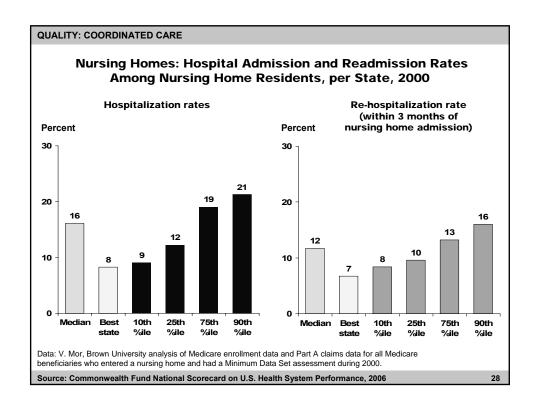


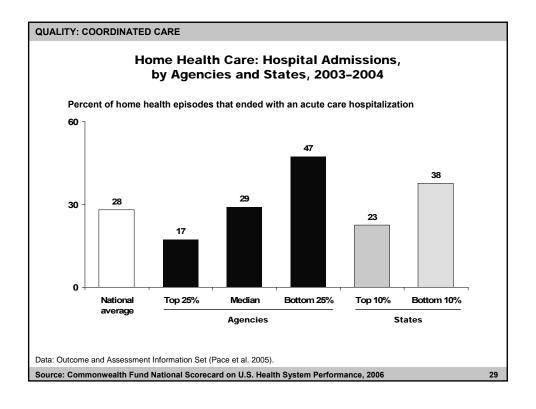












# QUALITY: SAFE CARE

# Safe Care

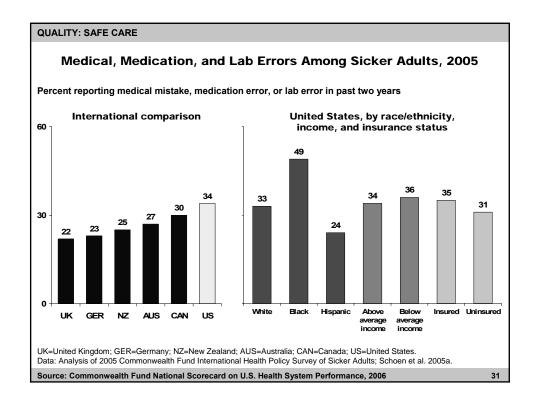
## **Scored Indicators:**

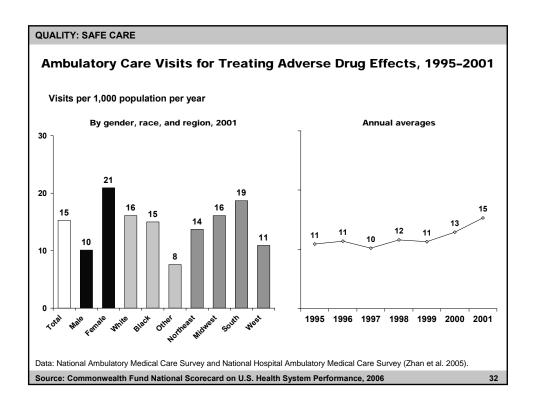
- 1. Patients reported medical, medication, or lab test error
- 2. Unsafe drug use
  - Ambulatory care visits for treating adverse drug effects
  - Children prescribed antibiotics for throat infection without a "strep" test
  - Elderly used 1 of 33 inappropriate drugs
- 3. Nursing home residents with pressure sores
- 4. Hospital-standardized mortality ratios

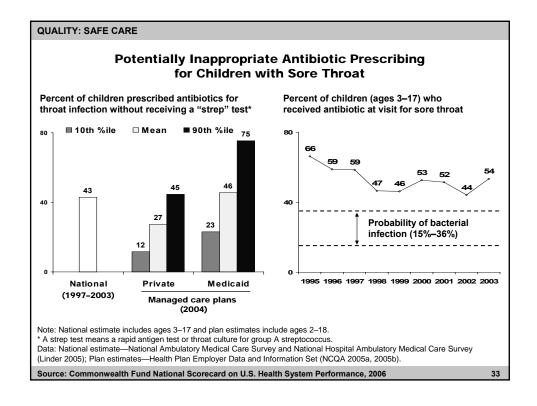
#### Other Indicators:

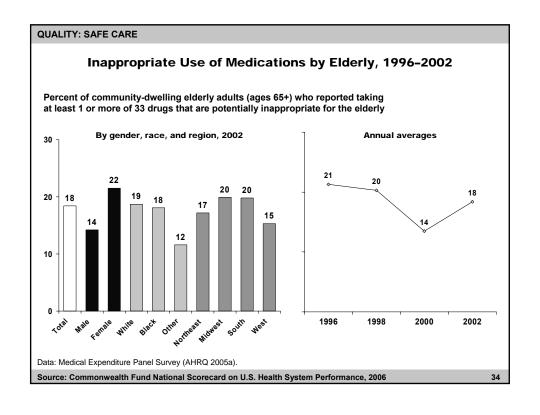
- 1. Nosocomial infections in intensive care unit patients
- 2. AHRQ indicators for patient safety in hospitals: trends

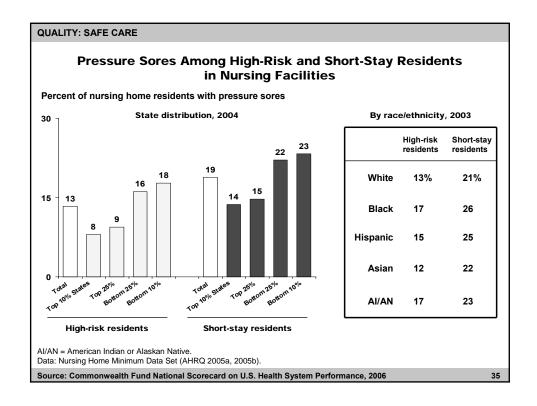
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

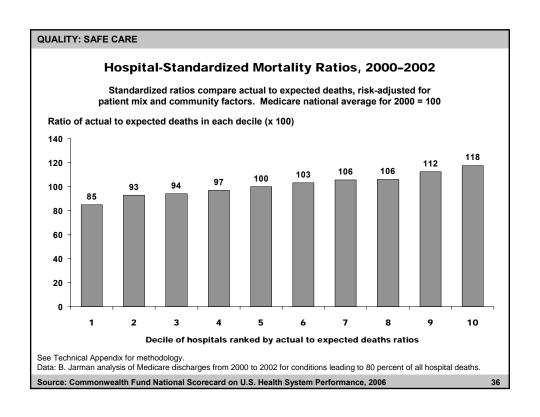












#### **QUALITY: SAFE CARE**

# Nosocomial Infections in Intensive Care Unit Patients, 2002-2004

infection rate, per 1,000 days use	Percentile					
Type of ICU	No. of units	10%	25%	50%	75%	90%
Medical	94	0.5	2.4	3.9	6.4	8.8
Medical-surgical—major teaching	100	1.7	2.6	3.4	5.1	7.6
Medical-surgical—all others	109	0.8	1.6	3.1	4.3	6.1
Surgical	99	0.0	2.0	3.4	5.9	8.7
High-risk nursery (infants weighing 1,000 grams or less)	104	1.6	5.4	8.5	11.6	16.1
Ventilator-associated pneumonia rate, per 1,000 days use			Р	ercentile		
Type of ICU	No. of units	10%	25%	50%	75%	90%
Medical	92	0.5	2.1	3.7	6.2	8.9
	99	1.2	2.6	4.6	7.2	9.9
Medical-surgical—major teaching	99					8.9
Medical-surgical—major teaching Medical-surgical—all others	109	1.7	2.9	5.1	6.7	0.9
, ,		1.7 2.2	2.9 4.7	5.1 8.3	12.2	17.9

Data: ~300 hospitals participating in the National Nosocomial Infections Surveillance (NNIS) System (NNIS 2004, Tables 1,3).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

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# QUALITY: SAFE CARE

# Potentially Preventable Adverse Events and Complications of Care in Hospitals, National and Medicare Trends

Risk-adjusted rate per 10,000 discharges*	1997/1998**	2000	2002	2003
Decubitus ulcer (pressure sore)				
National	199	217	233	NA
Medicare	206	225	251	267
Postoperative pulmonary embolism				
or deep vein thrombosis				
National	65	75	84	NA
Medicare	62	71	86	92
Postoperative sepsis				
National	85	105	116	NA
Medicare	80	97	111	120
Postoperative respiratory failure				
National	23	34	40	NA
Medicare	25	34	46	50
Accidental puncture or laceration				
National	27	33	38	NA
Medicare	31	32	36	34
Infection due to medical care				
National	18	20	23	NA
Medicare	20	20	24	25

<sup>\*</sup> Rates exclude complications present on admission and are adjusted for gender, comorbidities, and diagnosis-related group clusters. \*\* National rate is for 1997, Medicare rate is for 1998. Data: National estimates—Healthcare Cost and Utilization Project, Nationwide Inpatient Sample (retrieved from HCUPNet at http://www.ahrq.gov/HCUPnet); Medicare estimates—MedPAC analysis of Medicare administrative data using AHRQ indicators and methods (MedPAC 2005, Chart 3-3).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

#### QUALITY: PATIENT-CENTERED, TIMELY CARE

# Patient-Centered, Timely Care

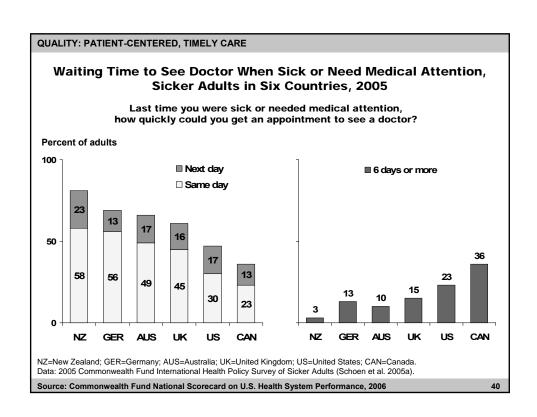
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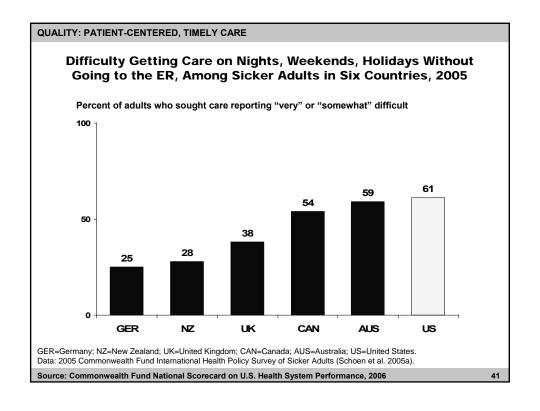
- Ability to see doctor on same/next day when sick or needed medical attention
- 2. Very/somewhat easy to get care after hours without going to the emergency room
- 3. Doctor-patient communication: always listened, explained, showed respect, spent enough time
- 4. Adults with chronic conditions given self-management plan
- 5. Patient-centered hospital care

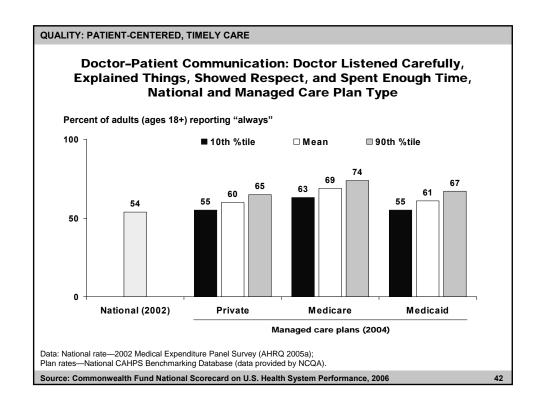
## Other Indicator:

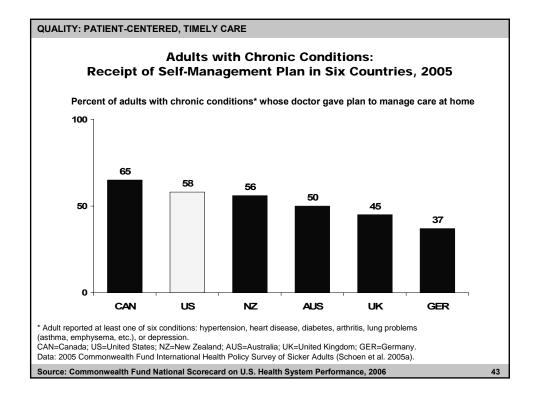
1. Physical restraints in nursing homes

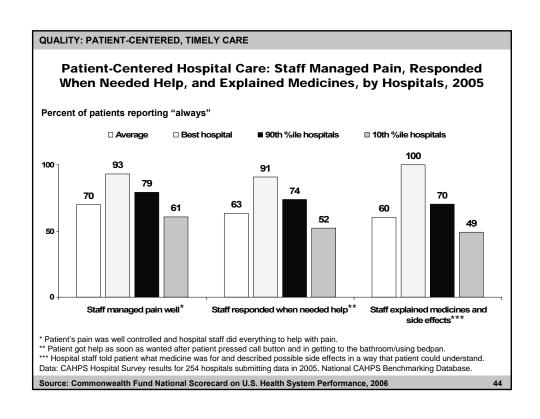
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

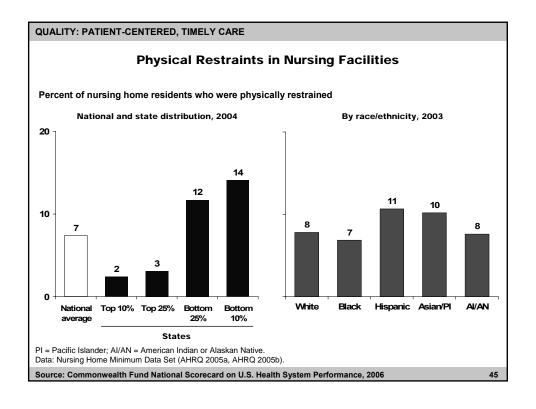












# **ACCESS**

# **SECTION 3. ACCESS**

Access includes indicators organized into two groups:

- Universal participation
- Affordable care

The Scorecard scores each group of indicators separately, and then averages the two scores to create the overall score for Access.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

# **ACCESS: UNIVERSAL PARTICIPATION**

# **Universal Participation**

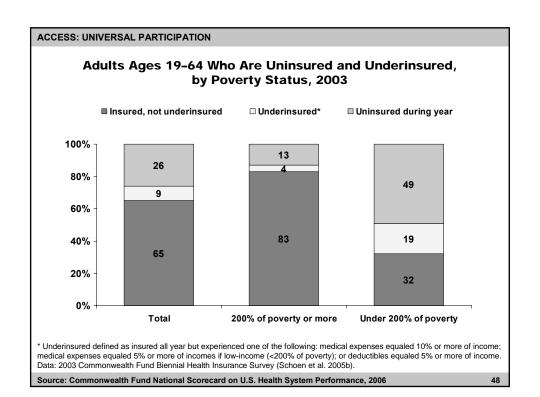
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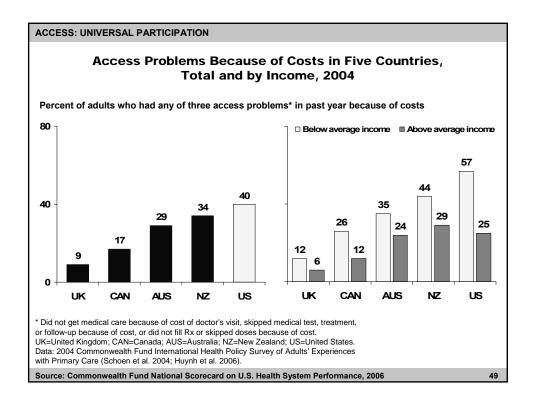
- 1. Adults under 65 insured all year, not underinsured
- 2. Adults with no access problem due to costs

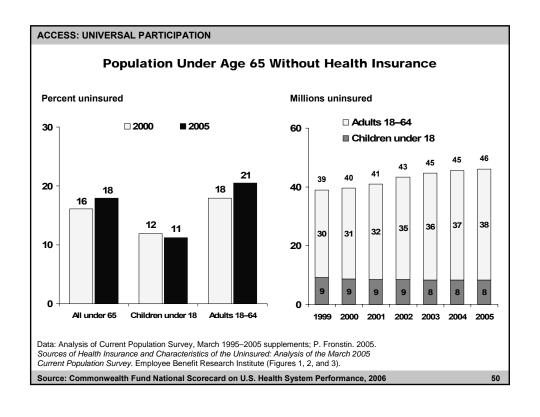
## Other Indicator:

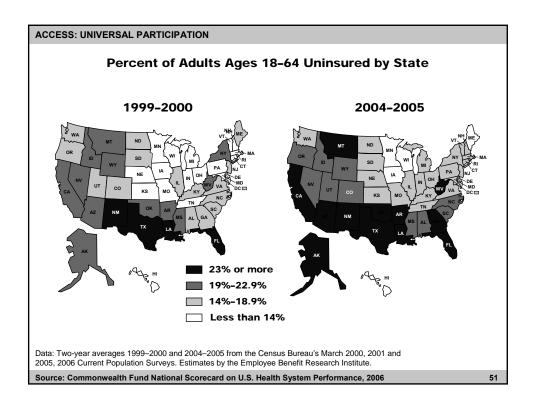
1. Uninsured under 65: national and state trends

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006









# ACCESS: AFFORDABLE CARE

# **Affordable Care**

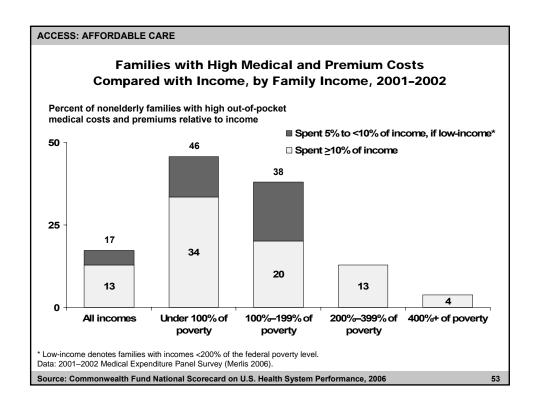
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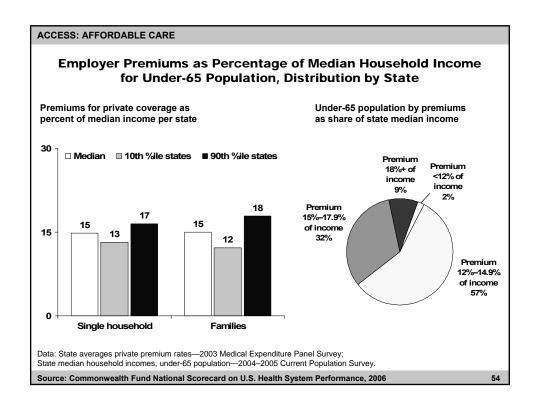
- 1. Families spending less than 10% of income or less than 5% of income, if low-income, on out-of-pocket medical costs and premiums
- 2. Population under 65 living in states where premiums for employer-sponsored health coverage are less than 15% of under-65 median household income
- 3. Adults under 65 with no medical bill problems or medical debt

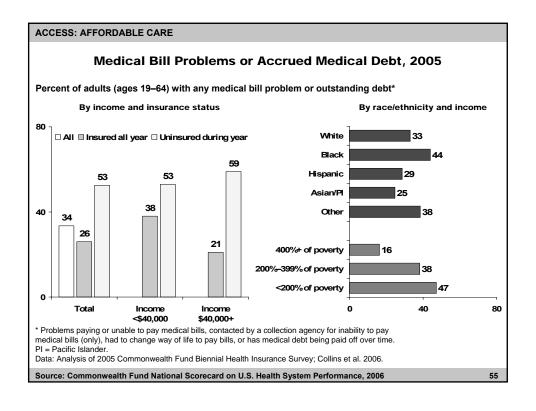
## Other Indicator:

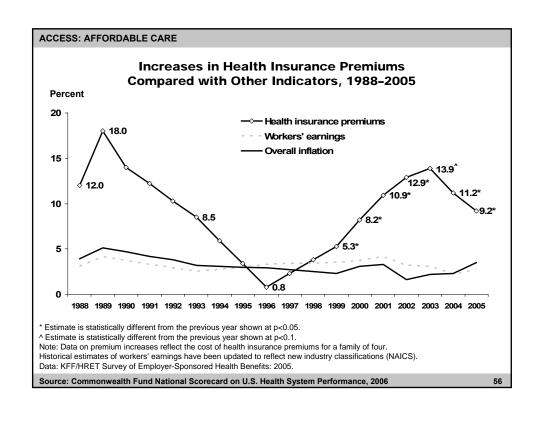
 Health insurance premium trends compared to workers' earnings and overall inflation

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006









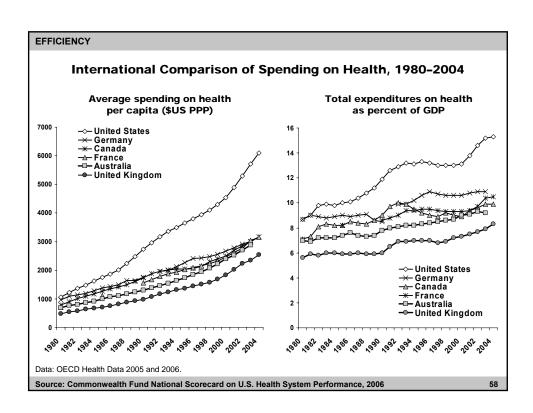
#### **EFFICIENCY**

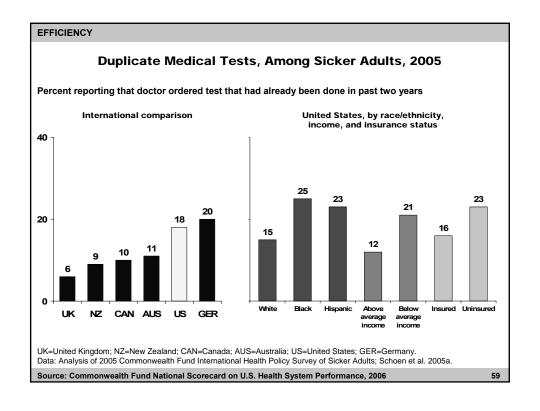
#### **SECTION 4. EFFICIENCY**

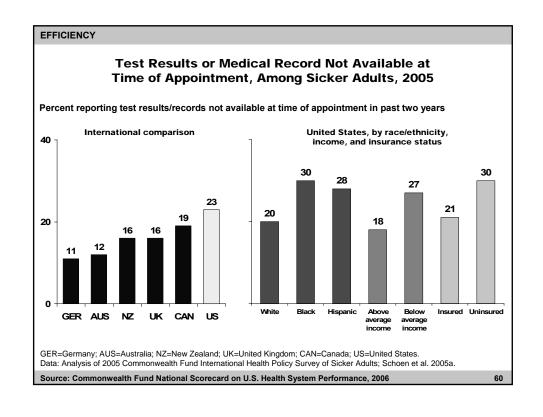
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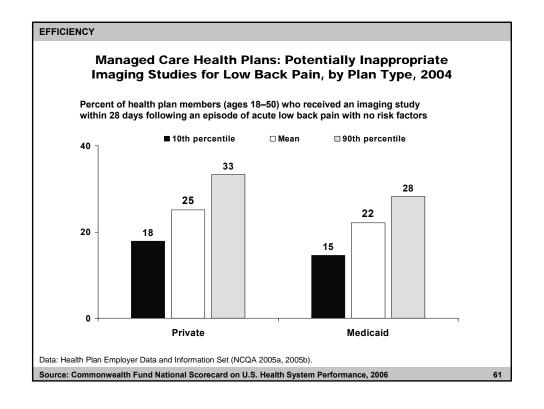
- 1. Potential overuse or waste
  - Duplicate medical tests
  - Tests results or records not available at time of appointment
  - Received imaging study for acute low back pain with no risk factors
- 2. ER use for condition that could have been treated by regular doctor
- 3. Hospital admissions for ambulatory care sensitive (ACS) conditions
  - National ACS admissions: CHF, diabetes, and pediatric asthma
  - Medicare ACS admissions
- 4. Medicare hospital 30-day readmission rates
- 5. Medicare costs of care and mortality for AMI, colon cancer, hip fracture
- 6. Medicare costs of care for chronic diseases: diabetes, CHF, COPD
- 7. National health expenditures spent on health administration and insurance
- 8. Physicians using electronic medical records

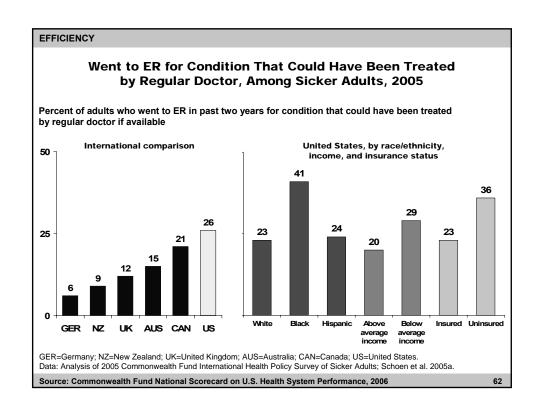
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

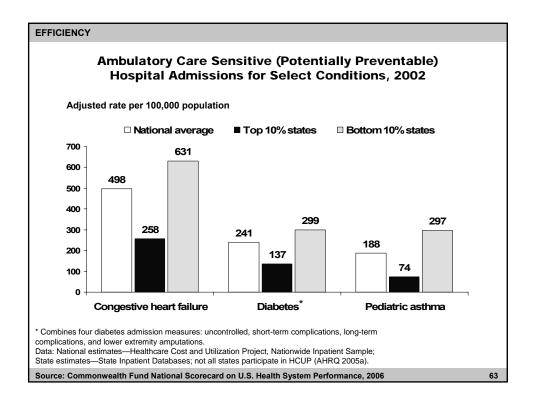


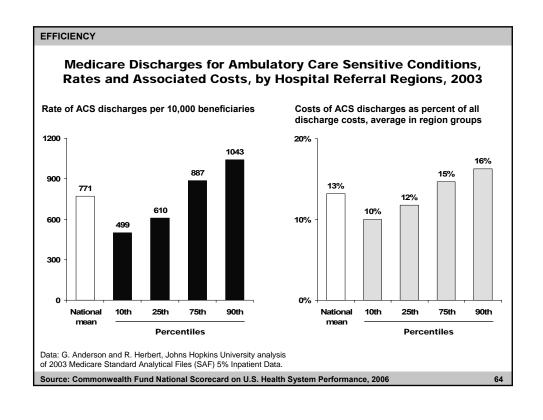


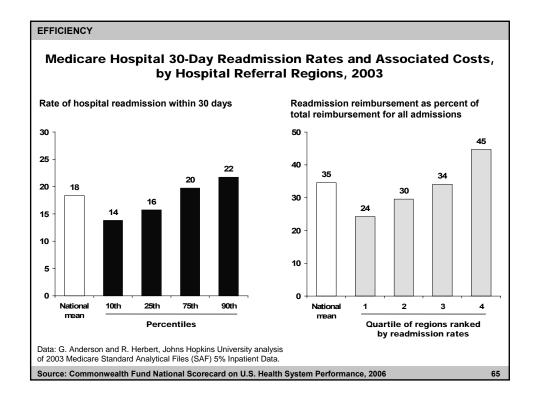


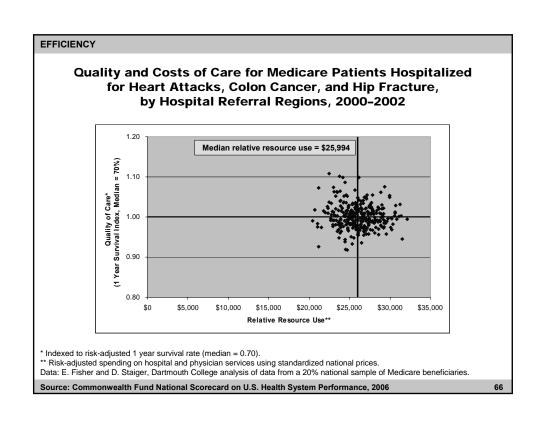


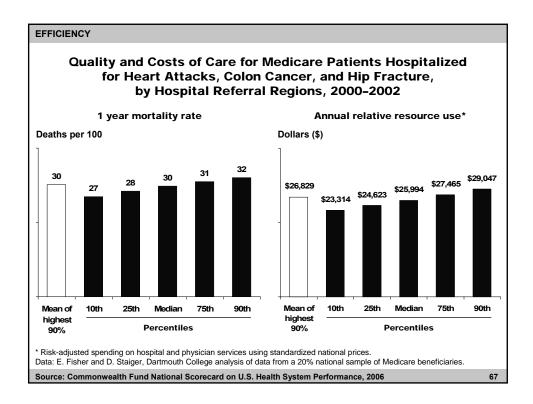












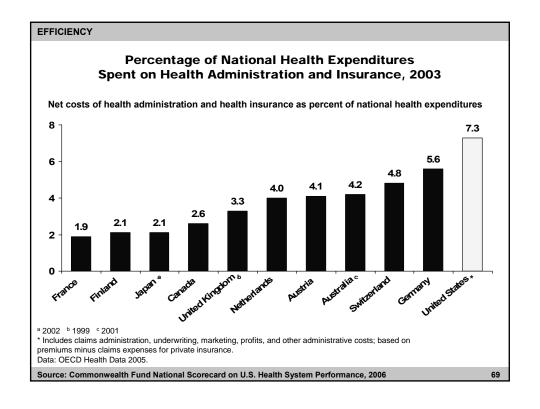
# **EFFICIENCY**

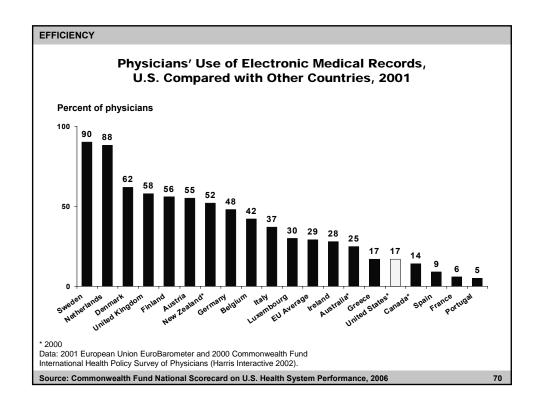
# Costs of Care for Medicare Beneficiaries with Multiple Chronic Conditions, by Hospital Referral Regions, 2001

		Ratio of percentile groups					
	Average	10th percentile	25th percentile	75th percentile	90th percentile	90th to 10th	75th to 25th
All 3 conditions							
(Diabetes + CHF + COPD)	\$31,792	\$20,960	\$23,973	\$37,879	\$43,973	2.10	1.58
Diabetes + CHF	\$18,461	\$12,747	\$14,355	\$20,592	\$27,310	2.14	1.43
Diabetes + COPD	\$13,188	\$8,872	\$10,304	\$15,246	\$18,024	2.03	1.48
CHF + COPD	\$22,415	\$15,355	\$17,312	\$25,023	\$32,732	2.13	1.45

CHF = Congestive heart failure; COPD = Chronic obstructive pulmonary disease. Data: G. Anderson and R. Herbert, Johns Hopkins University analysis of 2001 Medicare Standard Analytical Files (SAF) 5% Inpatient Data.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006





#### **EQUITY**

#### **SECTION 5. EQUITY**

For equity, the Scorecard contrasts rates of risk by insurance, income, and race/ethnicity. Specifically, the risk ratios compare:

- Insured to uninsured rates
- High-income to low-income rates
- White to black rates
- White to Hispanic rates

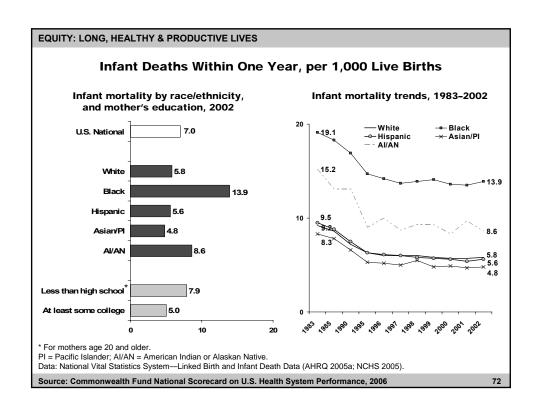
Indicators used to score equity include a subset of main indicators and a few equity-only indicators to highlight certain areas of concern. They are grouped as follows:

- Long, healthy & productive lives
- The right care
- Safe care
- Patient-centered, timely care
- Coordinated and efficient care
- Universal participation and affordable care

Charts for equity indicators are interspersed throughout other sections as appropriate.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

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#### **EQUITY: LONG, HEALTHY & PRODUCTIVE LIVES**

# Five-Year Survival Rates for All Cancers, by Gender, Race/Ethnicity, and Census Tract Poverty Rate

	White	Black	Hispanic	Asian	AI/AN
TOTAL (1988-1997)					
Men	55	46	53	50	40
Women	58	47	57	61	47
MEN (1988–1994)					
Low poverty, <10%	61	58	60	55	38
High poverty, 20%+	52	45	54	44	42
WOMEN (1988–1994)					
Low poverty, <10%	63	58	65	66	44
High poverty, 20%+	55	48	60	56	53

Note: Low poverty denotes census tracts where less than 10% of households have incomes below the federal poverty level in 1990; high poverty denotes census tracts where 20% or more of households have incomes below the federal poverty level in 1990.

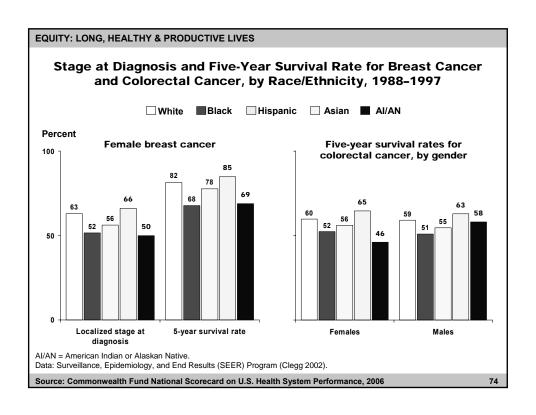
AI/AN = American Indian or Alaskan Native.

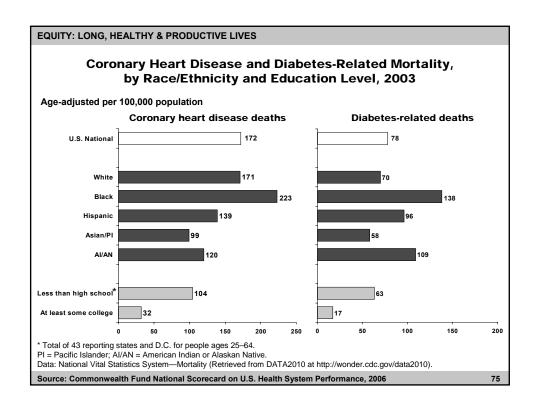
Data: Surveillance, Epidemiology, and End Results (SEER) Program

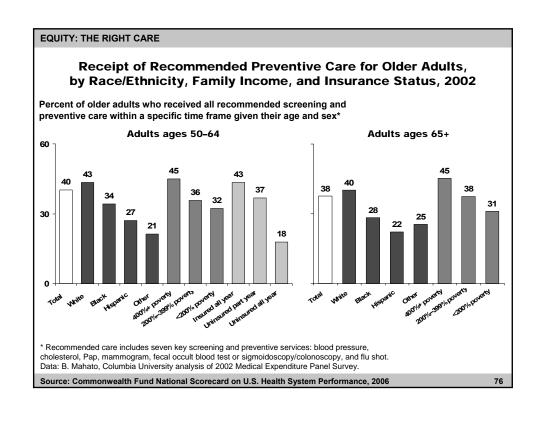
(Total estimates—Clegg 2002; Poverty estimates—Singh 2003).

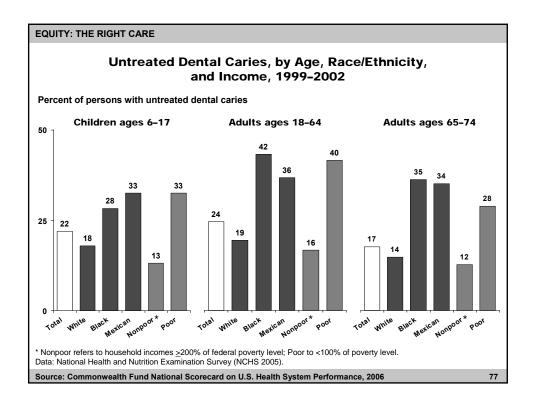
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

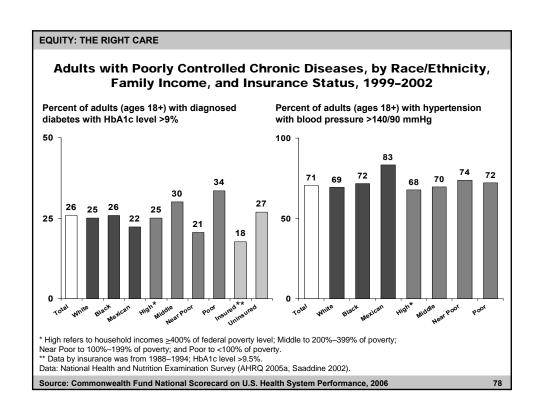
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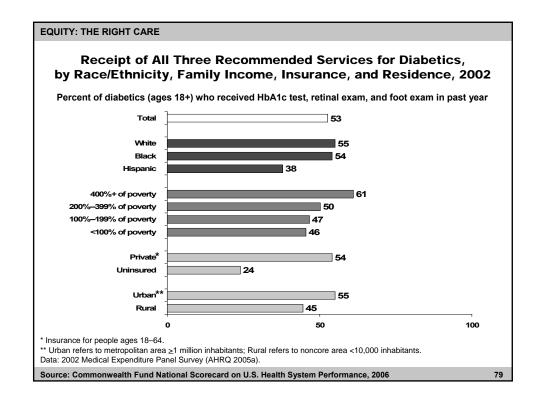




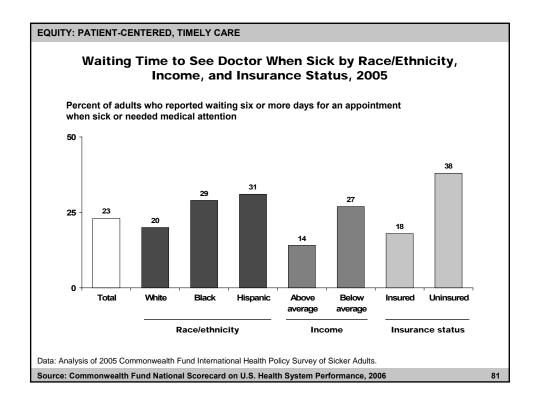


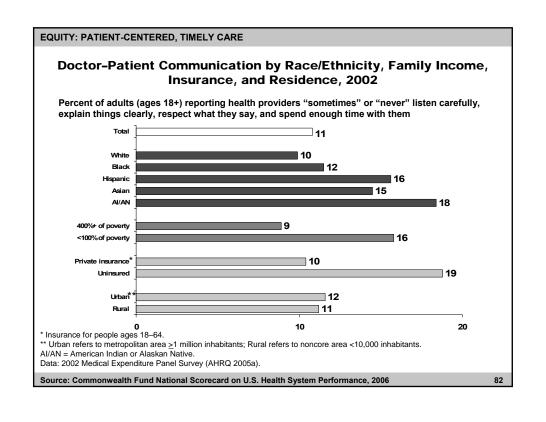


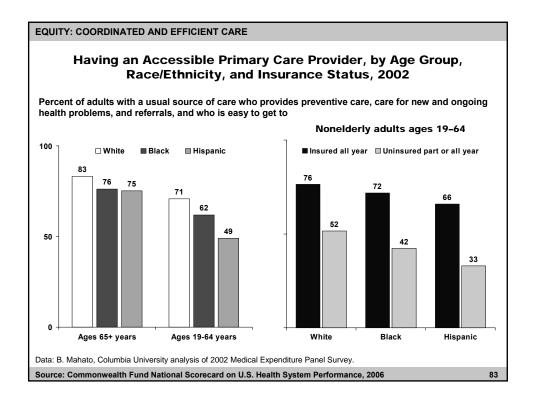


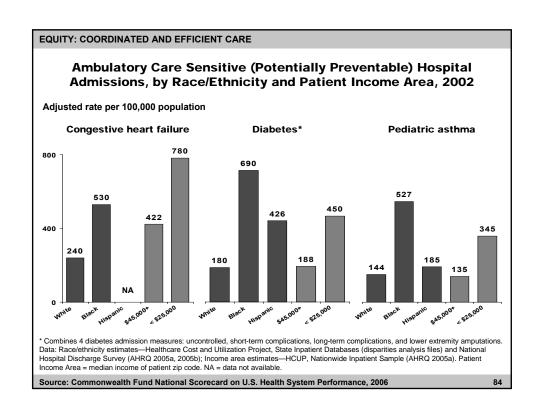


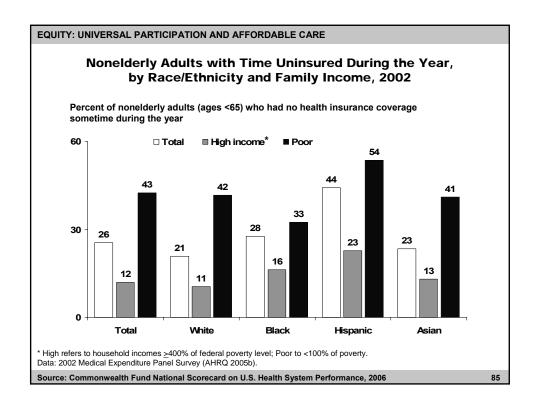
Risk adjusted rate per 1,000 discharges*	Failure to rescue	Decubitus ulcers	Selected infections due to medical care	Postoperative pulmonary embolus or deep vein thrombosis	Postoperative sepsis
RACE/ETHNICITY					
White	141.6	22.4	2.2	7.9	11.1
Black	141.3	35.2	3.3	12.0	16.2
Hispanic	146.3	25.3	2.1	7.4	13.1
Asian/Pacific Islander	155.6	19.9	2.5	5.4	12.6
MEDIAN INCOME OF PATIENT ZIPCODE					
Less than \$25,000	128.9	28.0	2.4	9.4	13.8
\$45,000 or more	136.4	23.8	2.4	8.8	11.1
INSURANCE					
Private insurance	128.5	20.3	1.9	7.5	9.4
Uninsured/self pay	151.3	19.4	1.5	7.6	10.5
PATIENT RESIDENCE	•				
Urban	138.8	26.2	2.5	9.4	12.8
Rural	124.8	18.7	1.7	6.8	10.0

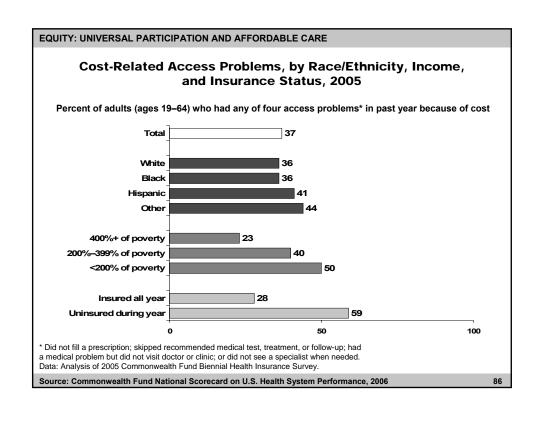












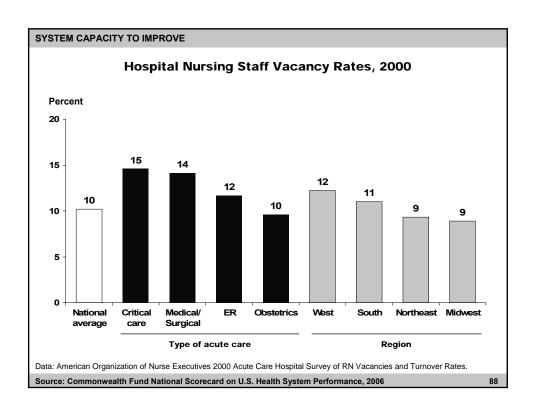
#### SYSTEM CAPACITY TO IMPROVE

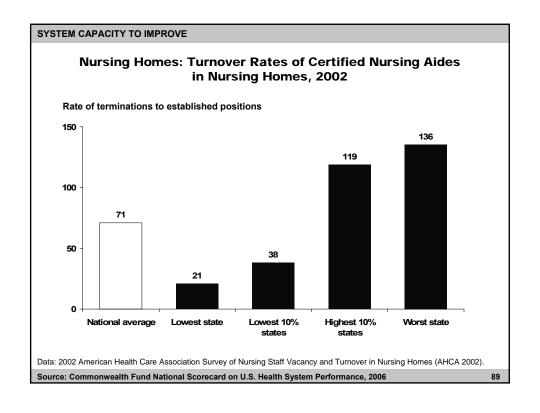
#### **SECTION 6. SYSTEM CAPACITY TO INNOVATE AND IMPROVE**

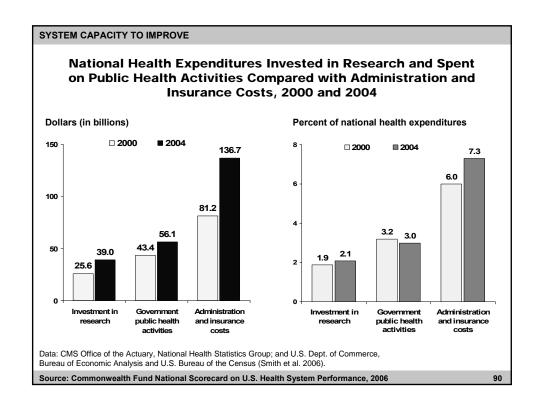
The Scorecard addresses but does *not* score indicators for system capacity to innovate and improve.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2006

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# **Scorecard-Related Publications**

### Health Affairs article

Cathy Schoen, Karen Davis, Sabrina K. H. How, and Stephen C. Schoenbaum, "<u>U.S. Health System</u>

<u>Performance: A National Scorecard</u>," *Health Affairs* Web Exclusive (Sept. 20, 2006):w457–w475.

### **Commonwealth Fund Publications**

Commonwealth Fund Commission on a High Performance Health System, Why Not the Best? Results from a National Scorecard on U.S. Health System Performance (Sept. 2006).

Cathy Schoen and Sabrina K. H. How, *National Scorecard* on U.S. Health System Performance: Technical Report (Sept. 2006).

Cathy Schoen and Sabrina K. H. How, *National Scorecard* on U.S. Health System Performance: Chartpack Technical Appendix (Sept. 2006).

# **Other Commission Publications**

Commonwealth Fund Commission on a High Performance Health System, <u>Framework for a High Performance Health</u> <u>System for the United States</u> (Aug. 2006).

These Fund publications are available for free download on The Commonwealth Fund's Web site at <a href="www.cmwf.org">www.cmwf.org</a>.