Will Anarchy or Equilibrium Prevail in U.S. Health Care?

How to Liberate Physicians
to Care for Patients?

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Overview

I. Today's health care landscape and climate
II. The care we get depends heavily on the caregivers we've got
III. Real-world lessons for U.S. health care from other rich democracies

I. Today's health care landscape and climate

A. A few noteworthy changes
B. Access, cost, appropriateness—allies or antagonists?
C. Market, government, and professionalism
D. Chaos or equilibrium?

A. A few noteworthy changes

1. Is access improving?
2. Are costs under control?
3. Is care becoming more appropriate?
4. How is the configuration of care changing?

1. Is access improving?

Yes

- 50 million uninsured falls to 20-30 million
- Medicaid and Medicare boost PCP fees, for now
- Shrink Rx donut hole

Maybe

- 250 million under-insured?
  - Serious illness = bankrupt
    - Maximum $6,000 - $12,000 out-of-pocket caps, if stay in-network
    - Weak dental insurance
    - Mental health parody?
    - LTC fears
    - Will low Medicaid prices lead hospitals and doctors to cease serving Medicaid patients outside ERs?
  - Especially combined with growing income inequality

2. Is cost under control?

Yes

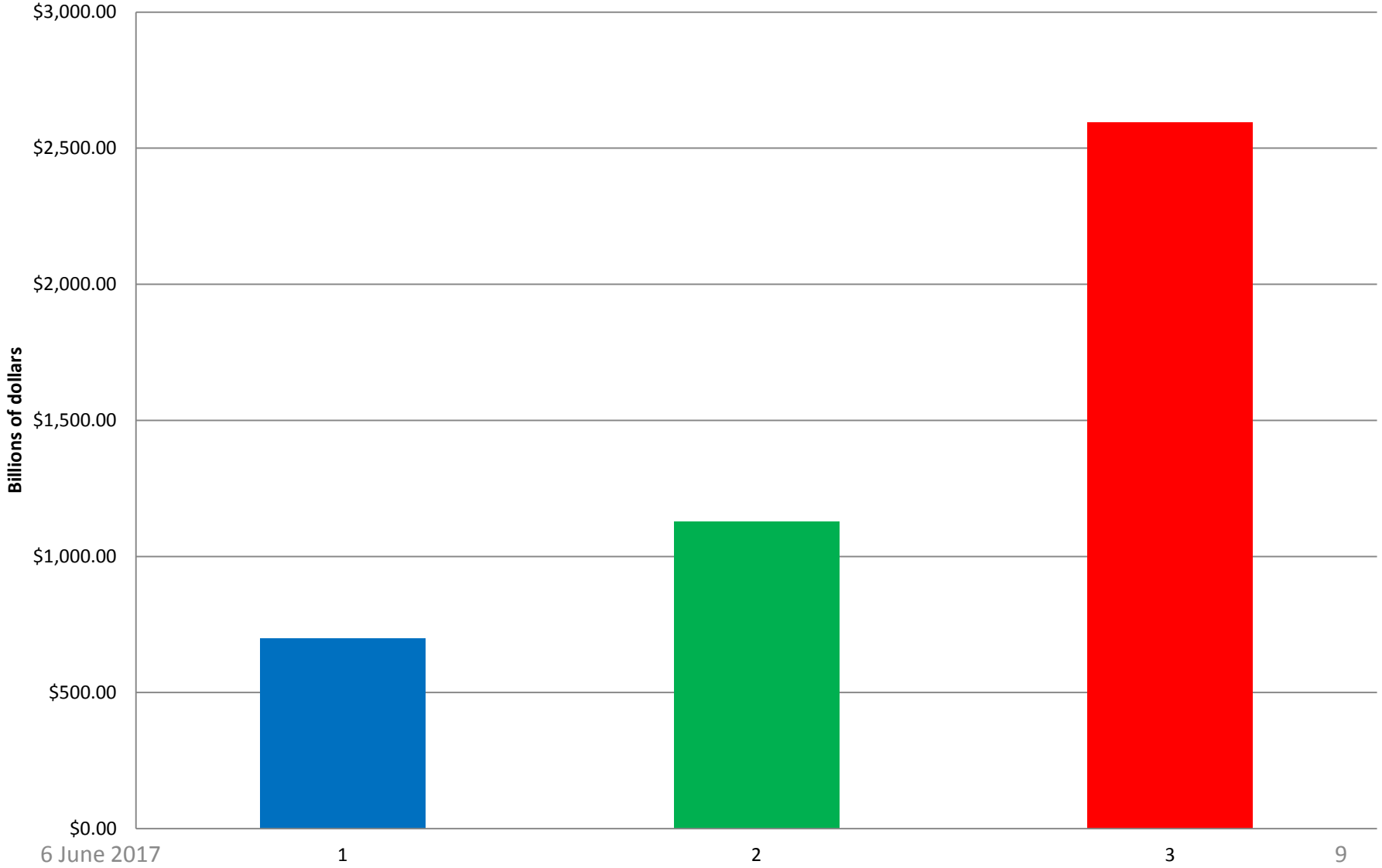
- Insurer rate caution
- 85% MLR / care share
- EHRs
- Primary prevention
- Population health
- ACOs
- Pay for value not volume

Not yet

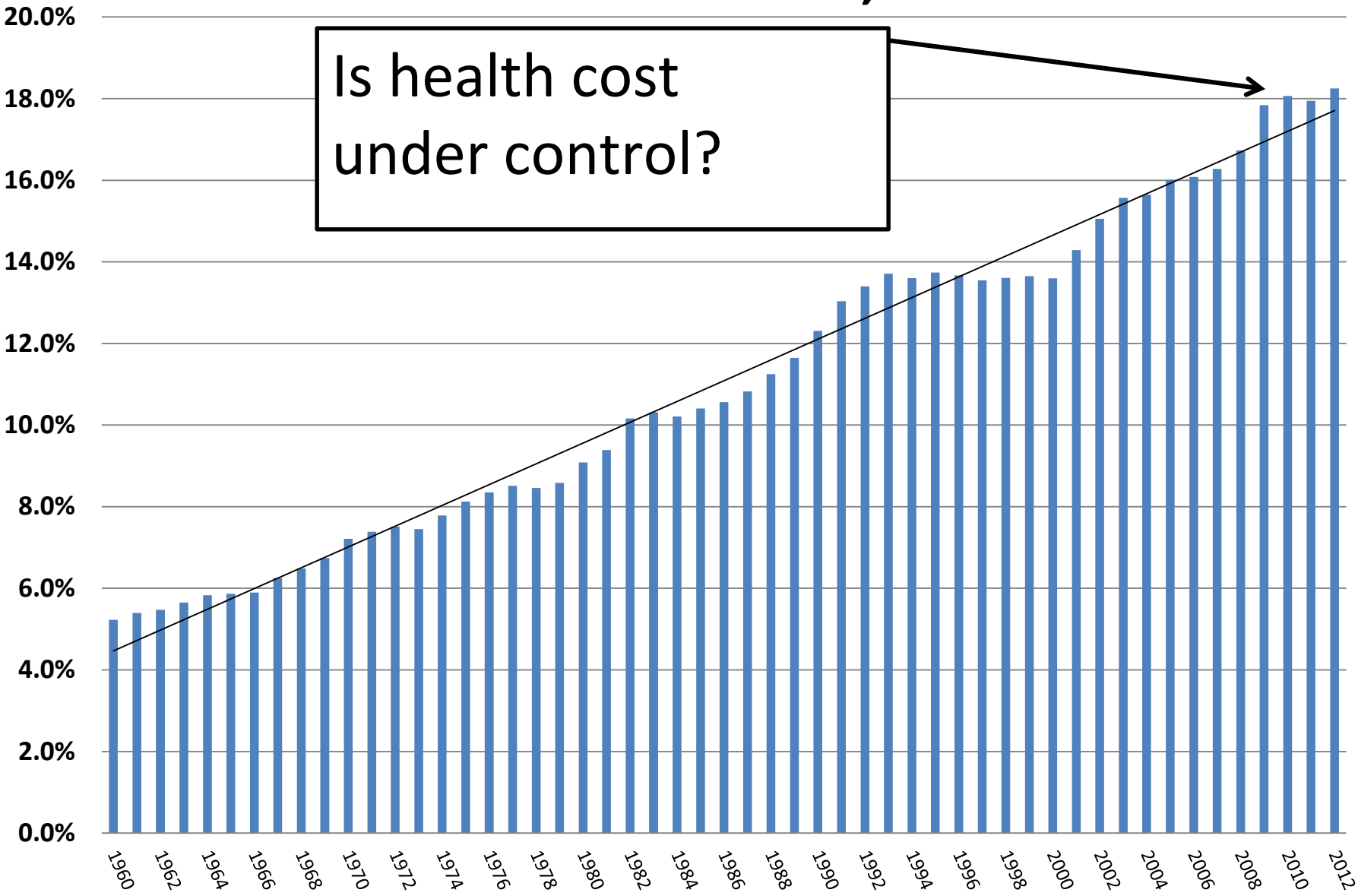
- Economy - fear
- Higher OOPs
- We've heard this song before, often
- Costs plateau and spike

How big?

Which is health? Education? Defense?



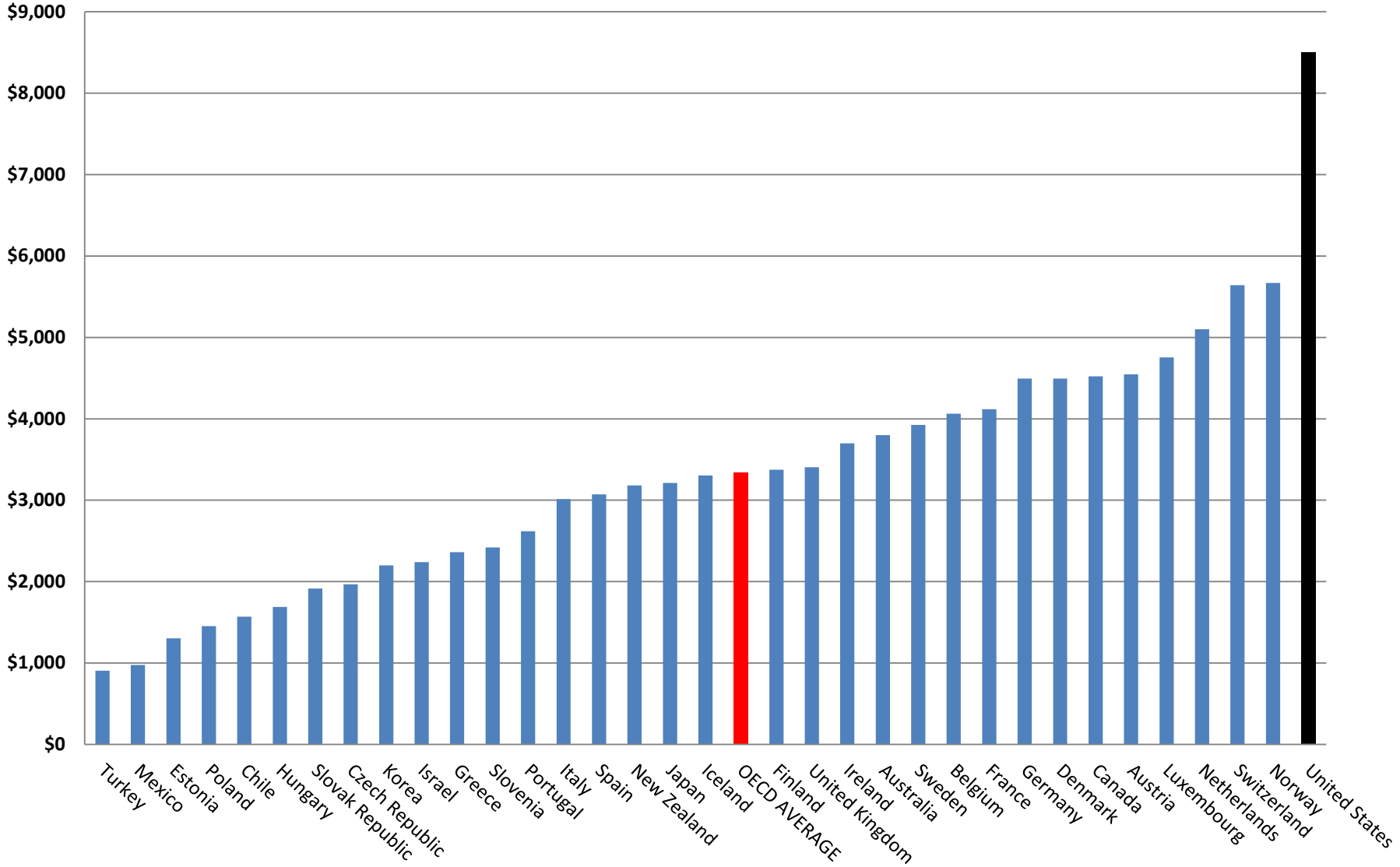
Health's Share of U.S. GDP, 1960 - 2012



 Sources: OACT/CMS and BEA.

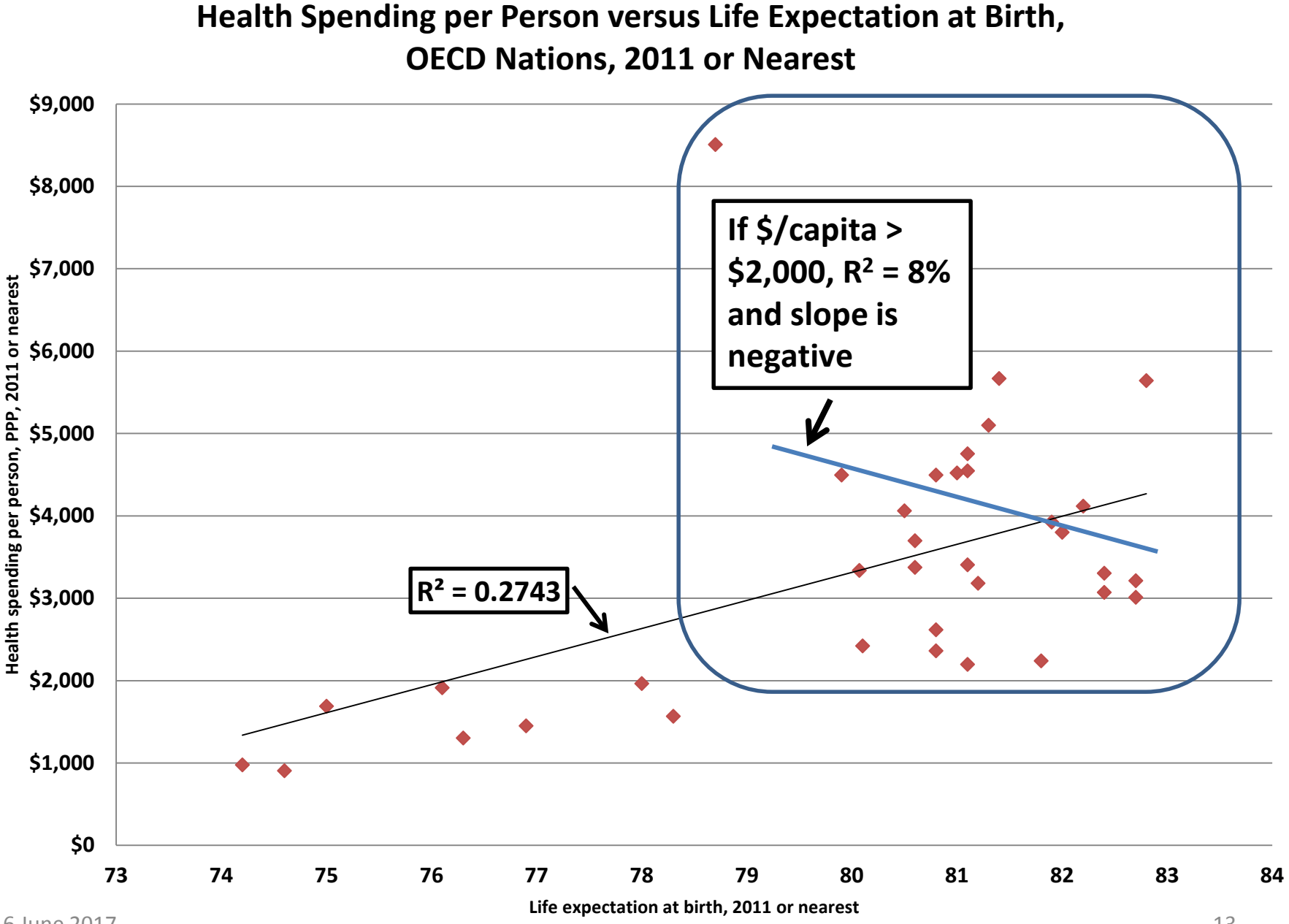
Health Spending per Person, OECD Nations, 2011

(or Nearest Year), U.S. Dollar Purchasing Power Parities

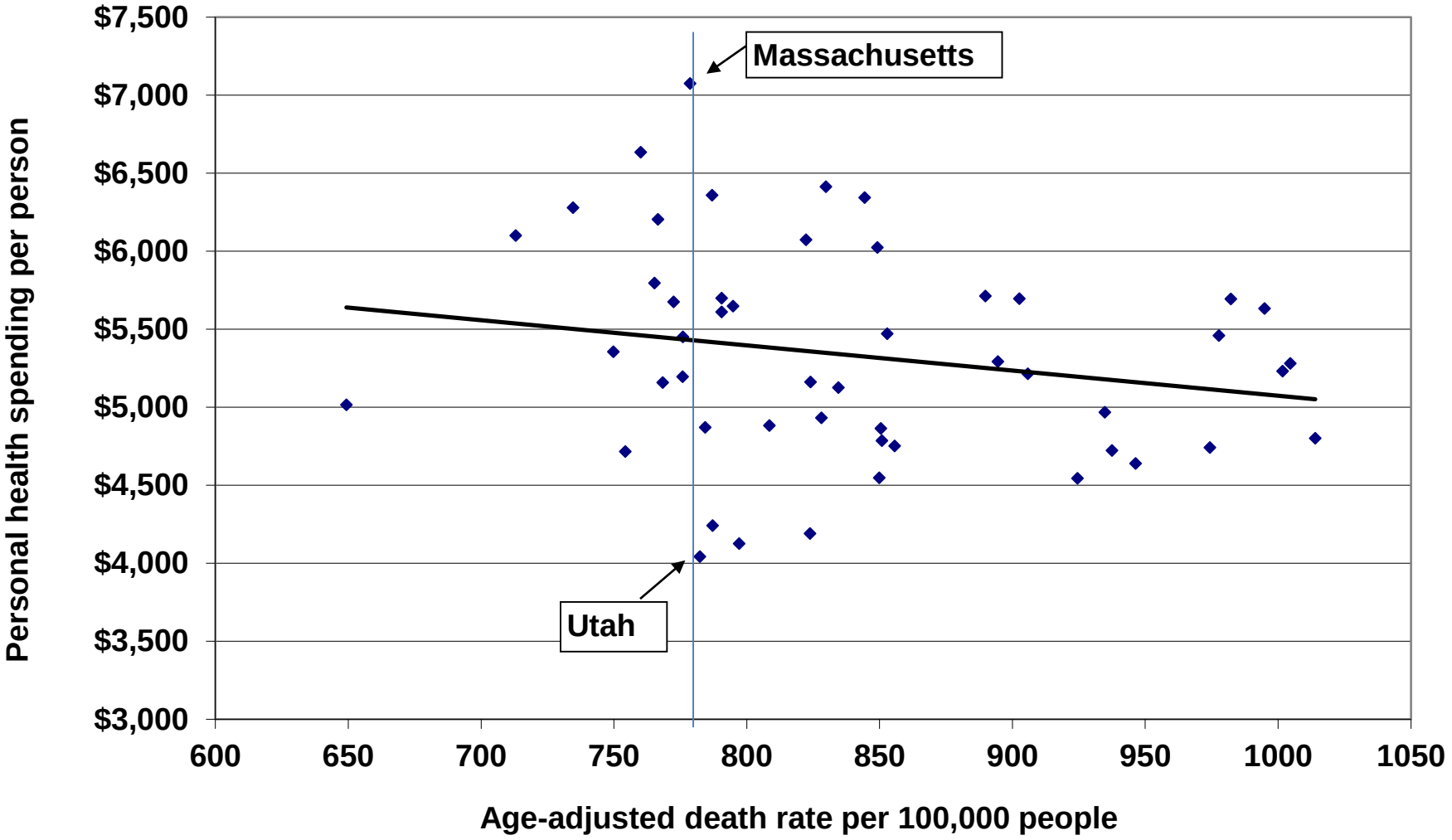


U.S. costs are high internationally despite

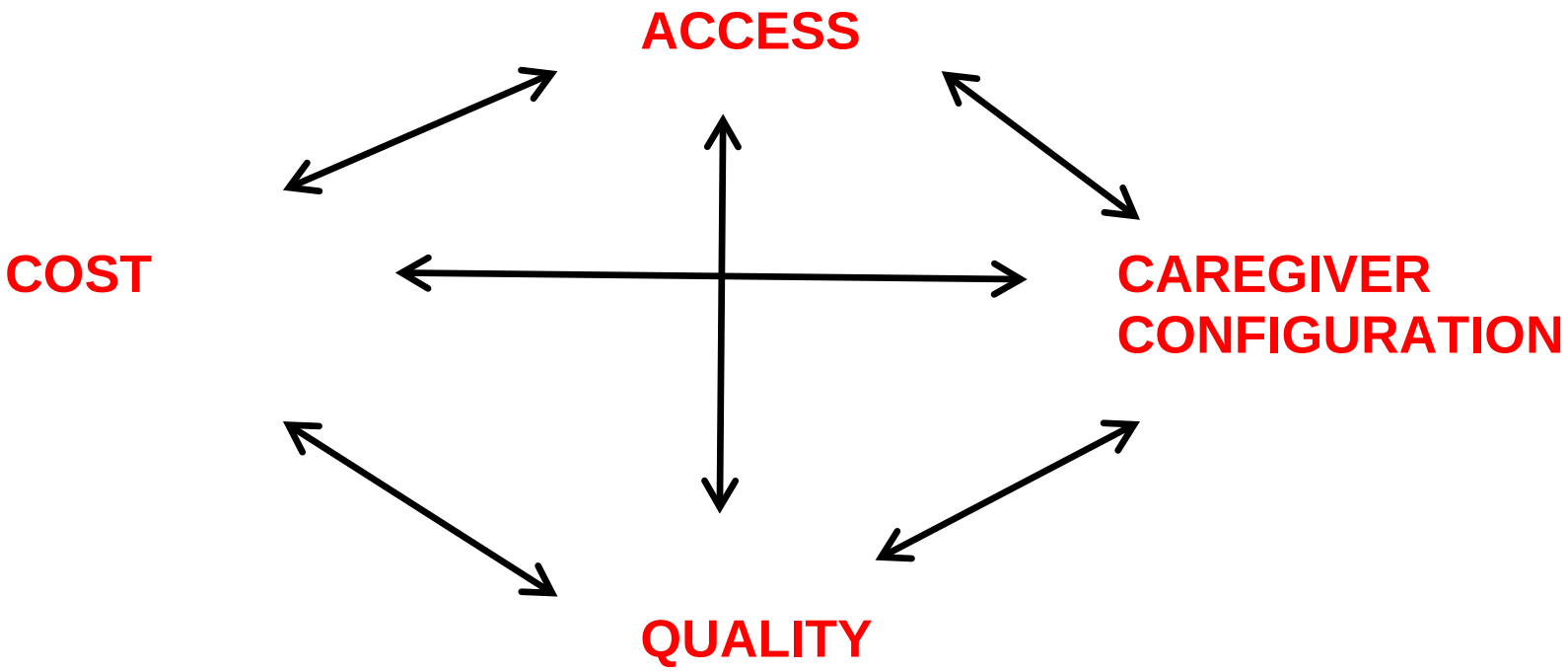
- Much younger people
- Health workforce still largely non-unionized
- Outcomes inferior—and slipping—relative to other rich democracies
  - They generally use more tobacco and alcohol than we do, and the outcomes gap long antedated our obesity problem


Health Spending per Person versus Life Expectation at Birth, OECD Nations, 2011 or Nearest
$9,000
$8,000
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0
Health spending per person, PPP, 2011 or nearest
73
74
75
76
77
78
79
80
81
82
83
84
Life expectation at birth, 2011 or nearest
If $/capita > $2,000, R² = 8% and slope is negative
R² = 0.2743

Across 50 States, Weak Correlation between Personal Health Spending per Person and Age-Adjusted Deaths per 100,000 People, 2003



B. Access, cost, appropriateness—allies or antagonists?



Iron triangle or triple aim?

Iron triangle

- Access
- Cost
- Quality

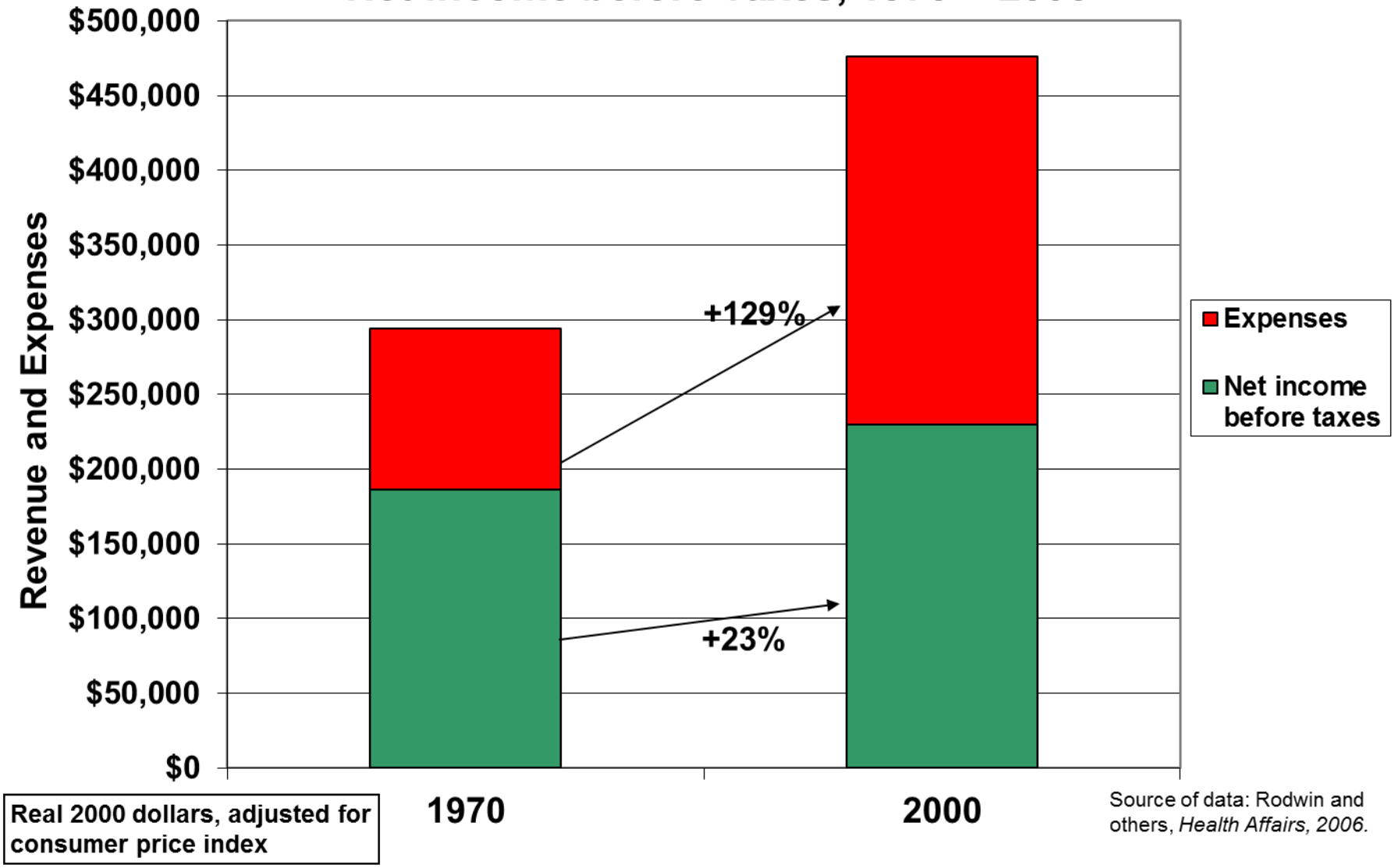
We can boost any two but the third must suffer

Triple aim

- Better care
- Improved population health
- Lower cost

We can have all three

U.S. Physician Average Gross Income, Expenses, and Net Income before Taxes, 1970 + 2000

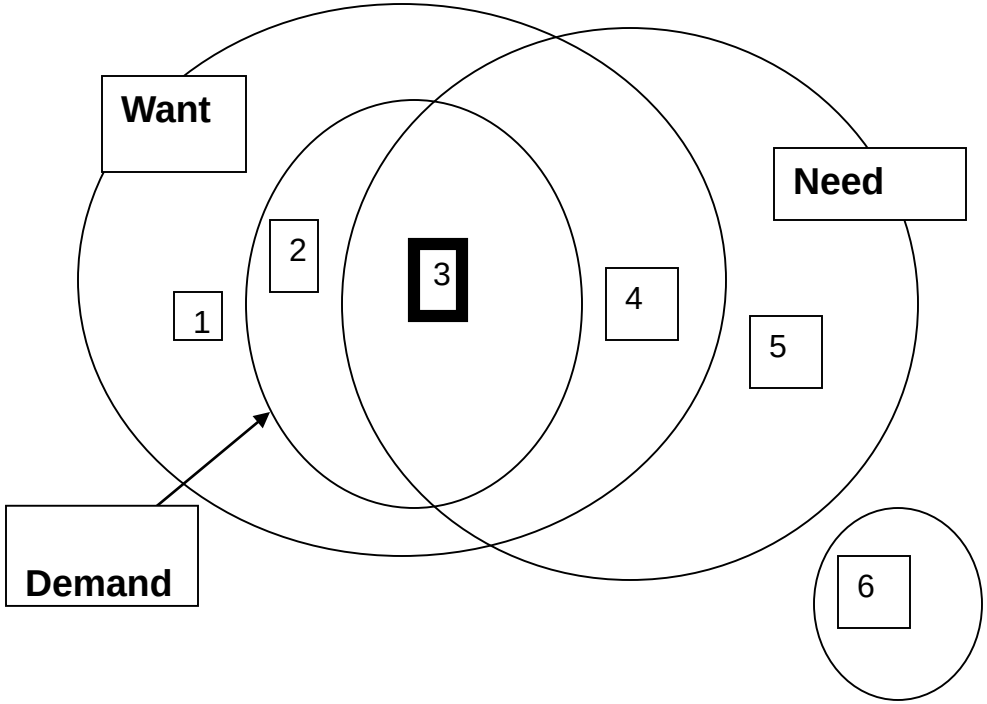


Real 2000 dollars, adjusted for consumer price index

Source of data: Rodwin and others, *Health Affairs, 2006.*

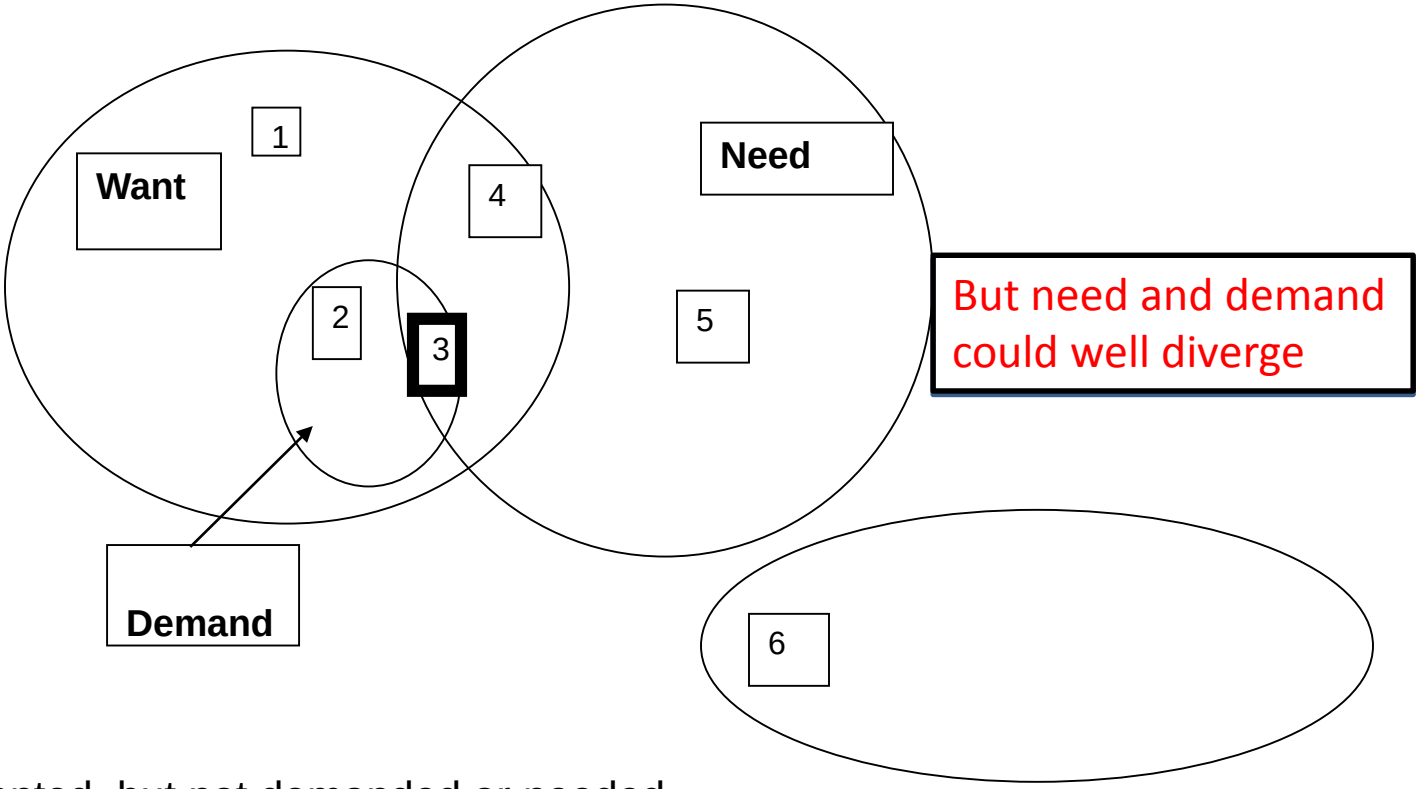
Initial want, need, demand – not to scale

Ideally, we'd like need, want, and demand to coincide—like pancakes stacked right on top of one another



1. Wanted, but not demanded or needed.
2. Wanted and demanded, but not needed.
3. Wanted, needed, and demanded. ***Yes!***
4. Wanted and needed, but not demanded.
5. Needed, but not wanted or demanded.
6. Supplier-induced demand—neither wanted nor needed, but demanded.

Growing unmet need and supplier-induced demand —not to scale



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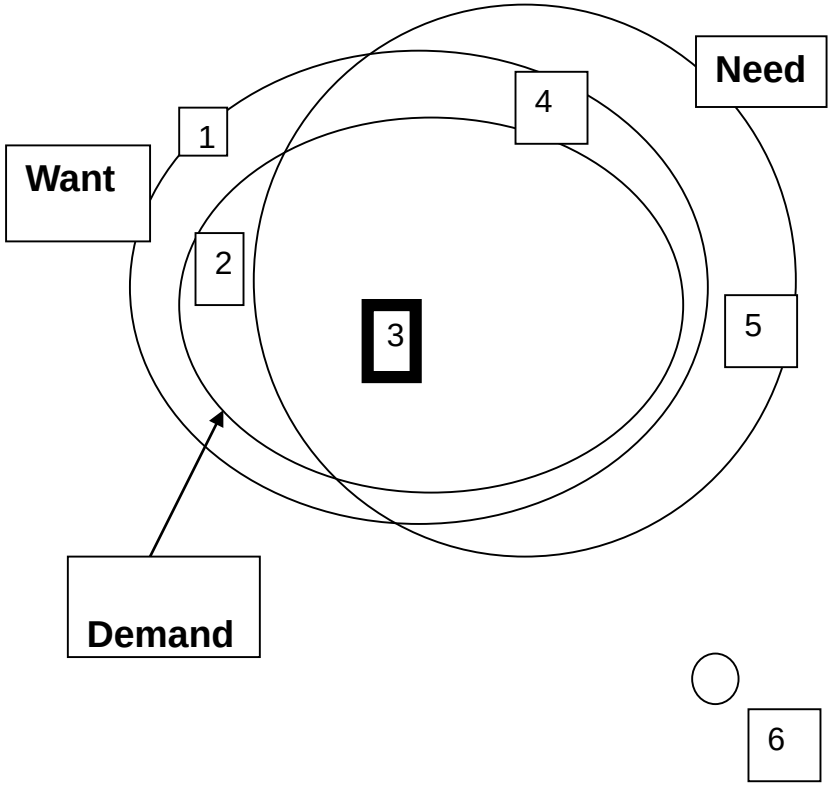
Want, need, demand better aligned



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Two equilibria

- One kind of equilibrium in health care means balancing access, cost, quality, caregiver configuration
  - The more they are inherently allied—or can be brought into alliance—the easier it will be to obtain equilibrium
  - And the reverse
- Another kind of equilibrium is political and financial—that patients, payers, and caregivers are reasonably happy
- The two equilibria are cousins

C. Market, government, and professionalism

- Governments are good at writing checks to finance insurance coverage
- In the U.S., markets and governments have been bad at
  - Containing cost
  - Improving appropriateness/quality
  - Reconfiguring caregivers

For now, a closer look at stubbornly high U.S. costs

- Political failure
- Market failure
- Blame over-insurance
- Blame patient behavior
- Blame new technology
- Tout succession of gimmicks
- Disdain elements that actually contain cost elsewhere

Political failure

- Weak political will to limit cost
  - Caregiver power
  - Invisibility of cost of insurance through job
  - Tout succession of gimmicks
    - Have to be seen to be trying something
    - But not too hard, given absence of solid political will
    - Movement without progress
  - Treat cost control as technical problem, not political one
    - Rely on “objective” and “research-based” mechanical payment formulas like Medicare PPS and RBRVS
    - Not on political negotiations
- Failure reinforces belief in government incompetence
  - Spurs zombie-like search for
    - Better gimmicks
    - **Policy by spasm**

Market's seduction

- When it works, it works very well, and without visible human or political interference
- Market seeks equilibrium
- For some, ideological preference
- For others, only practical way to contain cost absent (unattainable) political action
- Get insurers or HMOs or hospitals to compete, and prices and costs will fall
  - But competition is a chess game, not one knock-out blow
  - So caregivers compete for a while and then merge, because that's a lot easier and less worrying

Market failure

Not one of 6 market requirements satisfied in health care (darn!)

1. Lots of small buyers and sellers, so market makes price
2. Autonomous, independent providers and consumers
3. Easy entry and exit
4. Buyers and sellers have good, balanced information about price, quality
5. Prices track cost, so buying by price and quality rewards efficient satisfaction of consumer demand
6. Don’t trust anyone

Market failure

Double standard

- Ignore market requirements for caregivers
  - Encourage vertical, horizontal, and virtual integration of caregivers
    - Approve massive hospital mergers Sutter, Partners, Presbyterian/Cornell, Pitt
    - Allow hospital purchase of physician practices
- But insist that market requires weakening patients' insurance coverage via higher OOPs
  - This will force them to have "skin in the game"

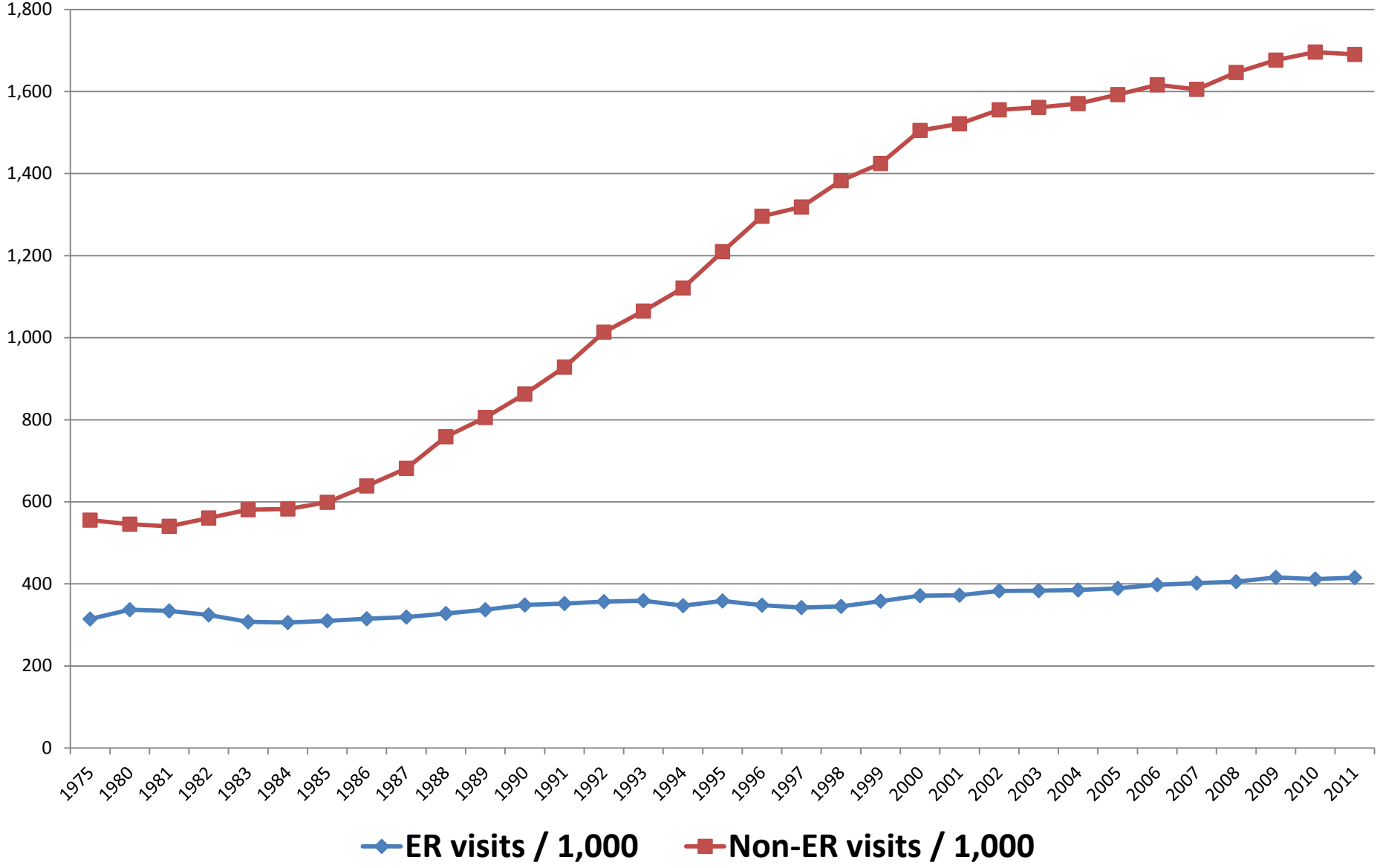
Market failure

- Profit-seeking can't convert greed into efficiency and satisfaction of consumer demand
  - In absence of functioning free market's invisible hand
- For-profit hospitals promise more efficient care
  - They do raise prices, depart from unprofitable locations, and engage in lots of bad behaviors
- For-profit HMOs promise more efficient care
  - Managed care for dual eligibles will be a major test
- Facing income constraints and hearing market talk, physicians seek ownership positions in MRI centers, ambulatory surgery sites, hospitals, others

Blame over-insurance

- “Moral hazard” perception
  - Good insurance prompts over-use of health care
- Recreational surgery, MRI, and ER indulgence
- So boost OOPs
  - Cuts use indiscriminately
  - Constitutes tax on sickness
  - Morally satisfying to blame

ER and Non-ER OPD Visits/1,000 People, 1975 - 2011



Blame patients' bad behavior

- Smoking and drinking (we're relatively low)
- Obesity (we were very costly before eating)
  - And lifetime health costs of non-smoking non-obese person are higher
- Points finger elsewhere—health care itself doesn't have to change
- Moralistically satisfying

New technology

- Often (usually?) promises higher performance, not lower cost
- Why is that?
  - Something inherently atypical in health care?
  - Focus on ceiling, not floor—best system can do, not worst

- Osborne PC, ca. 1983
  - 52-character 5” screen
  - 64 K RAM
  - Dual floppies
  - Wordstar, spreadsheet
- $2,000

Tout succession of gimmicks, overlays

- HMO – PPO – ACO
  - Improve organization and coordination
  - Reverse financial incentives
    - Imagining that the new incentives won't be gamed by those so disposed
- Shift sites of care – move the problem
  - Inpatient to ambulatory
  - Nursing home to home health care
  - Mental hospital to jails or streets, often
  - ER to ?
- Consumer-directed care
- Electronic health records (EHRs)
- Primary prevention, behavior changes

Many of these are entirely worth doing because they help patients—but they may not save money.

Failure to identify, squeeze, recycle waste

Four types of waste

1. Clinical
   - Provide unneeded care
   - Inefficiency
   - Lack of evidence on need, or failure to use it
   - Bad care and costs of fixing resulting problems
   - Costs stemming from PCP shortage, reliance on costly hospitals
2. Administrative
   - Complexity
   - Mistrust
3. High prices throughout U.S. health care
4. Theft, fraud
   - Perception that health theft is victimless
   - Weak/uneven enforcement

D. Chaos or equilibrium?

Chaos

- Incompetent market and government
- Weakening professionalism
- Glib, opportunistic slogans in place of sustained engagement and accountability
- “Death is optional”
- Patient sometimes becomes means to caregiver’s financial end

D. Chaos or equilibrium?

Equilibrium

- Accountable care for populations
- Caregivers configured accordingly
- Budgets and trade-offs
- Pathology is remorseless but dollars are finite
- Medical security = confidence I'll get needed, competent, and timely care without worrying about the bill, losing coverage, or fearing bankruptcy

Key threats

- Failing to recognize underlying anarchy
- Moving the problem
- Change without progress
  - Segregating patients by acuity and shifting site of care in hopes of
  - Saving money – acute – NH – home
  - Or shifting costs to another payer
- Rhetoric (primary prevention)
- Technological fixes
  - EHRs
  - CPOE

II. The care we get depends heavily on the caregivers we've got

1. Why is primary care like the weather?
2. The changing shape of urban hospital care
3. Long-term care?
4. Meds?

1. Why is primary care like the weather?

Because everyone talks about it but - - - -

Primary care is vital

- Adequate and well-distributed PCPs are a foundation for better, more accessible, and more equitable care at lower cost
  - The health care we get depends heavily on the caregivers we've got
- Bedrock of trust and competence – a personal relationship with a good doctor is even better than a good EHR
- Coordination and continuity
  - Especially for people who are very ill or disabled, who can destabilize very quickly
  - Primary care – the sun whose gravity keeps fragmented medical care from flying off into space

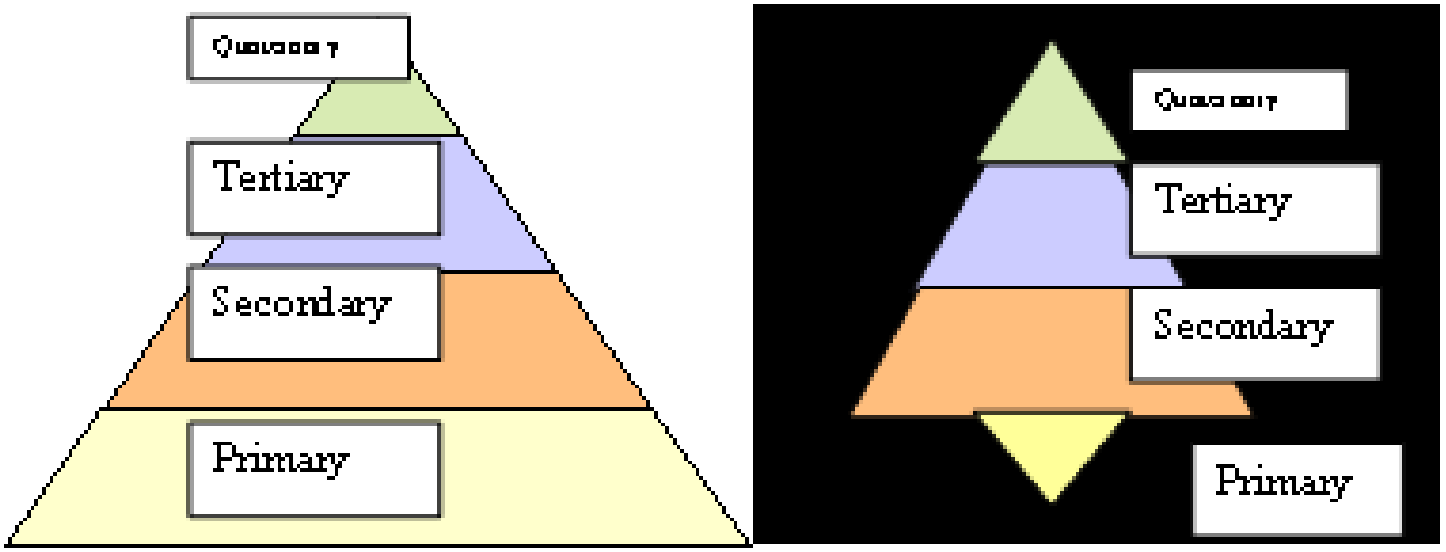
Too little sustained attention to physician configuration

- How many doctors? what kinds? where?
- Sixty years of too few doctors – too many – too few – too many.
  - Never have right number
  - Despair. We're too dumb to get it right
- Imagine that "health care market" will elicit right number of right types of doctors in right places
- Belief that training more U.S. medical school grads will push U.S. doctors into primary care

The inverted primary care pyramid

Chart X: the traditional health care pyramid, resting on a broad and solid primary care base.

Chart Y: Today's inverted primary care pyramid, in which growing pressure and disruption are imposed on primary care doctors by health care delivery and financing.

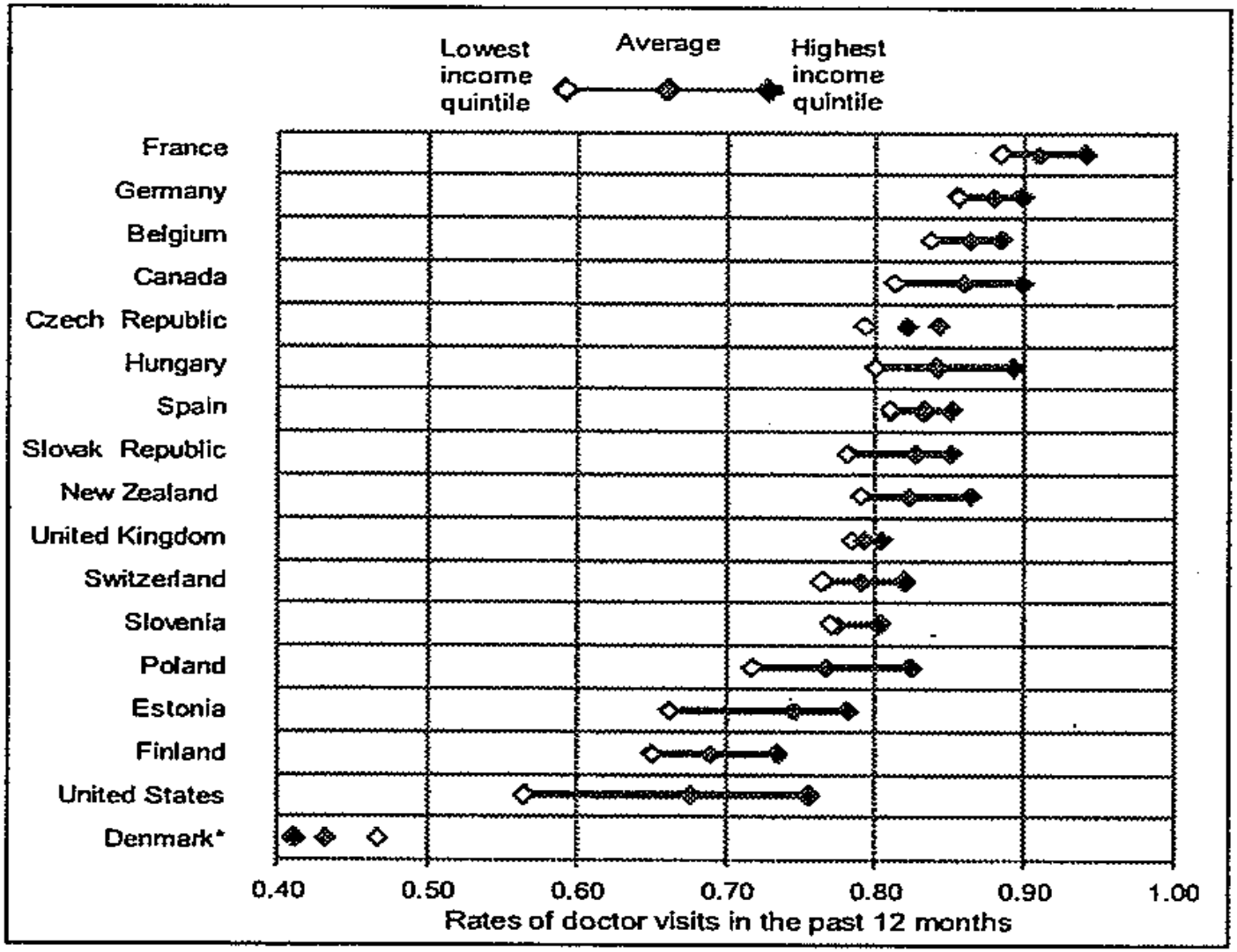


U.S. – OECD PCPs/1,000 People

	U.S.	OECD – 30-nation median
Practicing physicians/ 1,000 people	2.4	3.3
Share in primary care	1/3	1/2
PCPs / 1,000 people	**0.8**	**1.6**
Non-PCPs/1,000 people	**1.6**	**1.6**

Source: OECD, Frequently Requested Health Data, October 2012, http://www.oecd.org/els/health-systems/oecdhealthdata2012-frequentlyrequesteddata.htm; Health United States, 2011; and various estimates of PCP share in other nations.

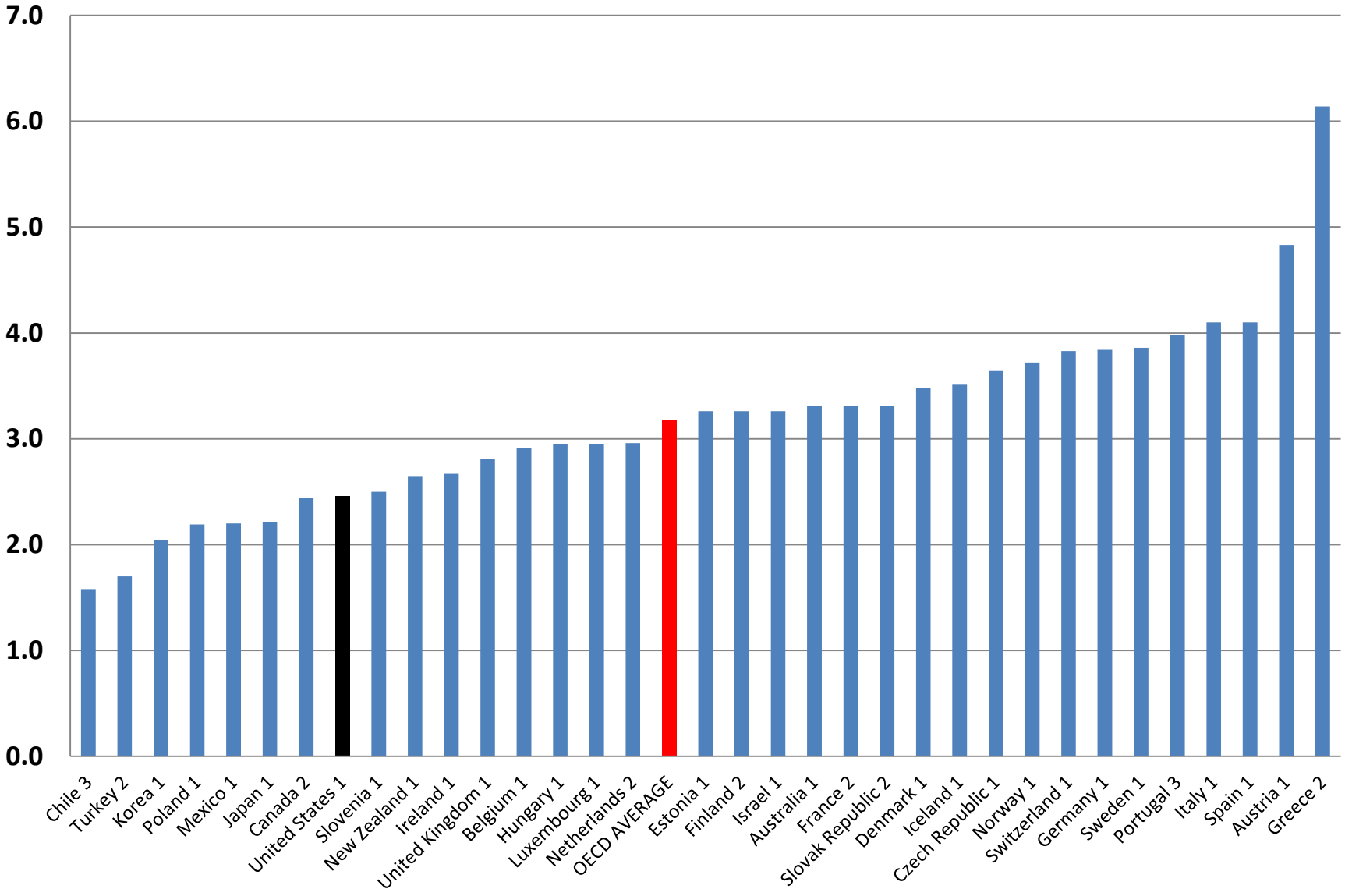
Figure: Needs-adjusted Probability of a Doctor Visit in Last 12 Months, by Income Quartile, 2009 (or latest year)



Note: Denmark reports three months of data only.

Source: Marion Devaux and Michael de Looper, *Income-related Inequalities in Health Services Utilisation in 19 OECD Countries, 2008-2009,* OECD Working Papers, No. 58, 2012, p. 17.

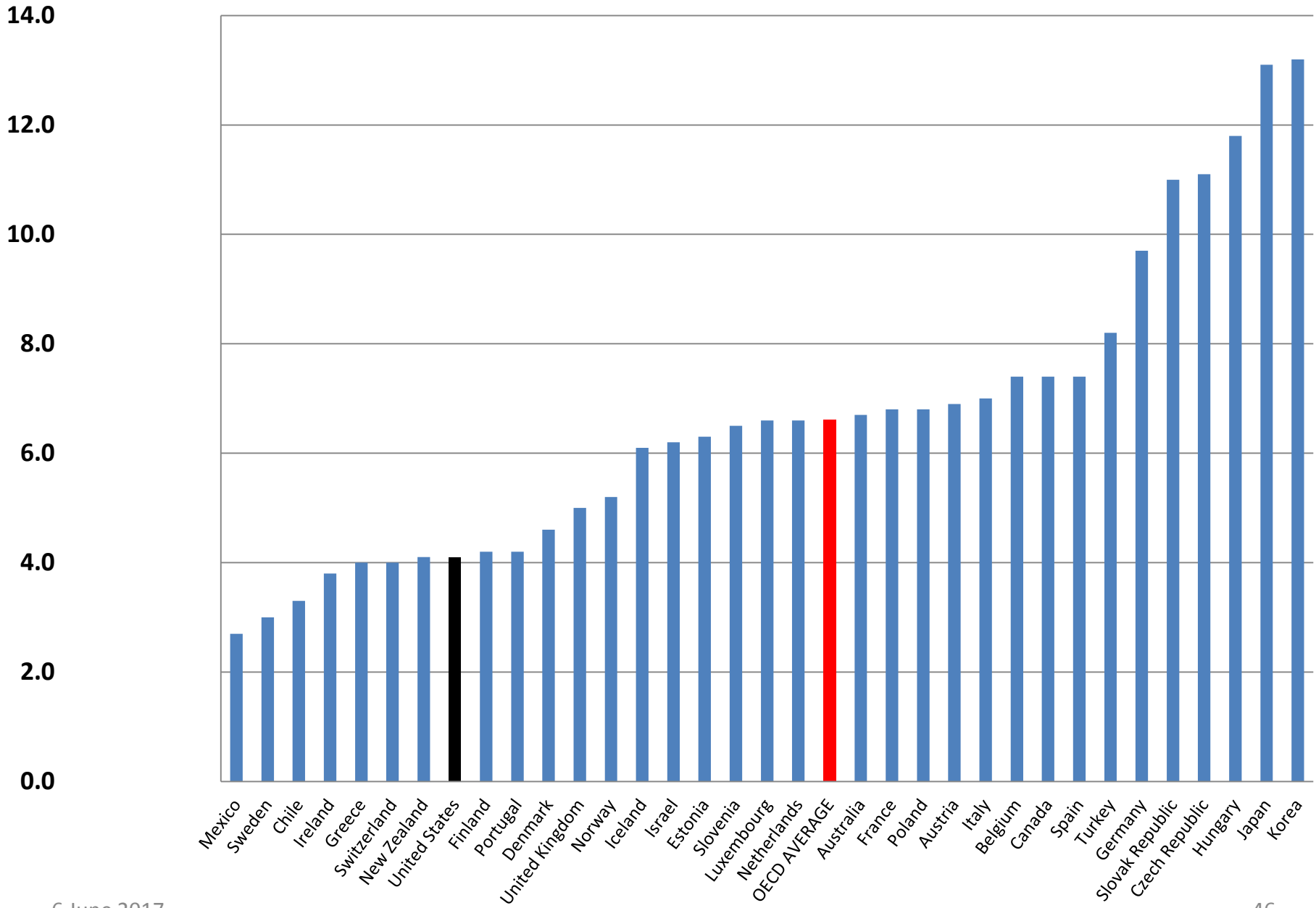
Doctors per 1,000 People, Rich Democracies, 2011



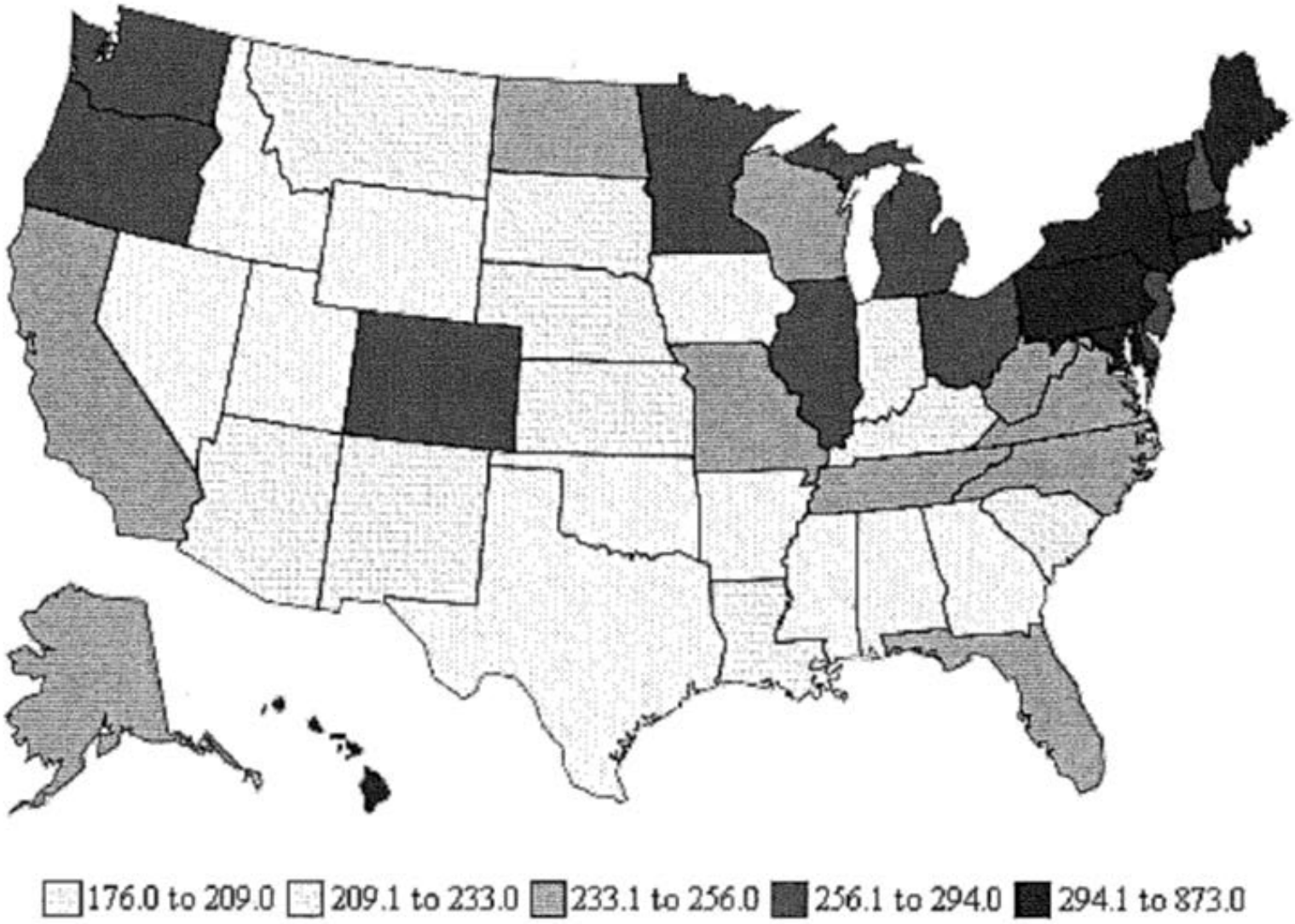
1. Data refer to **practising** physicians. Practising physicians are defined as those providing care directly to patients.
2. Data refer to **professionally active** physicians. They include practising physicians plus other physicians working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors).
3. Data refer to all physicians who are **licensed to practice**.

Source: http://www.oecd.org/els/health-systems/oecdhealthdata2013-frequentlyrequesteddata.htm

Doctor Consultations per Capita, 2011 (or Nearest)

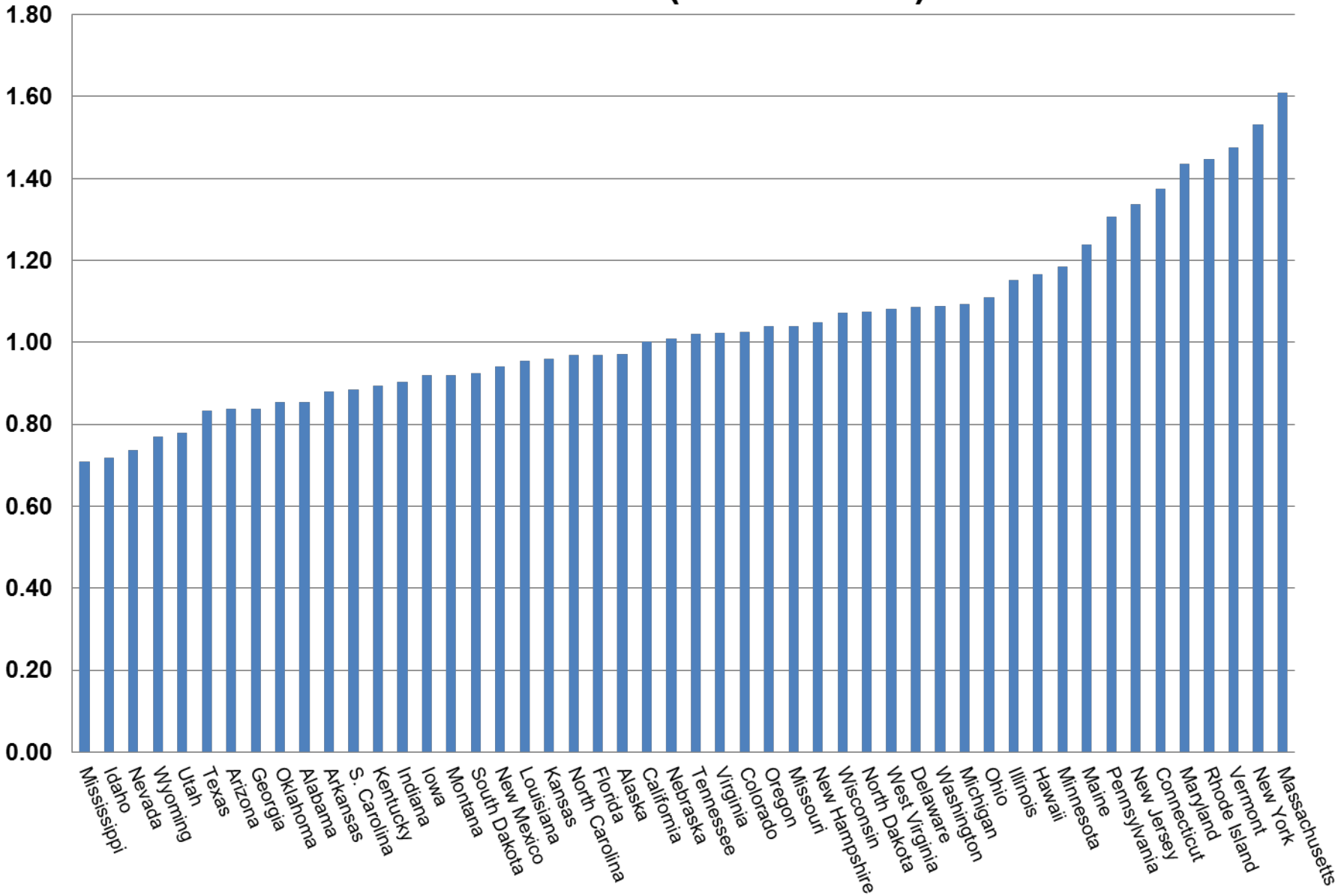


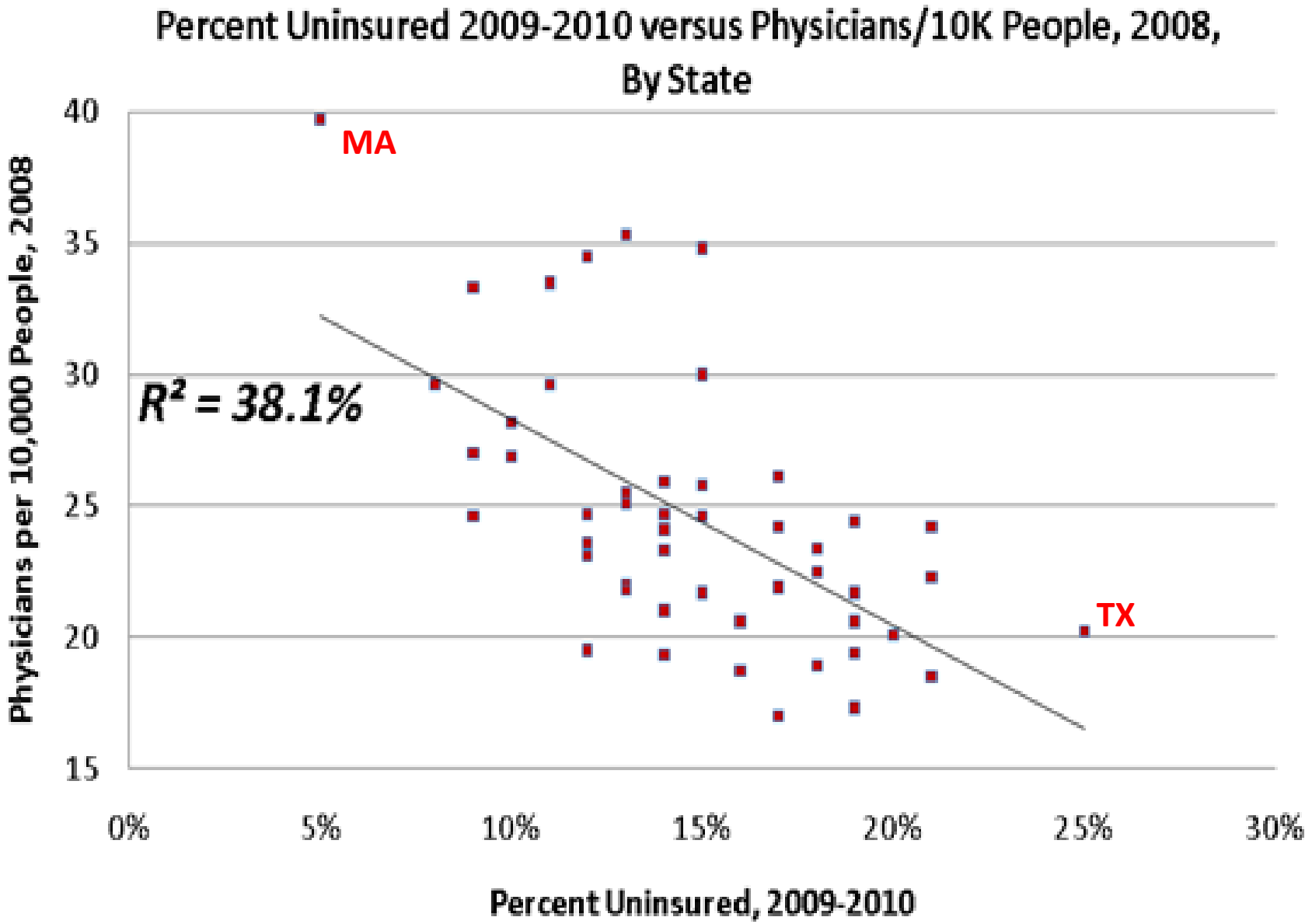
Map 1. Total Active Physicians per 100,000 Population, 2010



Source: American Association of Medical Colleges, *State Physician Workforce Data Book, 2011,* https://www.aamc.org/download/263512/data, p. 4.

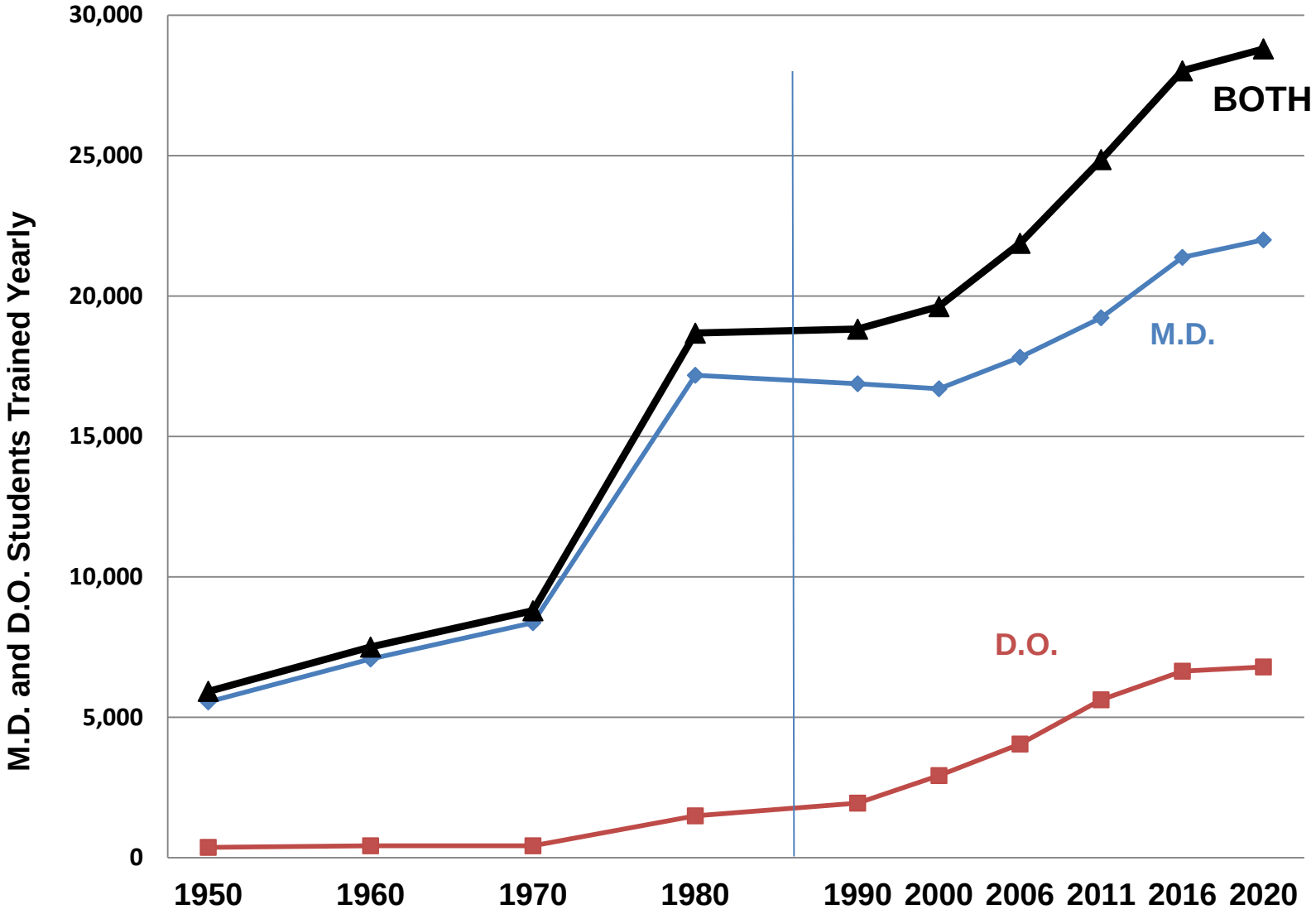
Patient Care PCPs per 1,000 People by State, 2003 – 2005 (M.D. + D.O.)




Percent Uninsured 2009-2010 versus Physicians/10K People, 2008, By State
MA
TX
$R^2 = 38.1\%$
Physicians per 10,000 People, 2008
40
35
30
25
20
15
0%
5%
10%
15%
20%
25%
30%
Percent Uninsured, 2009-2010

Will training more doctors in U.S. medical schools address PCP shortage?

M.D. and D.O. Students Trained Yearly, 1950 - 2020



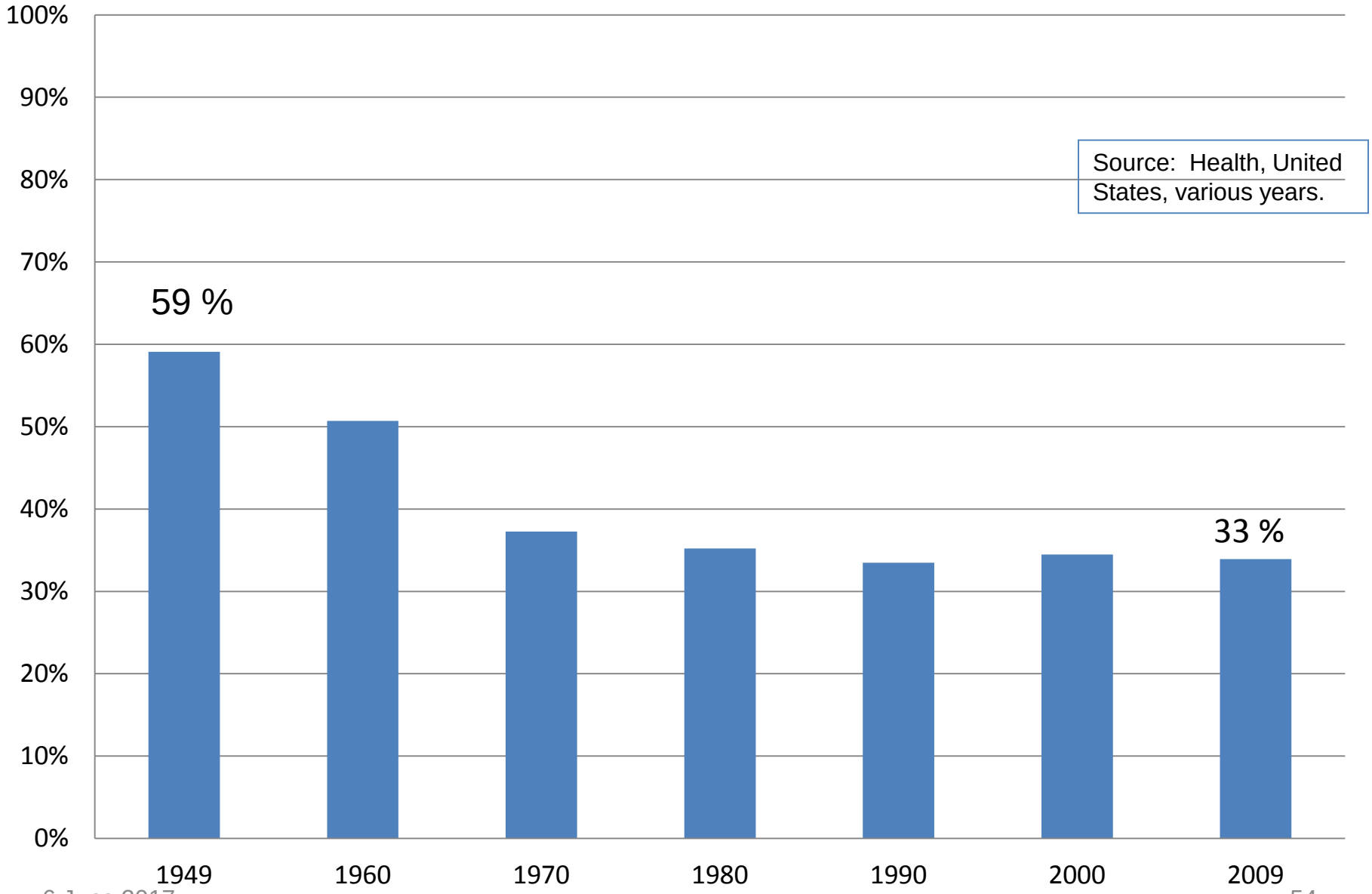
Results may surprise

- PCMH and its MD/DO/NP/PA/RN++ teams may reduce pressure to train more PCPs
- More USMGs combined with no or small increase in residencies will displace IMGs from residencies
  - Hospitals may try to convert unfilled PCP residencies to specialist/procedure-performing
- But, because IMGs had been much likelier to fill PCP residencies,
- Result could be fewer PCPs trained yearly

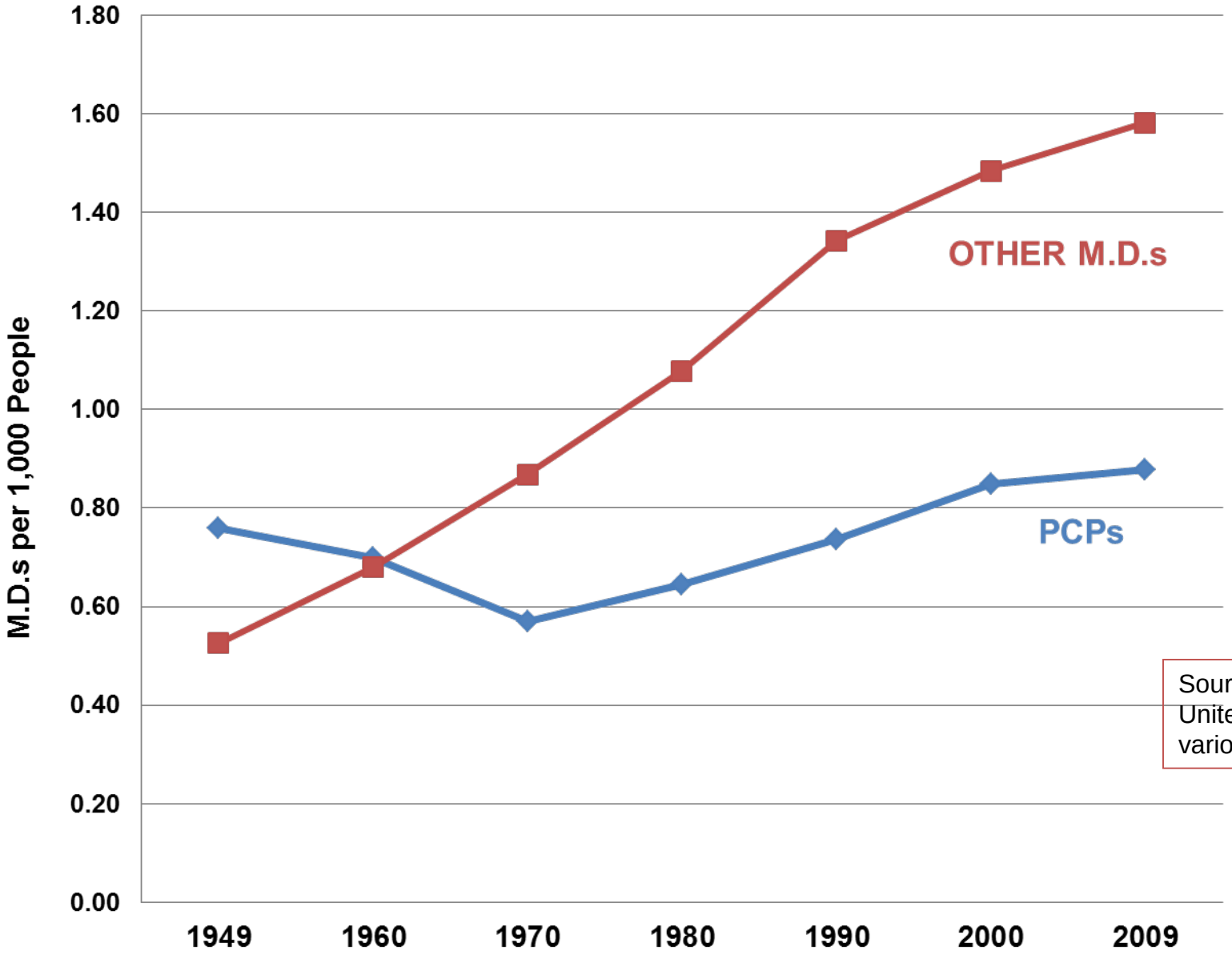
The U.S. PCP shortage is real

- International differences
- PCP share of U.S. physicians falls steadily
- Shortage much worse in many states
- Even bigger differences within states
  - Rural
  - Urban
  - Racially

PCP Share of Active U.S. M.D.s, 1949 - 2009



U.S. PCPs and other M.D.s per 1,000 People, 1949 - 2009



Source: Health, United States, various years.

PCP shortage: Causes, remedies

Causes	Past/current remedies	Others nations' remedies	Potential US remedies
Low PCP incomes	PCMH = hierarchy. Boost PCP M'caid fees to Medicare levels. ACO → market for PCPs.	Calibrate FFS to attain target incomes. FFS + capitation → target. 10% of premium $s to PCPs	300K FTEs * $300K. All payers pay same price for same care. Hike PCP % insurance. (But "docs overpaid")
High costs of billing, EHR	Sell practice to powerful protector providing capital	Simplify billing	One price. Build trust
Specialists set Blue Shield fees, dominate RUC	More PCPs on RUC. Re-evaluate time estimates for procedures. ACOs → limit specialist income	Cap specialists' numbers and incomes since hospitals set slots and pay from hospital budgets	ACO → cuts demand for specialists and their incomes.
High debt	NHSC, forgive loan		Tuition-free schools mean $0 PCP debt
Lower prestige	Teaching CHC. PCMH → PCP=internal consult.	Recognize value of relation with trusted PCP	Med school faculty may not deride PCPs
Need know breadth/depth	ACO → better coordination with specialists	More PCPs/smaller panels. Good access to specialists.	Smaller panels allow time to do the job.
Stunted empathy		Political commitment	Many can't find PCP
Weak access	M'care, M'caid, ACA	1 payer or all pay same price	
Weak cost		1-payer manifests political	Weak economy

Nothing tried so far has worked well enough

a. **Pretend** growing PCP shortage isn't a problem
- There's always the ER
- Specialists can/do provide primary care—quality of PCP and specialty care may suffer

b. **Expand** CHC capacity + enlarge NHSC + forgive some of some doctors' debts

c. **Try** RBRVS formula to re-balance cognitive/procedural fees

d. **Ignore** the problem

e. **Imagine** HMOs require more gatekeepers → higher pay to more PCPs

f. **Build** patient-centered medical home to offset PCP shortage
- NPs or PAs or teams could substitute for many PCP visits
- MD/DO works at top of license, could make more money (need fewer PCPs)

g. **Deride**: Who needs one-class PCP care?
- Walk-in clinics, in pharmacies and elsewhere
- Urgent care centers
- Free-standing ERs

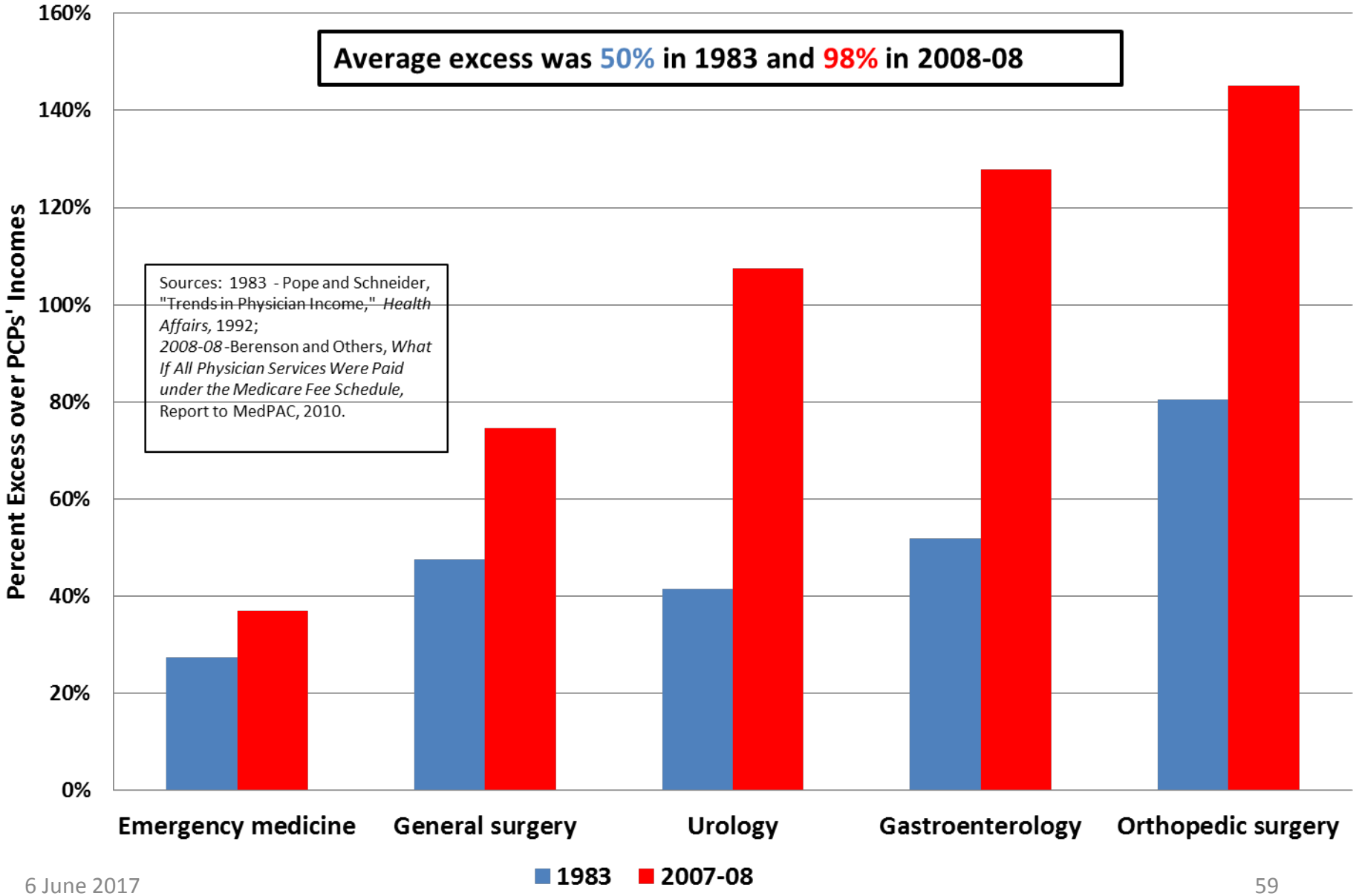
h. **Ignore** the problem some more

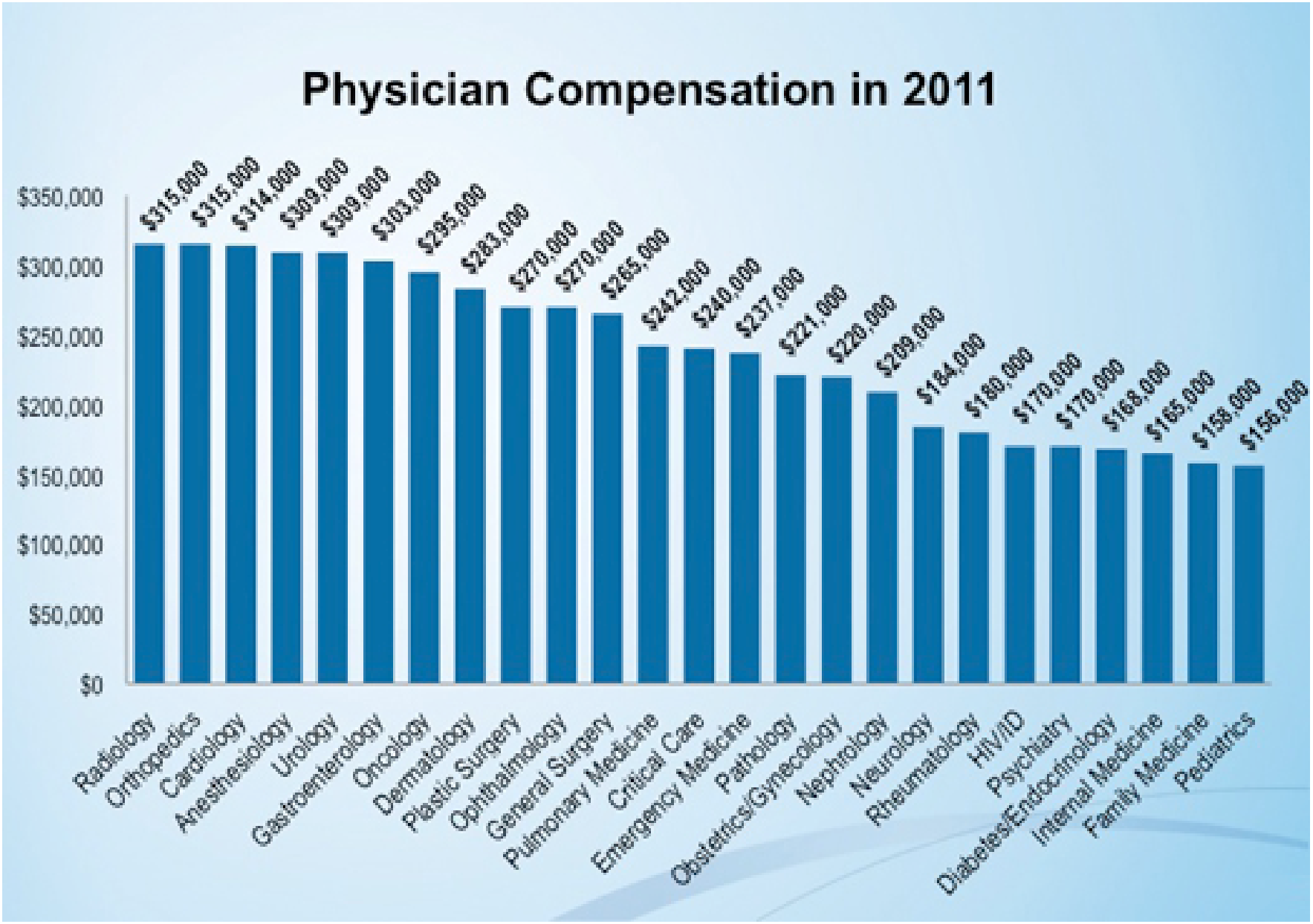
i. **Talk** about it, especially when seeking new medical schools from legislatures
- But focus on "doctor shortage," not on which doctors are in short supply
  → Big, indiscriminate rise in U.S. graduates is under way

Why not?

a. Income gap
b. Prestige gap
c. Primary care is very hard work
d. Cumulative erosion of many urban community hospitals—potential organizational bases for PCPs
e. Little sustained attention to physician configuration
f. No functioning market + no competent government = **?**
g. Haven't tried what works elsewhere
h. Stunted empathy + rampant myths
i. Very weak political commitment to finding solution

Five Specialties' Average Incomes - Percent Excess over PCPs' Incomes, 1983 and 2007-08





Source: Medscape Physician Compensation Report, 2012, http://www.medscape.com/features/slideshow/compensation/2012/public.

Expand CHCs + NHSC, + lower debt

- Income matters much more than debt
- Suppose average academic debt rises to $250K

  = 365 days' gap in before-tax income between orthopedic surgeon and PCP
- PCP incomes so low that many PCP residencies unfilled

Hope RBRVS will re-balance fees, incomes

- Some initial success but surgeons, others worked in Congress to cut fee shift in half
  - Now, we fight about the formula instead of incomes—methods instead of aims
  - Hard to win since RBRVS is zero-sum game
  - PCPs outnumbered numerically and politically
  - Time to perform procedures commonly over-stated, shifting income further away from PCPs
- Hospital-based proceduralists retain free capital
  - Use hospitals' machines, ORs, nurses to earn incomes, but don't pay for them
- Medicaid very low payer in many states

Prestige gap

- Medical school faculty – role model shortage
  - "You're too good for primary care"
  - One response: Teaching health center program
- Prestigious teaching hospitals train few PCPs
- Rise of hospitalists means PCPs have less contact with in-hospital physicians
- Diagnosis widely believed to rest less on accumulated wisdom, history, physical exam
  - Rely more on better imaging, labs than in past

Is primary care hardest job in medicine?

- Need great breadth + depth of medical knowledge
- Need enjoy science + relationship
  - Do medical schools enroll enough students who like both?
- Memory, history, physical exam inform diagnosis and treatment
  - Not all imaging, labs, referrals, EHRs
- Hours of self-limiting illnesses + staying alert to grave, acute problems
- Rising panel size, long hours, lots of unpaid paperwork

Stunted empathy + rampant myths

- **"It's not my problem"**
  - **Not one influential American now lacks a PCP or fears future lack**
- Ranting against "inappropriate and costly use of the ER"
  - Symptom, not cause
  - No one goes to ER if has a better choice
  - Fragmented care is costly; providing it in ER is no more costly
- Prevention fantasies – behave better and live forever
  - "It's your fault you got sick, anyway"

Greatly narrow income gap

- Suppose we wanted to pay PCPs $300 K yearly
- And suppose we wanted 300K FTEs
- Would drop panel size to about 1,000/PCP
- What would be total cost?
  - $300K/FTE * 300K FTEs = $90 billion
  - =$90 B / $2,900 B NHE = 3.1%
- Very strategic money
- But who'd support raising doctors' incomes?
  - Couldn't we just cut specialists' incomes to narrow gap?
    - Hard to take money away
    - Or health insurance, once you have it
    - Also, lots of specialists have scalpels

300,000 * $300,000

- Pay 300,000 FTE PCPs $300,000 annually
  - Incremental cost < $45 billion
  - < $150 / American
- Drop panel size to about 1,000 – concierge for all
  - Old-fashioned alternative to patient-centered medical home's team model
  - Time for phone calls, e-mails, chronic care case management, health education
  - Over time, attract more physicians to primary care
  - Need for many more PCP residency positions
  - Divert many new USMGs from specialties

Pushing the PCP – specialist income gap back down to its 1983 level—or below

- In 1983, the 5 specialties examined earlier had a mean income of 50% above the PCP mean
- By 2007-08, the excess had risen to 98%
- Suppose we restored the 2007-08 gap to 50%

  = boost mean 2007-08 PCP income from $185,000 to $235,000, a rise of $50,000 (27%)

  - For about 275,000 PCPs, the rise would cost $13.8 billion annually, or 0.50% of annual health care spending
- Instead, suppose we cut the 2007-08 gap to 25%

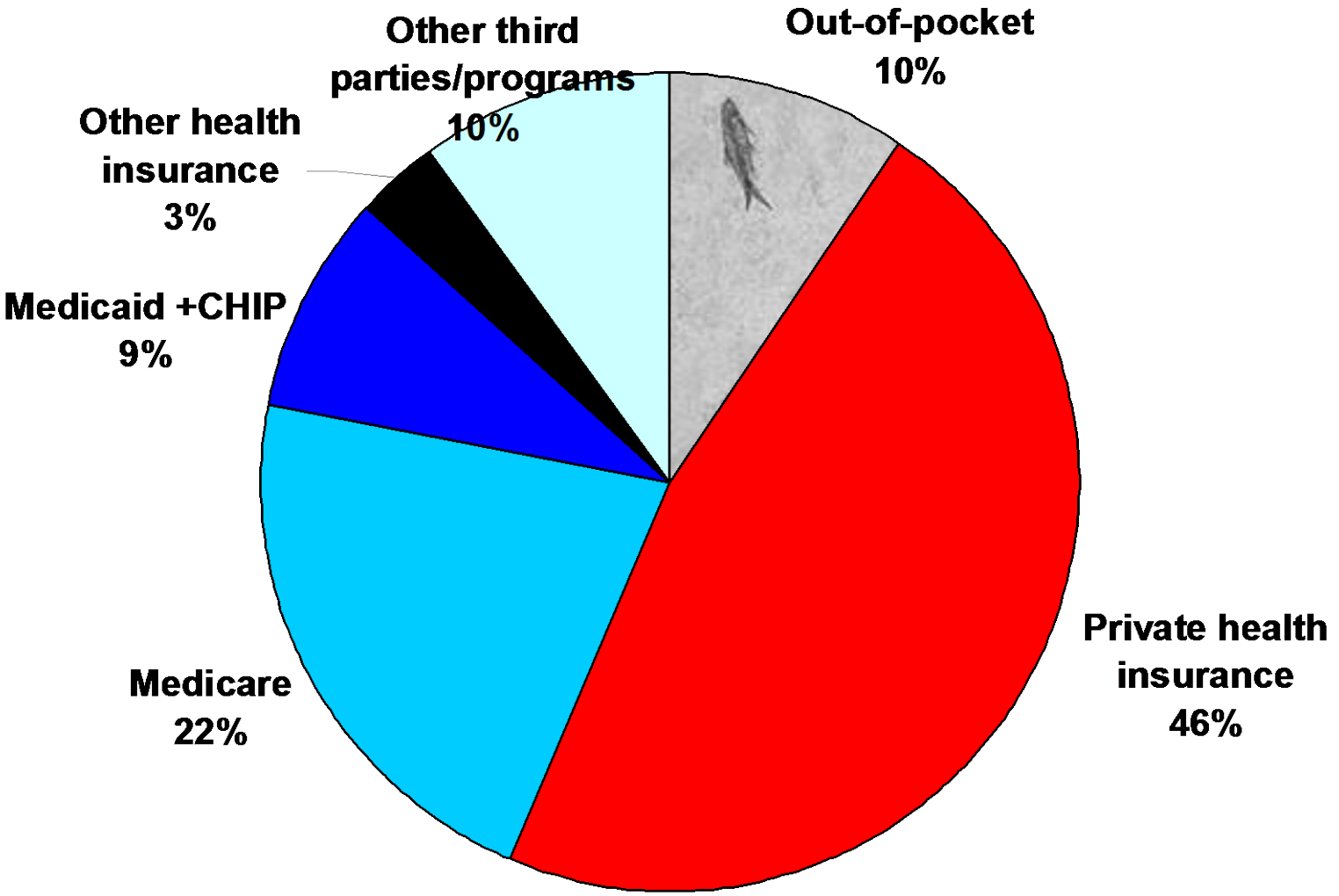
  = boost mean 2007-08 PCP income from $185,000 to $282,000, a rise of $97,000 (52%)

  - Cost: about $27 billion annually, or 1.0% of yearly spending

Where find money to boost PCP pay?

- Raise Medicaid PCP rates up to Medicare level permanently
- All payers must pay same price for any given physician service
- Sell idea that primary care ***really*** does save $
- PCPs charge $150/year fee to join practice
  - * 1,000 patients = $150K/year

Sources of Revenue to Finance Physician and Clinical Spending, 2009



Channel more physicians into PC

Use residency limits + surge in U.S. medical graduates to direct greater share of doctors into primary care

- Medicare can't pay for more residencies unless Congress acts
  - Leverage!
- Will Congress try to use this leverage to induce teaching hospitals to train more PCPs?
  - If so, will teaching hospitals manipulate "PCP training" to train specialists?
- Any value without narrowing PCP income gap?

Concrete steps to cap the gap

- Annual loan forgiveness for PCPs working in under-served area or if Medicaid share of patients exceeded a certain level (only affects those with outstanding debt)
- Adopt "all-payers pay same price to PCPs"
  - As would prevail in functioning free market
  - Prices set to provide target income to PCPs
- Encourage other states to adopt Rhode Island health insurance commissioner's requirement that private insurers direct 10% of premium revenue to PCPs (varying impacts across states)

Weak political commitment

- Many mechanisms could be used to boost PCP incomes, supply, location where needed
- But so what?—If the political commitment to adequate PCP supply and pay is weak.
- Is this inevitable?

Where do other nations find that commitment?

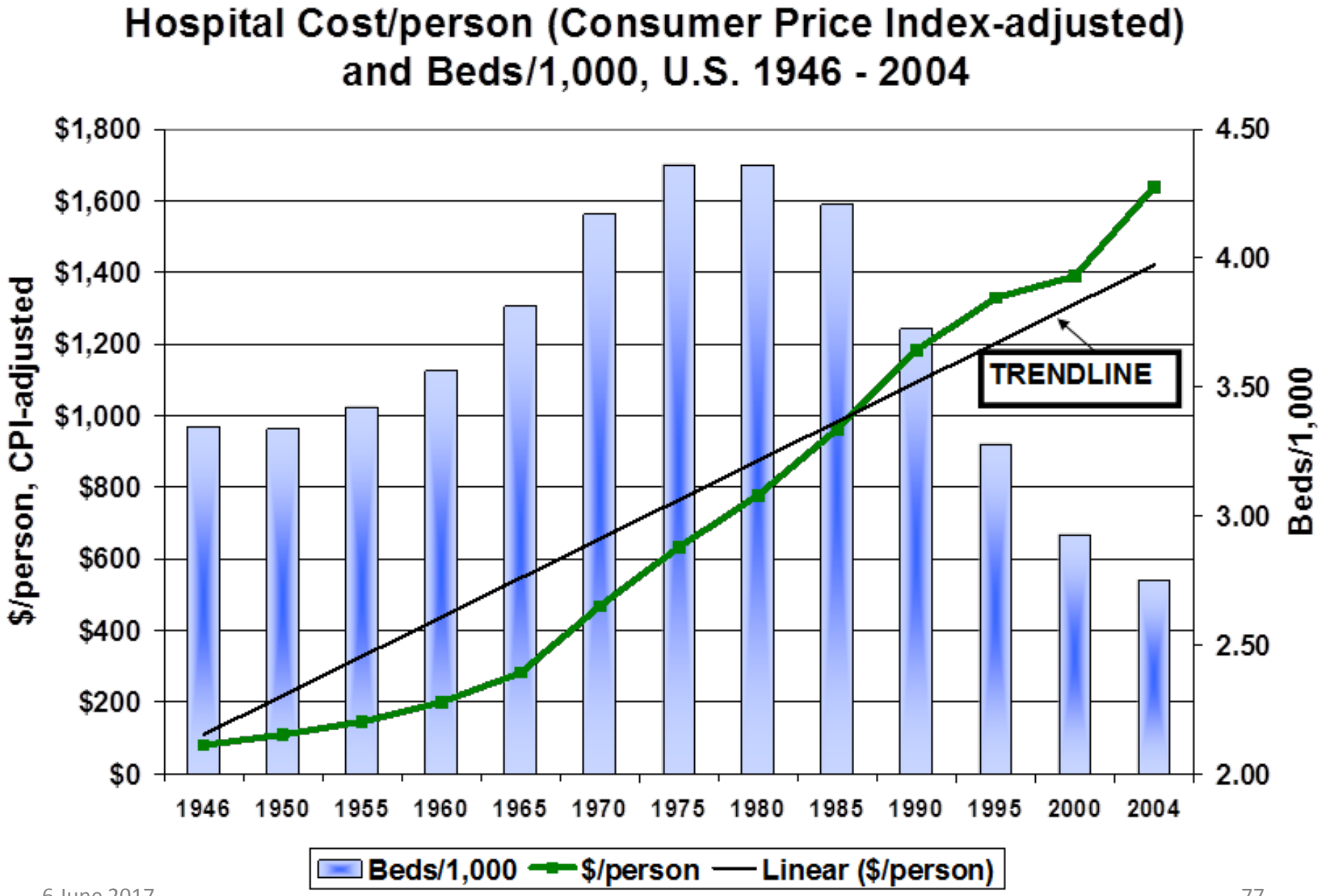
- When all are insured, people seek care
  - So PCPs must be available to assure access
    - And all payers pay same prices → access equity
- Long-standing caps on salaried hospital-based specialists and residents
  - Usually paid from hospital's capped budget
  - Remaining medical graduates will be PCPs
- Health spending capped
  - Recognition that PCPs help contain cost

How we might find that commitment

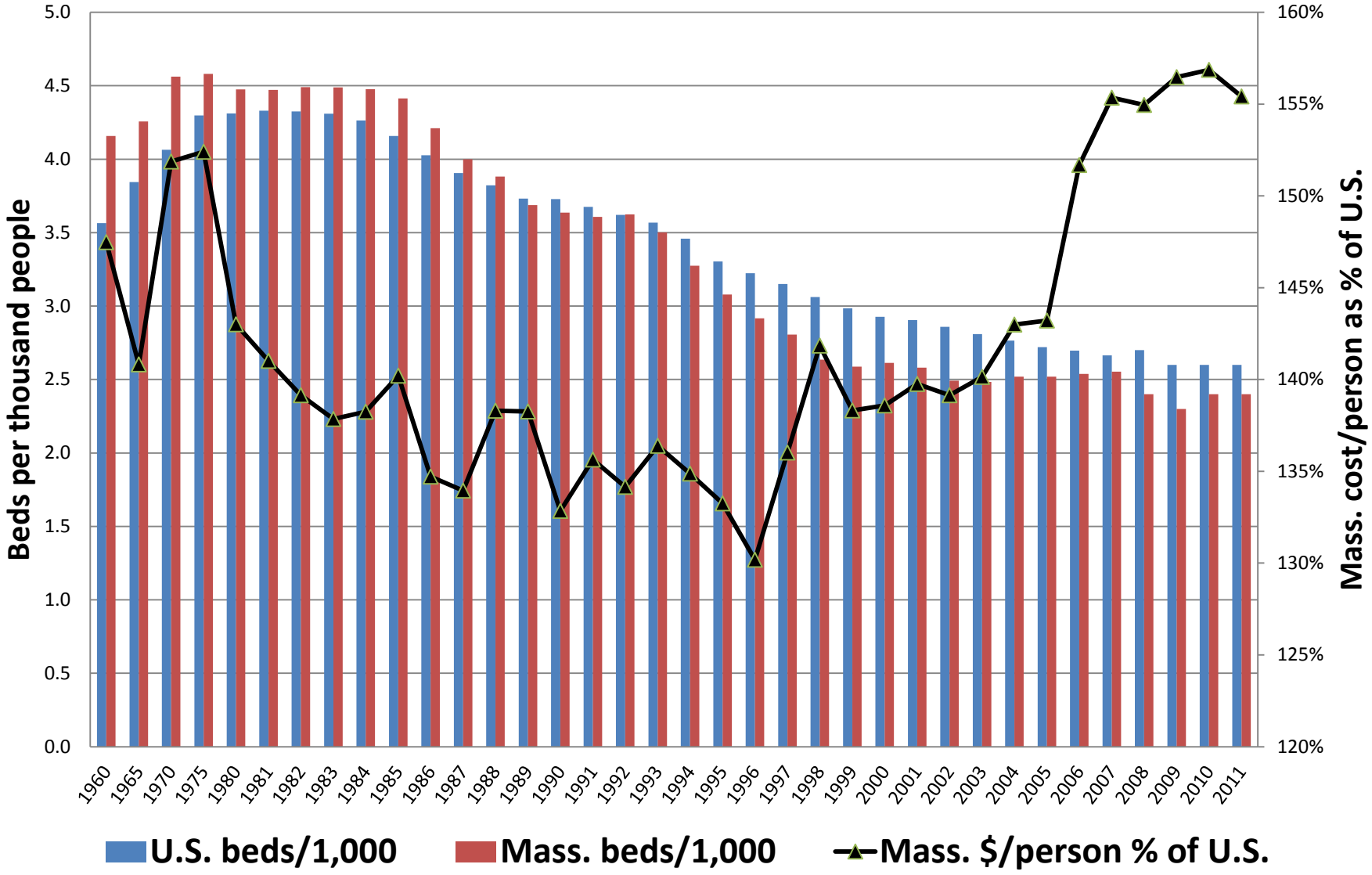
- Maybe, PCP shortage has begun to hit some influential people—this will worsen
- If ACA really does cover lots more people
  - And previously covered people face longer waiting times
- If today's cost control bubbles pop loudly
  - Boosting out-of-pocket payments bankrupts
  - ACOs could go the way of HMOs
- If PCPs' value shines through
  - Coordination and continuity
  - Cost control, appropriate care

2. The changing shape of urban hospital care

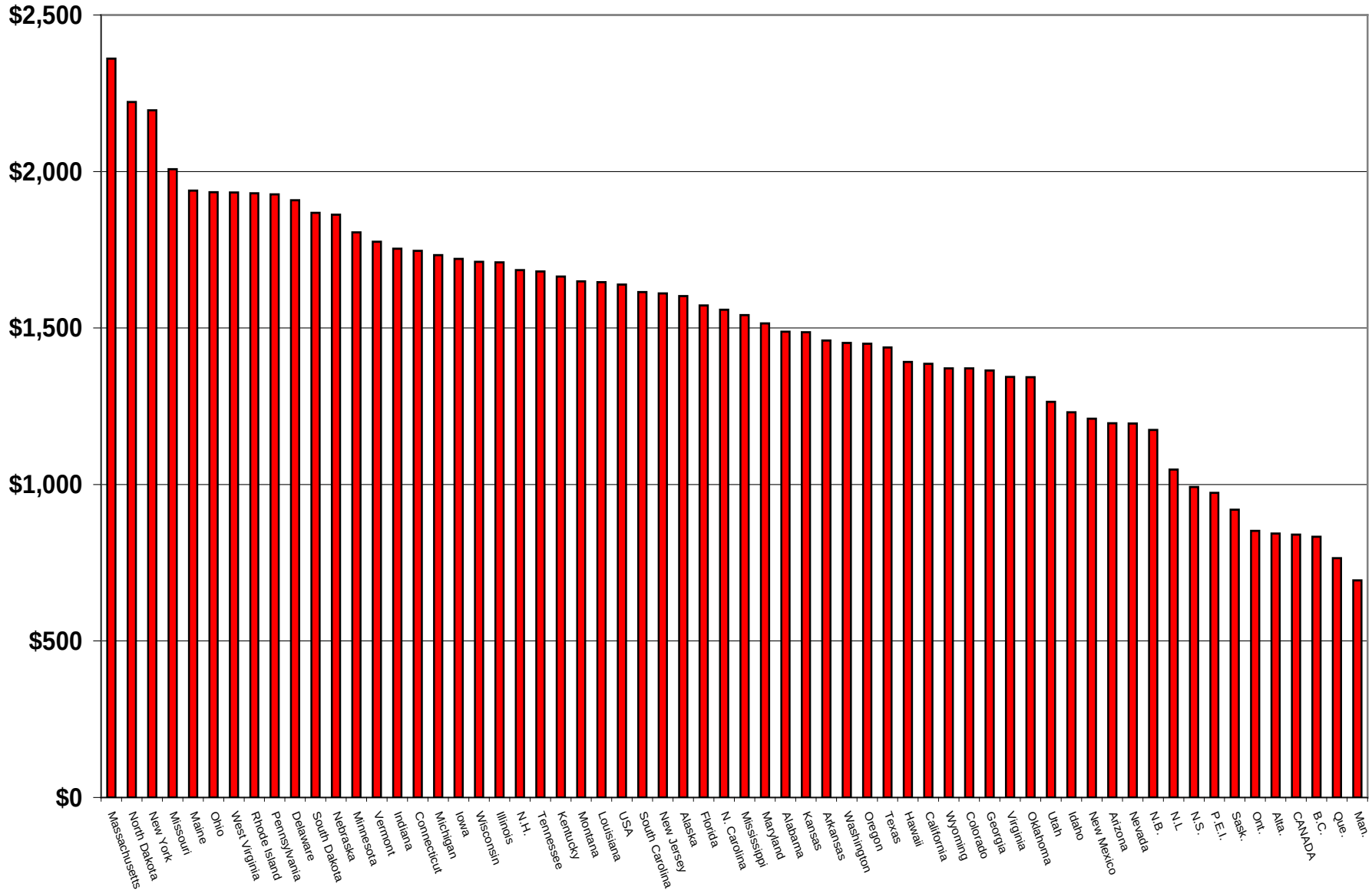
- Since WW II, the U.S. has gone from
  - Believing it had too few hospital beds (1946) to
  - Believing it had too many (since late-1970s)
- Will we shortly come to believe that we have too few? And have to rebuild @$2 million/bed
- Until then, many will persist in the decades-old policy of closing hospitals as a necessary way to save money
- And many say that if a hospital's losing money,
  - It should be closed because inefficient/not needed
  - And to allow surviving hospitals to flourish (NIRA – 1935)


Hospital Cost/person (Consumer Price Index-adjusted) and Beds/1,000, U.S. 1946 - 2004
$/person, CPI-adjusted
Beds/1,000
$1,800
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
4.50
4.00
3.50
3.00
2.50
2.00
1946
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2004
TRENDLINE
Beds/1,000
$/person
Linear ($/person)

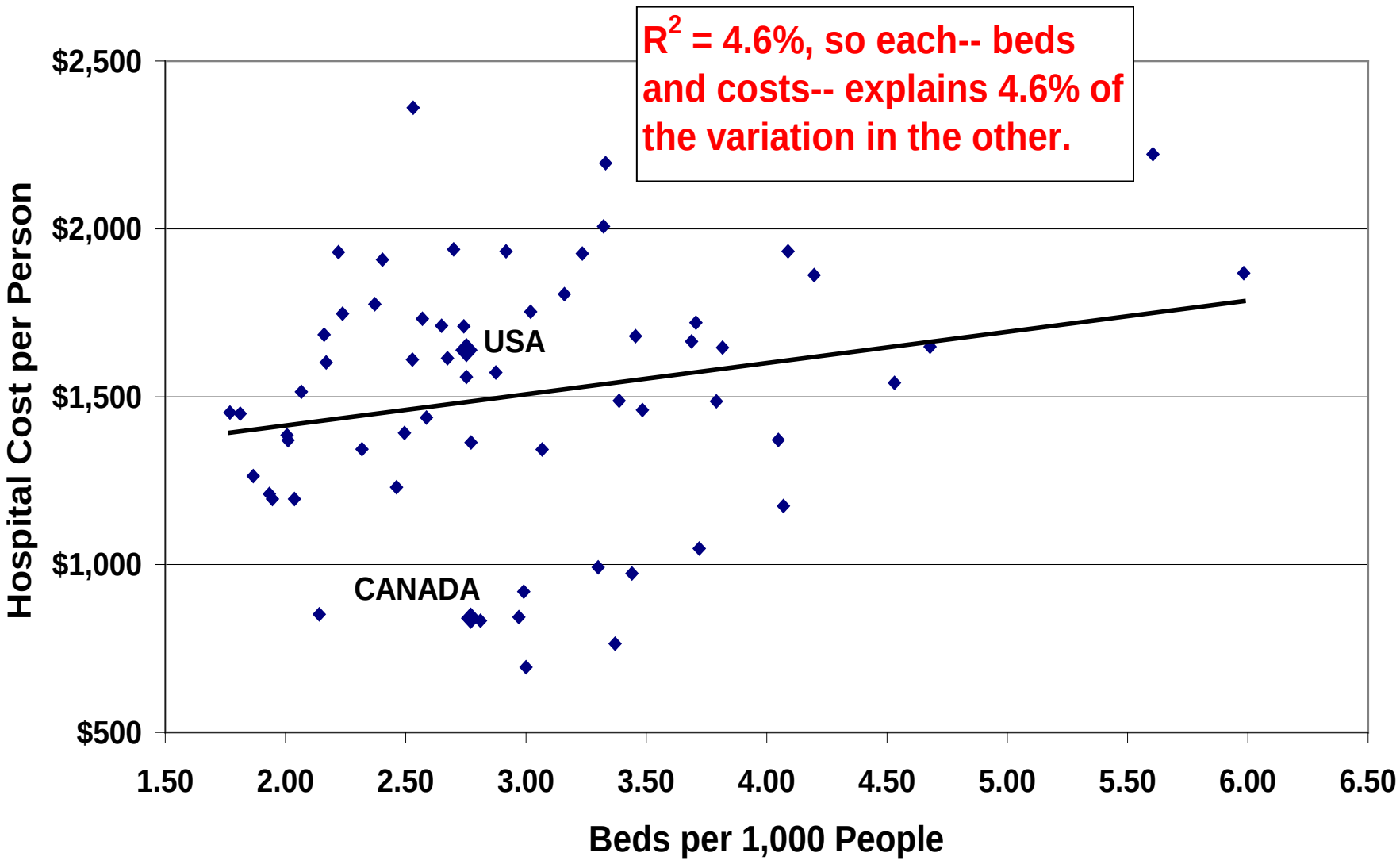
U.S. and Massachusetts Beds/1,000 People and Massachusetts Cost/person as Percent of U.S., 1960 - 2011



Hospital Costs per Person, U.S. and Canada, 2004



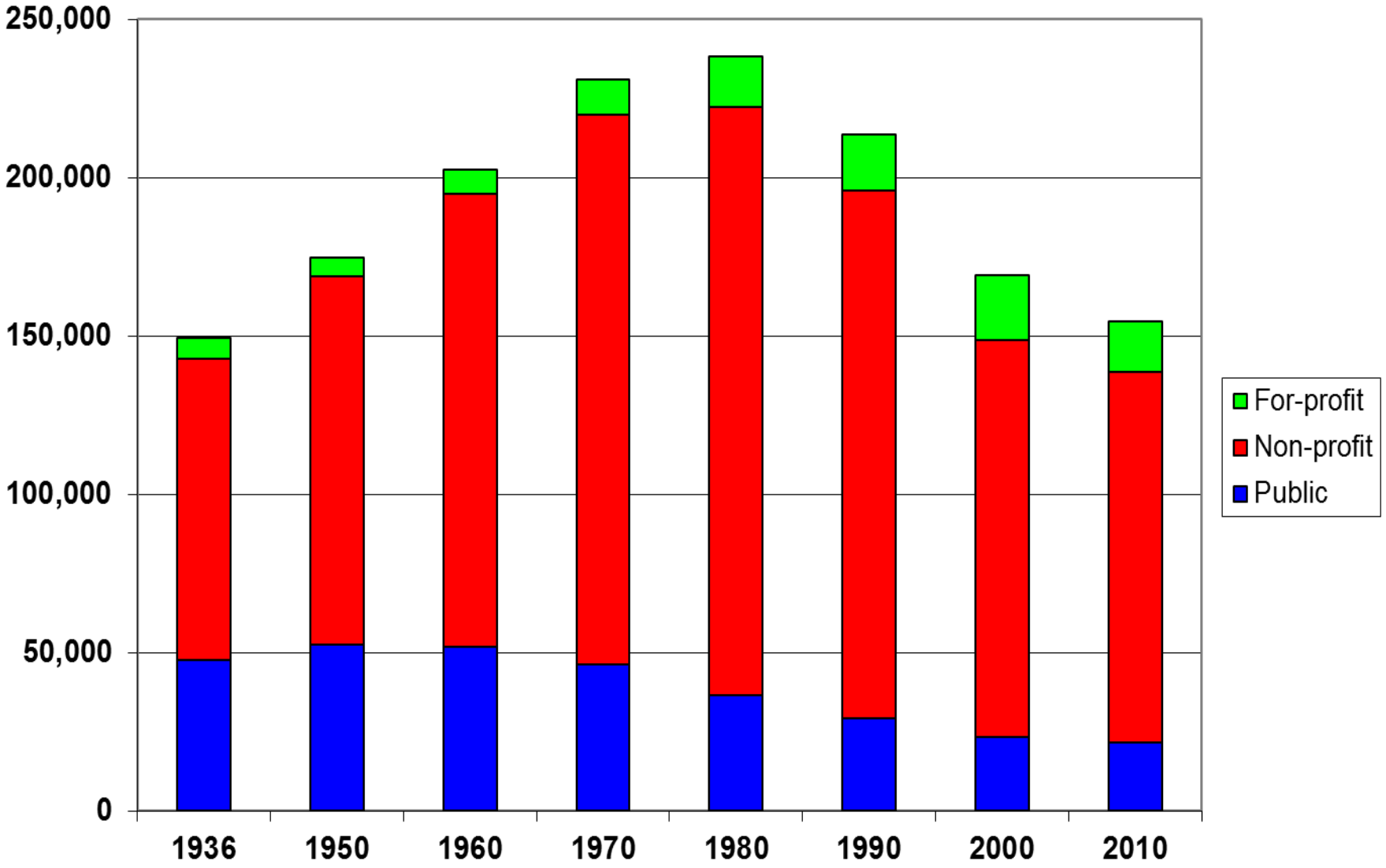
Hospital Cost per Person and Beds per 1,000 People, U.S. States and Canadian Provinces, 2004



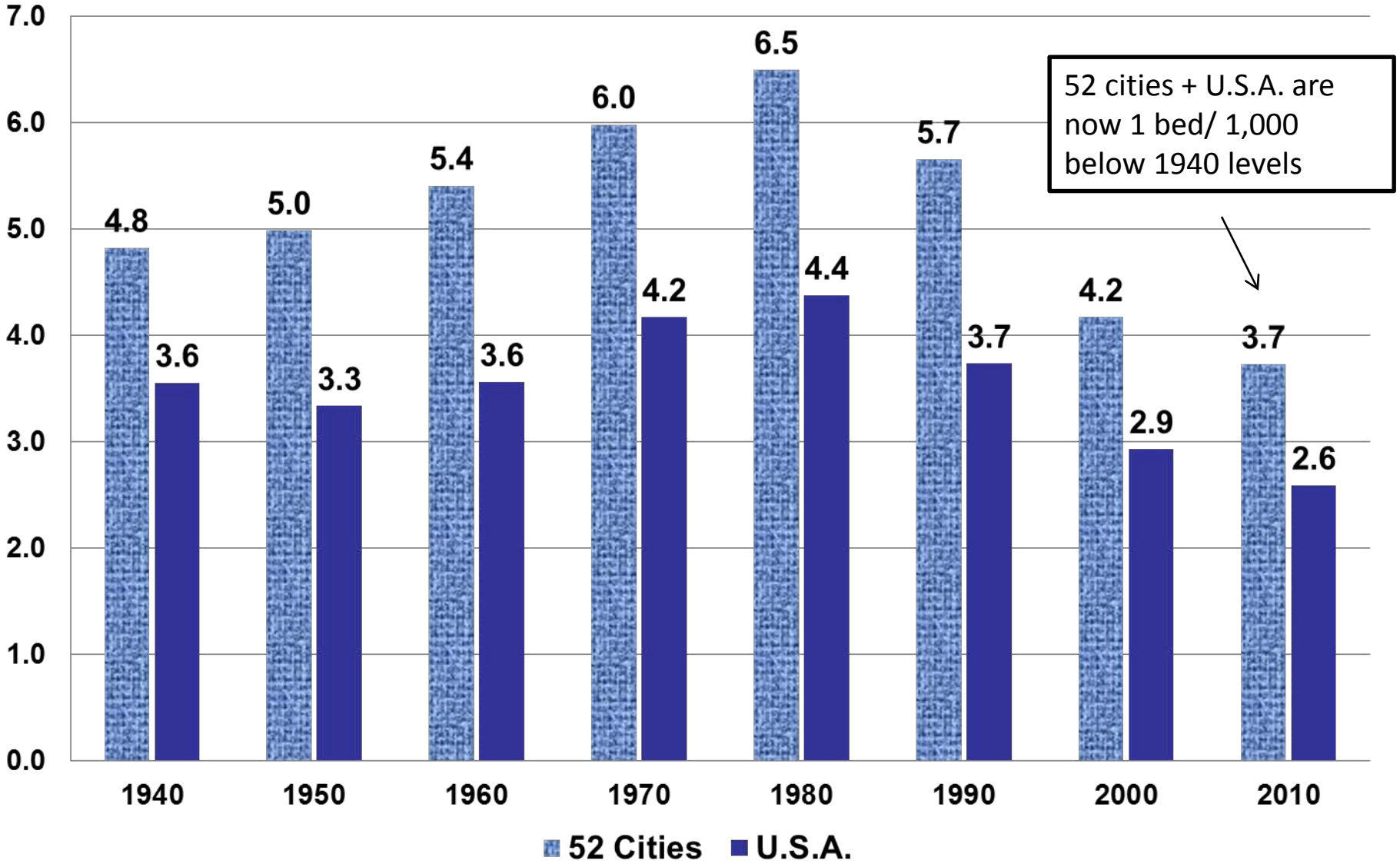
Overview

- The care we get depends heavily on the caregivers we've got.
- The configuration of urban hospital care—location, hospital type, and number of beds—evolves constantly.
- Over the decades, smaller and mid-size hospitals, and those located in black neighborhoods, have been much likelier to close.
- Efficiency confers no survival value.
- Patterns differ across cities but consequences for access and cost appear undesirable, on balance. Consequences for quality appear mixed.
- Financial, legal, and policy tools can and should be employed to identify and stabilize needed hospitals and ERs.

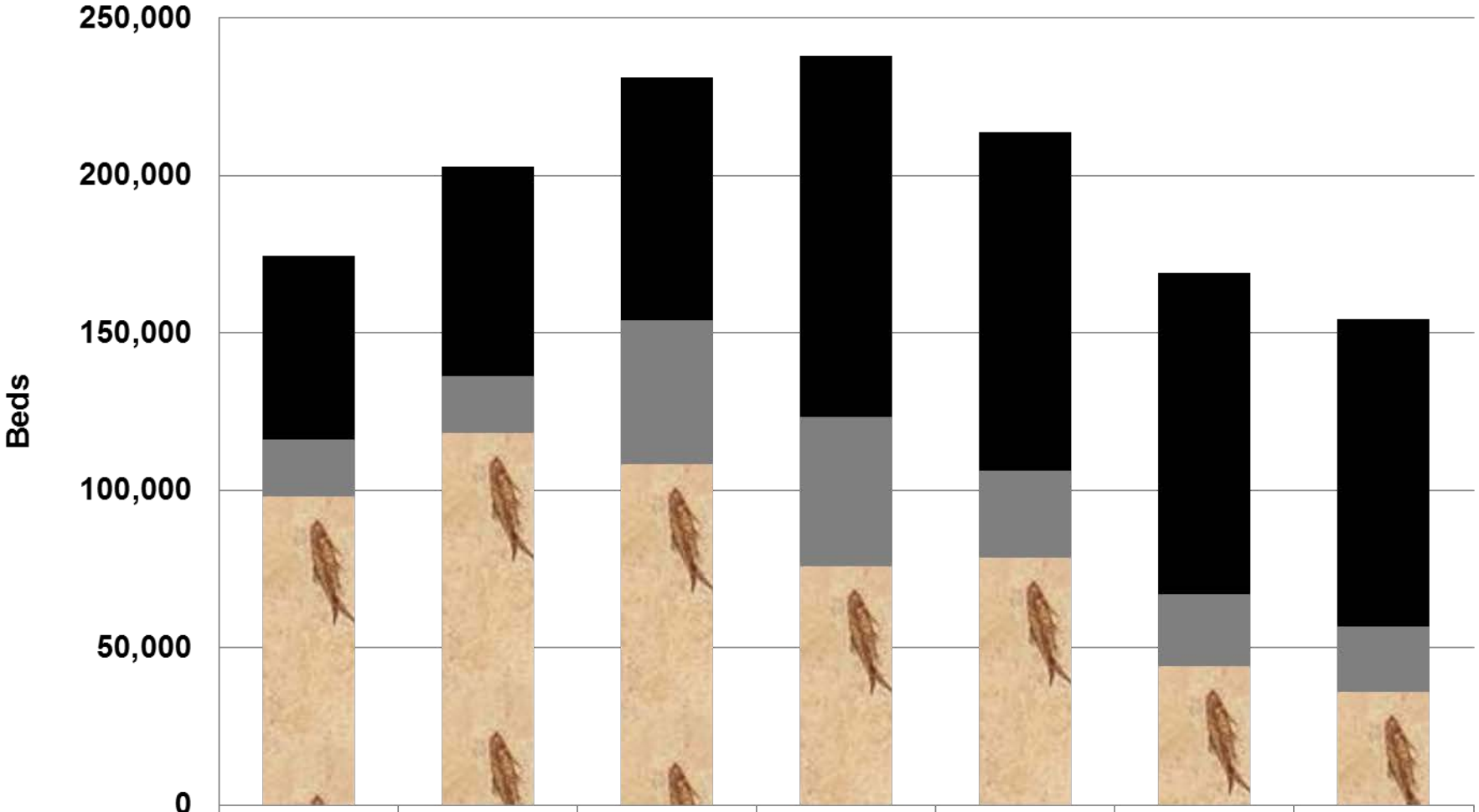
Number of Hospital Beds by Ownership, 52 U.S. Cities, 1936 - 2010



Beds per 1,000 People, 52 Cities and U.S.A., 1940 - 2010



Beds by Medical School Affiliation, 52 cities, 1950 - 2010



	1950	1960	1970	1980	1990	2000	2010
Major teaching	58,468	66,372	77,174	114,913	107,420	102,030	97,622
Minor teaching	17,948	18,098	45,645	47,442	27,554	23,012	20,986
Non-teaching	98,236	118,210	108,382	75,772	78,731	44,063	35,915

Do rich hospitals deserve to be rich?
(Sometimes)

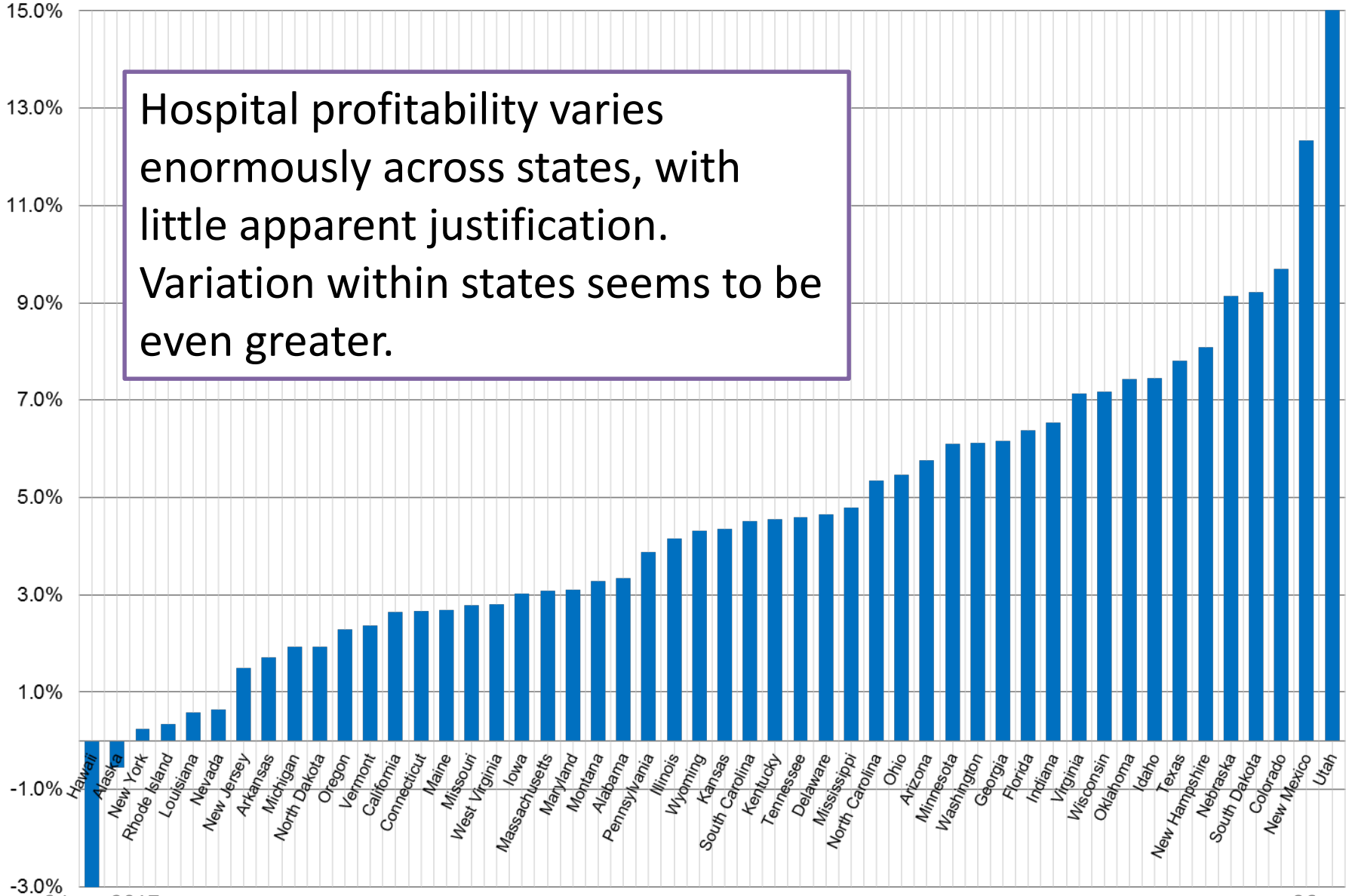
Rich hospitals

- Lots of privately insured patients
- Located in White area
- Treat profitable diagnoses
- Lots of doctors, many salaried
- Efficient? (No evidence)
- Endowment, gifts
- Market power to boost prices
- Reputation? Attract patients
- More political power
- Fair reward by real market?
  OR self-sanctification – profits without honor?

Poor hospitals

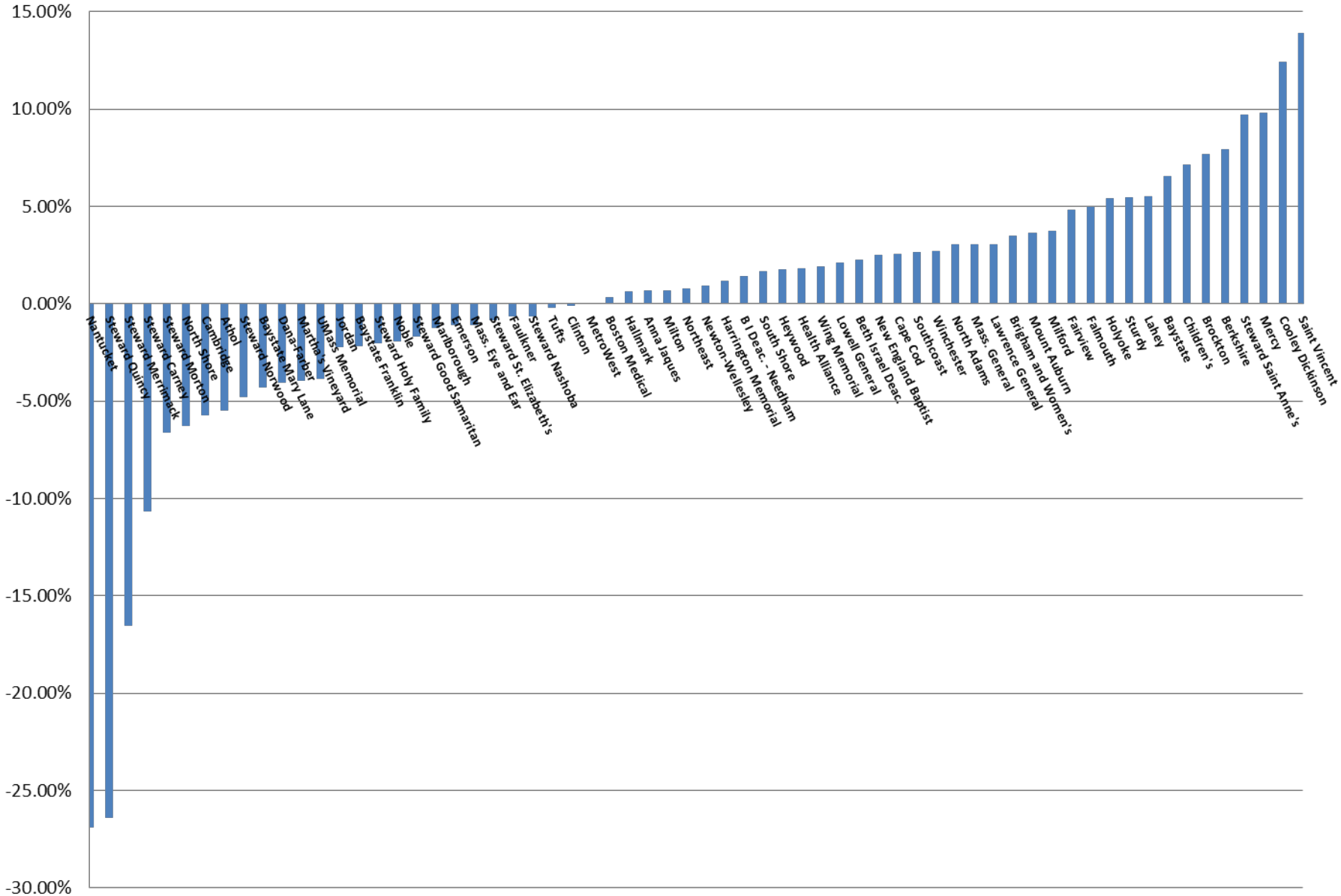
- Lots of Medicaid, uninsured
- Located in Black area
- Many unprofitable diagnoses
- Vanishing private doctors
- Weak management?
- Lack money to renew capital
- More competitors/low prices
- Poor perceived quality
- Usually less power
- Game is rigged?
- Self-blame

Statewide Hospital Operating Margins, 2009

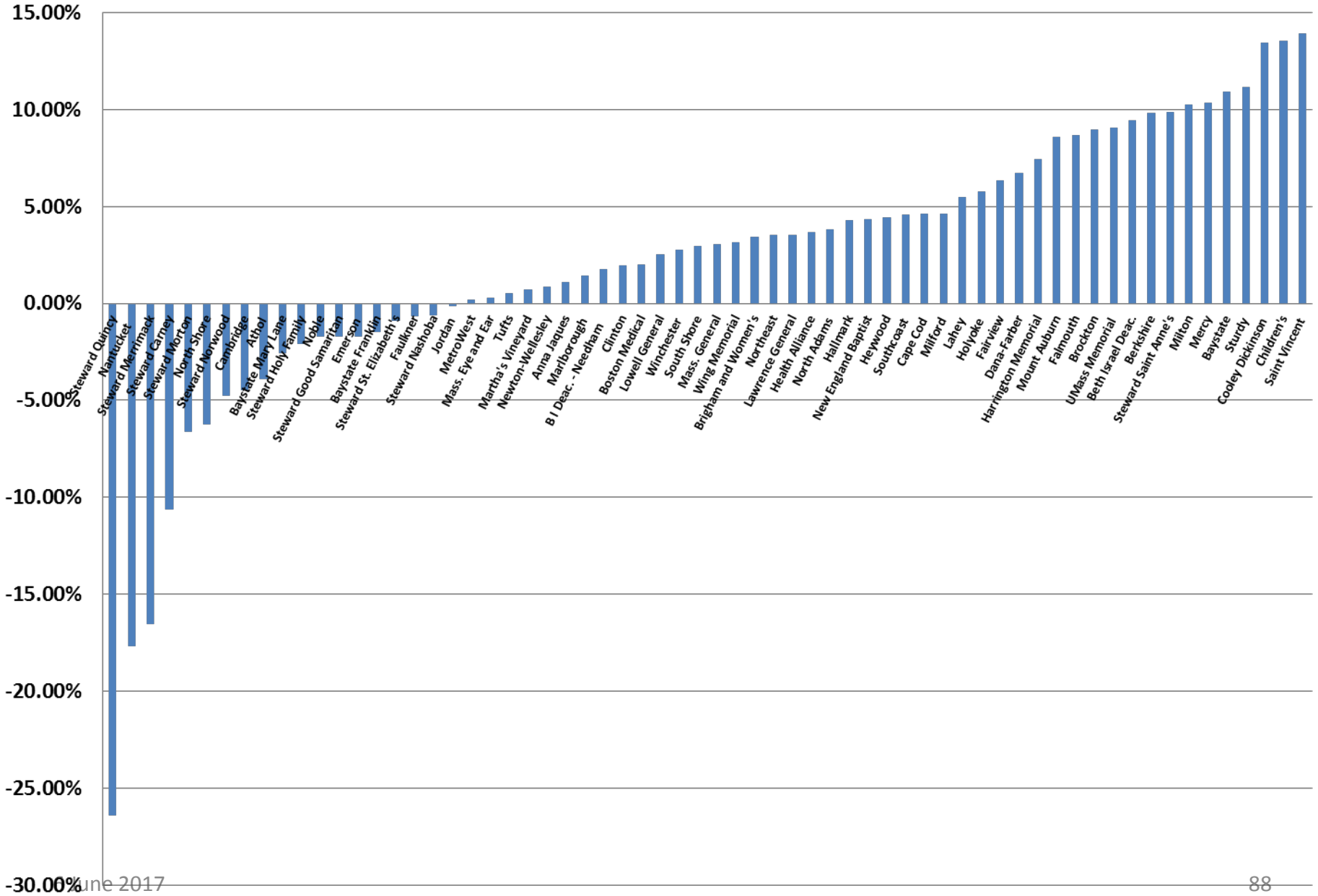


Hospital profitability varies enormously across states, with little apparent justification. Variation within states seems to be even greater.

Massachusetts Hospitals' Operating Margins, HFY 2013 Q2



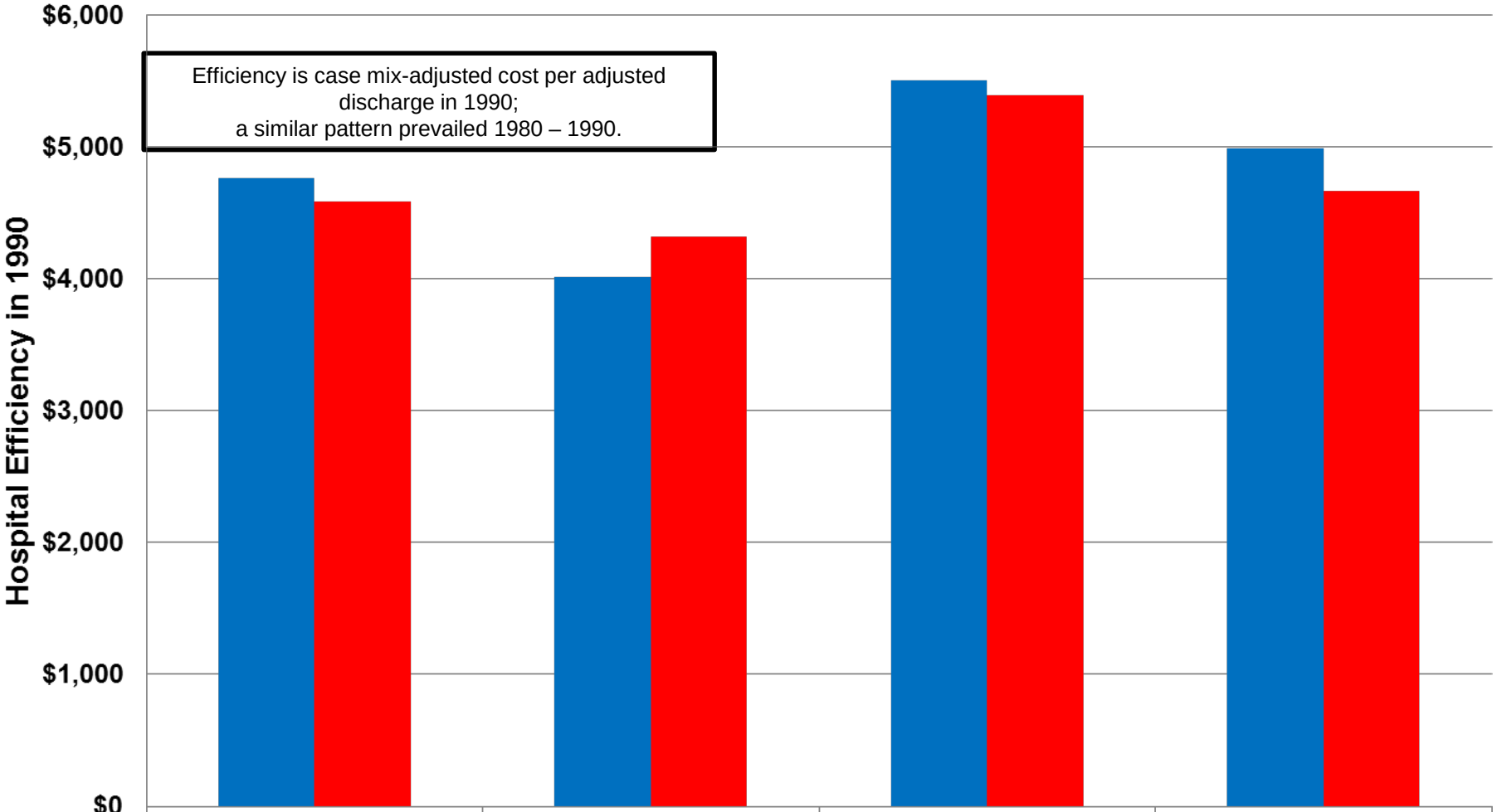
Massachustts Hospitals' Total Margins, HFY 2013 Q2



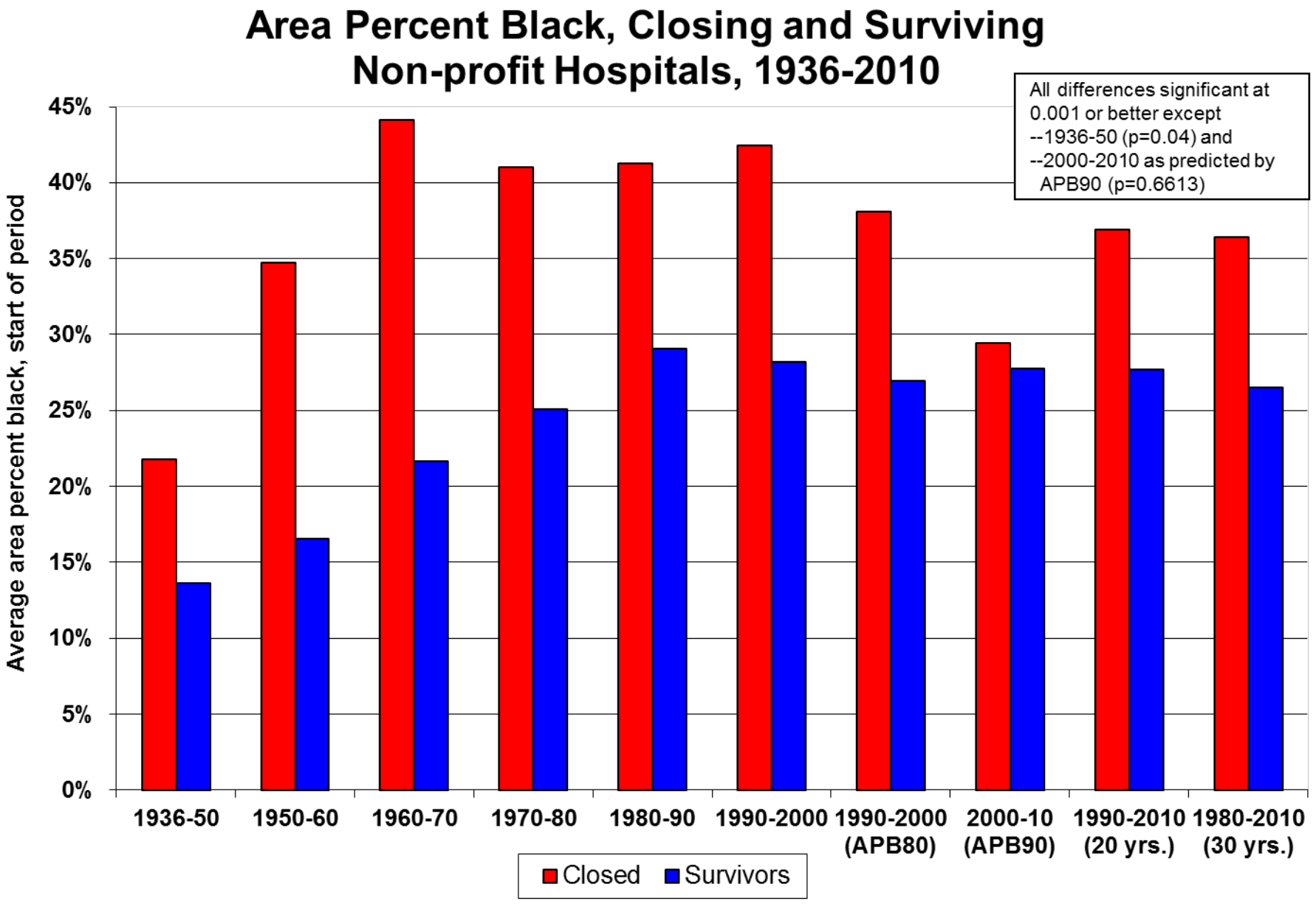
Predicting which hospitals close

- What factors do you think would predict whether a hospital closed or survived?

Hospital Efficiency in 1990 by Medical School Affiliation in 1990 And Survival until 2010



	non-teaching 1990	minor teaching 1990	major teaching 1990	All hospitals 1990
open 2010	$4,766	$4,012	$5,504	$4,986
closed 2010	$4,585	$4,319	$5,387	$4,663


Area Percent Black, Closing and Surviving Non-profit Hospitals, 1936-2010
All differences significant at 0.001 or better except --1936-50 (p=0.04) and --2000-2010 as predicted by APB90 (p=0.6613)
Average area percent black, start of period
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
1936-50
1950-60
1960-70
1970-80
1980-90
1990-2000
1990-2000 (APB80)
2000-10 (APB90)
1990-2010 (20 yrs.)
1980-2010 (30 yrs.)
Closed
Survivors

Predicting hospital closings, 1990 - 2010

Model C-statistic = 0.819

Predictor, 1990 values	Significance
Beds	0.000
Hospital fund balance / adjusted daily census (wealth)	0.000
Occupancy rate	0.004
Area percent black	0.008
Hospitals within 1 mile (competition)	0.034
Case mix-adjusted cost / discharge (efficiency)	0.637
Operating margin	0.679

WHAT PREDICTS MAJOR LEAGUE BASEBALL TEAM RELOCATIONS, 1950 – 1970?

- Race of residents living nearby
- Not
  - Attendance
  - Place in standings
  - Age of stadium

Predicted Chance of Hospital Closing, 1990 – 2010

(Mean hospital – as function of mean 1990 characteristics)

Independent Variable	β Estimate (coefficient)	Values for mean hospital	Prediction for mean hospital
Intercept	-2.190	1.000	-2.190
Beds	0.005	328.7	1.772
Area percent black	-0.010	28.7	-0.298
Occupancy rate	1.948	66.1	1.288
Hospitals in 1 mile	-0.168	1.2	-0.202
Fund balance/adjusted census	0.004	$134,183	0.573
Case mix-adjusted cost/discharge	0.000	$6,462	0.090
Sum			1.033
Exponential value of sum			2.810
Predicted probability of survival			73.8%
Predicted probability of closing mean hospital			**26.2%**

→ ***This slide is interactive if you double-click on table (won't work in slide show mode)***

Model C-statistic = 0.819

Predicted Chance of Closing between 1990 and 2010 Rises as Beds Fall and as Area Percent Black Rises

		Beds, 1990				
			Higher quartile	Mean	Lower quartile	
Area Percent Black, 1990		600	433	329	176	100
Lower quartile	5%	**6.1%**	11.8%	21.9%	38.9%	49.0%
Mean	29%	7.7%	14.6%	26.4%	44.9%	55.1%
Higher quartile	45%	9.0%	16.9%	29.9%	49.2%	59.4%
	75%	11.8%	21.7%	36.7%	56.9%	66.5%
	99%	14.7%	26.2%	42.7%	**62.9%**	71.8%

Of the 548 non-public hospitals with 50 or more beds that were open in 1990, 193 (35%) closed by 2010. Chance of closing was calculated from mean 1990 values of all significant variables—except Beds and Area Percent Black, which changed with the cell being calculated.

Predicting Hospital Closings, 1980–2010

- Of 608 hospitals with 50 or more beds in 1980
  - 291 (48%) closed by 2010
- The model used hospitals' 1980 characteristics to predict which closed over the next three decades
- It correctly classified 82 percent of hospitals.
  - These were hospitals predicted to stay open that did so plus hospitals predicted to close that did so, as a share of all hospitals
- Which hospitals were likelier to close?
  - Smaller hospitals and non-teaching hospitals
  - In more heavily black neighborhoods
  - Less wealth relative to volume of care
  - Lower occupancy rate
  - More hospitals nearby
- Efficiency had no predictive value

Closed Brooklyn Hospitals

St. Mary's

Interboro

Brooklyn Jewish

Vulnerable Brooklyn Hospitals

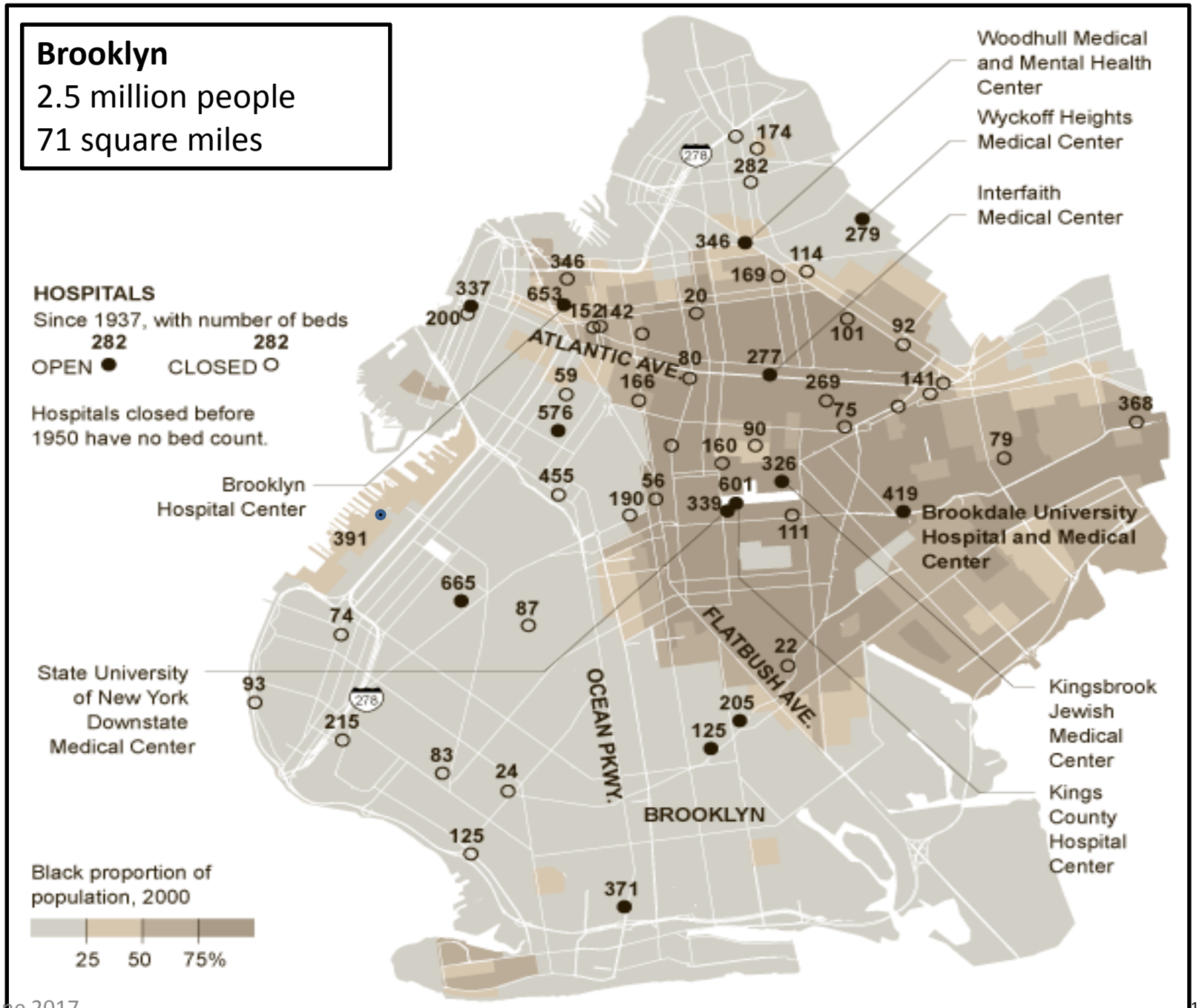
Interfaith

Wyckoff

Long Island College Hospital

Kingsbrook

Brookdale


Brooklyn
2.5 million people
71 square miles
HOSPITALS
Since 1937, with number of beds
282 282
OPEN CLOSED
Hospitals closed before 1950 have no bed count.
Brooklyn Hospital Center
State University of New York Downstate Medical Center
Woodhull Medical and Mental Health Center
Wyckoff Heights Medical Center
Interfaith Medical Center
Brookdale University Hospital and Medical Center
Kingsbrook Jewish Medical Center
Kings County Hospital Center
ATLANTIC AVE.
FLATBUSH AVE.
OCEAN PKWY.
BROOKLYN
278
Black proportion of population, 2000
25 50 75%

4. Why do hospital closings matter?

- Access
- Cost
- Quality

So what?

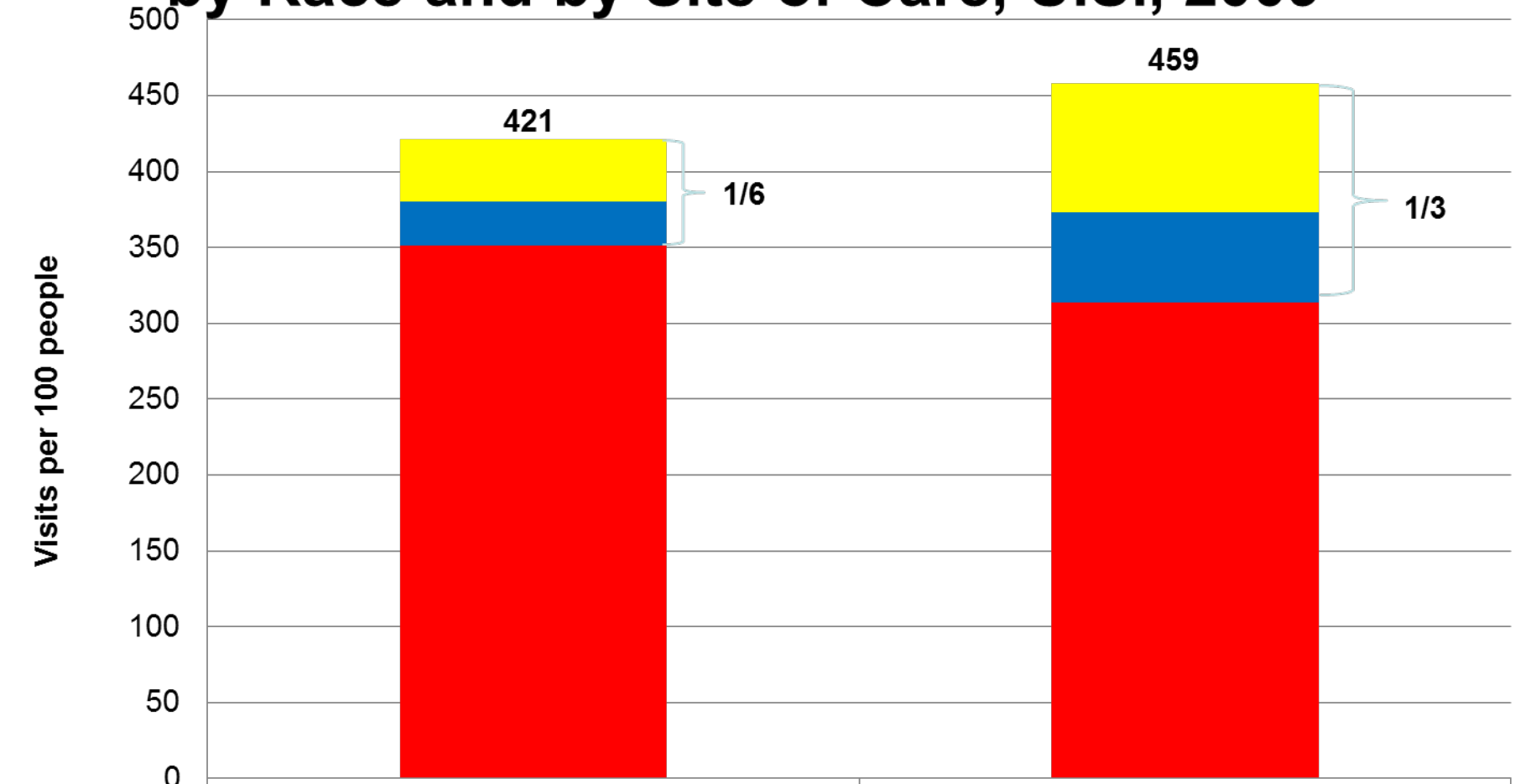
- Don’t patients just vote with their feet, avoiding low-quality or unresponsive hospitals?
- How can a hospital be needed if it’s losing $
- Do we really need many hospitals?
  - Won’t community health centers substitute?
  - Won’t we live forever if we lose a little weight?

- Consider access – cost – quality → →

ACCESS - Ambulatory

- Share of all doctor visits made at hospital emergency room or outpatient department
  - Blacks 32 percent
  - Whites 15 percent
- So hospital closings disproportionately displace ambulatory care for blacks.
- Loss of a hospital undermines remaining physicians in private practice in an area.
- CHC capacity likely to remain inadequate, especially in arranging specialty physician care.

Physician Visits per 100 People, by Race and by Site of Care, U.S., 2009



	white	black
ER	41	85
OPD	29	59
MD office	351	314

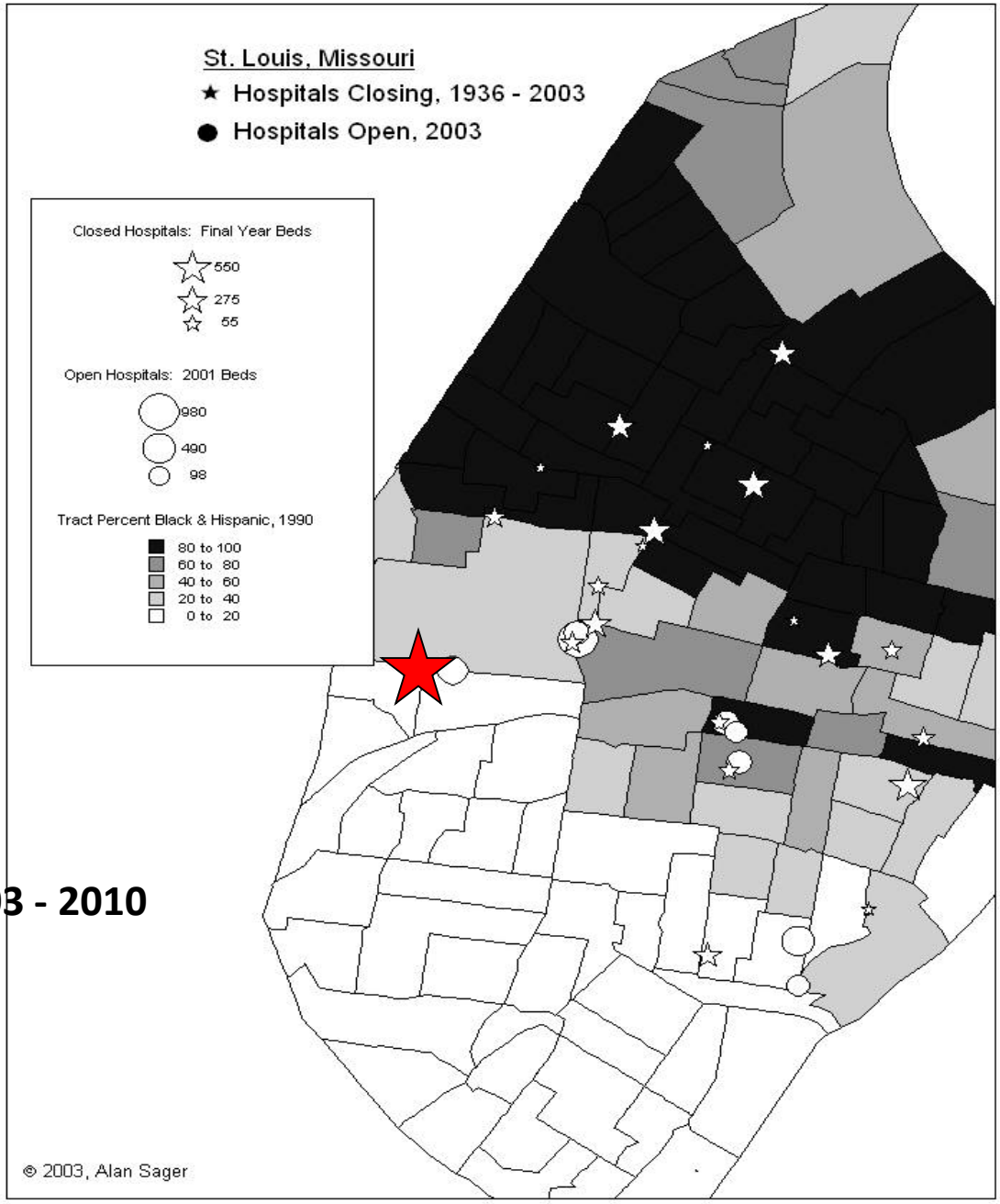
Source: *Health United States, 2011*, Table 96, age-adjusted.

If doctors exit community hospitals, they're forced to close

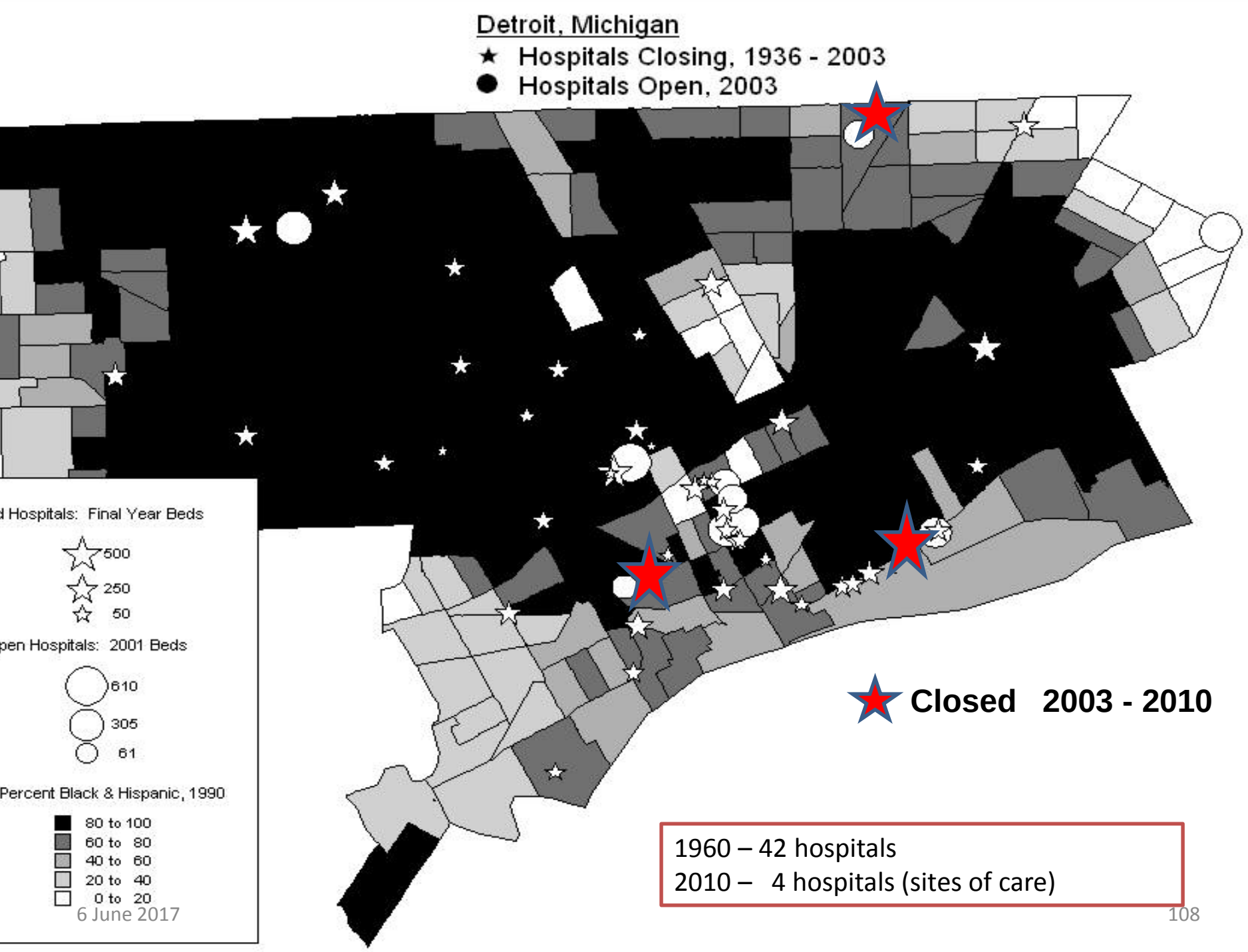
- Hospitals + doctors = symbiotic, not substitutes
- If neighborhood changes, ordinary non-teaching community hospitals often want to provide care to new residents
- But, if doctors in private practice followed former residents to suburbs, lack of physicians can mean no care for patients and no revenue for hospital
- Loss of hospital can drive away remaining docs

ACCESS – inpatient

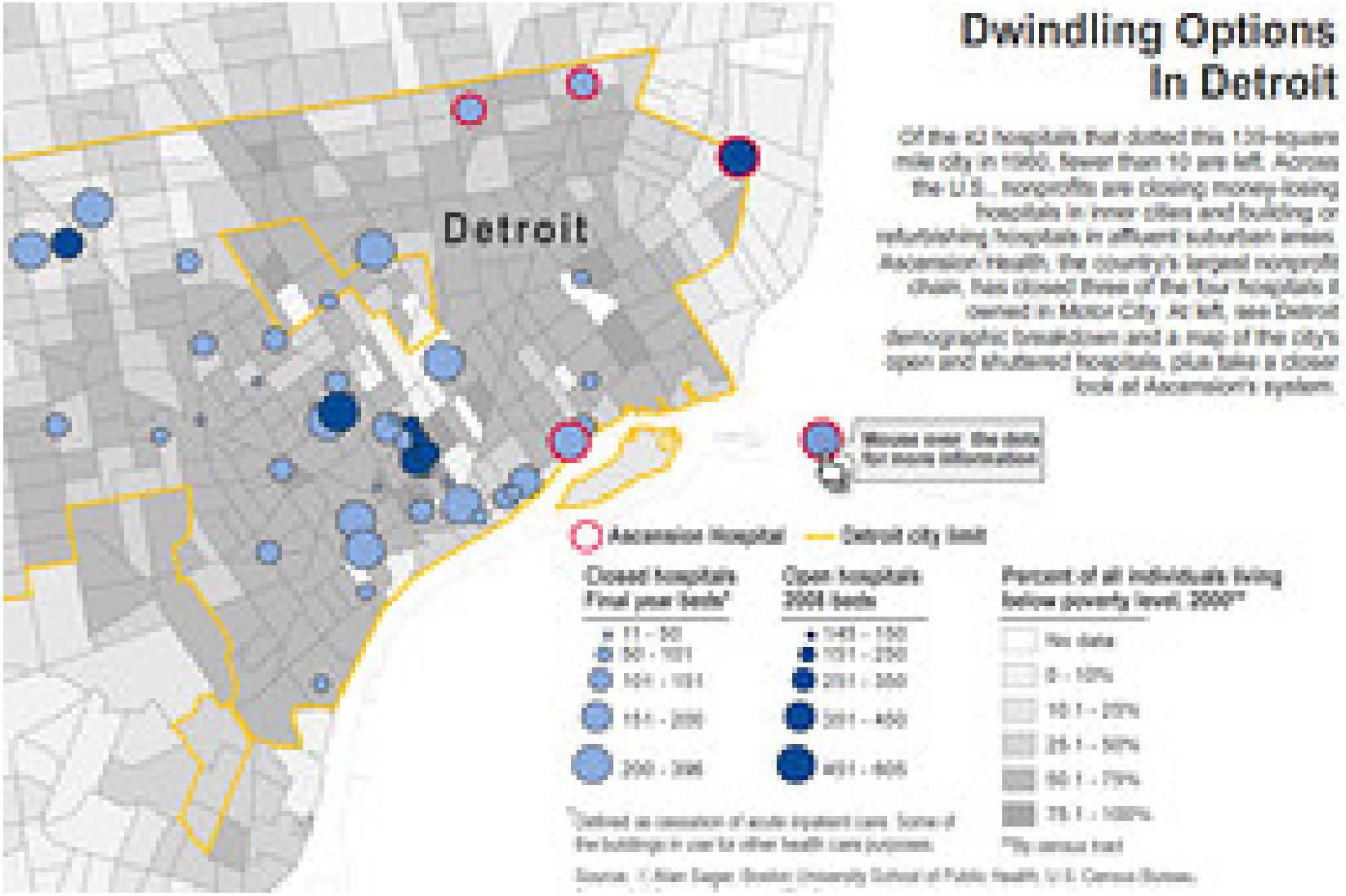
- Cumulative loss of access grows over time, as large expanses of many U.S. cities lose their hospitals→ "medical wastelands"
  - 45% of 774 open in 1970 had closed by 2010
  - 3/5 closed in areas >60% black in 1990
- Risk of putting too many beds in too few baskets: Katrina/New Orleans, Sandy/Manhattan
- Medical deserts emerge in St. Louis, Detroit, New York, Washington, D.C., Baltimore, and Cleveland
- 30% of inpatient volume displaced by closing is lost initially, and only gradually reappears



Closed 2003 - 2010


Detroit, Michigan
Hospitals Closing, 1936 - 2003
Hospitals Open, 2003
d Hospitals: Final Year Beds
500
250
50
pen Hospitals: 2001 Beds
610
305
61
Percent Black & Hispanic, 1990
80 to 100
60 to 80
40 to 60
20 to 40
0 to 20
Closed 2003 - 2010
1960 – 42 hospitals
2010 – 4 hospitals (sites of care)

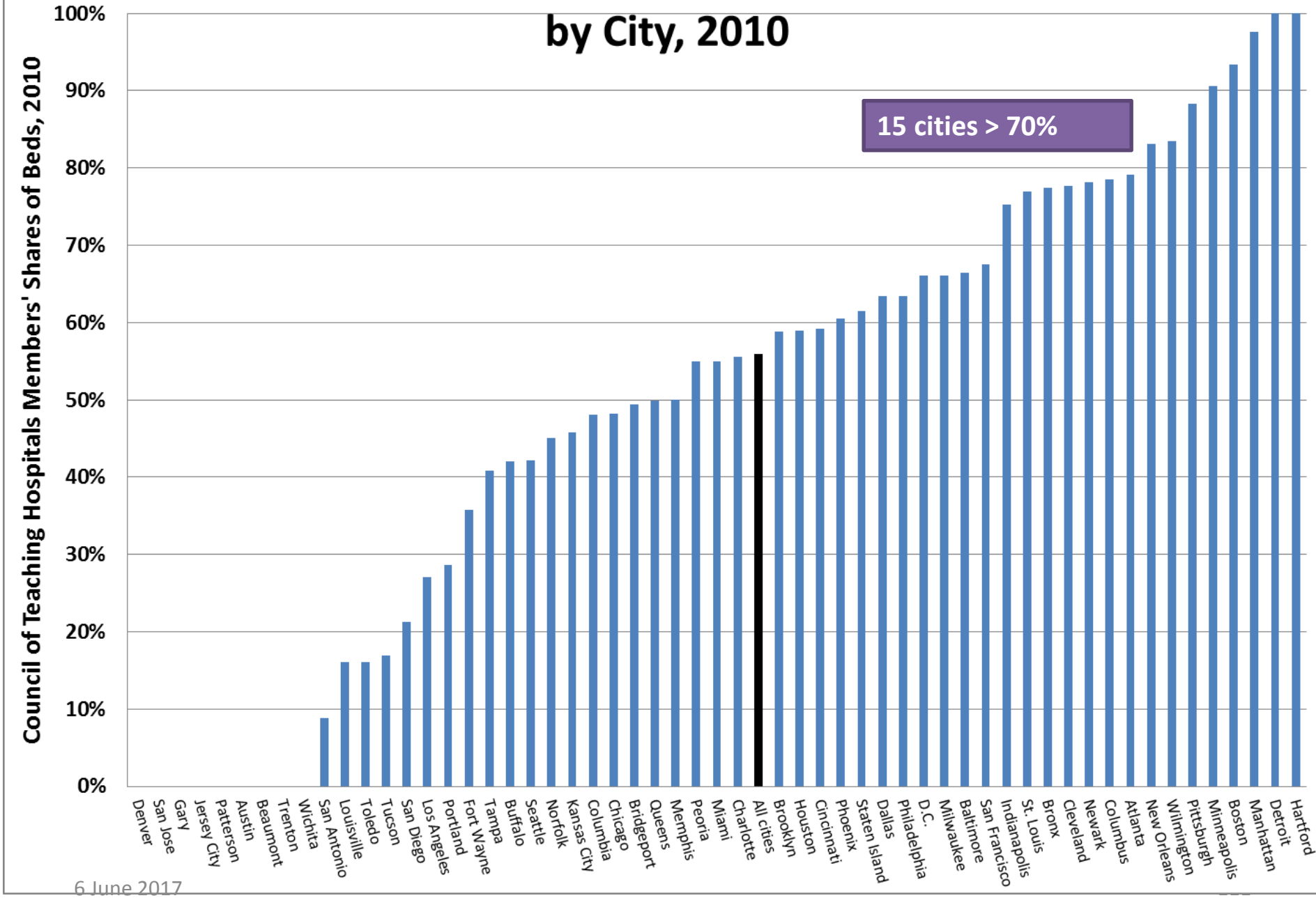
Barbara Martinez, “Nonprofit Hospitals Leave the City for Greener Pastures,” *WSJ*, 14 Oct. 08



COST

- Fewer hospitals → fewer competitors → less price competition → higher revenue for surviving hospitals → enables them to incur higher costs.
- Slight/moderate tendency, decade after decade, for the more efficient—the less expensive—hospitals to close
- Teaching hospitals' growing share of most cities' hospital beds (great variation x city)
  - 44% in 1950
  - 77% in 2010
- Major COTH teaching hospitals' share rises from 46% in 1970 to 56% in 2010 (also great variation by city)
- Growing tendency to care for our lower-income urban patients in the world's costliest teaching hospitals
  - Puts added cost pressure on Medicaid

COTH Major Teaching Hospitals' Shares of Beds, by City, 2010



QUALITY

- Were many closed hospitals effectively segregated racially and unequal in quality?
- If so, closing of heavily black non-teaching hospitals ***and*** successful relocation of their patients to large teaching hospitals might → more integrated, mainstream care, boosting quality.
- But
  - When hospitals in heavily black hospitals close, do their patients succeed in obtaining substitute care? If so, do they get it at higher-quality hospitals?
  - Do patients with routine problems get good care in large teaching hospitals that focus on complex problems?
  - And is care at integrated teaching hospitals racially neutral?

Separate care is unequal care, but do closings make for greater equality?

Consider Bindman's "Health Care Safety Net Ambivalence" article from *JAMA*, 21 Aug. 2013

- Bindman asserts that safety net hospitals' quality is inferior to that of other hospitals
- Also that "the availability of safety-net practitioners removes the responsibility from the majority of practitioners to contribute toward a goal of providing access and equitable care to all."
- Does that availability really remove a responsibility?
- Bindman urges caution—don't dismantle safety net caregivers without first providing care that's at least as good elsewhere. Closed hospitals are nearly impossible to re-open.
- If all people were insured and all payers paid the same price for care, would there be equal access to high-quality care?

3. Long-term care

1. Great share of elders/disabled people want to live at home but the great share of public $s pay for institutional care
   - How explain that disjunction in a democracy?
2. About 80% of LTC now provided by unpaid family/friends.
   - Families may become less available, able, or willing to help in future
   - But a small drop in the 80% share could result in a large proportionate rise in publicly-financed share

More LTC

3. U.S. elder population share ~13%, while many rich democracies approaching 20%
4. How do most of them provide broad public financing for LTC while we don't?
   - Political pressure from lots of elders/families
   - They spend much less on acute care so have money left over

Still more LTC

5. Very little innovation in LTC financing or delivery
   - Dual eligible demonstrations merge M'care + M'caid $s
   - Private LTC insurance—sometimes helpful, but often unstable
   - Housing supports, multi-generational living
   - Reverse annuity mortgages—check the fees and real payouts! Threw FHA into deficit for first time!
6. Two sides of stone bridge
   - Mobilize time by banking it—when can, and get help when need—create a parallel economy of reciprocity
   - And social insurance for in-home and institutional care

4. Rx

- U.S. prices for brand name drugs highest
- High prices → payers hope to save by cutting volume
- How?
  - Formularies
  - Higher OOPs
- So your patients won't fill the Rx you prescribe
- PhRMA: Need high prices to innovate
  - "Your money or your life"?

But does big PhRMA innovate?

- Most nervous very-well-dressed people in North America
- Lacking business plans, you'd be nervous, too
  - Cut research spending
  - Boost revenue via 3 M's
    - Mergers and acquisitions
    - Marketing and advertising
    - Me-too's
  - And by hiking prices
- Are research findings and FDA applications trustworthy?

If really want innovation, incentivize it

- How much would all payers pay for a pill that prevented Alzheimer's?
- Post that as prize
  - In exchange for patent rights
- Contract for manufacturing and price at incremental cost
  - Take research and development costs out of price
  - Free market's pricing
- Innovation and proper price signals
- And kleptocrats wouldn't have incentive to fly drugs donated to poor nations back to Zurich
- Provide generous jail time for falsifying research findings
- Also, cover fixed costs of lots of innovative labs, so can compete for prize
- And break up vertically integrated manufacturers

III. Real-world lessons for U.S. health care from other rich democracies

A. Money: Who should think about it, when, and how intensely?

B. Self-regulating arrangements

A. Money: Who should think about it, when, and how intensely?

B. Self-regulating arrangements

Disdain things that work elsewhere

- Health spending visible to everyone
  - So everyone knows that higher health spending means less take-home pay, vacation, profits, education spending, investment
  - In this climate, people understand trade-offs and prioritizing
- Budgets for hospitals
- Negotiated fee schedules for doctors
- Financial coverage for all people
  - Usually with low OOPs
- PCP for everyone
- Usually, simplify administration
  - Though all-payer more common than single payer

What we don’t do

- Covering everyone might facilitate cost control
- More PCPs and less care in major teaching hospitals would probably be more affordable
- Lots of hand-wringing about costs, and lots of hard work by smart people with good intentions, but nothing has worked so far
- Make case for spending more carefully and making trade-offs

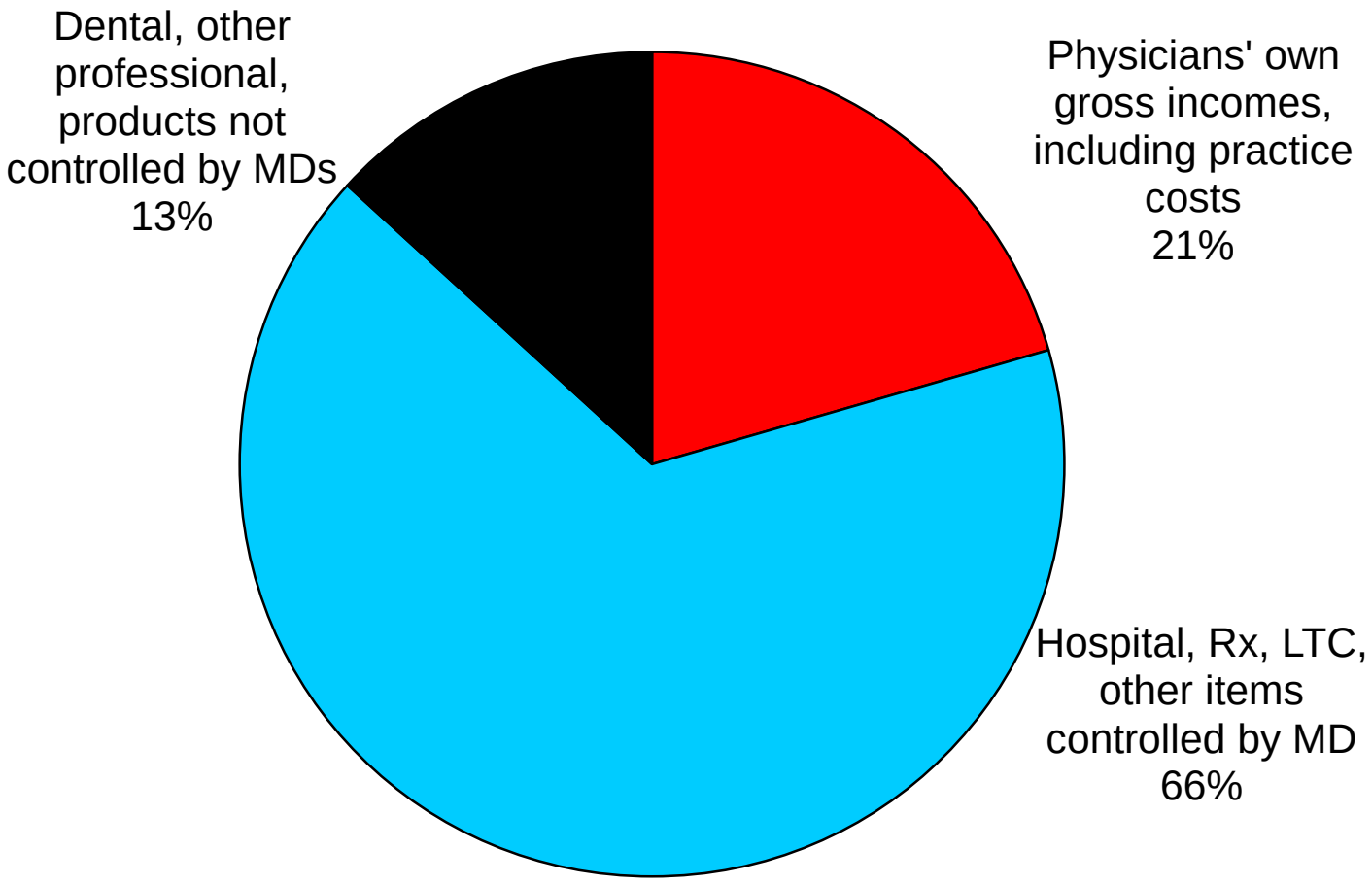
Doctors essential to containing cost

- Doctors' individual retail decisions commit and control overwhelming share of health $
- Can any cost control work if doctors oppose?
  - Could game new incentives if unsympathetic
  - Could urge patients to overthrow controls
- Urge need for political, financial, legal, clinical, and ethical deal between physicians and (who?)

But in past, doctors have often been

- Squeezed
  - Blue Shield or Medicaid fee cuts
- Manipulated
  - Pressured to join multiple HMOs—or patients won't be covered when they try to see you
  - Buy costly EHR or suffer financial penalties
  - IPA HMOs paid FFS, but with large withholds
- Marginalized
  - HMOs in 1980s required PCPs to serve as gatekeepers and specialists to serve by referral only
- Ignored

PHYSICIANS RECEIVE OR CONTROL 87% OF U.S. PERSONAL HEALTH SPENDING



A different type of managed care deal

- PCP-based coordinated care
- Patients sign up with PCPs
- Money follows the patient, and PCPs are capitated for all services
  - Risk-adjusted
  - Money divided into three watertight budgets
    1. To pay PCPs
    2. To pay other doctors
    3. To pay for all the things doctors authorize
       - Labs and imaging
       - Surgical and medical inpatient hospital care
       - Meds
       - LTC
- No budget can be exceeded
- No PCP can benefit financially from savings in other two budgets
- No specialist can benefit from savings in third budget
- Self-regulating? Trustworthy? Liberates physicians to spend carefully by marshaling a budget, with no incentives to under- or over-serve?

Aims of the deals

- Equilibrium-seeking, homeostasis
- Durably affordable balance among access, cost, appropriateness, caregiver configuration
- No financial incentives to under- or over-serve
- Pursuit of value for patients, driven by evidence, constrained by caregiver and financial capacity
- Professionalism, honor, and fiduciary behavior
- Medical security

What do all other rich democracies do?

- Cover everyone
- Budgets for hospitals
- Little role for market forces to contain cost or give care (may be growing, but not much)
- Heavier reliance on PCPs
- Greater balance of living standards and incomes

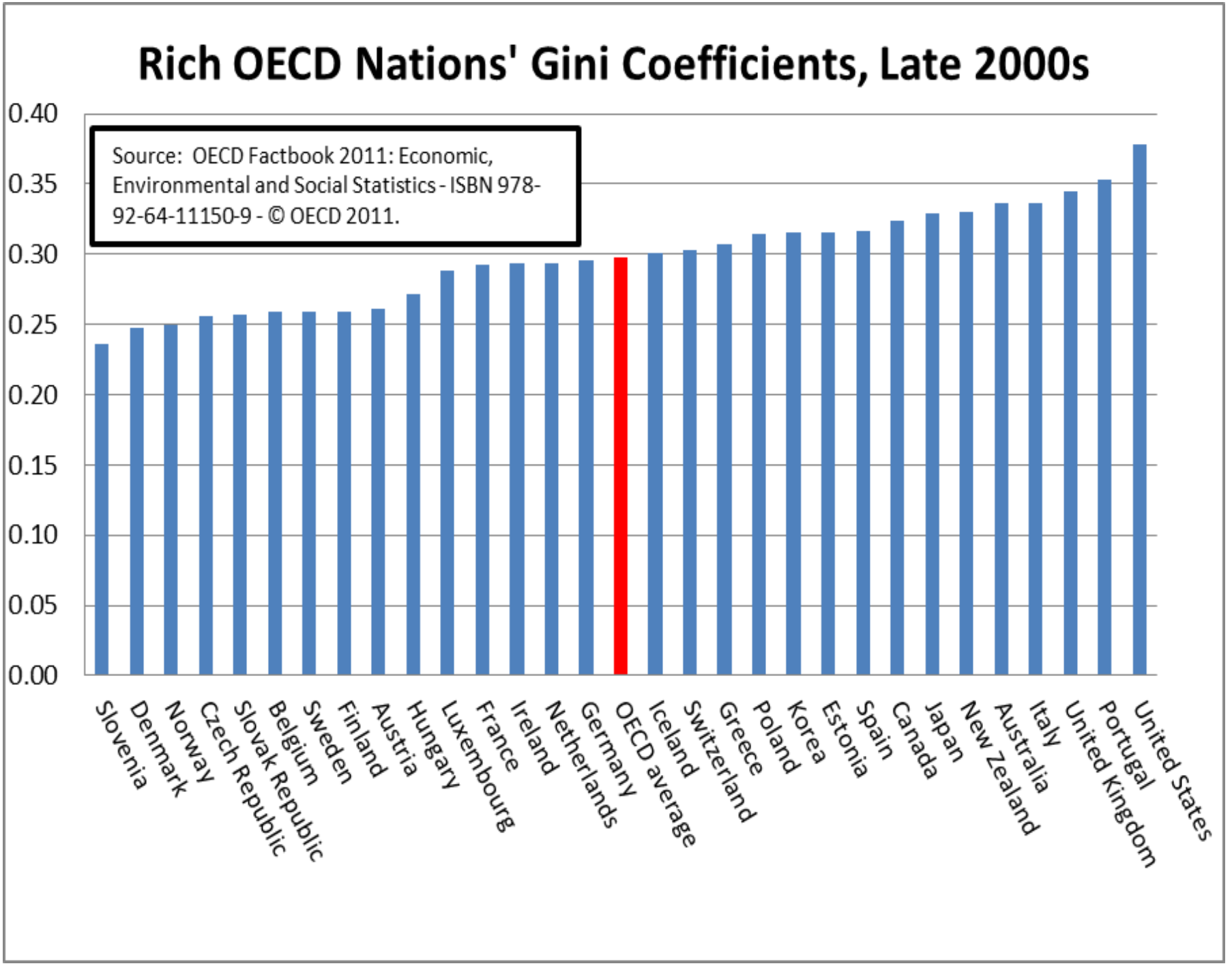
What don’t they do?

- Don’t all rely on single payer
- Don’t rely on high OOPs
- Don’t restrict or tier networks of care

- All payers pay same price for same care
- Flexible budgets for all hospitals
- LTC social insurance + volunteer mobilization

A European-style deal

- No networks or other restrictions on patient access
- Payers set adequate budget for each needed hospital
- Budgets allocated by salaried hospital-based doctors in light of evidence on value of care (clinical value to patients divided by cost)
- Negotiate fees with doctors in ambulatory practices
  - Cut doctors' administrative costs
    - Doctors accept simplified and trustworthy fee schedules designed to achieve target incomes if work reasonably hard
  - Cut defensive medicine
    - End dual-purpose malpractice system


Rich OECD Nations' Gini Coefficients, Late 2000s
Source: OECD Factbook 2011: Economic, Environmental and Social Statistics - ISBN 978-92-64-11150-9 - © OECD 2011.
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Slovenia
Denmark
Norway
Czech Republic
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Luxembourg
France
Ireland
Netherlands
Germany
OECD average
Iceland
Switzerland
Greece
Poland
Korea
Estonia
Spain
Canada
Japan
New Zealand
Australia
Italy
United Kingdom
Portugal
United States

Cost of ending medical school debt

- Suppose medical school costs
  $50,000/year tuition + $15,000/year living expenses
  = $65K/year * 4 years = $260 K
- * about 25K MDs + DOs yearly = $6.5 billion
- = 0.22% of health spending ($6.5B/$2,900B)
- But very strategic
- Doctors don't repay their debt (payers do)
- Doctors just write checks (financial intermediaries)
  - But debt might help make them money-conscious
- But, were medical school made free, why not engineering, business, social work, or—LAW?

Malpractice

- One system aims to accomplish two purposes
  - Identify, re-educate, extrude, punish bad actors
  - Compensate victims of wrongful acts (torts)
- Fails at both—and probably engenders considerable defensive medicine cost
- Why not abandon tort system and adopt separate, efficacious method of attacking each?