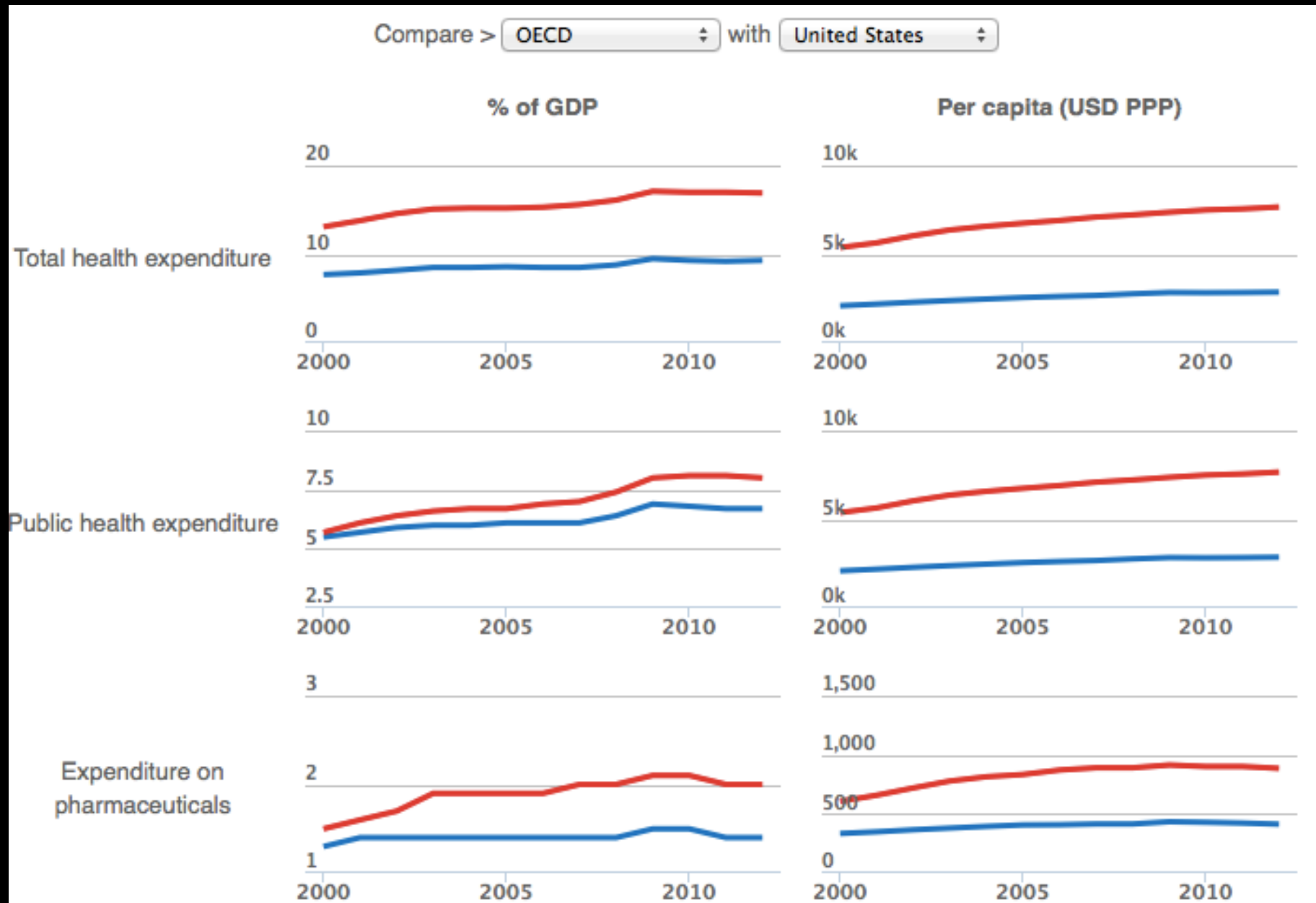


COMPARATIVE HEALTH SYSTEMS II



COMPARATIVE HEALTH SYSTEMS

- The US System
 - Working people under sixty-five (but not all) = Bismark (but we're for-profit)
 - Native Americans, military, veterans = Beveridge
 - Over 65 = National Health Insurance
 - Uninsured = Out-of-Pocket
 - But just really complicated and particular because of an array of private, for-profit insurers

EXHIBIT ES-1. OVERALL RANKING

COUNTRY RANKINGS

Top 2*

Middle

Bottom 2*



AUS CAN FRA GER NETH NZ NOR SWE SWIZ UK US

OVERALL RANKING (2013)

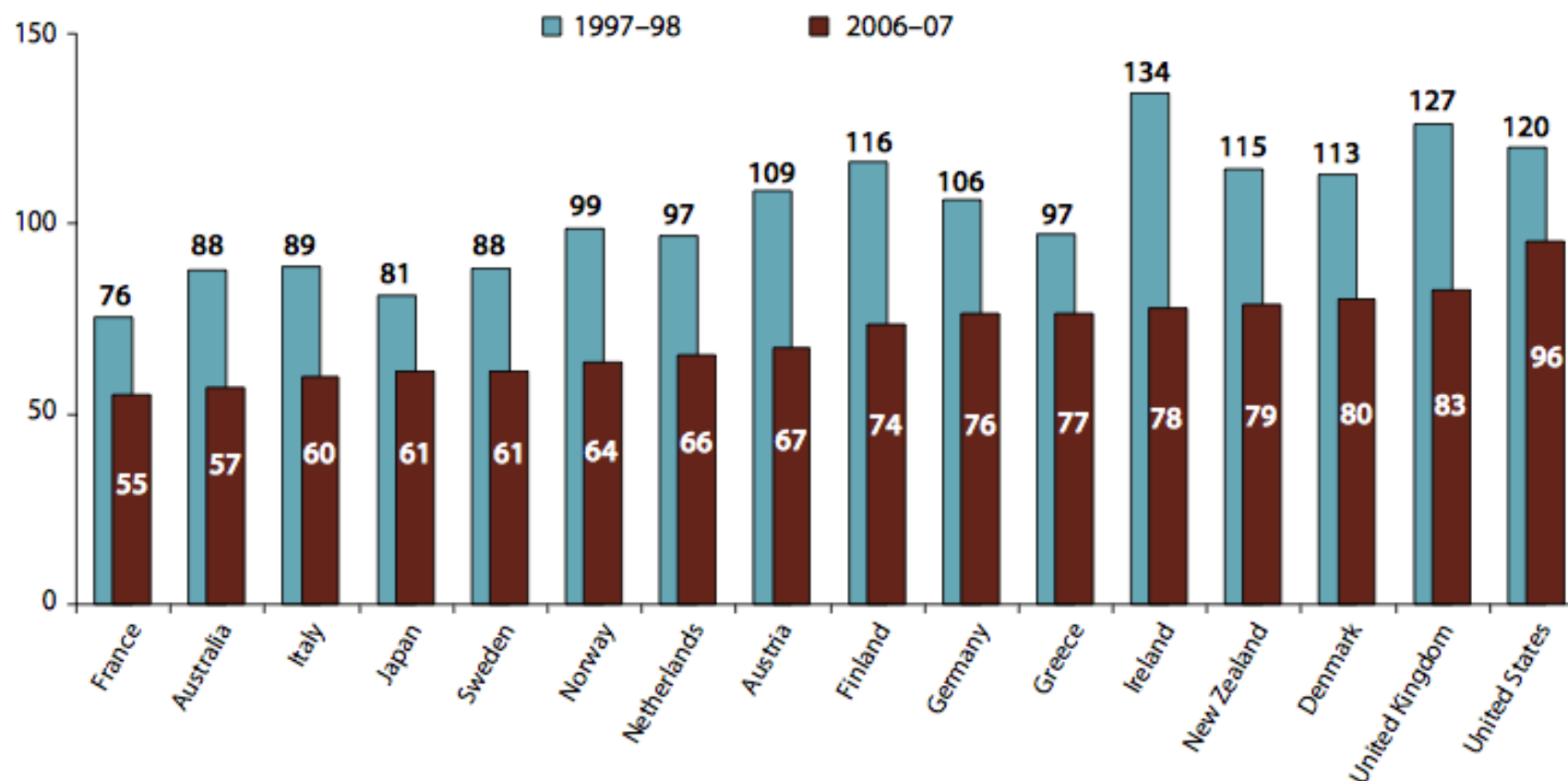
Quality Care	4	10	9	5	5	7	7	3	2	1	11
Effective Care	2	9	8	7	5	4	11	10	3	1	5
Safe Care	4	7	9	6	5	2	11	10	8	1	3
Coordinated Care	3	10	2	6	7	9	11	5	4	1	7
Patient-Centered Care	4	8	9	10	5	2	7	11	3	1	6
Access	5	8	10	7	3	6	11	9	2	1	4
Cost-Related Problem	8	9	11	2	4	7	6	4	2	1	9
Timeliness of Care	9	5	10	4	8	6	3	1	7	1	11
Efficiency	6	11	10	4	2	7	8	9	1	3	5
Equity	4	10	8	9	7	3	4	2	6	1	11
Healthy Lives	5	9	7	4	8	10	6	1	2	2	11
Health Expenditures/Capita, 2011**	4	8	1	7	5	9	6	2	3	10	11
	\$3,800	\$4,522	\$4,118	\$4,495	\$5,099	\$3,182	\$5,669	\$3,925	\$5,643	\$3,405	\$8,508

Notes: * Includes ties. ** Expenditures shown in \$US PPP (purchasing power parity); Australian \$ data are from 2010.

Source: Calculated by The Commonwealth Fund based on 2011 International Health Policy Survey of Sicker Adults; 2012 International Health Policy Survey of Primary Care Physicians; 2013 International Health Policy Survey; Commonwealth Fund National Scorecard 2012; World Health Organization; and Organization for Economic Cooperation and Development, OECD Health Data, 2013 (Paris: OECD, Nov. 2013).

Mortality Amenable to Health Care

Deaths per 100,000 population*



* Countries' age-standardized death rates before age 75; including ischemic heart disease, diabetes, stroke, and bacterial infections.

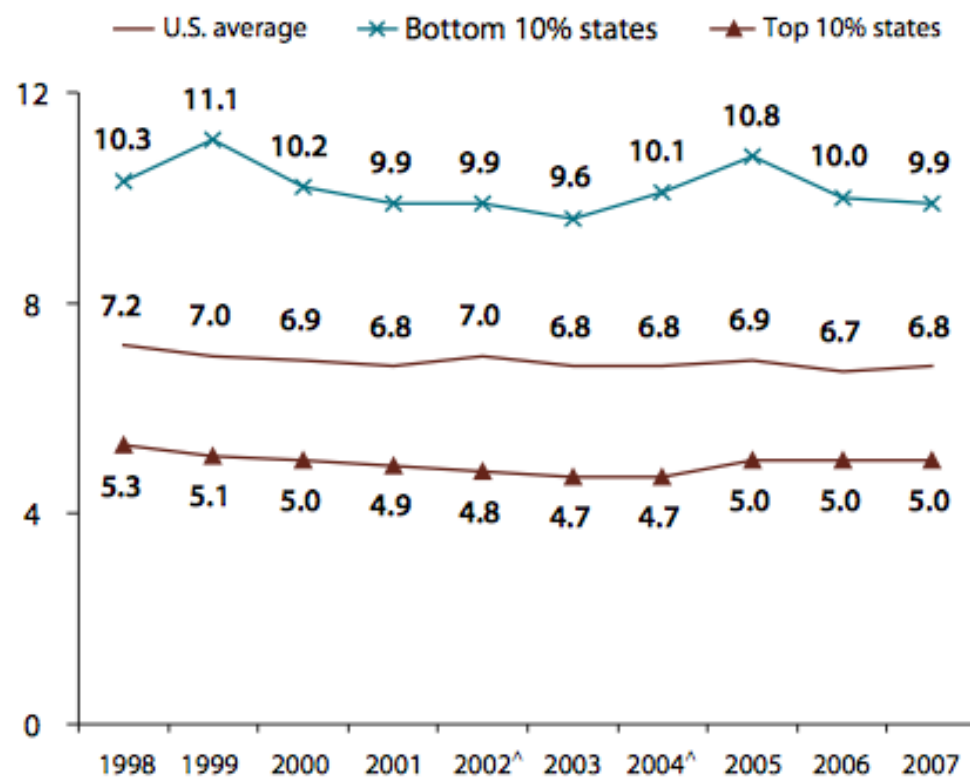
See Appendix B for list of all conditions considered amenable to health care in the analysis.

Data: E. Nolte, RAND Europe, and M. McKee, London School of Hygiene and Tropical Medicine, analysis of World Health Organization mortality files and CDC mortality data for U.S. (Nolte and McKee, 2011).

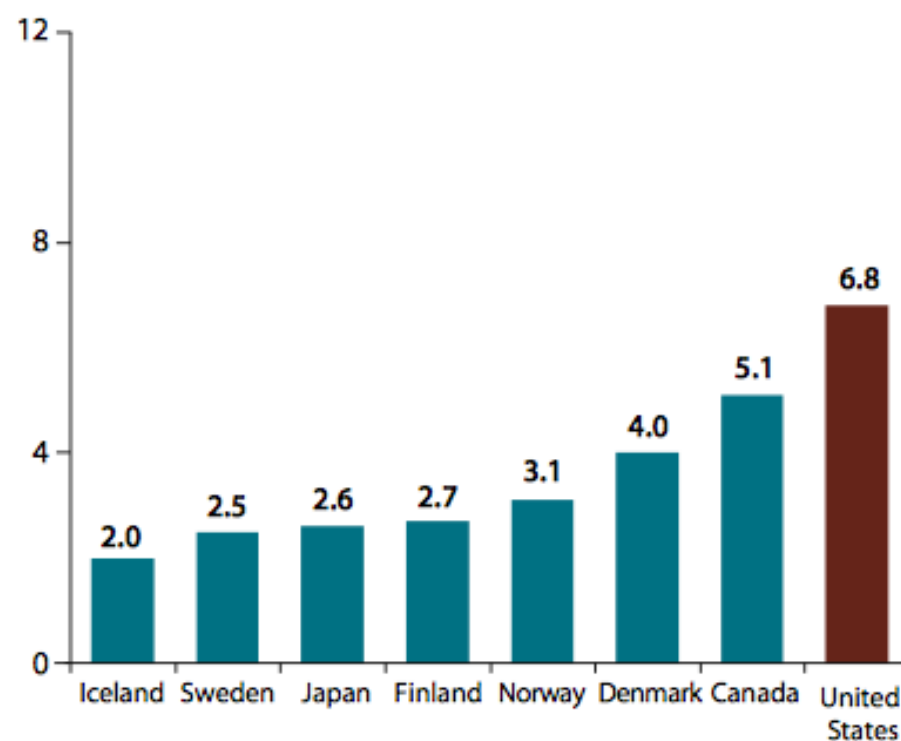
Infant Mortality Rate

Infant deaths per 1,000 live births

National Average and State Distribution



International Comparison, 2007



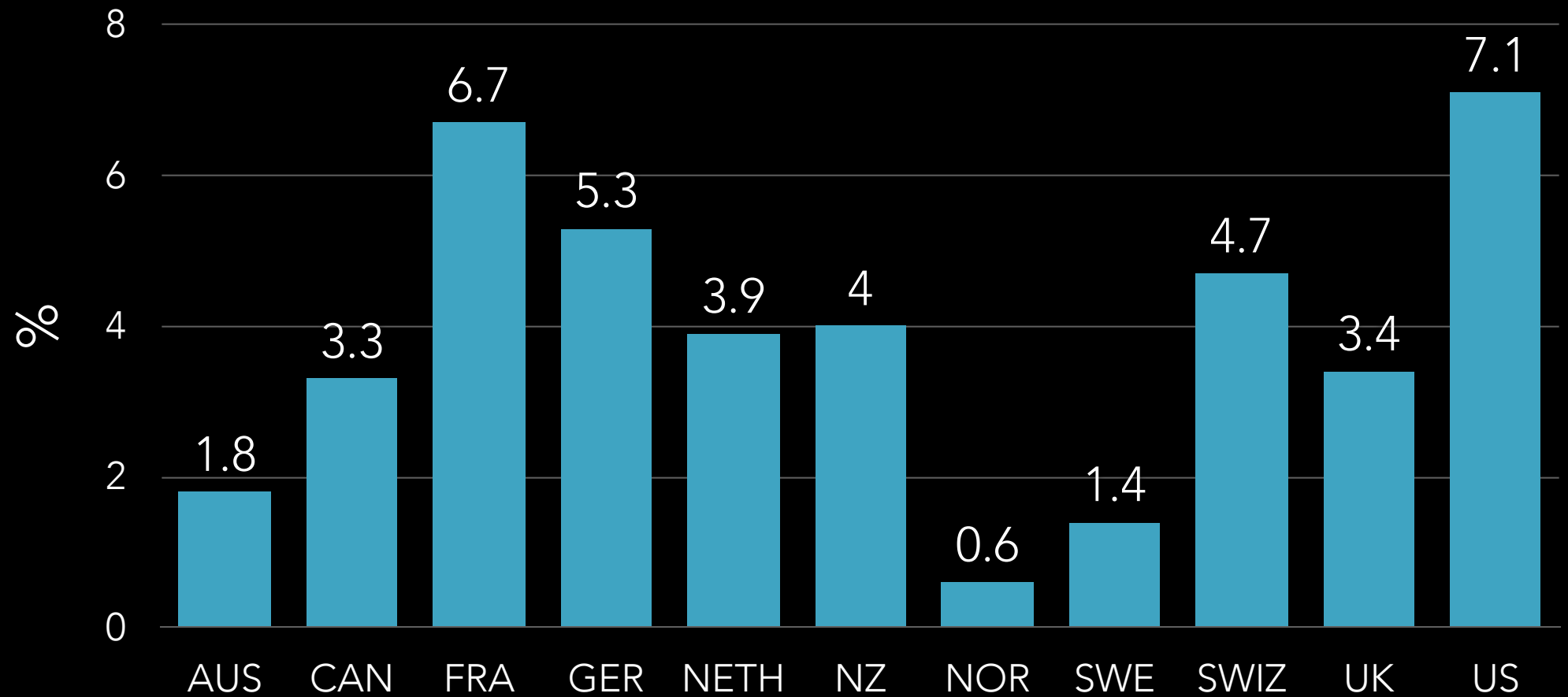
[^] Denotes years in 2006 and 2008 National Scorecards.

Data: National and state—National Vital Statistics System, Linked Birth and Infant Death Data (AHRQ 2003–2008; Mathews and MacDorman, 2011); international comparison—OECD Health Data 2011 (database), Version 06/2011.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2011.

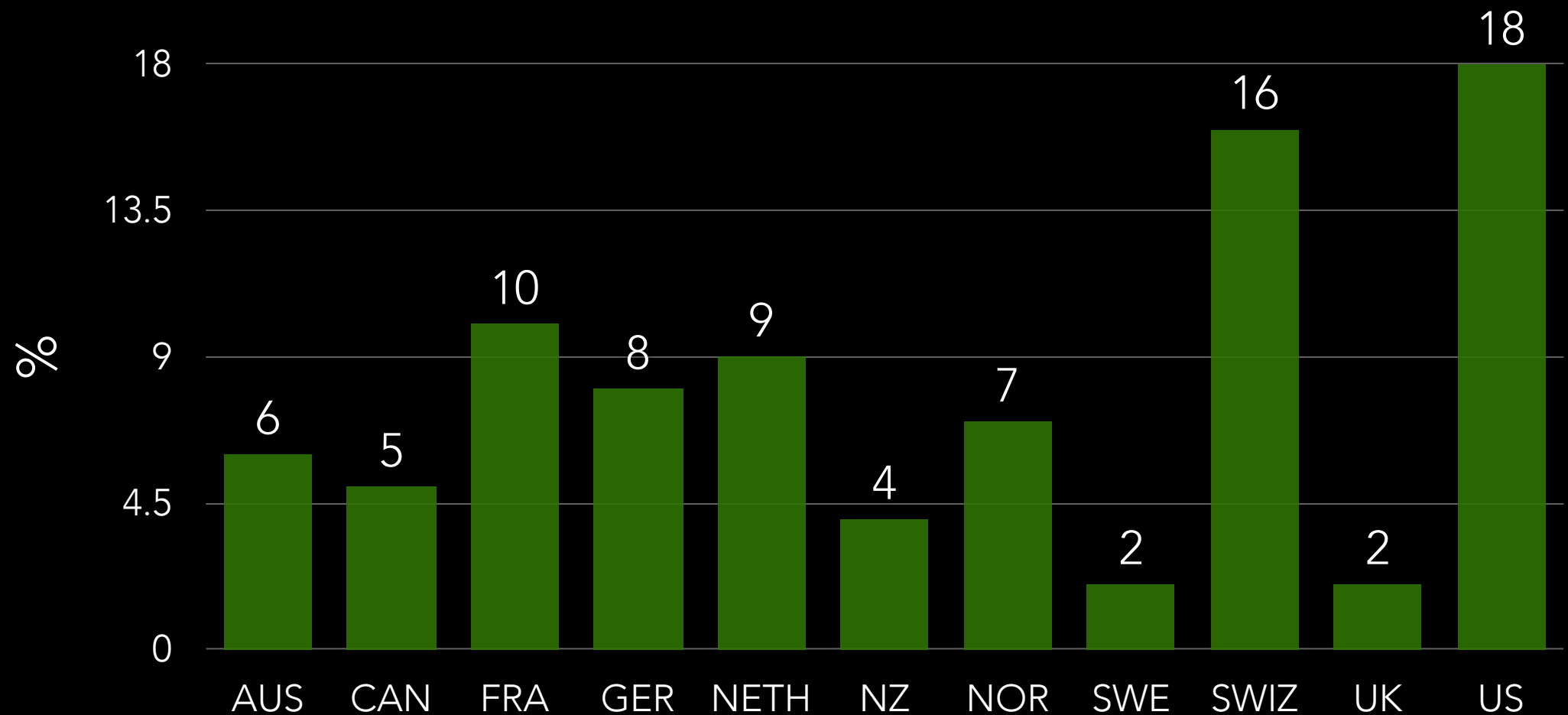
EFFICIENCY MEASURES

% OF HEALTH SPENDING ON HEALTH
INSURANCE ADMINISTRATION



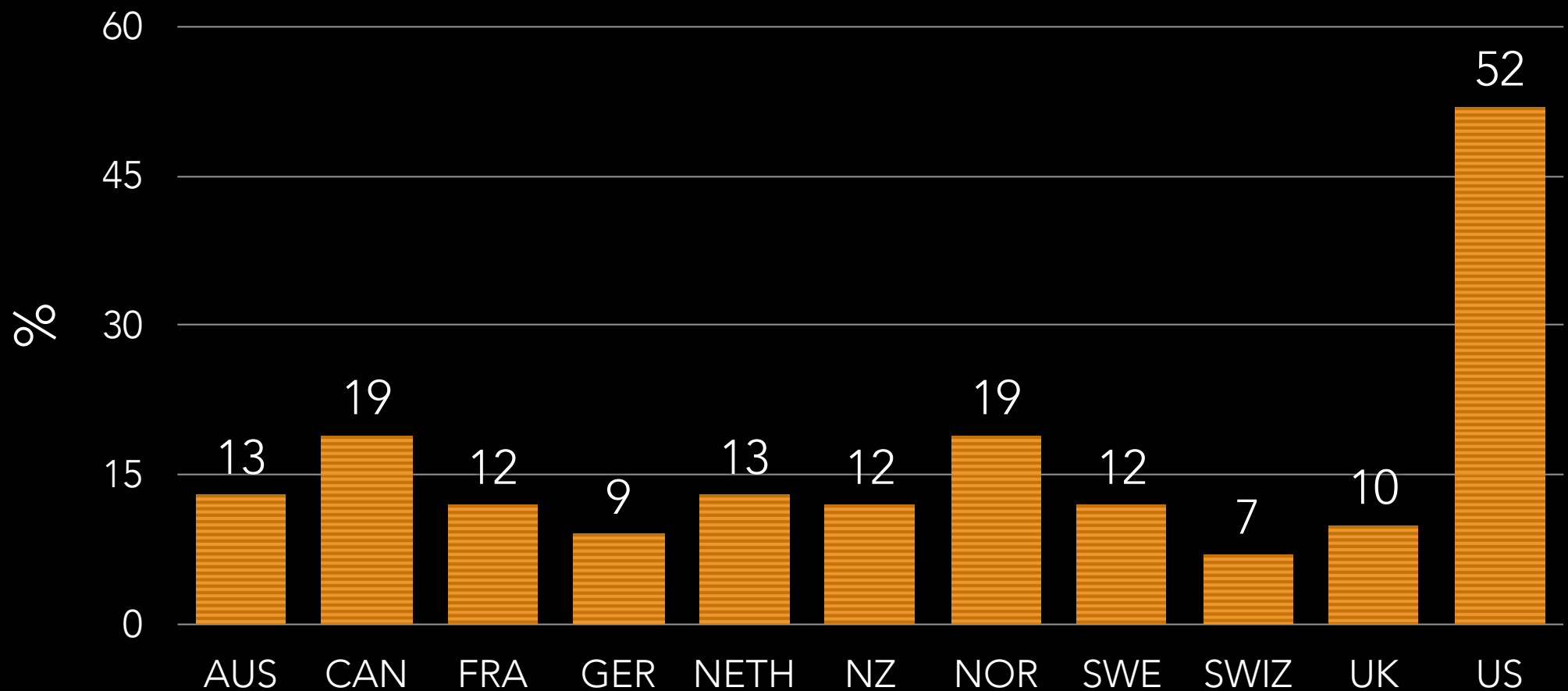
EFFICIENCY MEASURES

PATIENT SPENT A LOT OF TIME ON PAPERWORK
OR DISPUTES RELATED TO MEDICAL BILLS



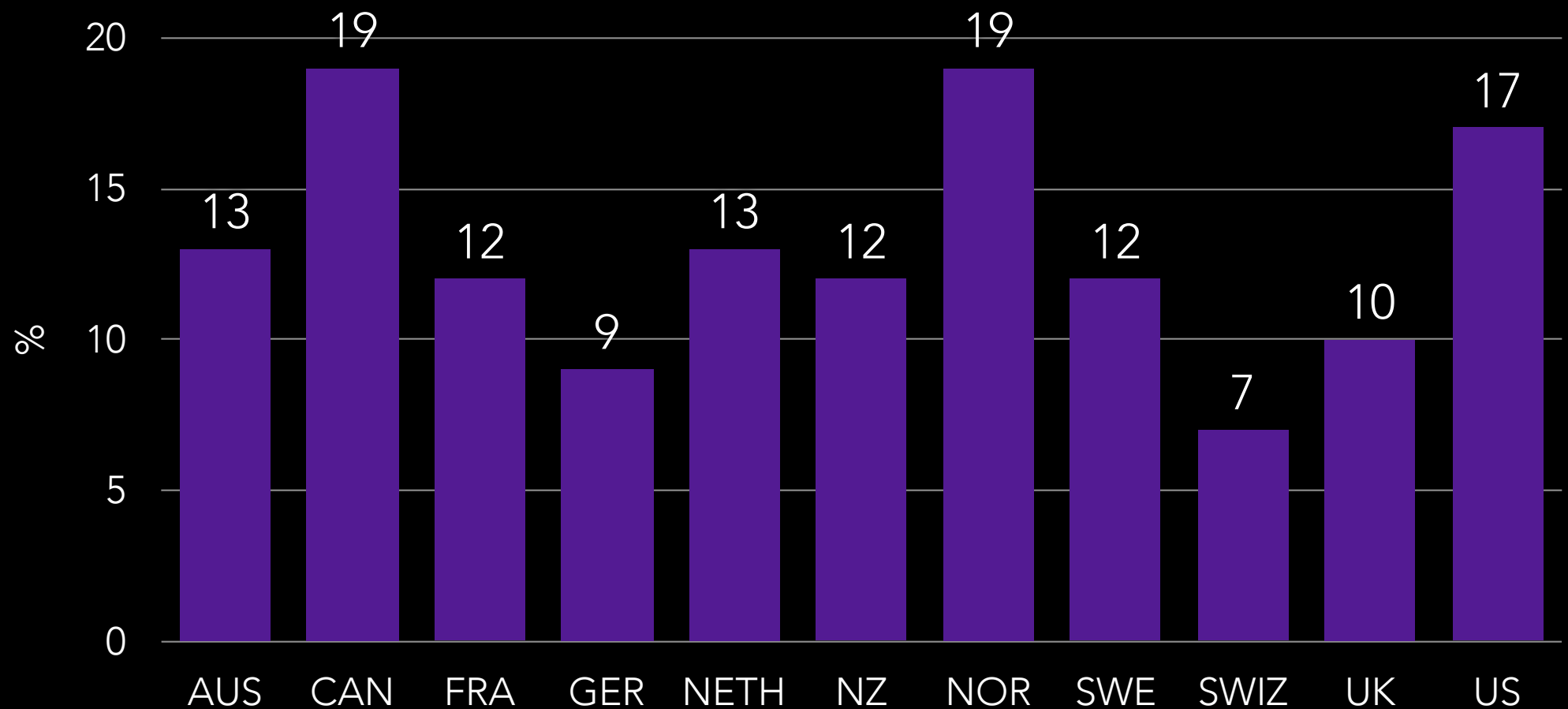
EFFICIENCY MEASURES

DR SPENT EXTRA TIME GETTING RX AND TREATMENTS B/C OF COVERAGE RESTRICTIONS



EFFICIENCY MEASURES

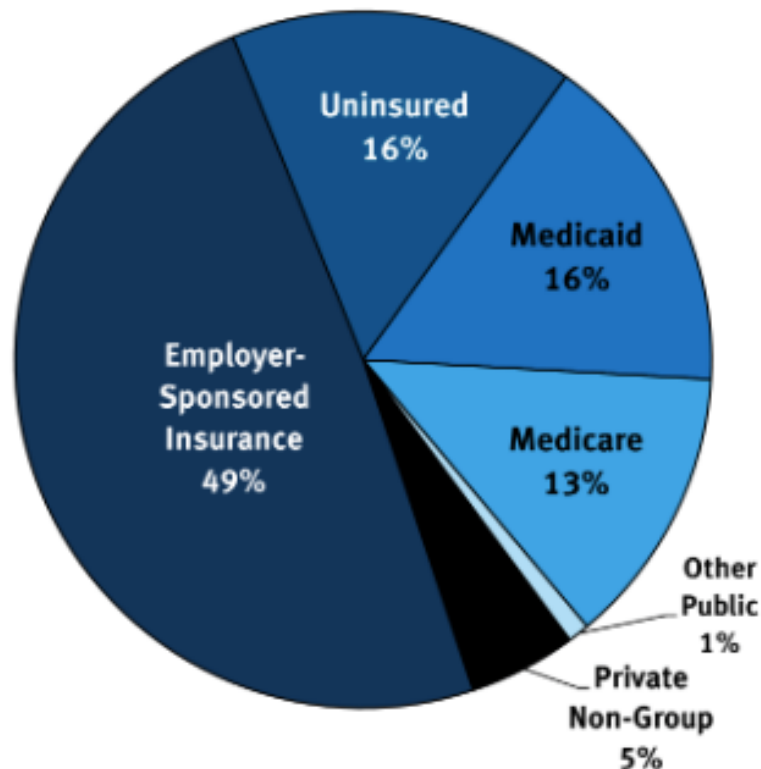
MED RECORDS/TESTS DID NOT REACH DR IN TIME
FOR APPOINTMENT, IN PAST 2 YEARS



HEALTH INSURANCE COVERAGE AND COSTS

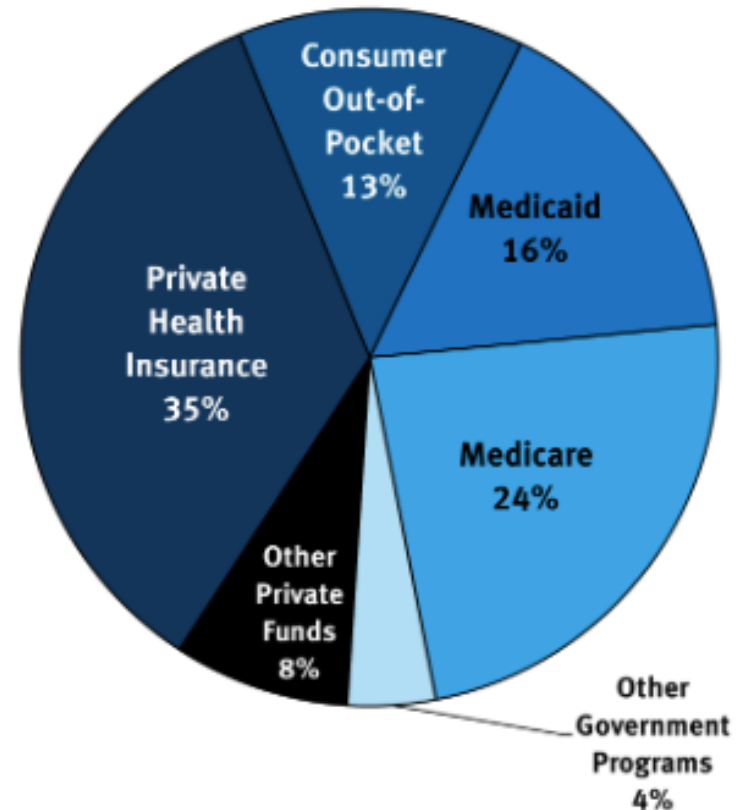
Health Care Coverage and Personal Health Care Expenditures in the U.S., 2011

Health Coverage



Total = 307.9 million

Health Spending



Total = \$2.3 trillion

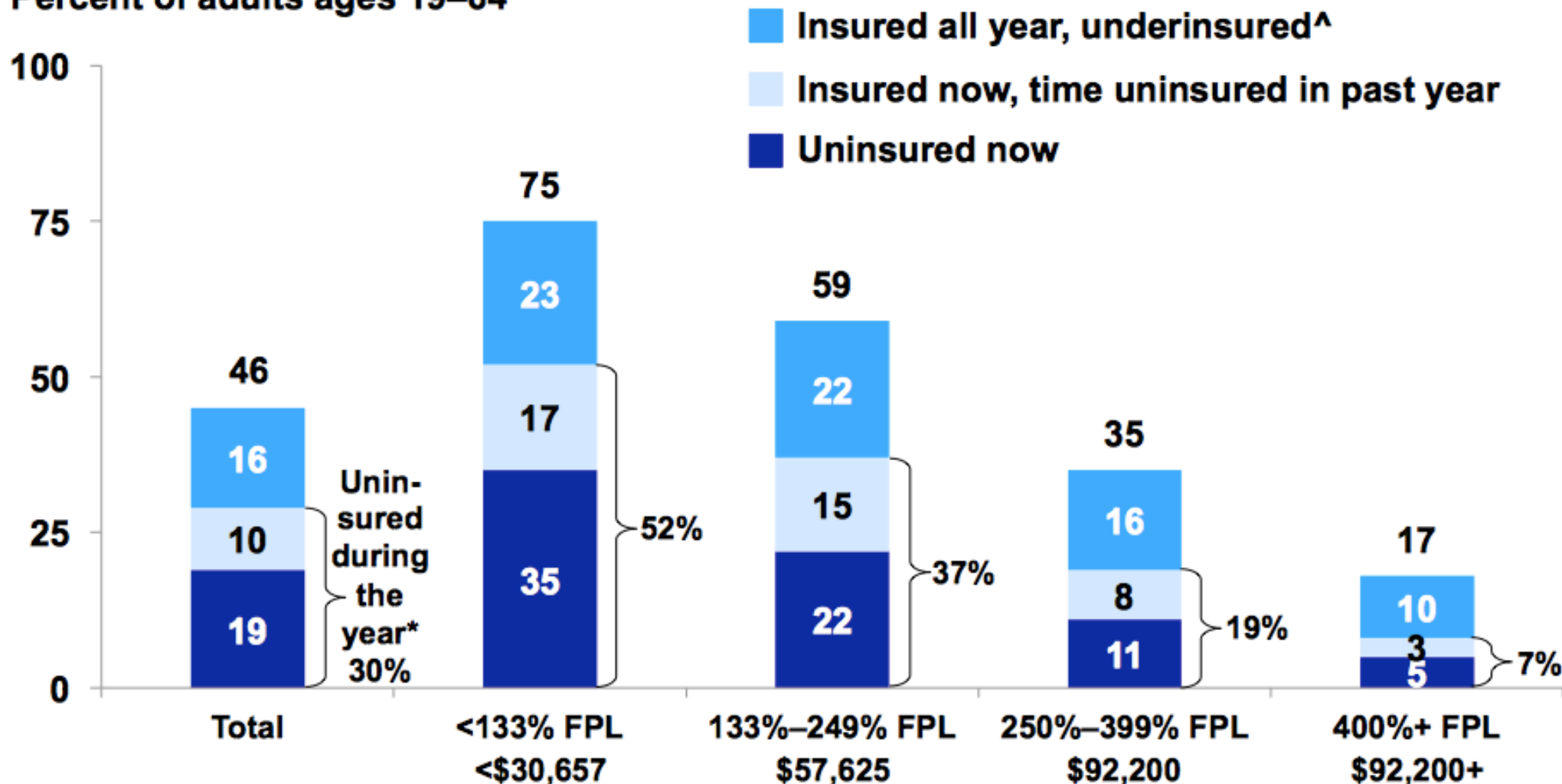
NOTE: Health spending total does not include administrative spending.

SOURCE: Health insurance coverage: KCMU/Urban Institute analysis of 2011 data from 2012 ASEC Supplement to the CPS.

Health expenditures: KFF calculations using 2011 NHE data from CMS, Office of the Actuary

Exhibit 5. Adults with Low Incomes Are Uninsured and Underinsured at the Highest Rates, 2012

Percent of adults ages 19–64



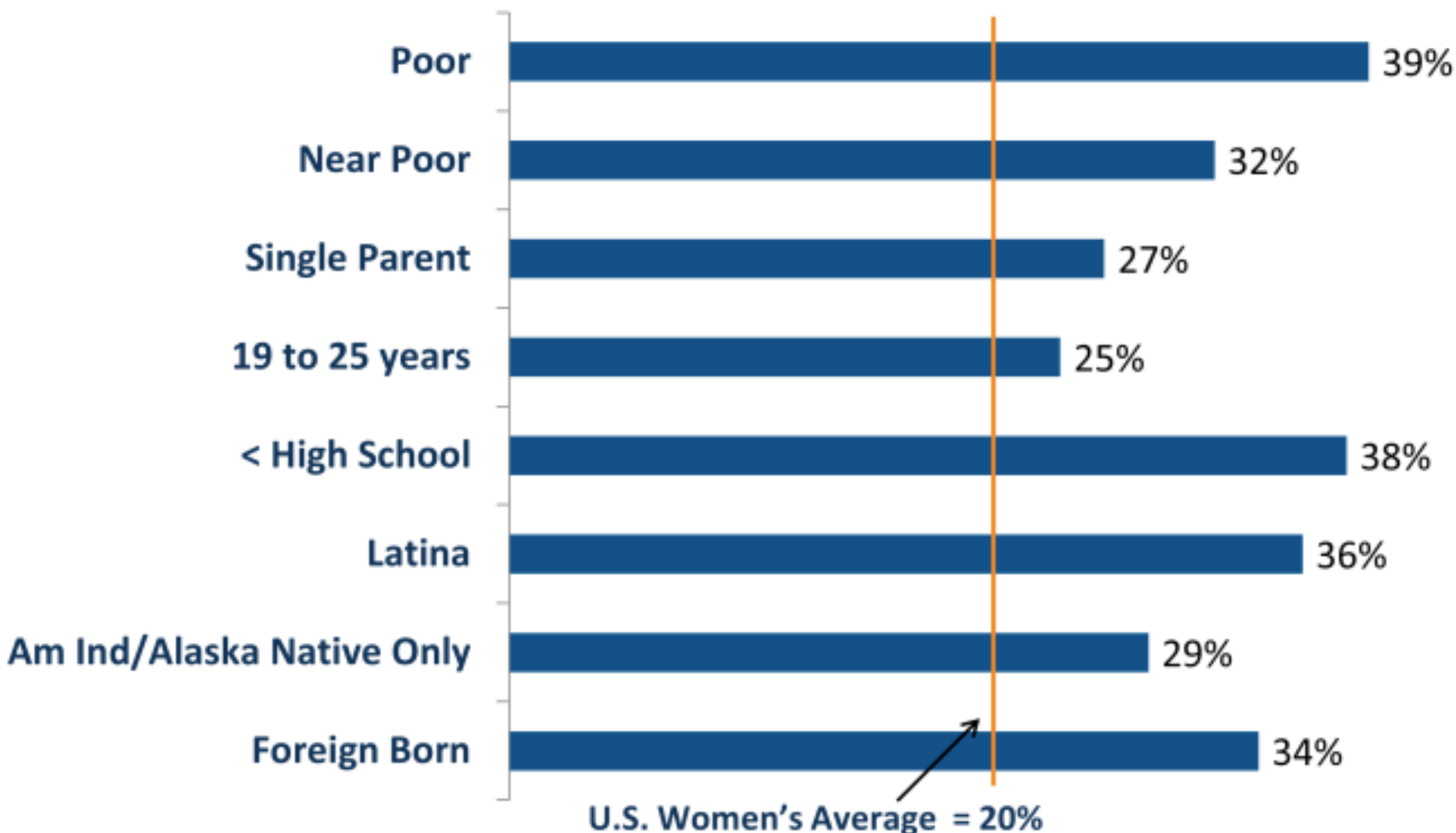
Notes: Totals may not equal sum of bars because of rounding. FPL refers to federal poverty level. Income levels are for a family of four in 2012.

^ Underinsured defined as insured all year but experienced one of the following: out-of-pocket expenses equaled 10% or more of income; out-of-pocket expenses equaled 5% or more of income if low income (<200% of poverty); or deductibles equaled 5% or more of income. * Combines "Uninsured now" and "Insured now, time uninsured in past year."

Source: The Commonwealth Fund Biennial Health Insurance Survey (2012).

Women at Greatest Risk for Being Uninsured, 2012

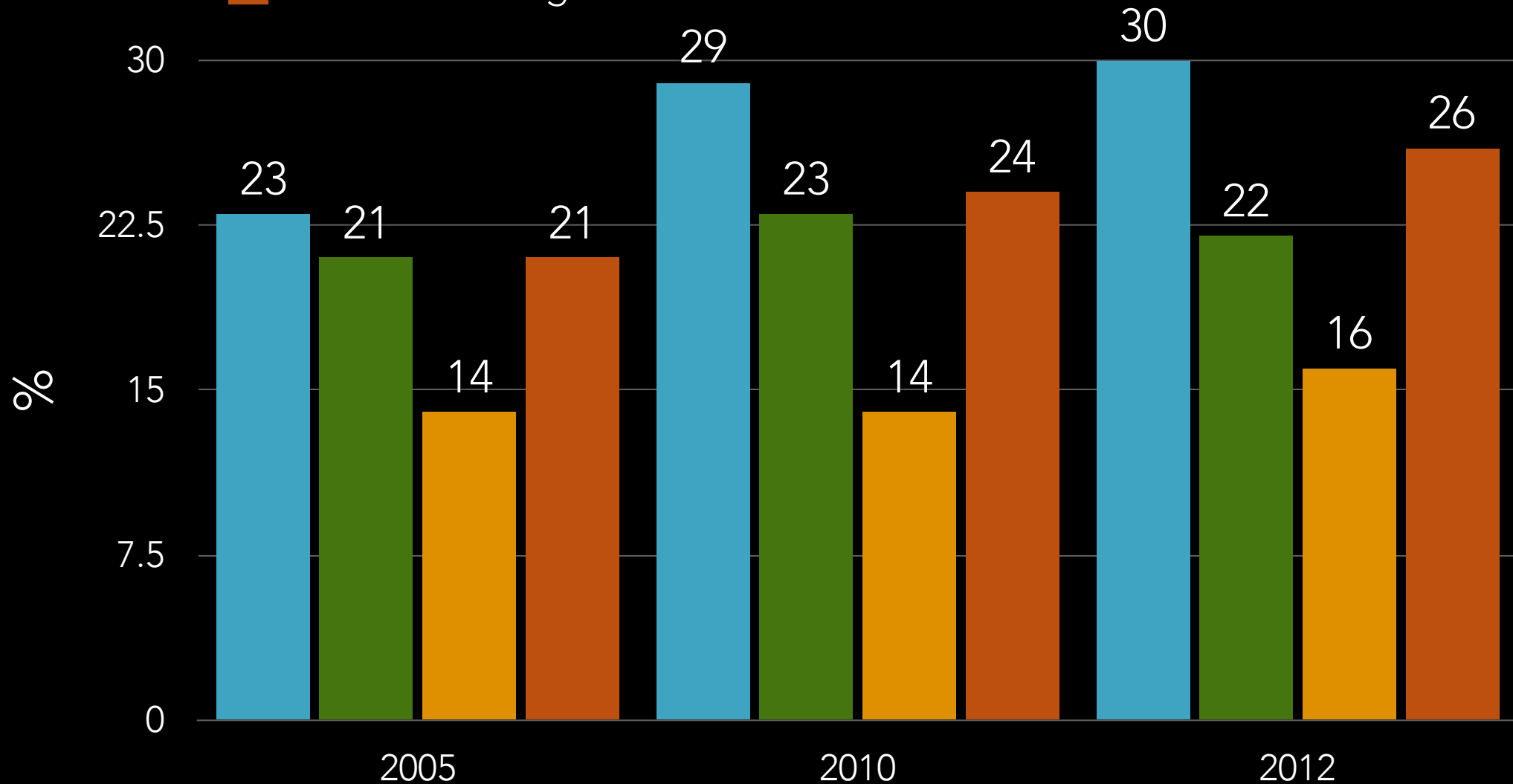
Percentage of Women ages 18 to 64 years among various groups who are uninsured



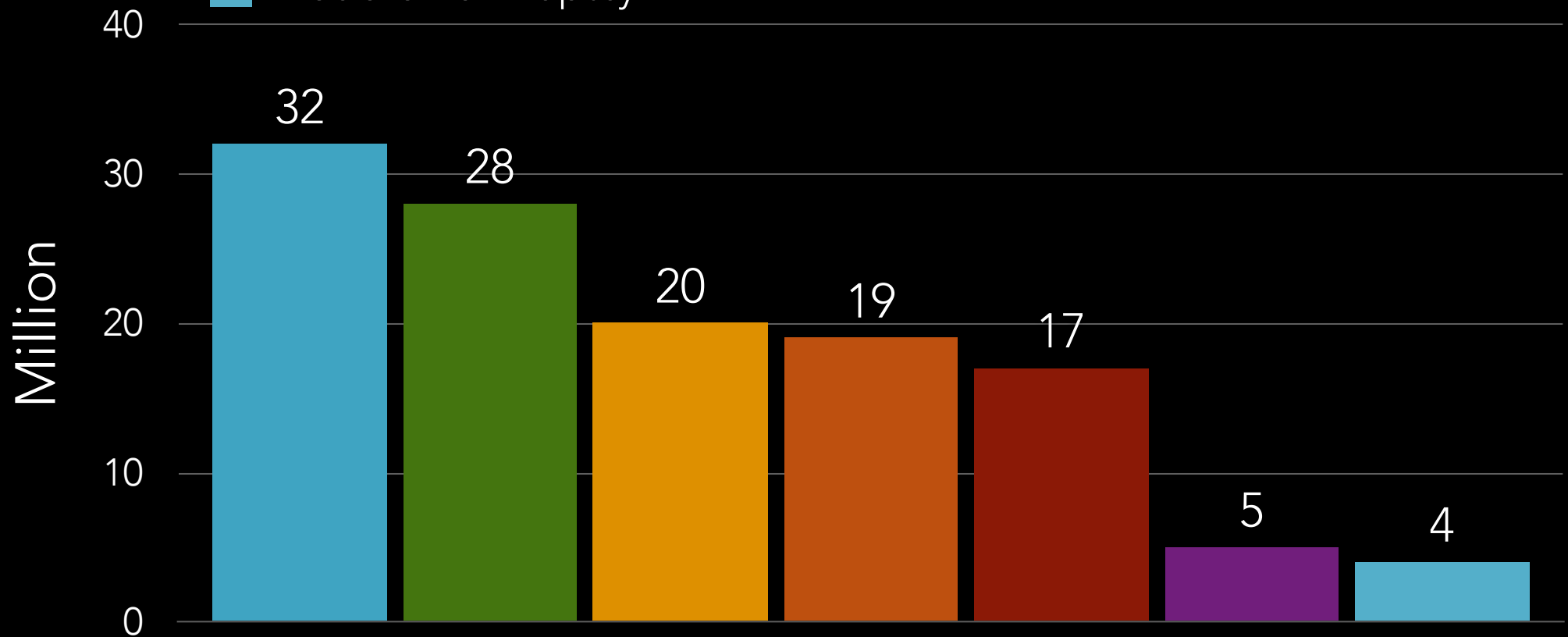
Note: Poor indicates family income <100% of the federal poverty level, which was \$19,090 for a family of three in 2012. Near poor indicates family income between 100% and 200% of the federal poverty level.

Source: Kaiser Family Foundation and Urban Institute analysis of the March 2013 Current Population Survey, U.S. Bureau of the Census.

- Problems Paying or Unable to Pay Med Bills
- Contacted by a Collection Agency about Med Bills
- Had to Change Way of Life to Pay Bills
- Med Bills Being Paid Off Over Time



- Received a Lower Credit Rating
- Used All of Savings
- Took on Credit Card Debt
- Unable to Pay for Basic Necessities
- Delayed Career or Education Plans
- Took Out a Mortgage Against Home or Took out A Loan
- Declare Bankruptcy

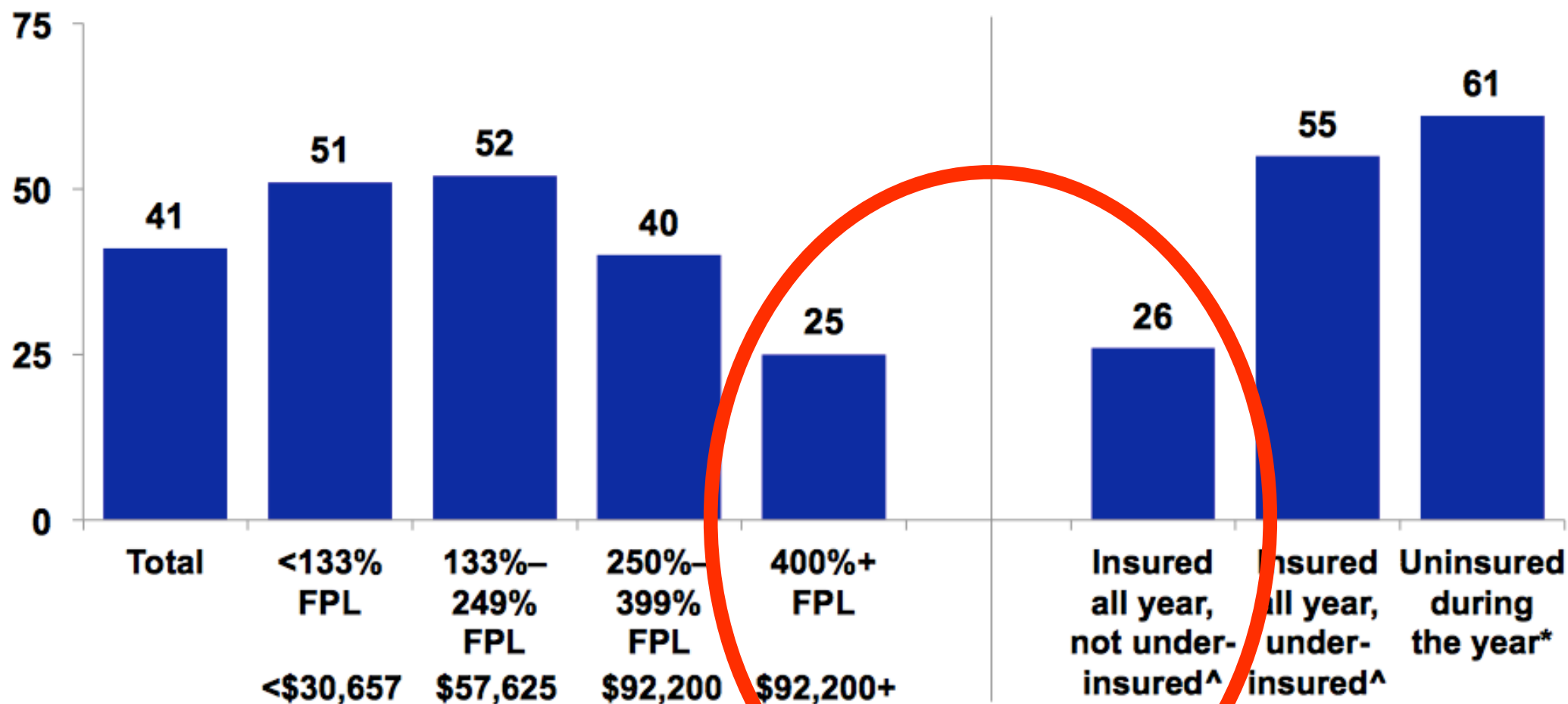


2012, with Med Bill Problems or Med Debt

Commonwealth Fund Biennial Health Insurance Survey

Exhibit 8. Problems with Medical Bills or Accrued Medical Debt Highest Among Adults with Low and Moderate Incomes, 2012

Percent of adults ages 19–64 with medical bill problems or accrued medical debt**



Notes: FPL refers to federal poverty level. Income levels are for a family of four in 2012.

** Had problems paying medical bills, contacted by a collection agency for unpaid bills, had to change way of life in order to pay medical bills, or has outstanding medical debt. ^ Underinsured defined as insured all year but experienced one of the following: out-of-pocket expenses equaled 10% or more of income; out-of-pocket expenses equaled 5% or more of income if low income (<200% of poverty); or deductibles equaled 5% or more of income. * Combines "Uninsured now" and "Insured now, time uninsured in past year."

Source: The Commonwealth Fund Biennial Health Insurance Survey (2012).

Why is our system so expensive?

Drawing on the readings provide at least 3 reasons.

WHY SO EXPENSIVE?

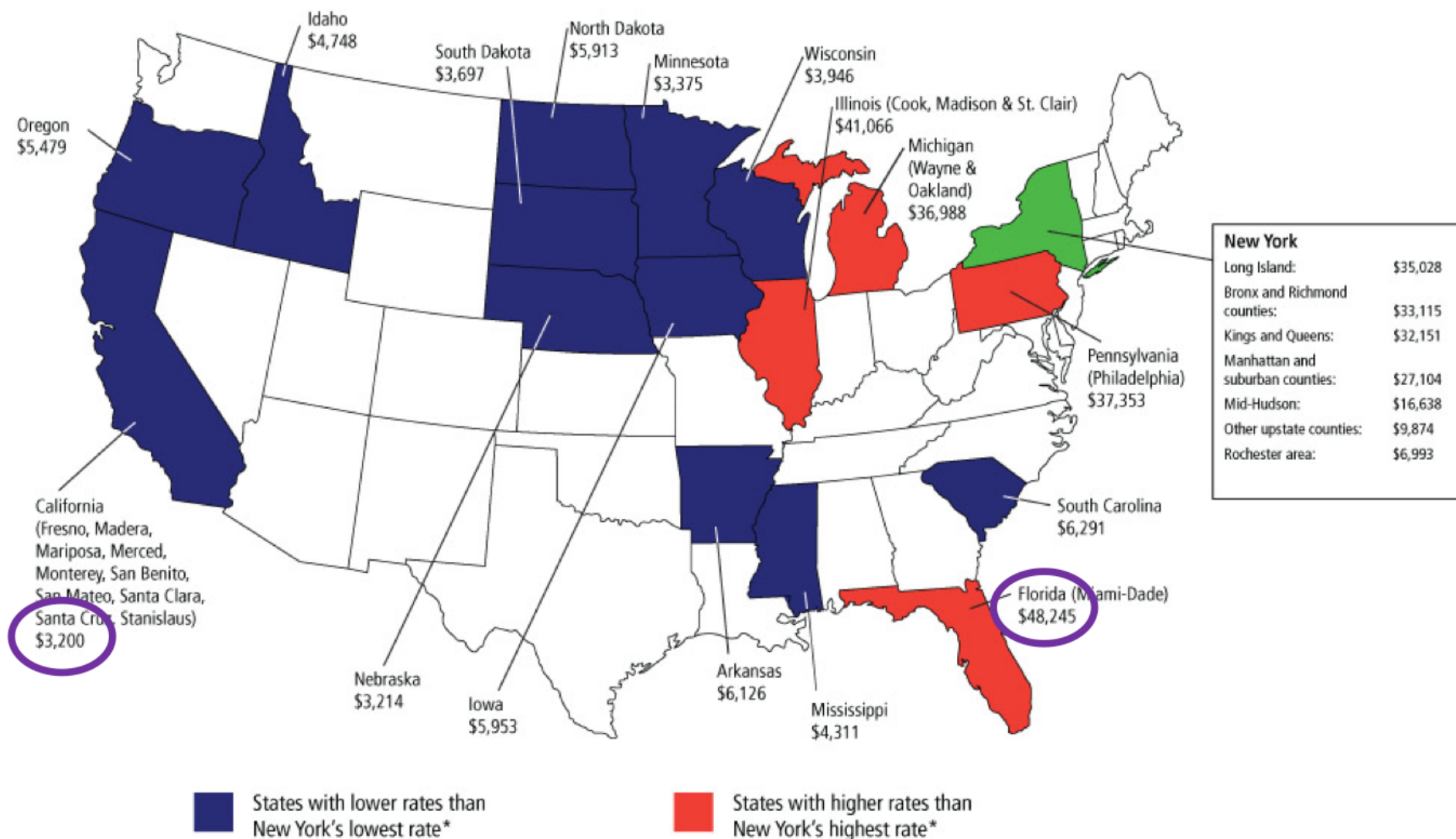
- Providers make much more relative to those who are overseas
 - Rx's 2-10 x's as expensive
 - Dr.'s salaries are quite high comparatively
- Hospitals maintain a somewhat large profit margin (even non-profits - average somewhere between 5.5-11.7%)
- But not a big culprit of our spending on health care

WHY SO EXPENSIVE?

- Malpractice lawsuits
 - Again, though, NOT a big culprit

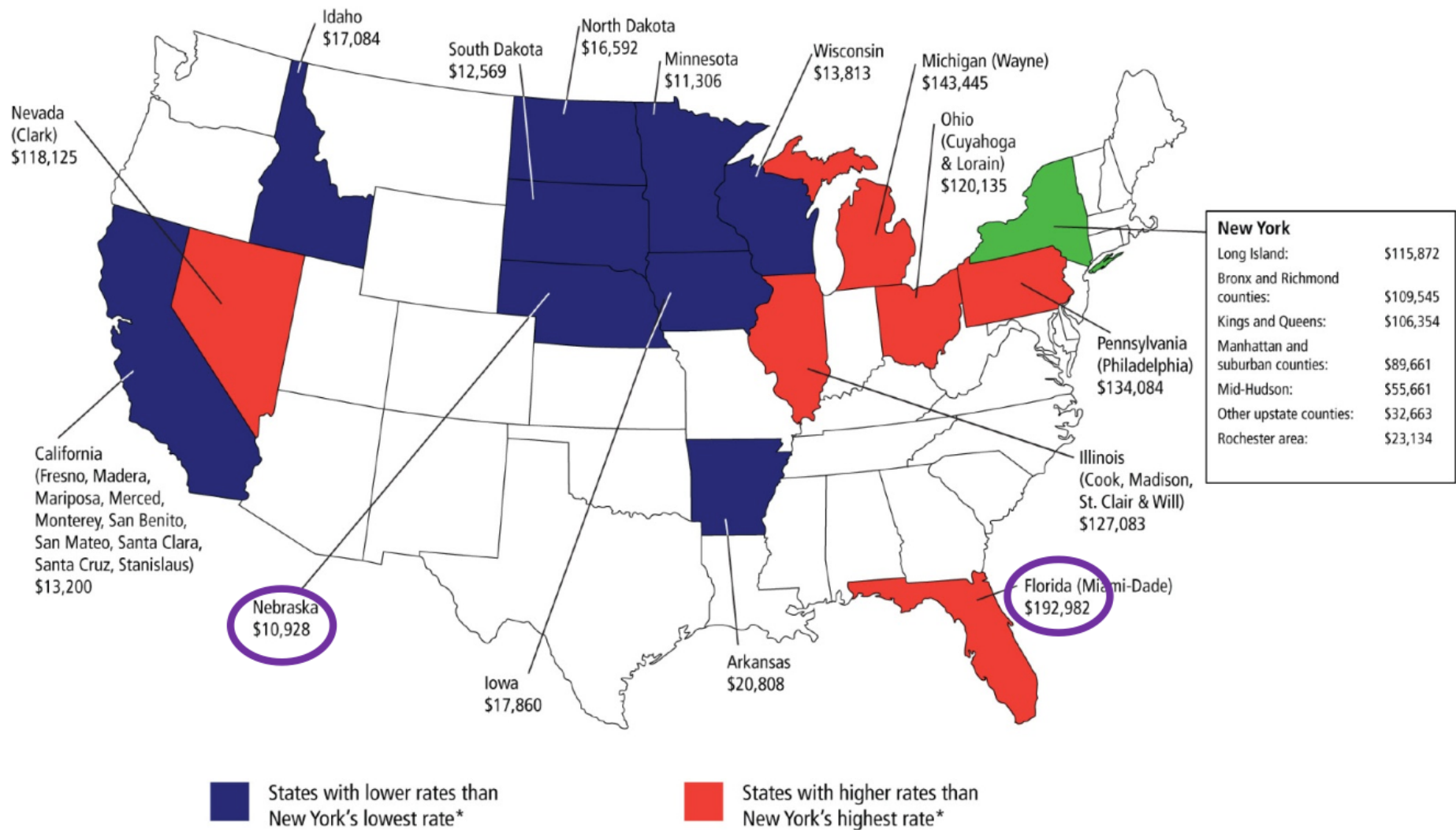


Internal Medicine - Sample medical malpractice rates, 2010





General Surgery – Sample medical malpractice rates, 2010





Obstetrics & Gynecology – Sample medical malpractice rates, 2010

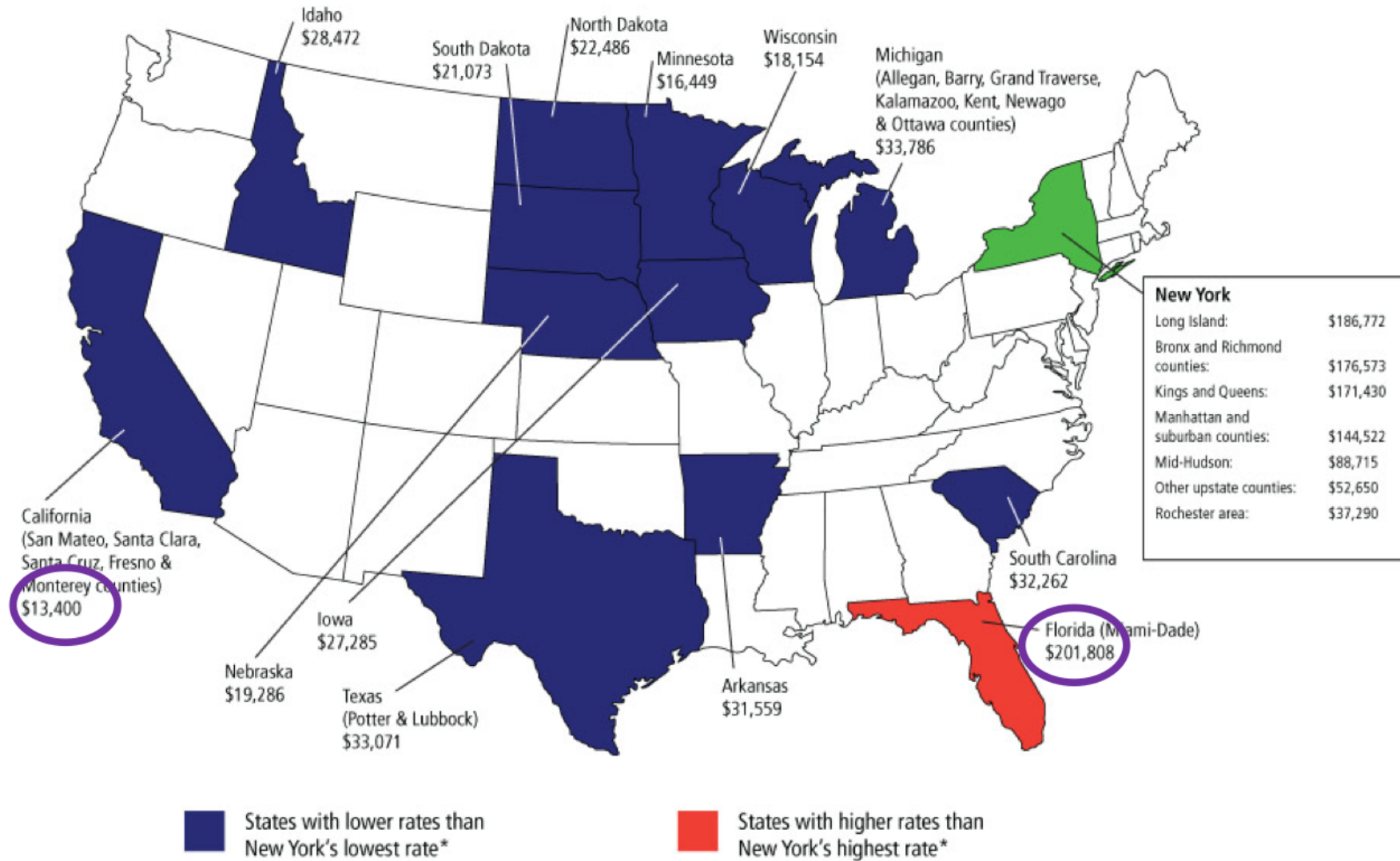
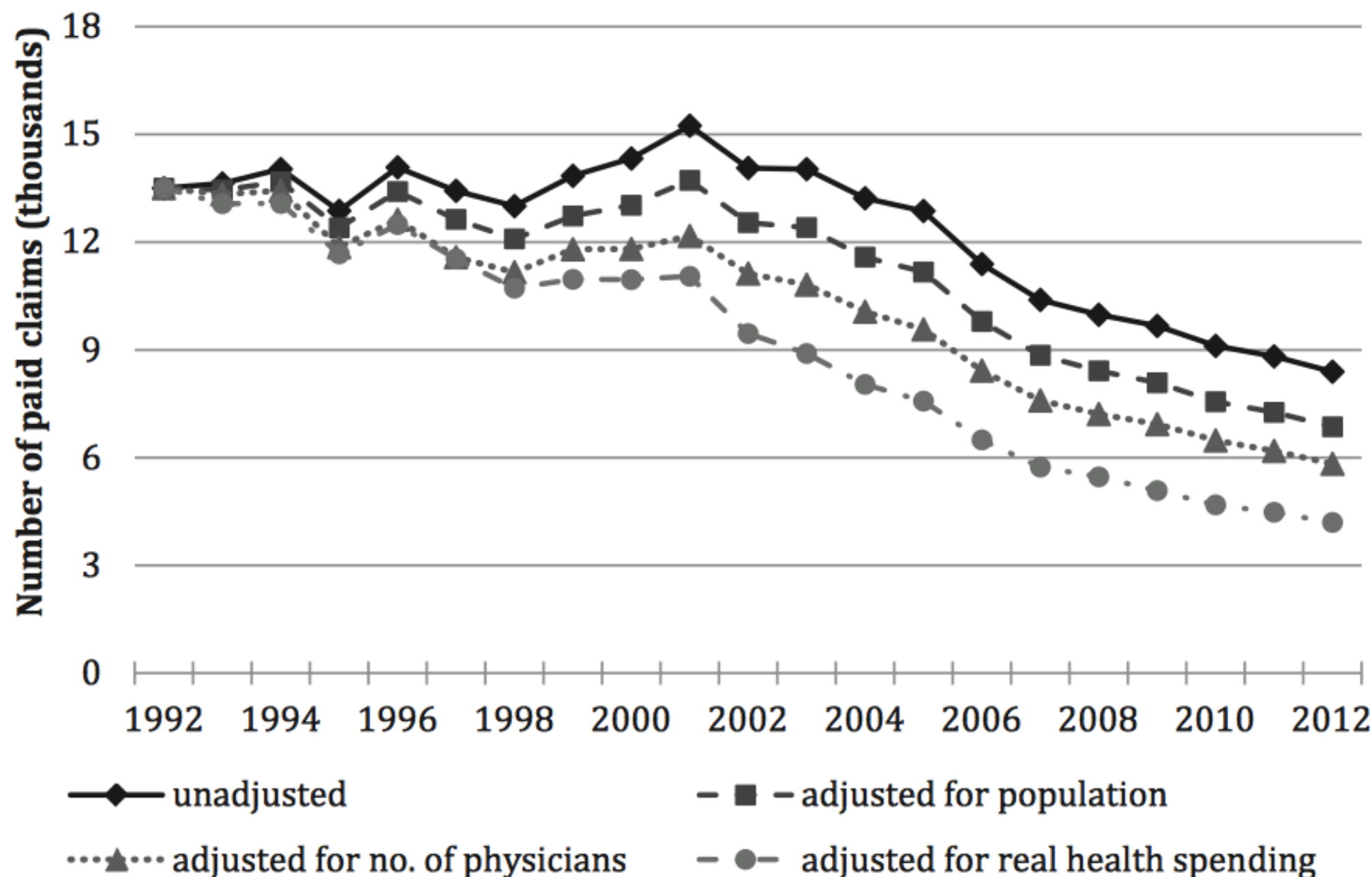
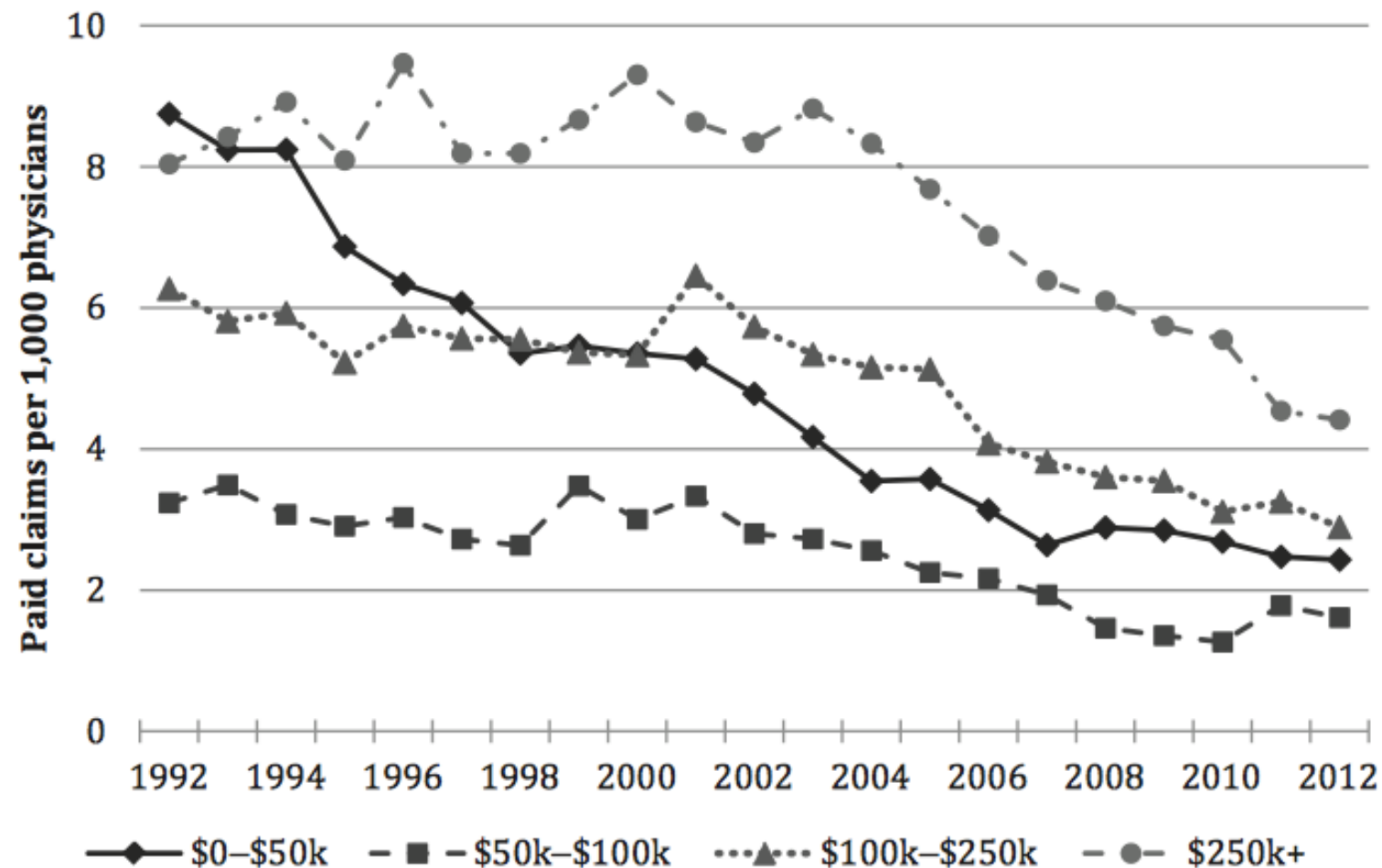


Figure 1: National trends: total paid claims by year.



NOTE: Paid med mal claims reported to NPDB by year, and paid claims adjusted for population, number of physicians, and real health spending, respectively. Sample is 259,941 paid claims against physicians closed from 1992–2012. Adjustments are relative to base year of 1992. Amounts in 2011 dollars.

Figure 2: Paid claims per 1,000 physicians by payout amounts.

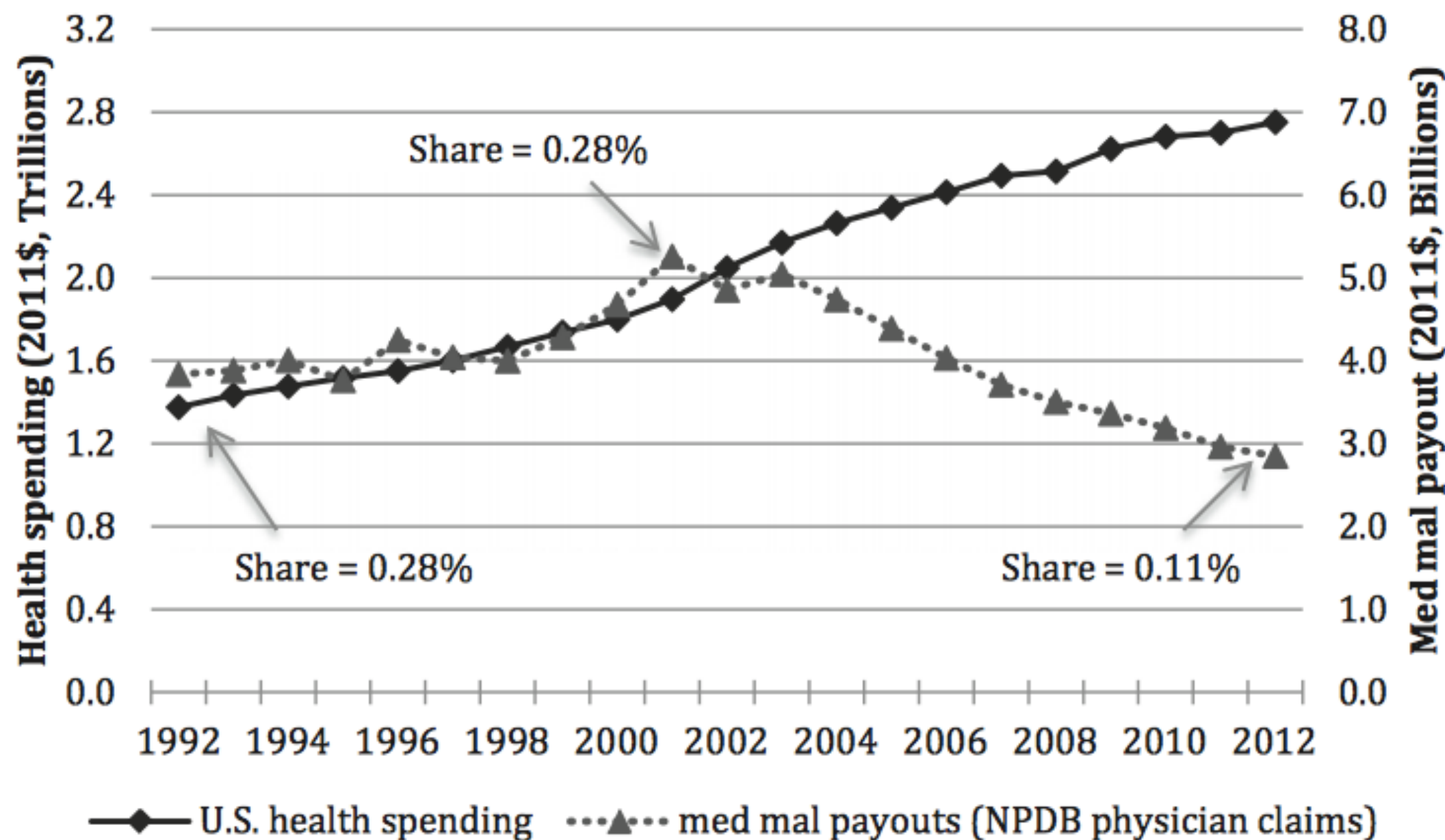


Percentage Changes in Paid Claims per 1,000 Physicians

Time period	\$0-\$50k	\$50-\$100k	\$100-\$250k	≥ \$250k
1992-2001	-39.7%	3.0%	3.0%	7.4%
2001-2012	-53.9%	-51.6%	-55.2%	-48.9%
1992-2012	-72.2%	-50.2%	-53.9%	-45.1%

NOTE: Paid med mal claims reported to NPDB by year, per 1,000 physicians, for indicated payout ranges (<\$50k, \$50-100k, \$100-250k, and >\$250k). Sample is 259,941 paid claims against physicians closed from 1992-2012. Amounts in 2011 dollars. Table 1 provides state-level detail on paid claims per 1,000 physicians.

Figure 5: Total health-care spending versus med mal payouts.



NOTE: U.S. national health expenditures (left axis), and total payouts on med mal claims against physicians reported to NPDB, by year (right axis). Sample is 259,941 paid claims against physicians closed from 1992–2012. Amounts in 2011 \$ trillions for left axis and 2011 \$ billions for right axis.

WHY SO EXPENSIVE? COST OF RX'S

Table 1. Examples of Country-Specific Average Drug Prices for Top-Selling Drugs in 2015

Drug	Monthly Price, US \$				
	United States		Canada	France	Germany
	Nondis- counted Price	Estimated Discounted Price			
Adalimumab (Humira), 40 mg biweekly	3430.82	2504.50	1164.32	981.79	1749.26
Fluticasone/salmeterol (Advair), 250 µg, 50 µg daily	309.60	154.80	74.12	34.52	37.71
Insulin glargine (Lantus), 50 insulin units daily	372.75	186.38	67.00	46.60	60.90
Rosuvastatin (Crestor), 10 mg daily	216.00	86.40	32.10	19.80	40.50
Sitagliptin (Januvia), 100 mg daily	330.60	168.61	68.10	35.40	39.00
Sofosbuvir (Sovaldi), 400 mg daily	30 000.00	17 700.00	14 943.30	16 088.40	17 093.70
Trastuzumab (Herceptin), 450 mg every 3 wk	5593.47	4754.45		2527.97	3185.87

Source: Bloomberg Business report and SSR Health

WHY SO EXPENSIVE? COST OF RX'S

Table 4. Sales and Research and Development Expenditures of the 10 Largest Pharmaceutical Companies in 2014^a

Ranking	Company	\$ (in Millions)		Research and Development, % Total Sales
		Total Sales	Research and Development	
1	Novartis	57 996	9943	17
2	Pfizer	49 605	8393	17
3	Sanofi	41 114	5873	14
4	Roche	48 039	10 015	21
5	Merck	42 237	7180	17
6	Johnson & Johnson ^b	74 331	8494	11
7	AstraZeneca	26 095	5579	21
8	GlaxoSmithKline	35 825	5372	15
9	Teva ^c	20 272	1488	7
10	Gilead	24 474	2854	12

Source: Securities and Exchange Commission 10-K Filings and Company Annual Reports

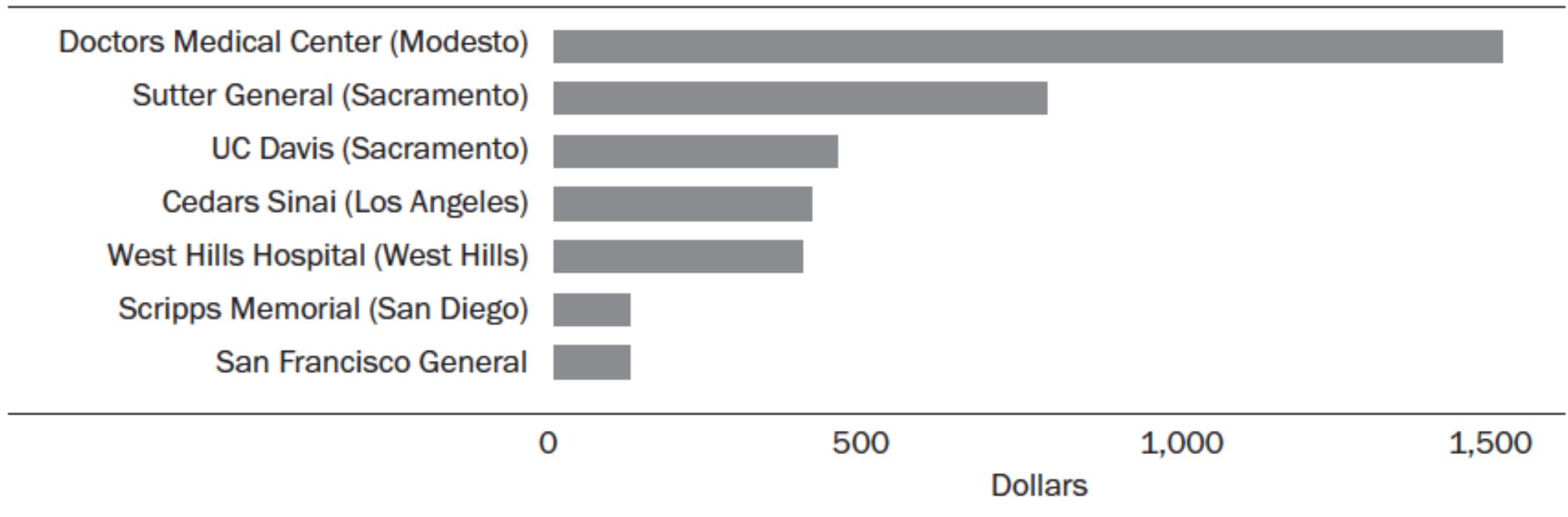
WHY SO EXPENSIVE?

- For-profit health insurance companies
 - Guaranteed issue
 - Individual mandate
- Complexities of our care system
 - “Quite often, neither the buyer (the patient) nor the seller (the doctor) knows how much a particular treatment costs.” (Reid p. 42)

THE CHARGEMASTER

EXHIBIT 1

Charges For A Chest X-Ray (Two Views, Basic) At Selected California Hospitals, 2004



SOURCE: L. Lagnado, "California Hospitals Open Books, Showing Huge Price Differences," *Wall Street Journal*, 27 December 2004.