Sticker Shock!

Economics and Hospital Pricing

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Thursday, March 3, 2022

Health care in the U.S.

Some thought on U.S. health care...

1. Quality is "Meh"
2. The System is Confusing
3. Prices are Really High!
4. Economics can help

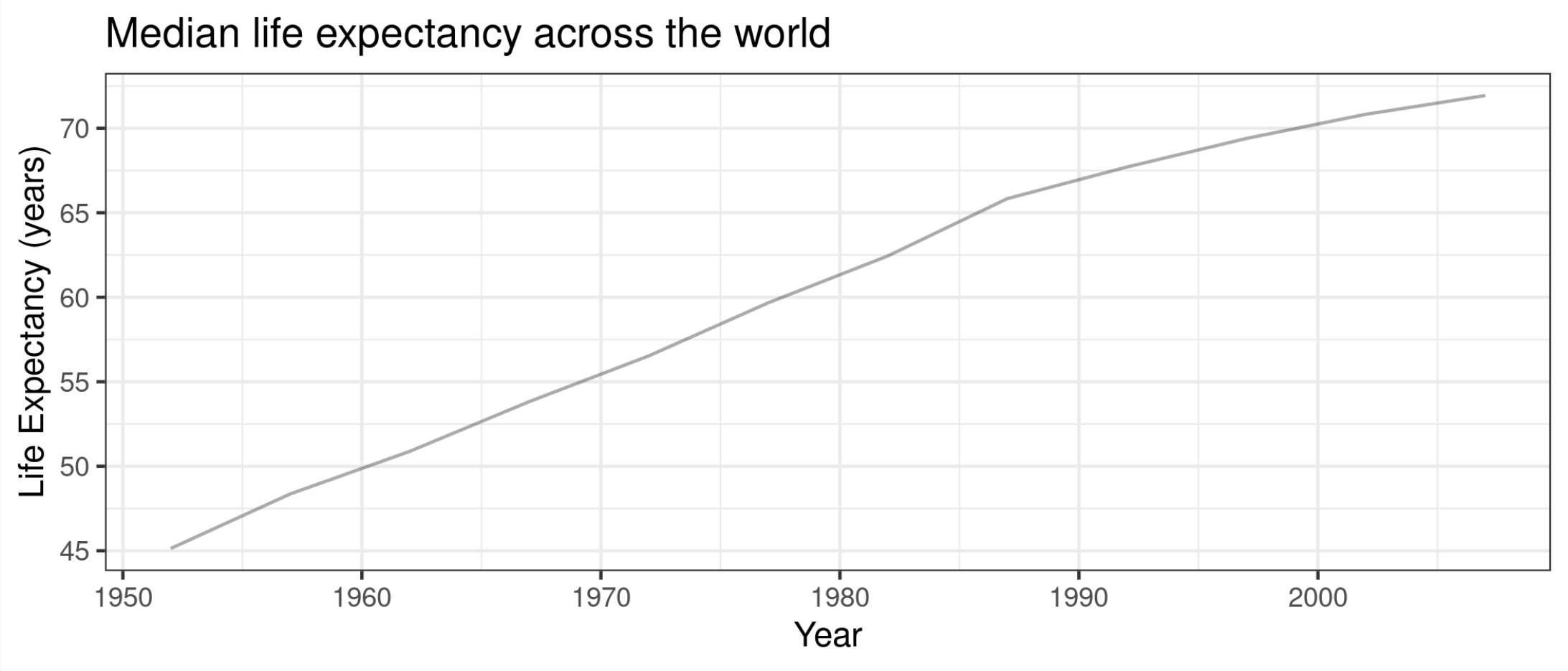
Spending and Quality

Health improvements worldwide

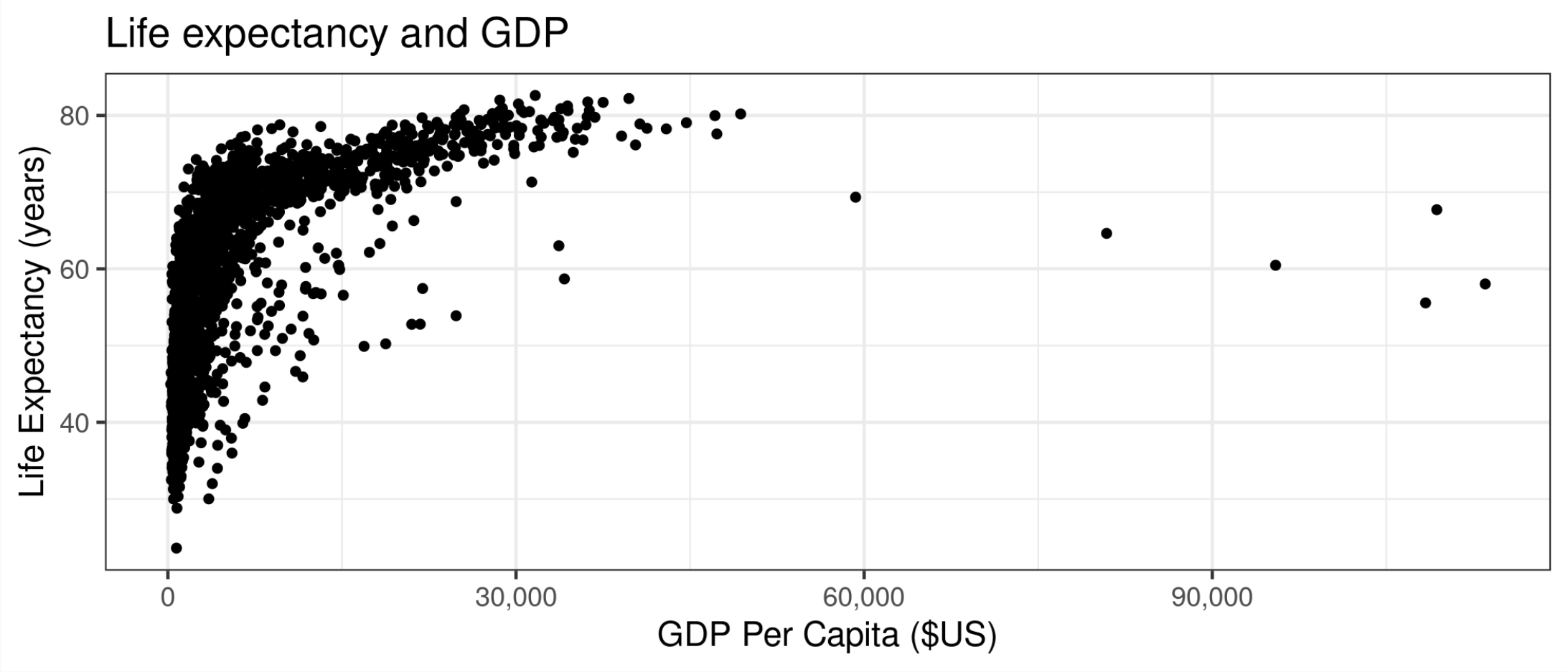
We've made *major* improvements in life expectancy (and many other measures of health) across the world

- Poverty reduction
- Technology development and innovation
- Technology diffusion and adoption
- Access to better services, including health care

Health improvements worldwide



Health improvements related to economic growth



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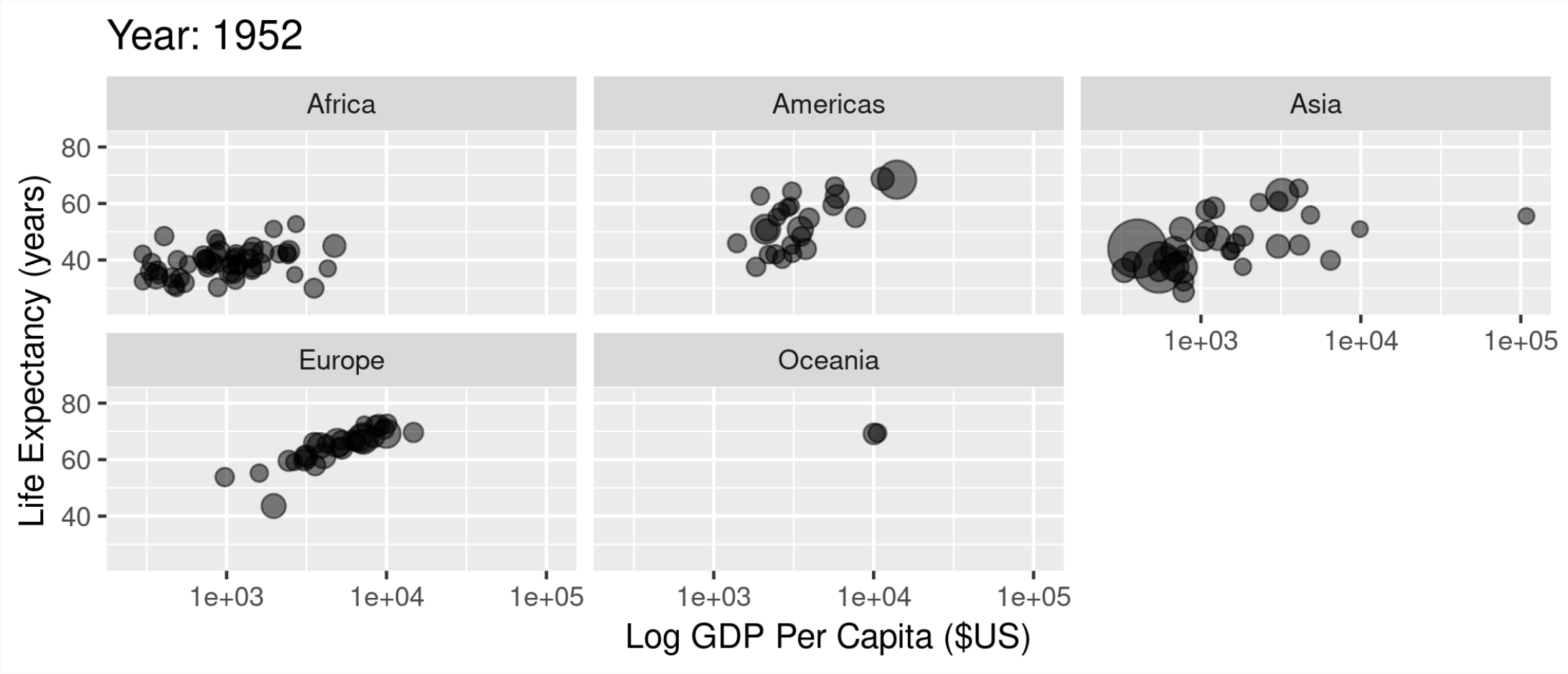
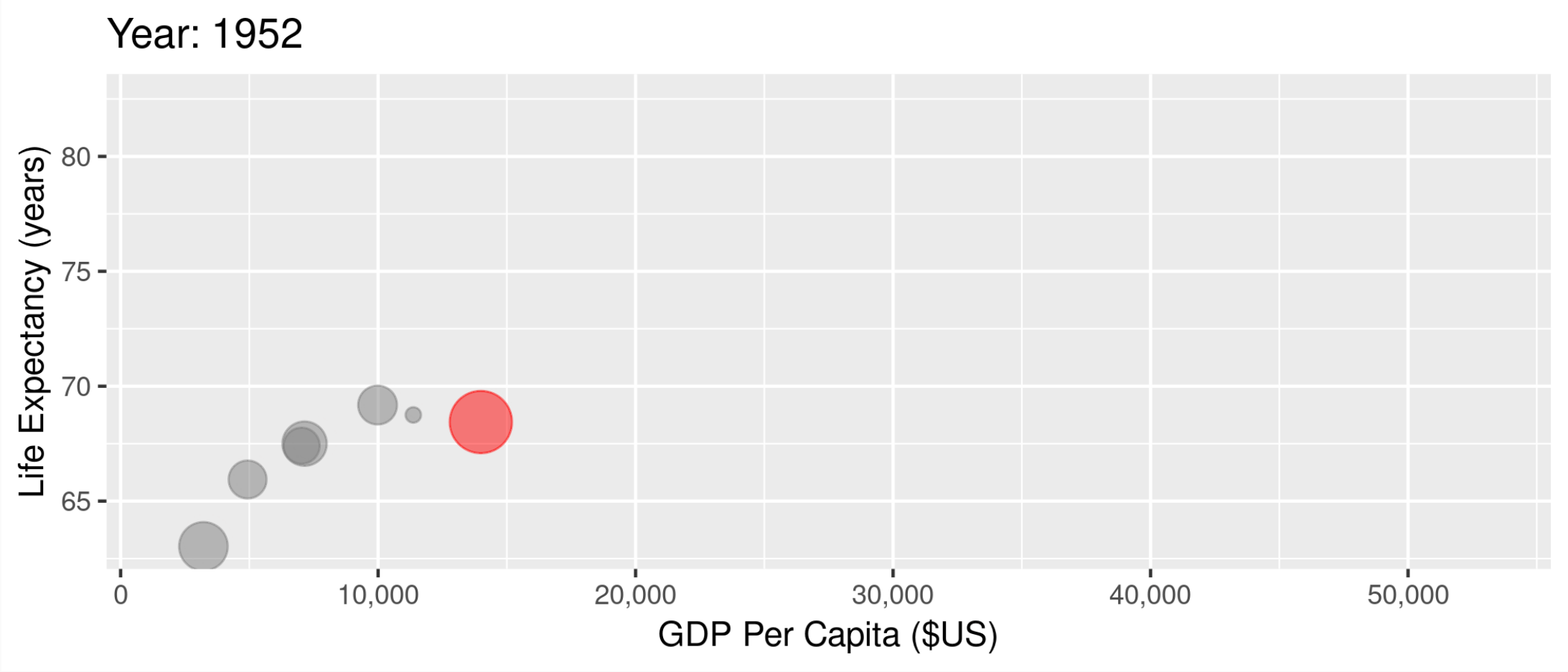
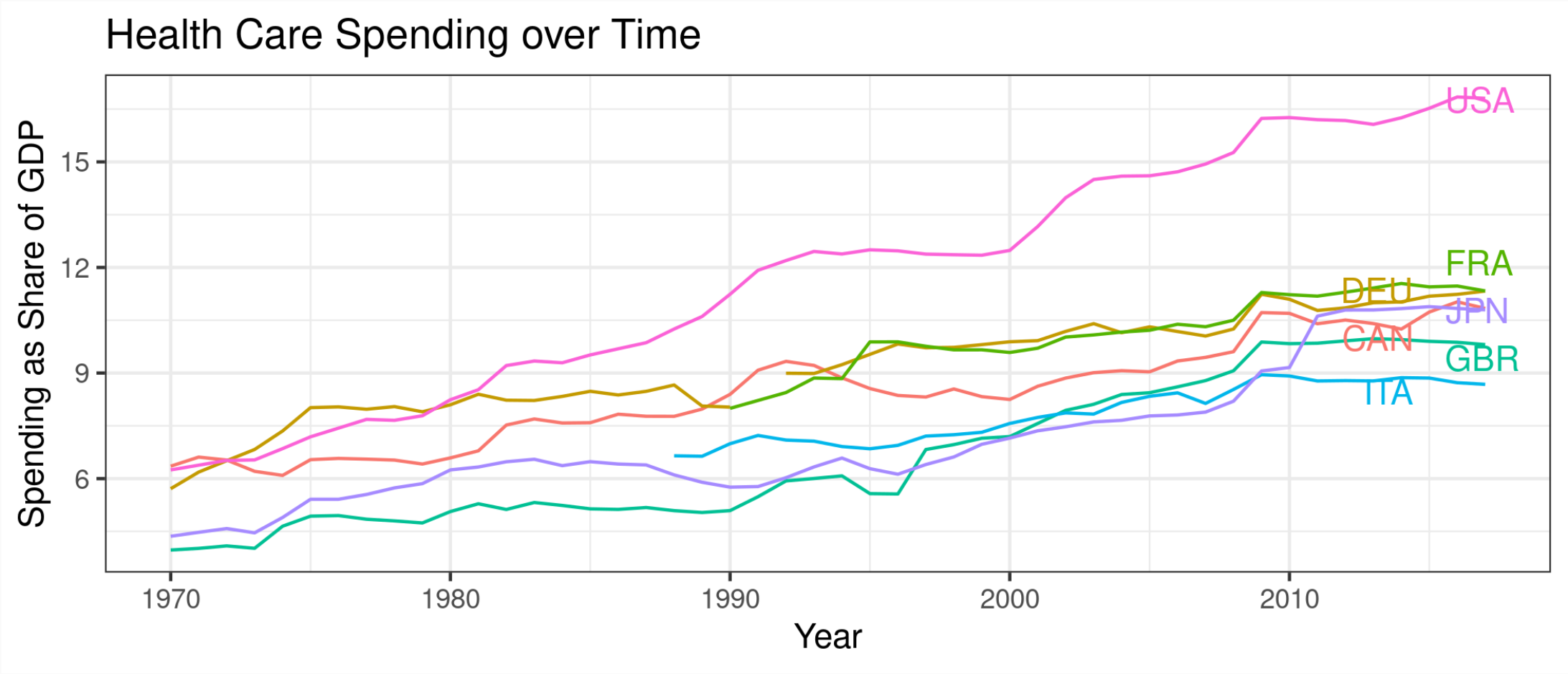


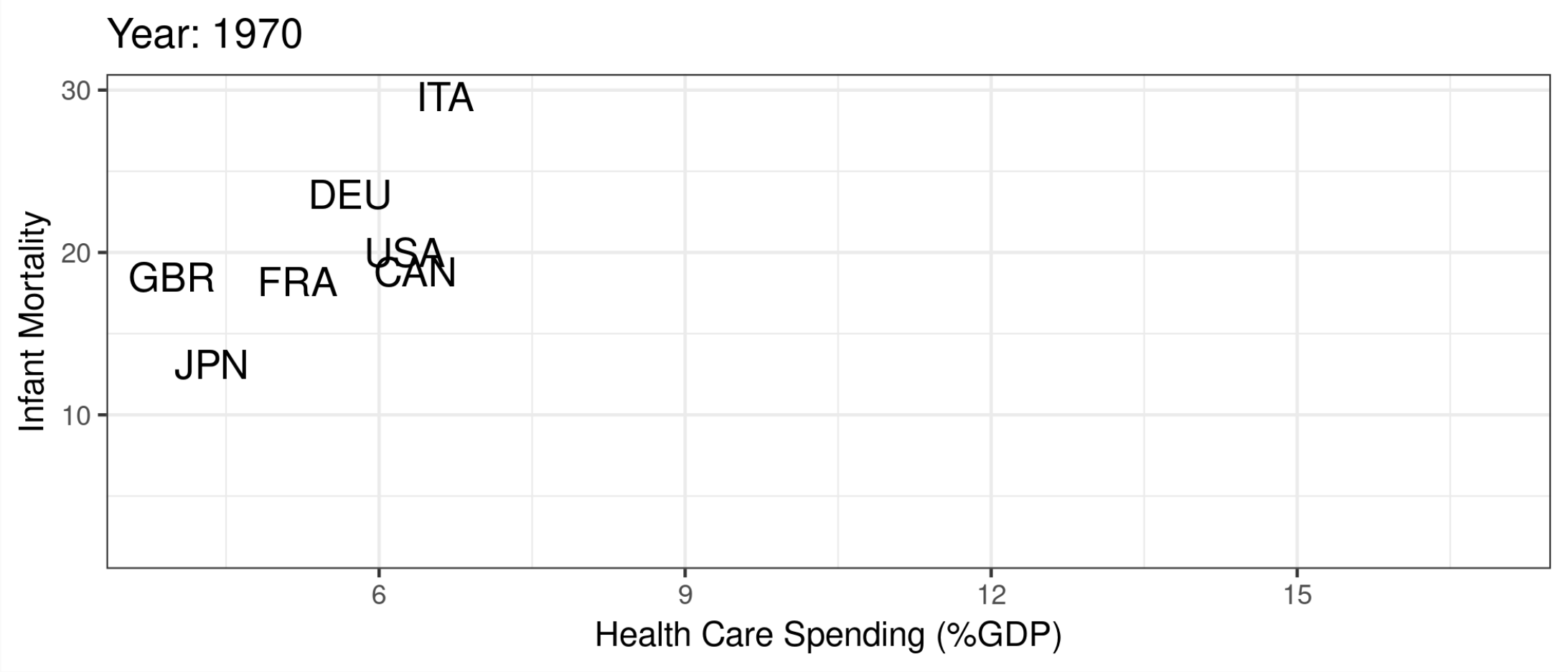
But the U.S. is unique



The U.S. has very high spending



And our spending doesn't pay off in some areas



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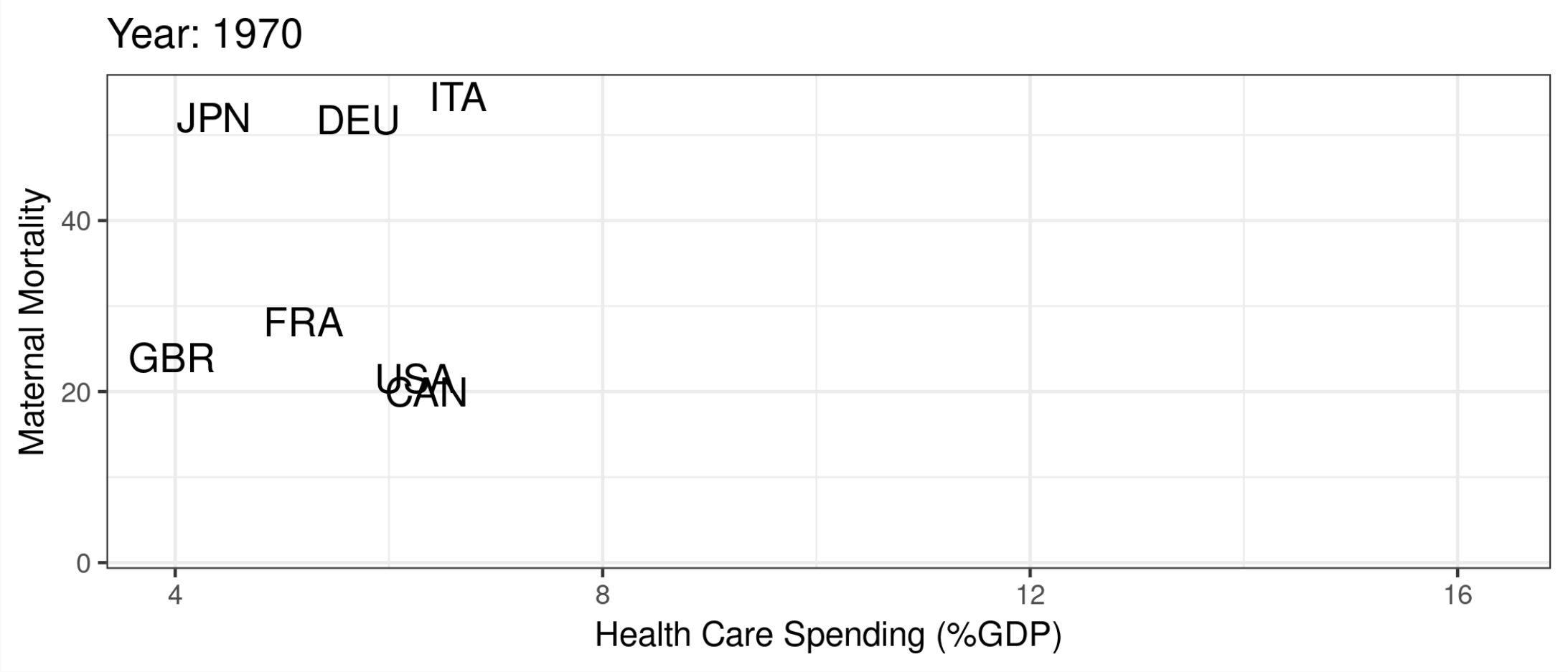


U.S. Health Care is Confusing!

> *"Nobody knew health care could be so complicated"*
>
> -- Donald Trump

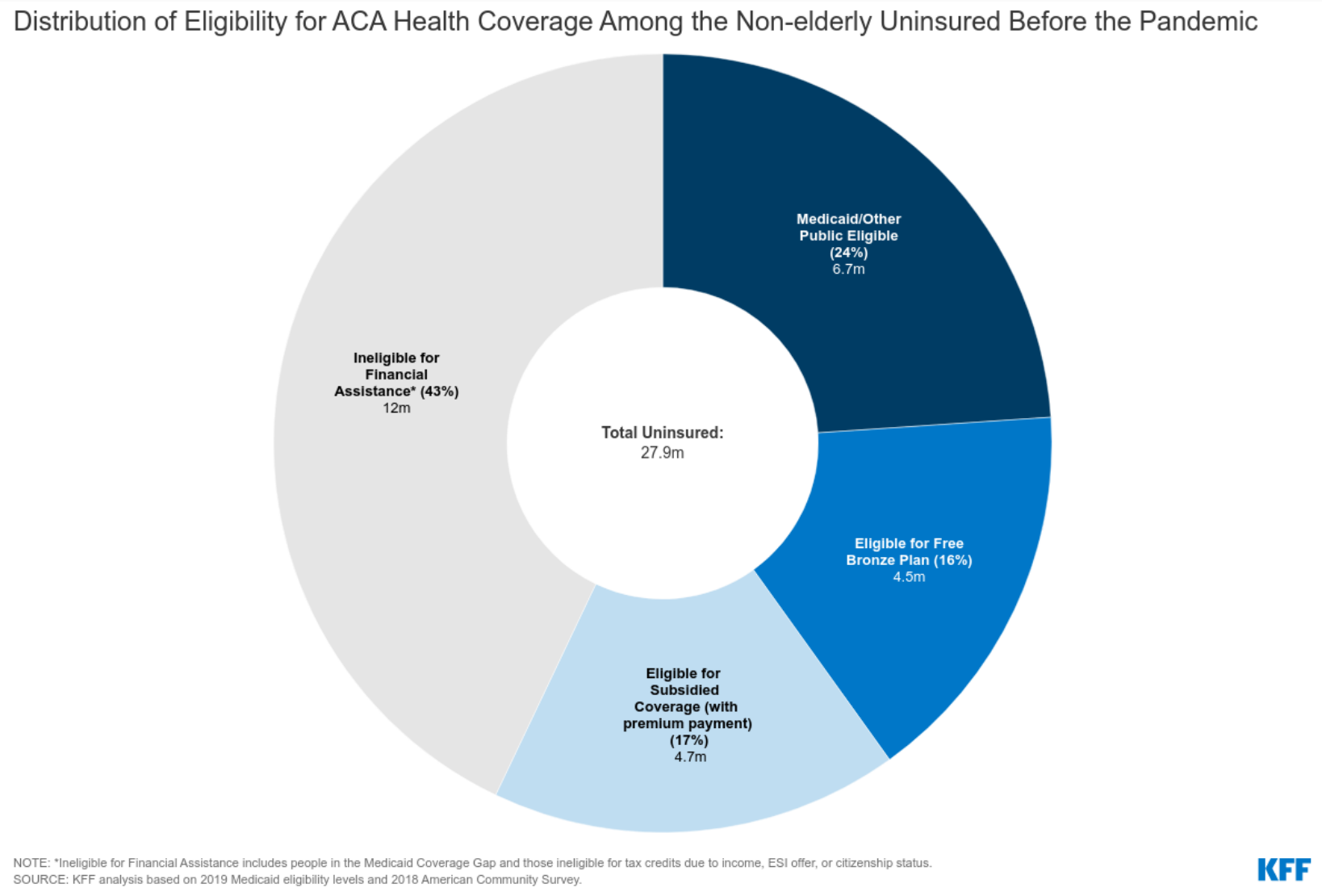
Fragmentation

A common criticism of U.S. health care is that it is extremely fragmented:

- different ways to get insurance
- mix of providers, organizational structures, and reliance on referrals
- separate billing (for the most part)

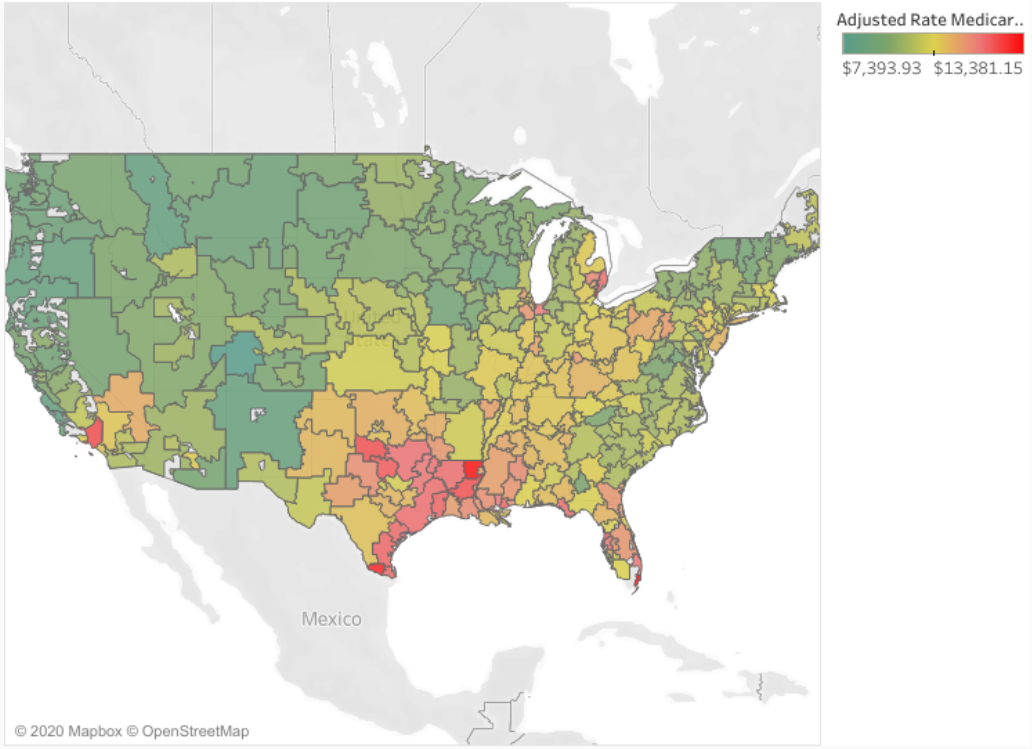
What does all this complexity mean?

1. Too many uninsured



2. Variation in health care delivery and spending

Map: Price-Adjusted Total Medicare Reimbursements per Enrollee (Parts A and B), by HRR (2016)
(Price, Age, Sex, and Race adjusted)



Distribution: Price-Adjusted Total Medicare Reimbursements per Enrollee (Parts A and B), by HRR (2016)
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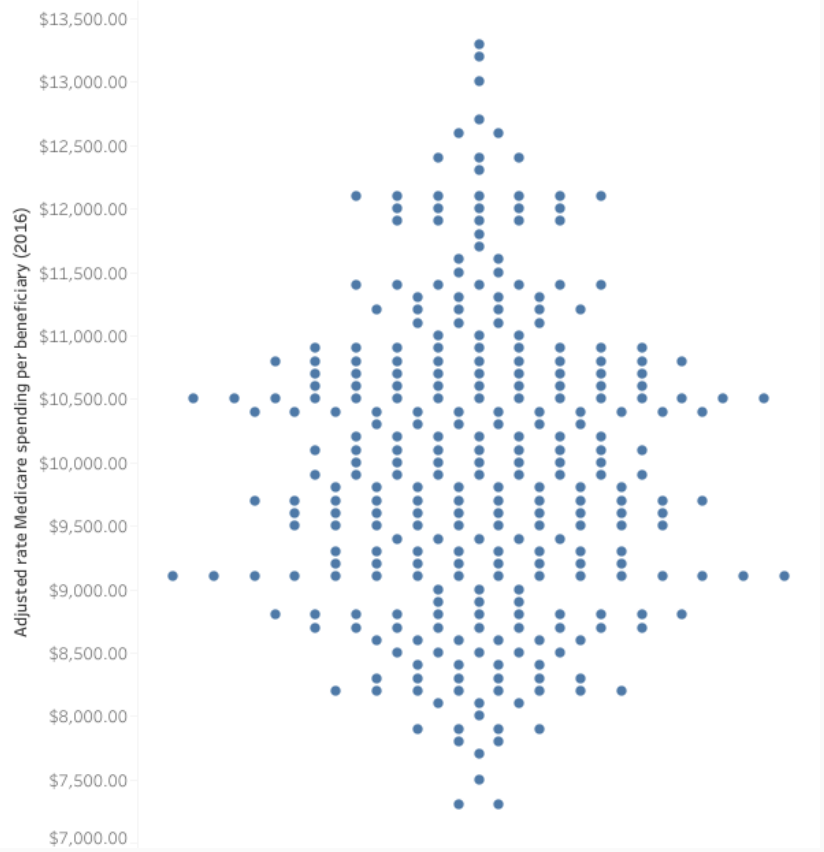
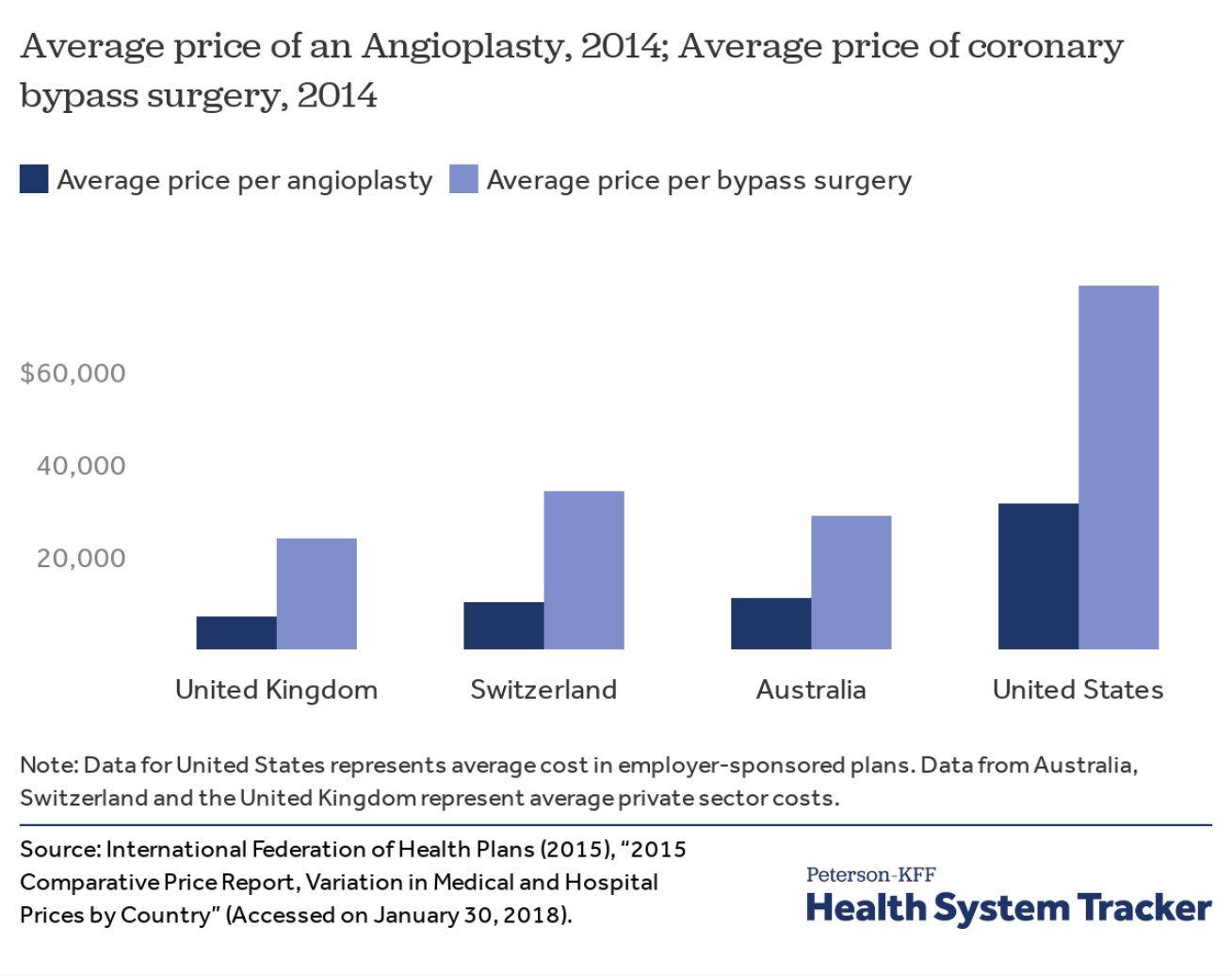


3. Really high prices



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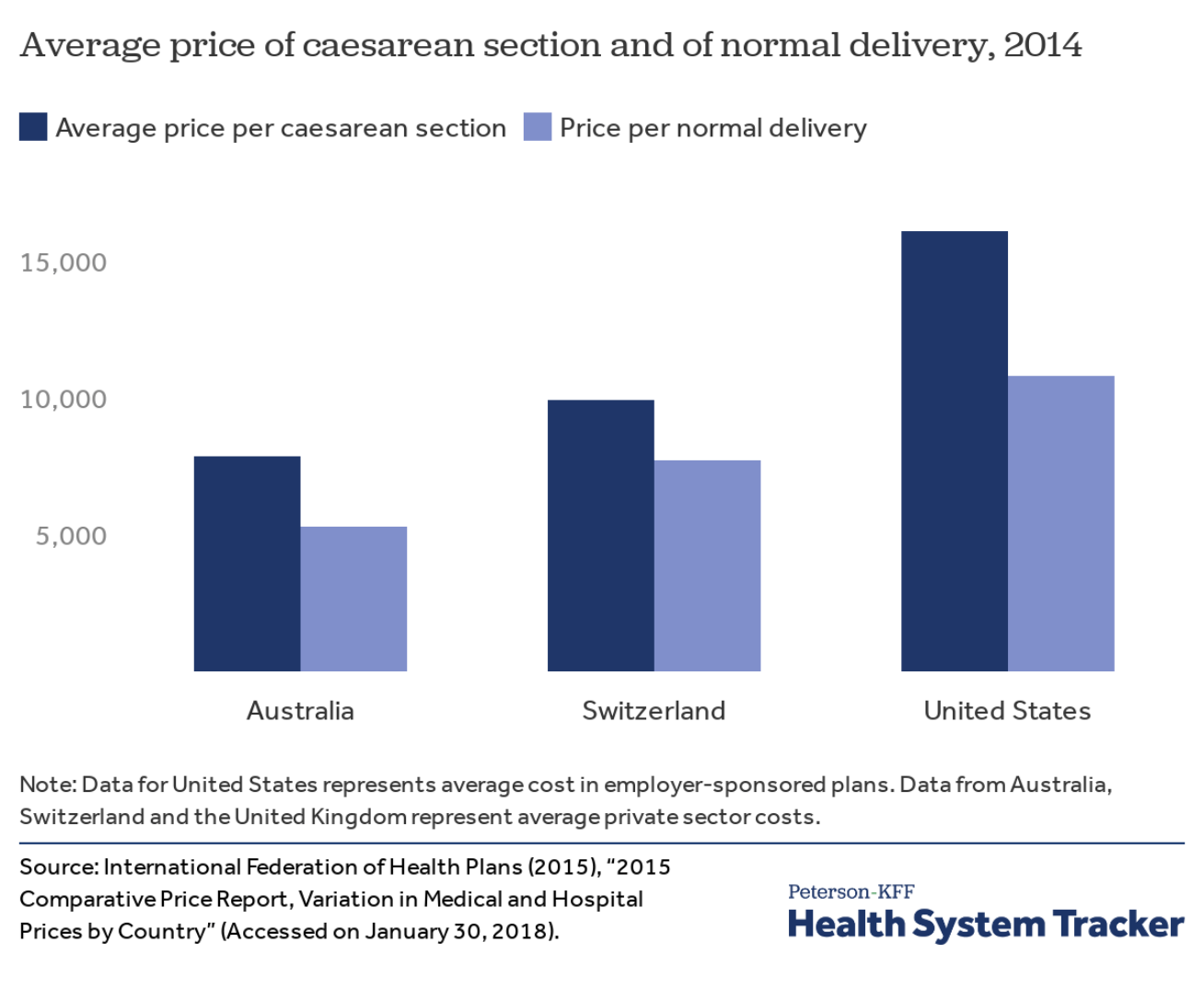

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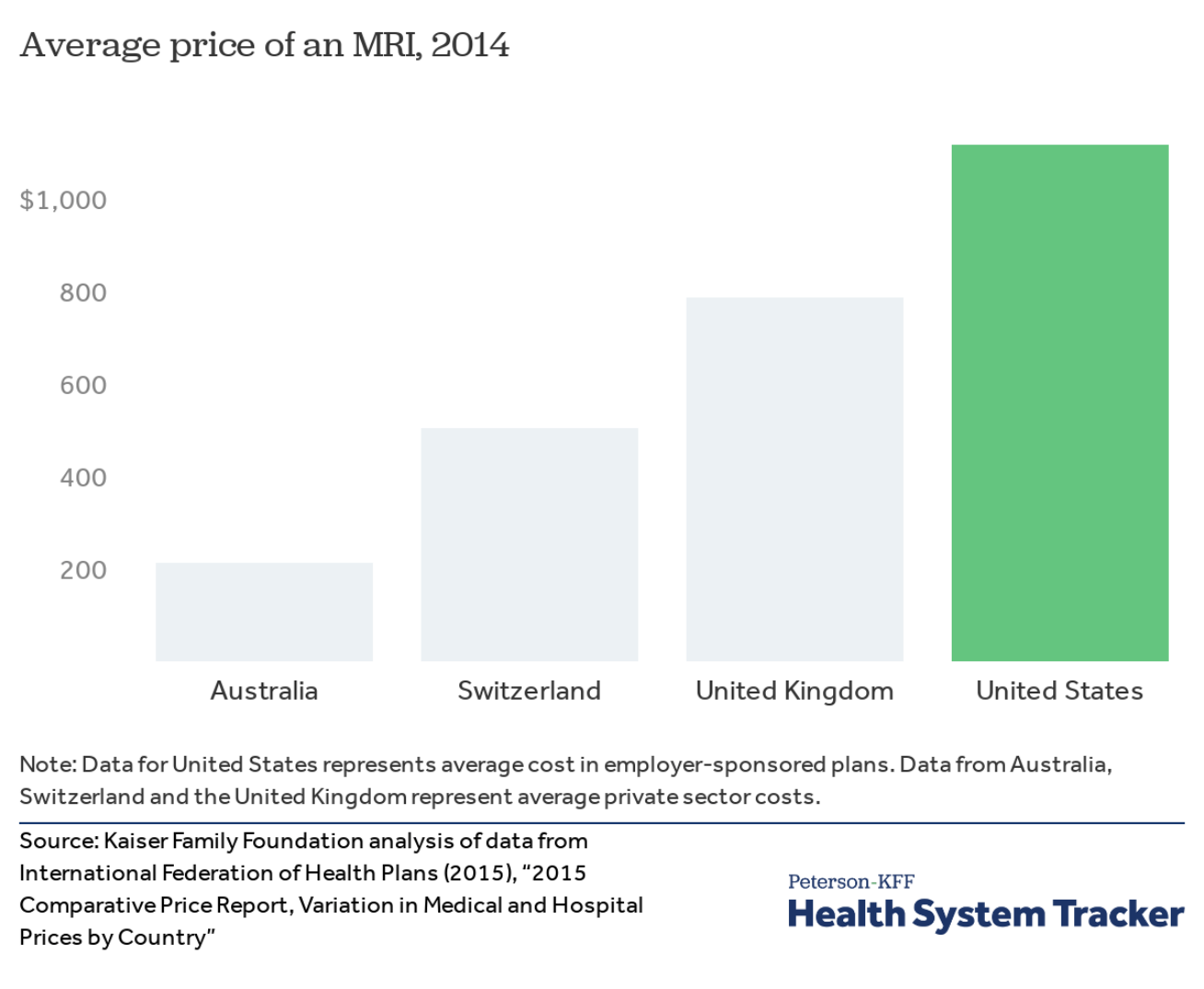

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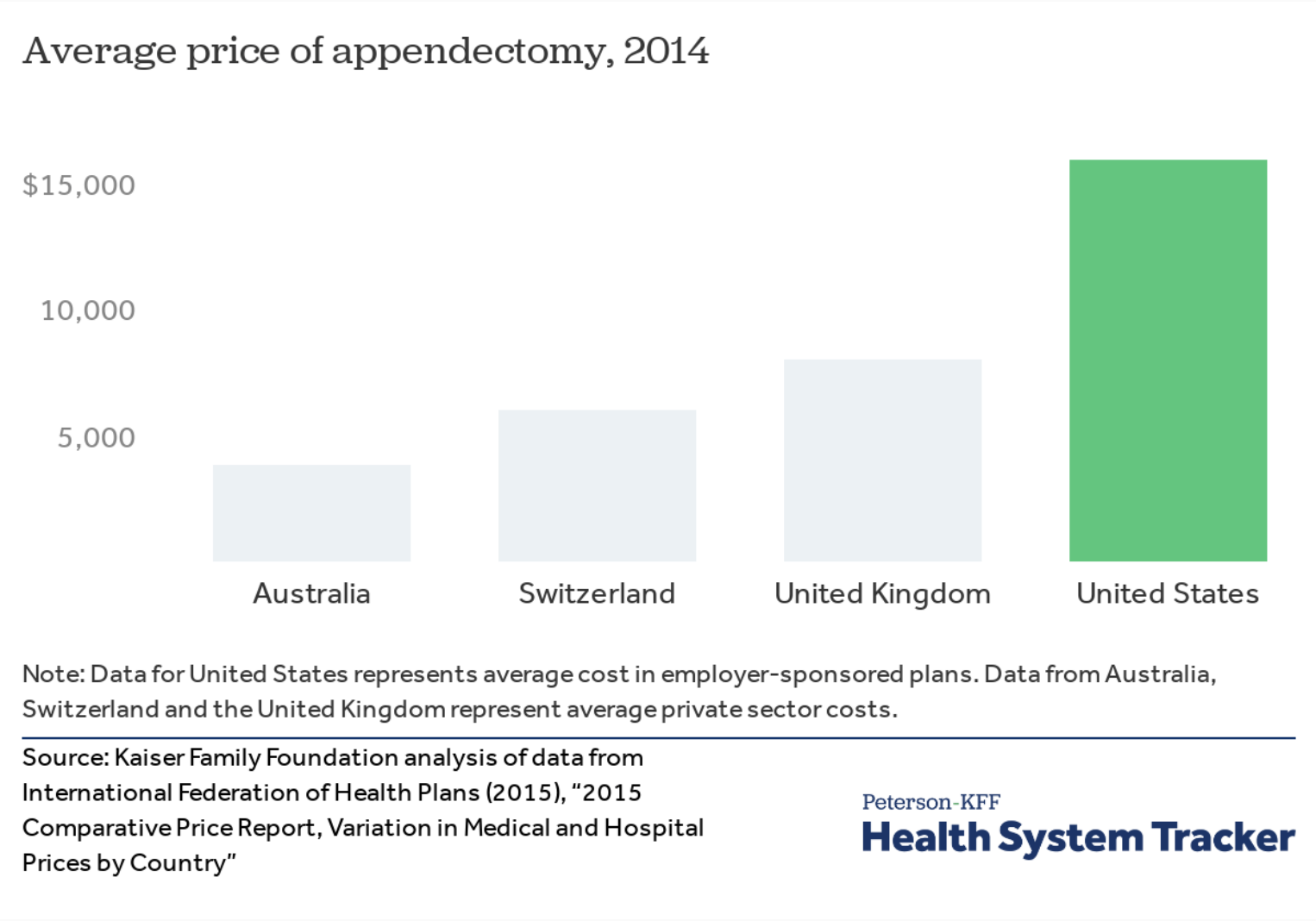

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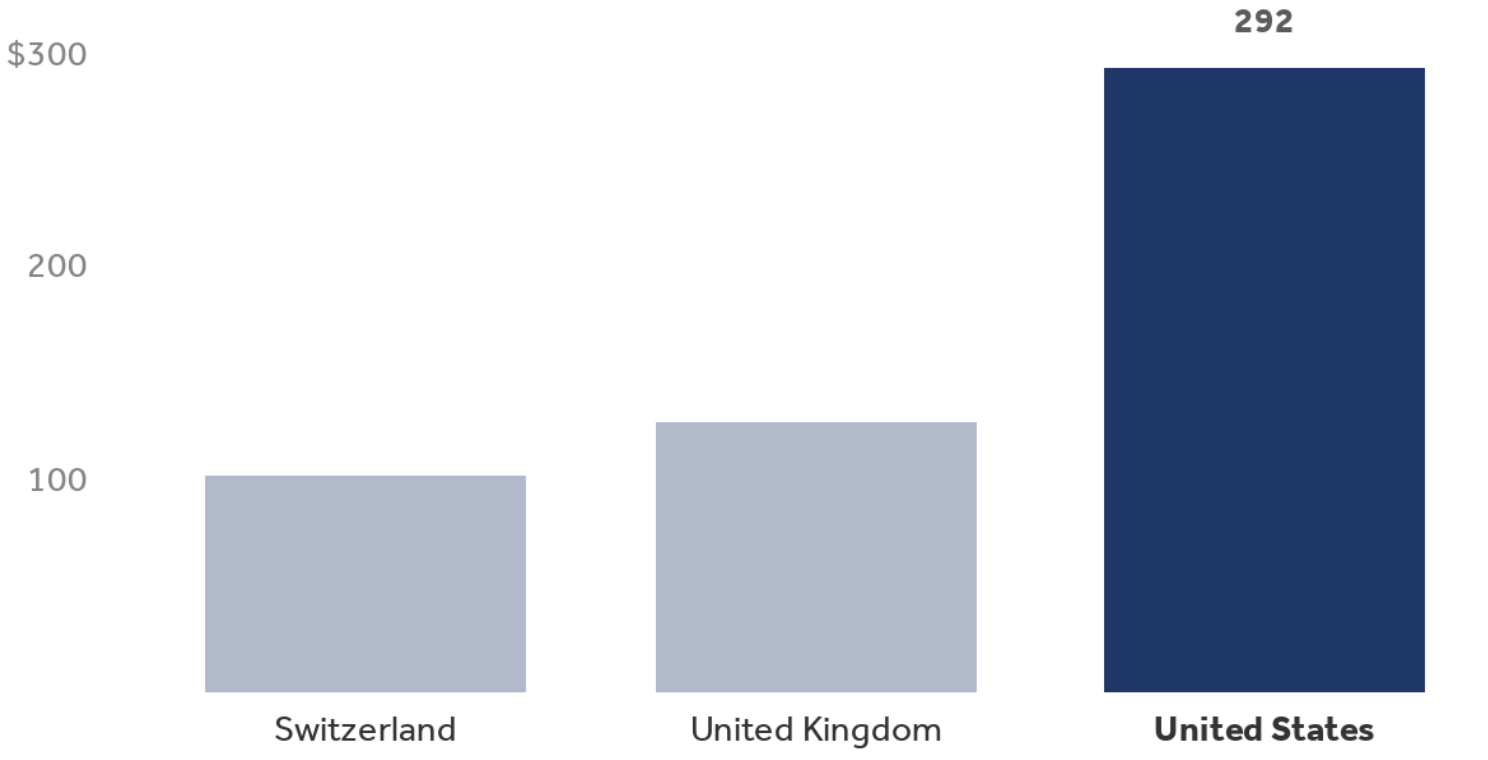
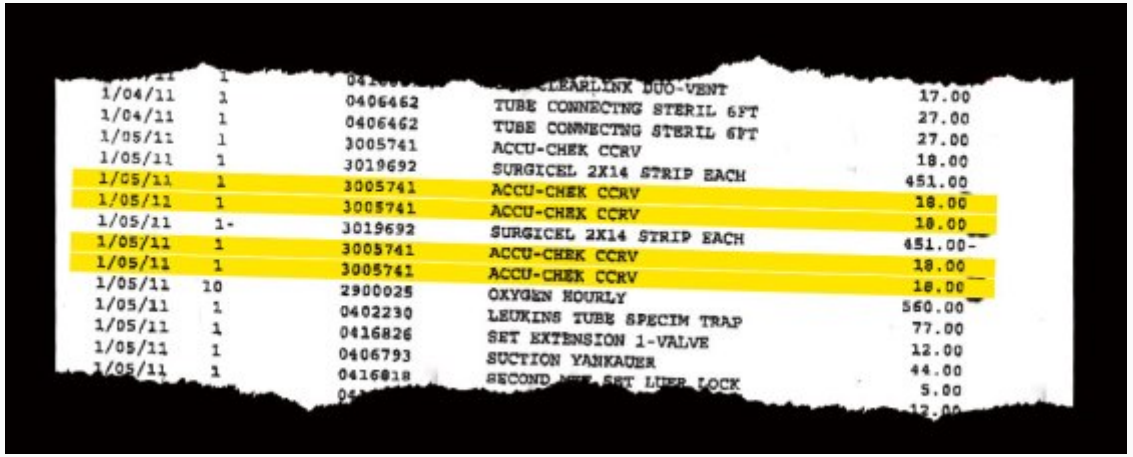


4. Confusing pricing

Our fragmented system has led to a ridiculously complex and convoluted billing process



1/04/11	1	0406462	TUBE CONNECTNG STERIL 6FT	17.00
1/04/11	1	0406462	TUBE CONNECTNG STERIL 6FT	27.00
1/05/11	1	3005741	ACCU-CHEK CCRV	27.00
1/05/11	1	3019692	SURGICEL 2X14 STRIP EACH	18.00
1/05/11	1	3005741	ACCU-CHEK CCRV	451.00
1/05/11	1	3005741	ACCU-CHEK CCRV	18.00
1/05/11	1-	3019692	SURGICEL 2X14 STRIP EACH	18.00
1/05/11	1	3005741	ACCU-CHEK CCRV	451.00-
1/05/11	1	3005741	ACCU-CHEK CCRV	18.00
1/05/11	10	2900025	OXYGEN HOURLY	18.00
1/05/11	1	0402230	LEUKINS TUBE SPECIM TRAP	560.00
1/05/11	1	0416826	SET EXTENSION 1-VALVE	77.00
1/05/11	1	0406793	SUCTION YANKAUER	12.00
1/05/11	1	0416018	SECOND	44.00
				5.00
				12.00

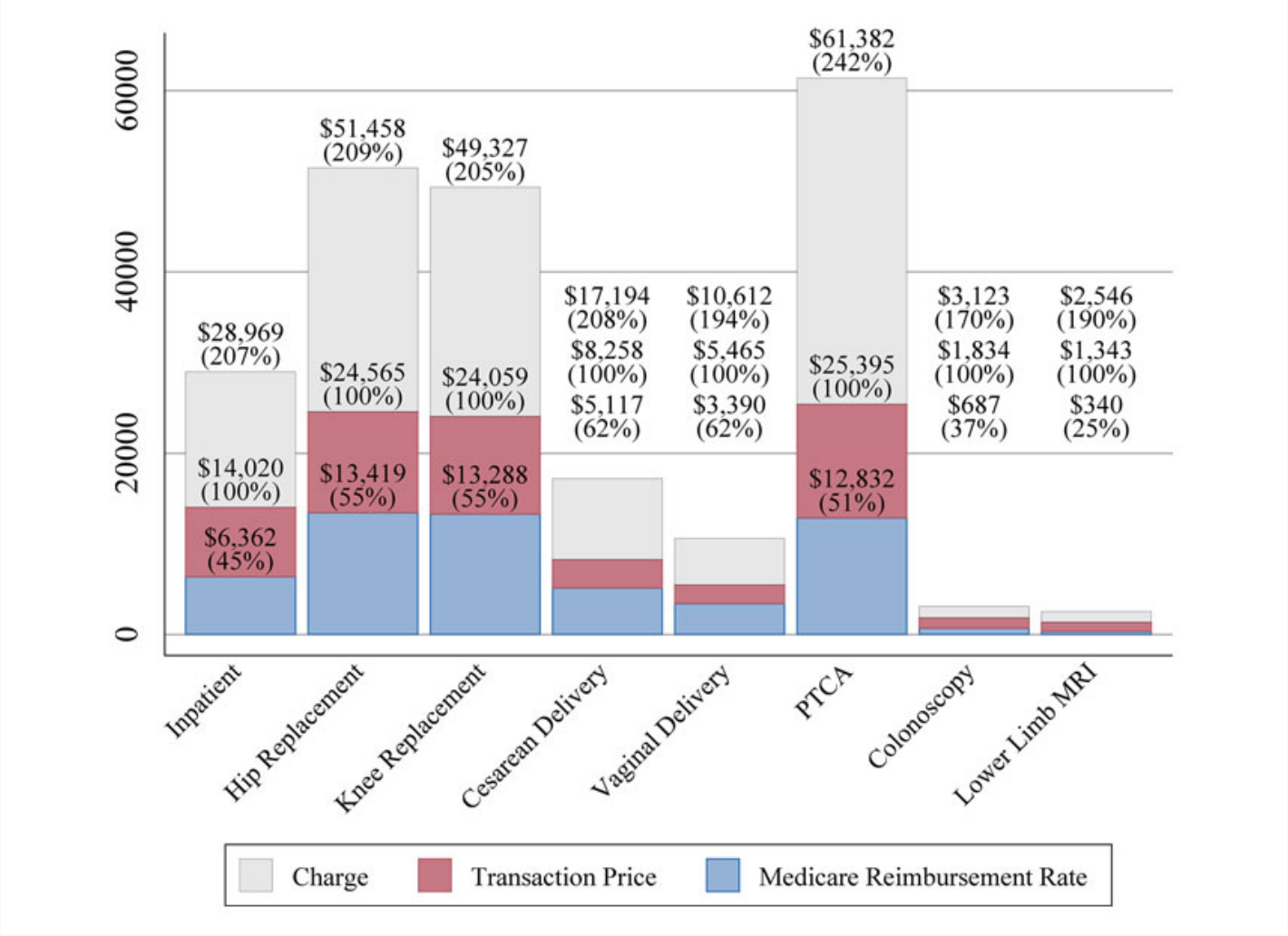
Brill, Steven. 2013. "Bitter Pill: Why Medical Bills are Killing Us." *Time Magazine*.

4. Confusing pricing

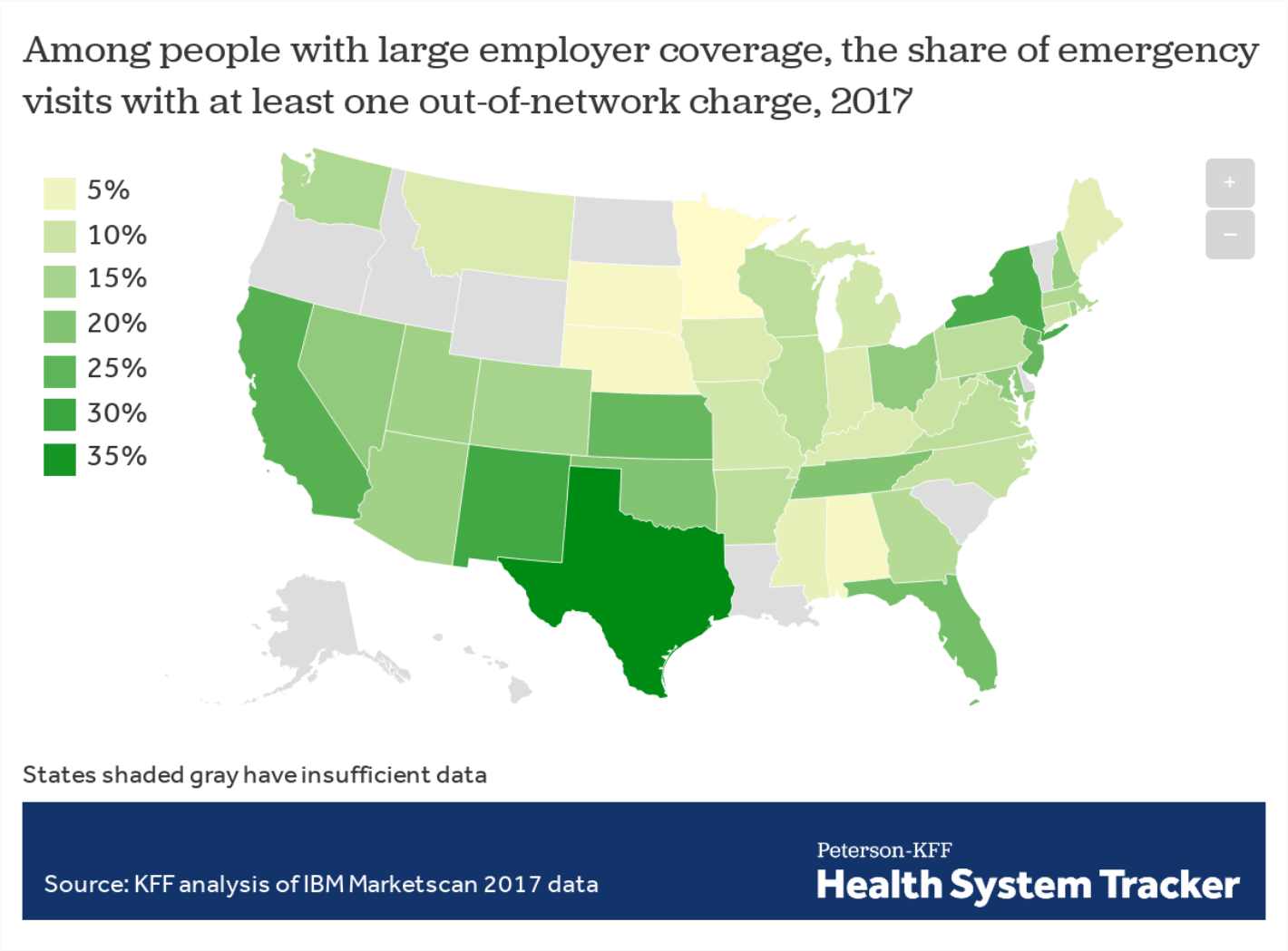
- Negotiation with private insurers (bargaining problem)
- Set payment from Medicare and Medicaid
  - Medicaid managed care (80%)
  - Medicare Advantage (45%)
- Uninsured patients (charge amounts)

$$\text{Price} \neq \text{charge} \neq \text{cost} \neq \text{patient out-of-pocket spending}$$

4. Confusing pricing



5. Crazy billing practices



5. Crazy billing practices

Why are prices so high?

What is a hospital price?

Not clear what exactly is negotiated...

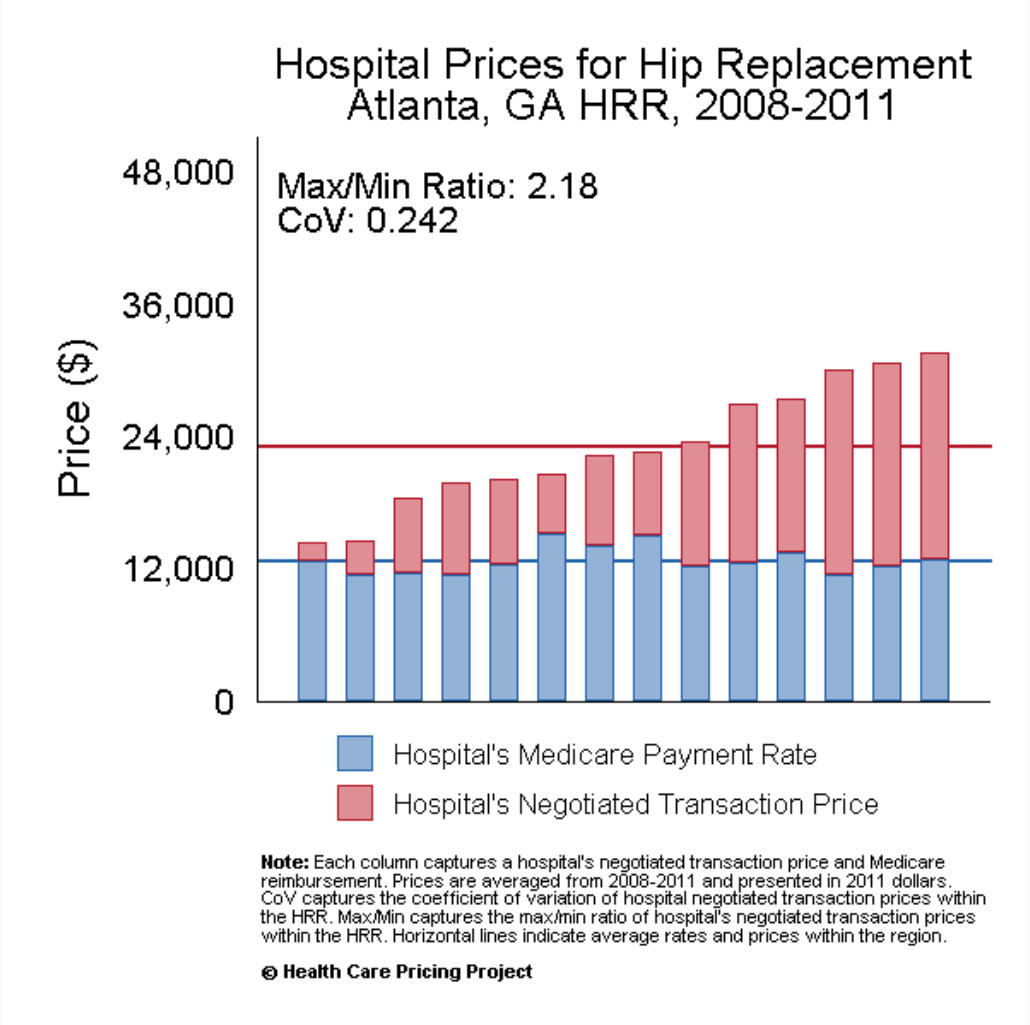
Fee-for-service

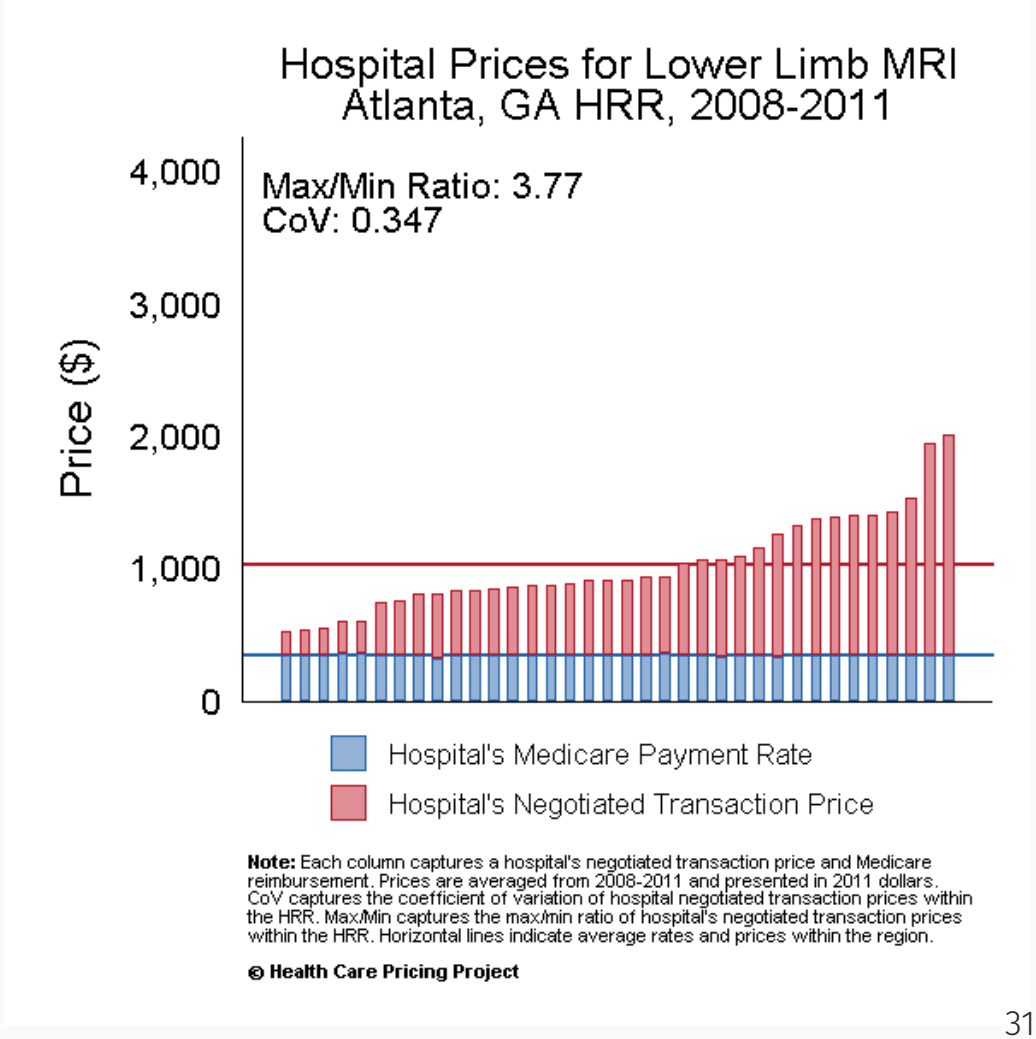
- price per procedure
- percentage of charges
- markup over Medicare rates

Capitation

- payment per patient
- pay-for-performance
- shared savings

Hospital price variation





Where does economics fit in here?

Health care and economics (in general)

Lots of interesting economic issues in health care (not all unique to the U.S.):

1. Extremely heterogeneous products
2. Asymmetric information between patients and physicians
3. Unobservable quality (experience good)
4. Unpredictable need (inability to shop in many cases)
5. Distortion of incentives due to insurance
6. Adverse selection (asymmetric information between patients and insurers)

How is the U.S. unique?

These factors exist in other markets and in other countries, but...

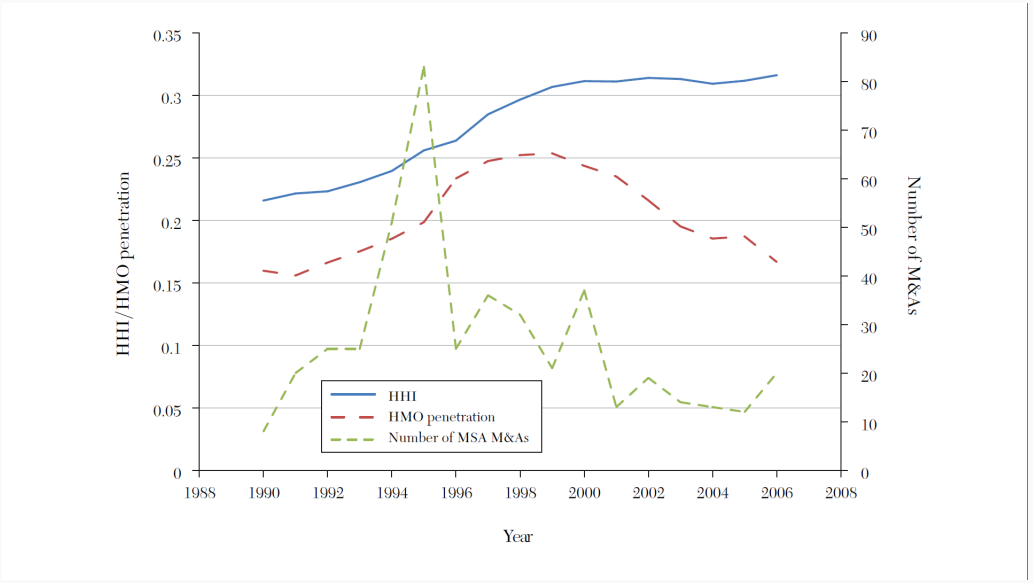
- Health care is unique in the combination of these issues
- U.S. is unique in the extent of these issues in health care (policy problems)
- We have a market based system but without sufficient competition...

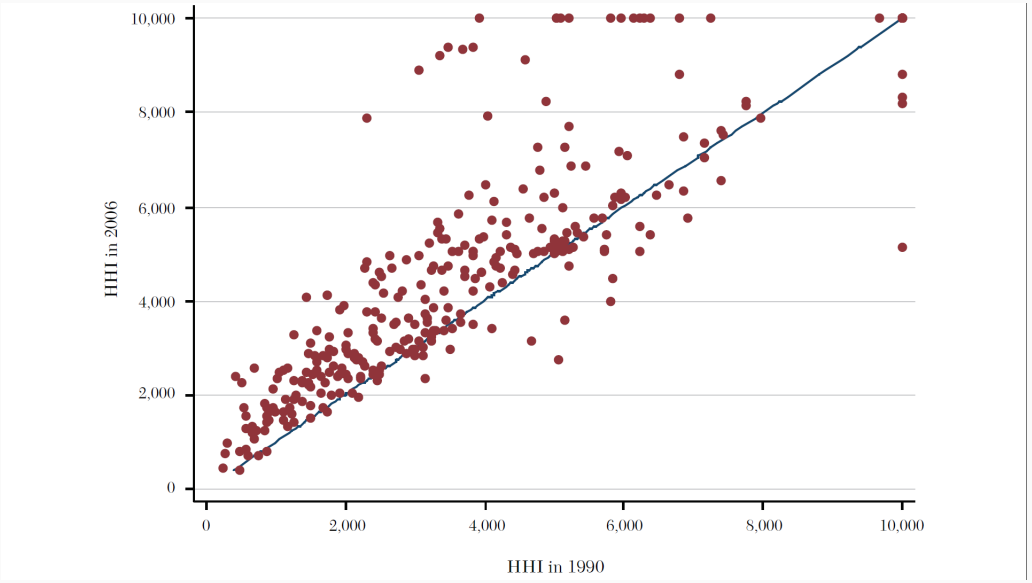
Trends in competitiveness

Almost any way you define it, hospital markets are more and more concentrated (less competitive) in recent decades.

- 1990: 65% of MSAs highly concentrated, 23% unconcentrated
- 2006: 77% highly concentrated, 11% unconcentrated

Hospital concentration over time





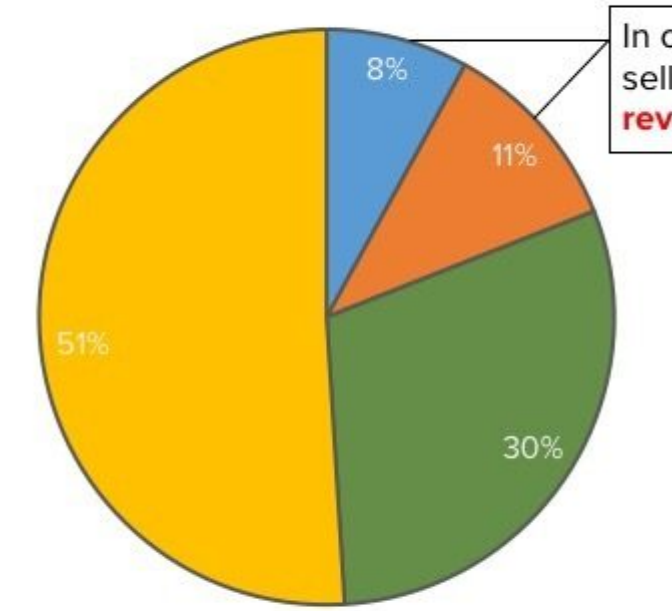
Source: Gaynor, Ho, and Town (2015). The Industrial Organization of Health Care Markets. Journal of Economic Literature.

Hospital concentration over time

Types of hospitals involved in mergers

NIHCM FOUNDATION

Many Mergers and Acquisitions Are Between Large, Strong Partners



In one fifth of the announced 2018 deals, the seller or smaller partner had **net annual revenues of more than $500M**

Across all announced deals in 2018:

- the average revenue of the smaller partner was $409 million, the highest figure in a decade of tracking
- only 20 percent of the deals involved a "financially distressed" partner

For full slide deck and all references see https://www.nihcm.org/categories/hospital-consolidation-trends-impacts-outlook.

Types of hospitals involved in mergers

- Ascension-Presence: Largest non-profit system in US adds 10 hospitals to existing 9 hospitals in Chicago
- Fairview-HealthEast: 11 hospital system becomes largest in Twin Cities area
- Hospital corporation of america (HCA) adds 4 hospitals to the 10 existing HCA hospitals in Houston
- Northwestern-Centegra: Forms 10 hospital system in Chicago
- Emory-DeKalb: Forms 10 hospital system in Atlanta
- Jefferson-Einstein: Forms 18 hospital system in Philadelphia area

Source: NIHCM Hospital Consolidation Trends

Different merger types

Essentially two types of mergers:

1. "Within-market"
2. "Out-of-market"

Within-market mergers

- **Big** price effects
  - 20 to 40% in many studies
  - Up to 60% in some studies
  - Bigger increases the closer are the hospitals
  - Price increases spillover to other hospitals too
- Account for about 50% of all mergers since 2000

Out-of-market mergers

- Involve larger systems spanning different isolated markets
  - Advocate-Aurora: 27 hospital system in IL and WI
  - Baptist Memorial-Mississippi Baptist: 22 hospitals in TN, AR, and MS
  - UPMC-Pinnacle: 24 hospital system recently added 8 in central PA
  - Catholic Health Initiatives-Dignity Health: 142 hospitals in 21 states
  - HCA: 177 hospitals in 21 states
  - RCCH HealthCare Partners: 89 hospitals in 30 states, focusing on non-urban areas
- About 35% of all mergers are out-of-market but in same state, 15% out-of-state
- Smaller but meaningful price increases, 5 to 10%

1. Out of market mergers and common customers

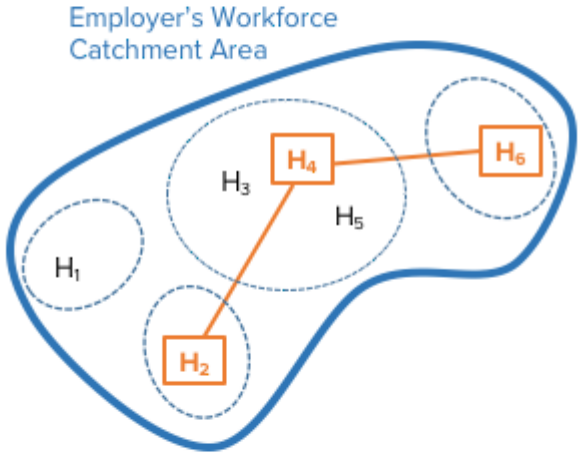
NIHCM FOUNDATION

Broader Merger Geographies Require New Approaches by the FTC

These emerging conceptual frameworks have not yet been used in a federal merger challenge, despite the rapid pace of cross-market and multimarket hospital mergers.

Cross-Market Regional Mergers[a]

- Employers often draw workers from numerous distinct markets within a broader geographic region.
- To sell insurance to these employers, insurers must build a hospital network covering all markets where their employees live.
- A merger that gives a hospital system a presence in several of these distinct markets also gives that system more market power – **even if it does not increase hospital concentration within any of the smaller markets.**
- By negotiating on an "all or nothing" basis, the system can force insurers to include all system members in the network and to pay them higher prices.



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2. Out of market mergers and multimarket contact

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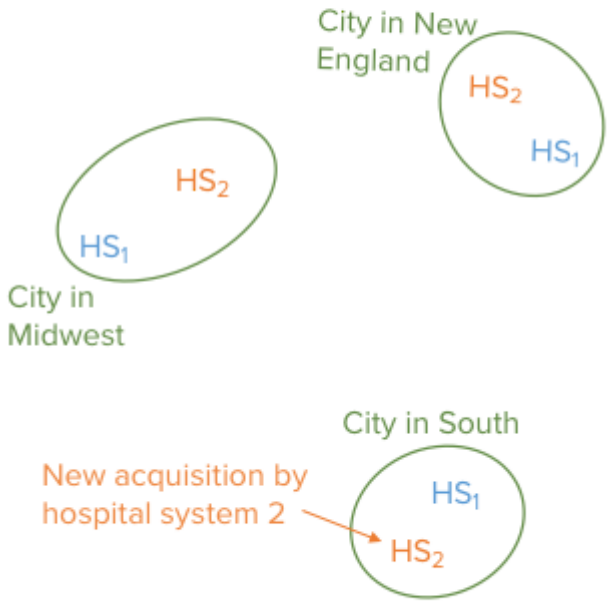

Mergers Across Distant Markets[a]

- As large hospital systems (HSs) expand their geographic reach nationally, they are increasingly competing against one another in multiple far-flung markets.
- The mutual forbearance hypothesis posits that such systems may avoid competing strenuously in any given common market so as to not set off vigorous competition with rival system members in other common markets.
- Consolidations that increase the extent of multimarket contact can lead to higher hospital prices – **even when the markets of the merging entities do not overlap at all and there is no increase in market power locally.**

For full slide deck and all references see https://www.nihcm.org/categories/hospital-consolidation-trends-impacts-outlook.

Effects of reduced competition

1. Higher prices
2. Lower quality, 2020 NEJM Paper
3. Maybe lower costs (but not passed on to lower prices)

Why?

Historical perception of hospital competition as "wasteful" and assumption that more capacity means more (unnecessary) care:

- Certificate of need laws
- Certificate of public advantage
- Scope of practice laws
- Any willing provider laws
- Site-based payment differentials (encourage vertical integration)

Where do we go frome here?

1. Adopt sensible policies

2. Antitrust enforcement


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