

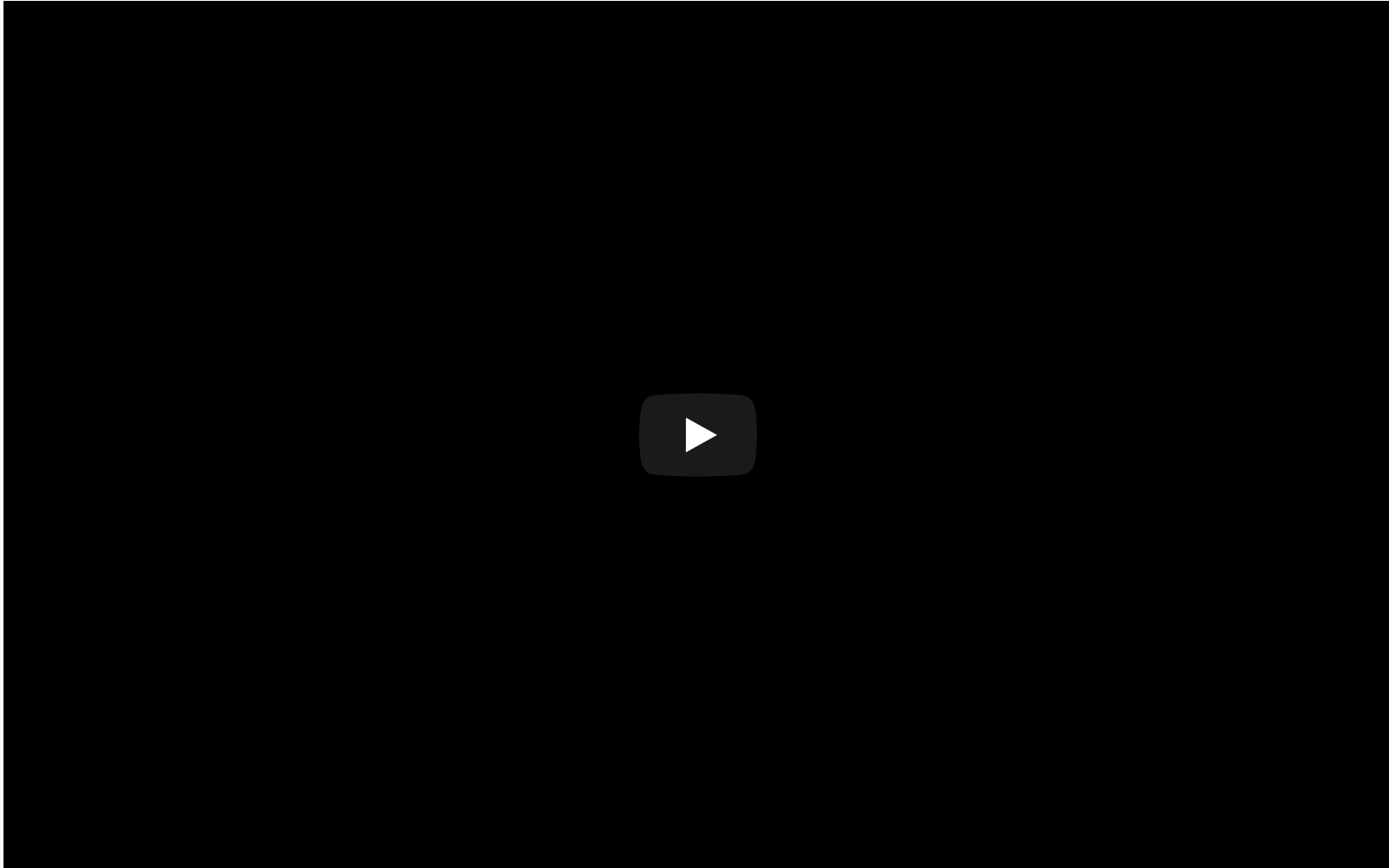
Sticker Shock! Economics and Healthcare Pricing

and health economics at Emory

Ian McCarthy | Emory University

Tuesday, August 23, 2022

Health care in the U.S.



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

1. Quality is "Meh"
2. The System is Confusing
3. Economics can help
4. What we're doing at Emory

Spending and Quality

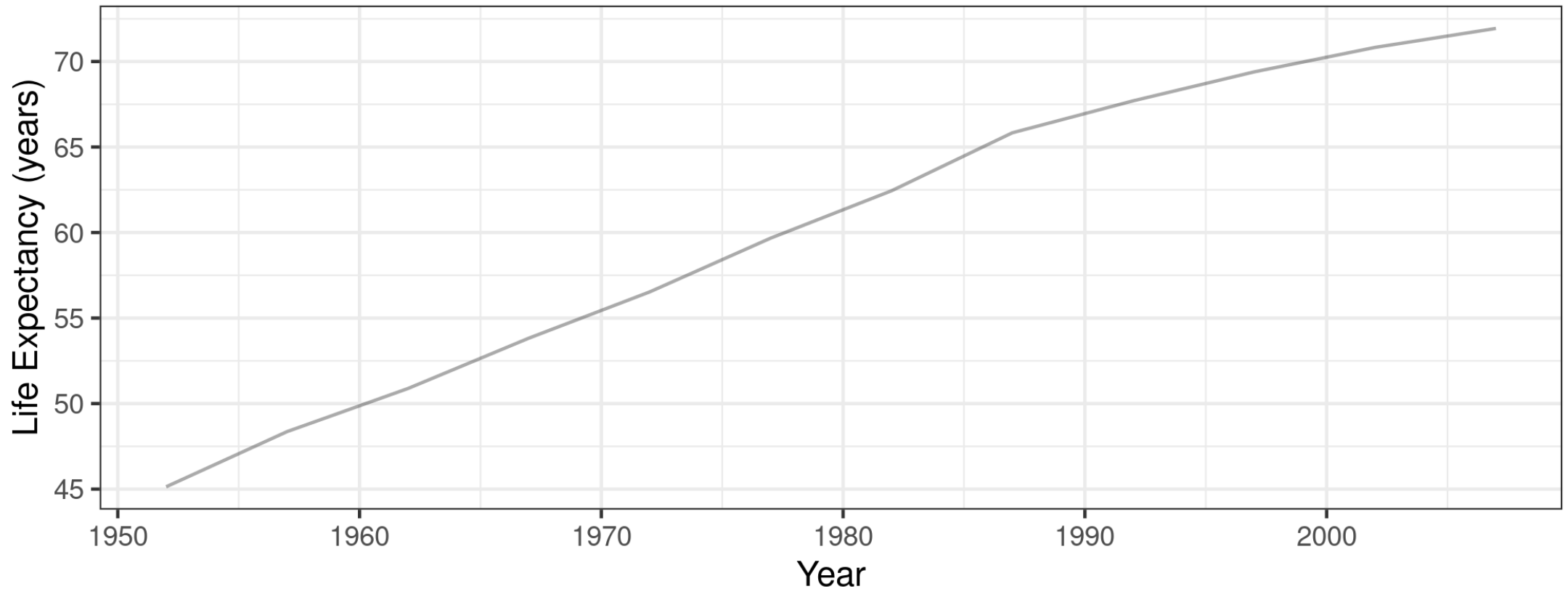
Health improvements worldwide

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

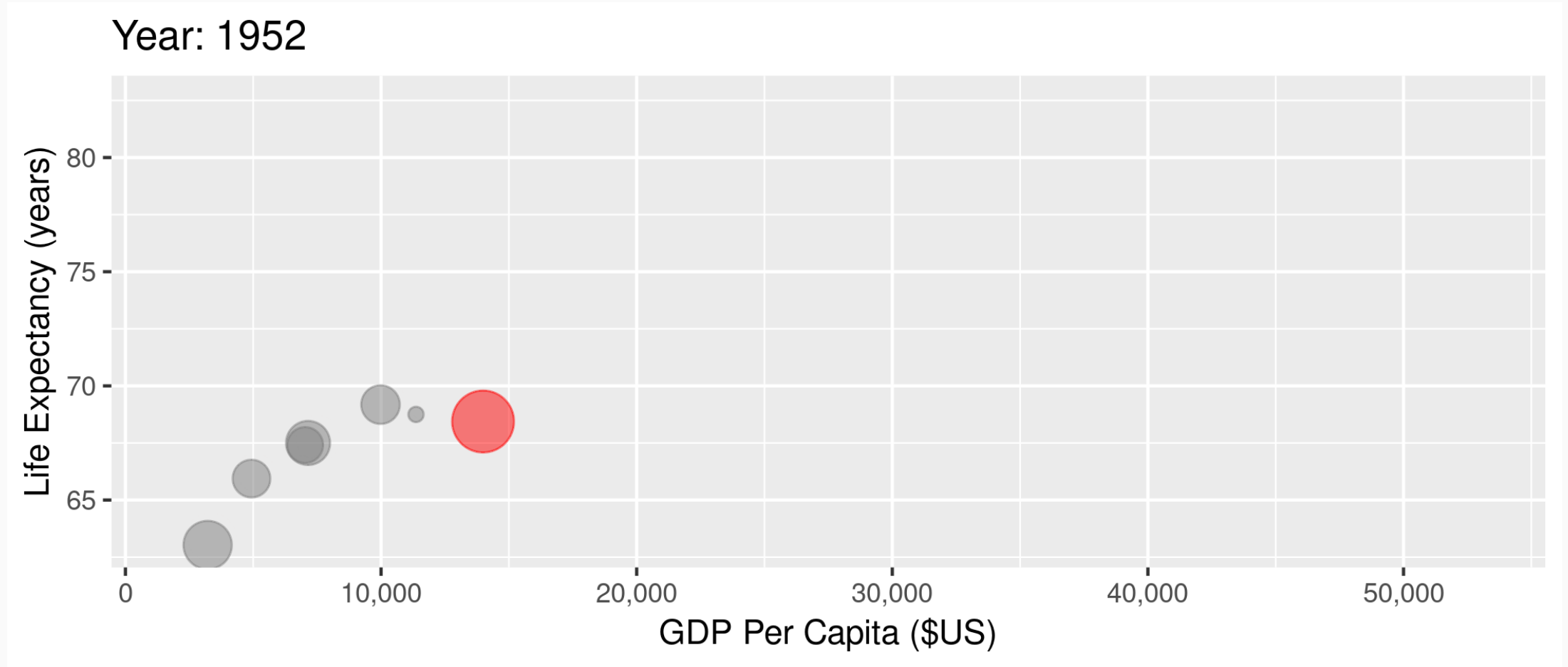
- Poverty reduction
- Technology development and innovation
- Technology diffusion and adoption
- Access to better services, including health care

Health improvements worldwide

Median life expectancy across the world

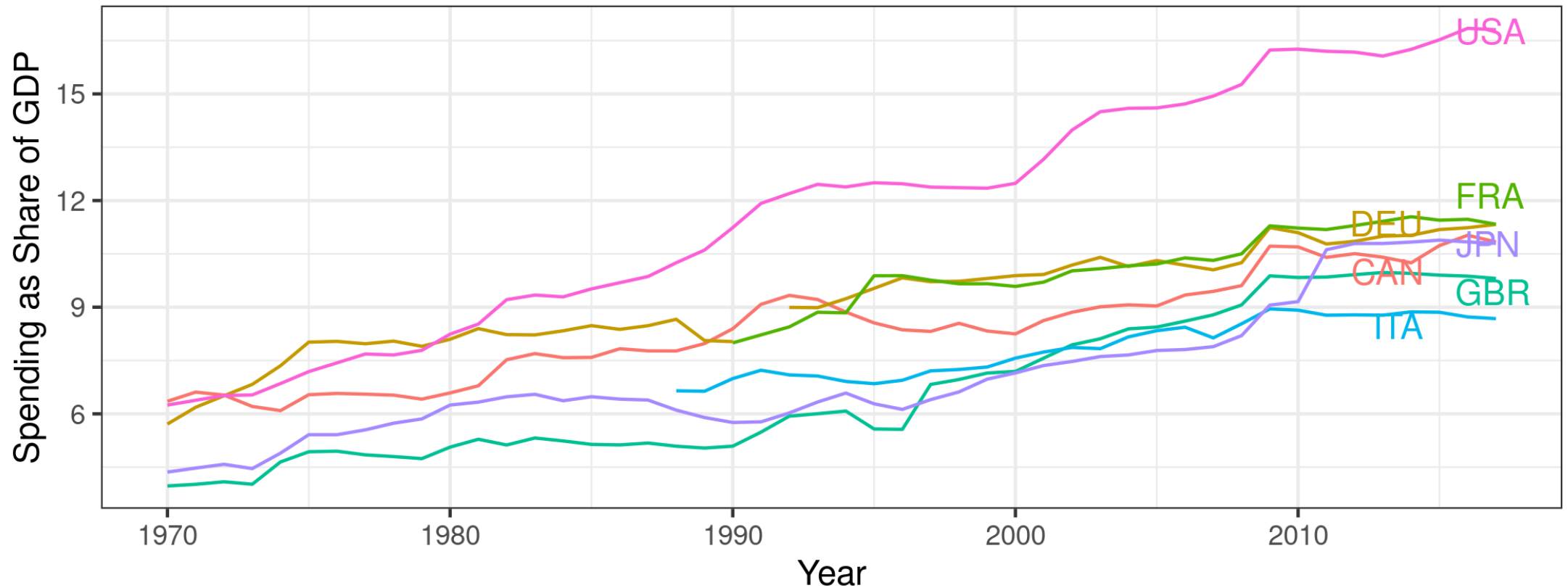


But the U.S. is unique

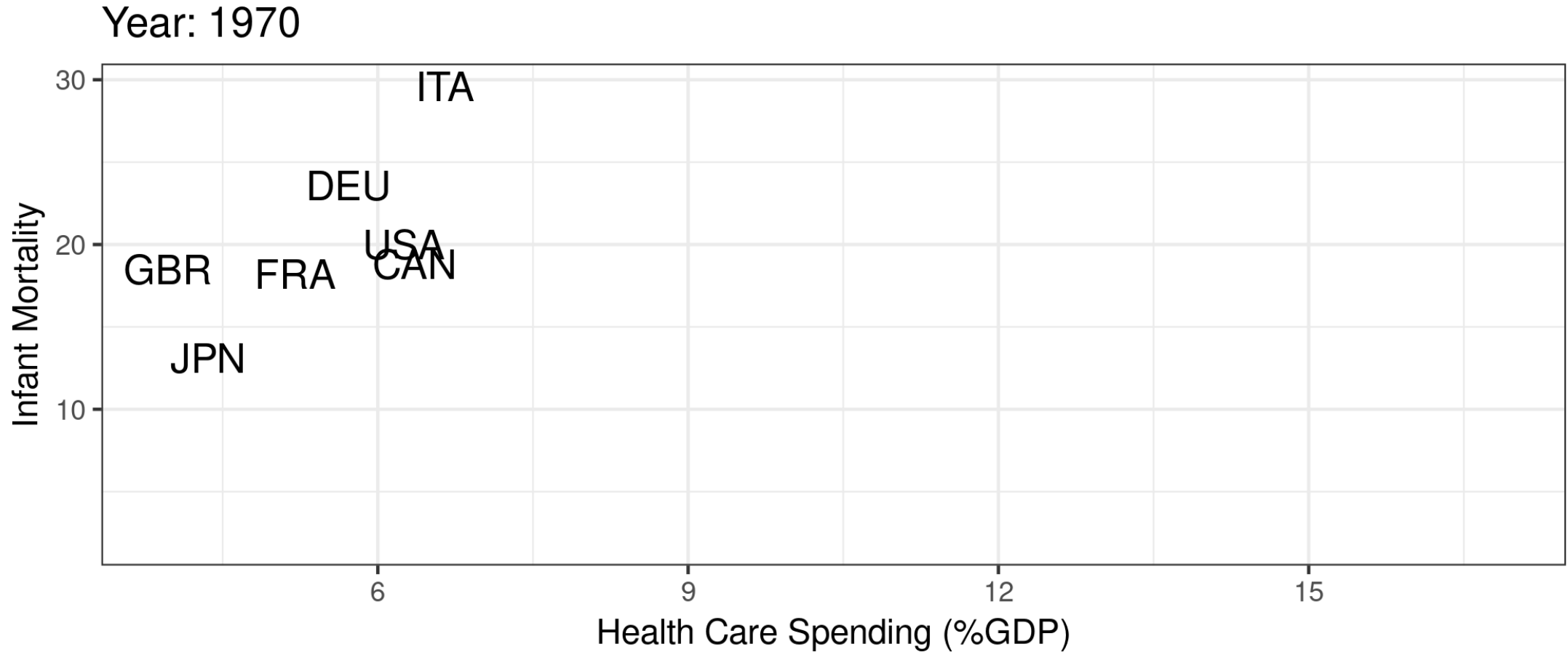


The U.S. has very high spending

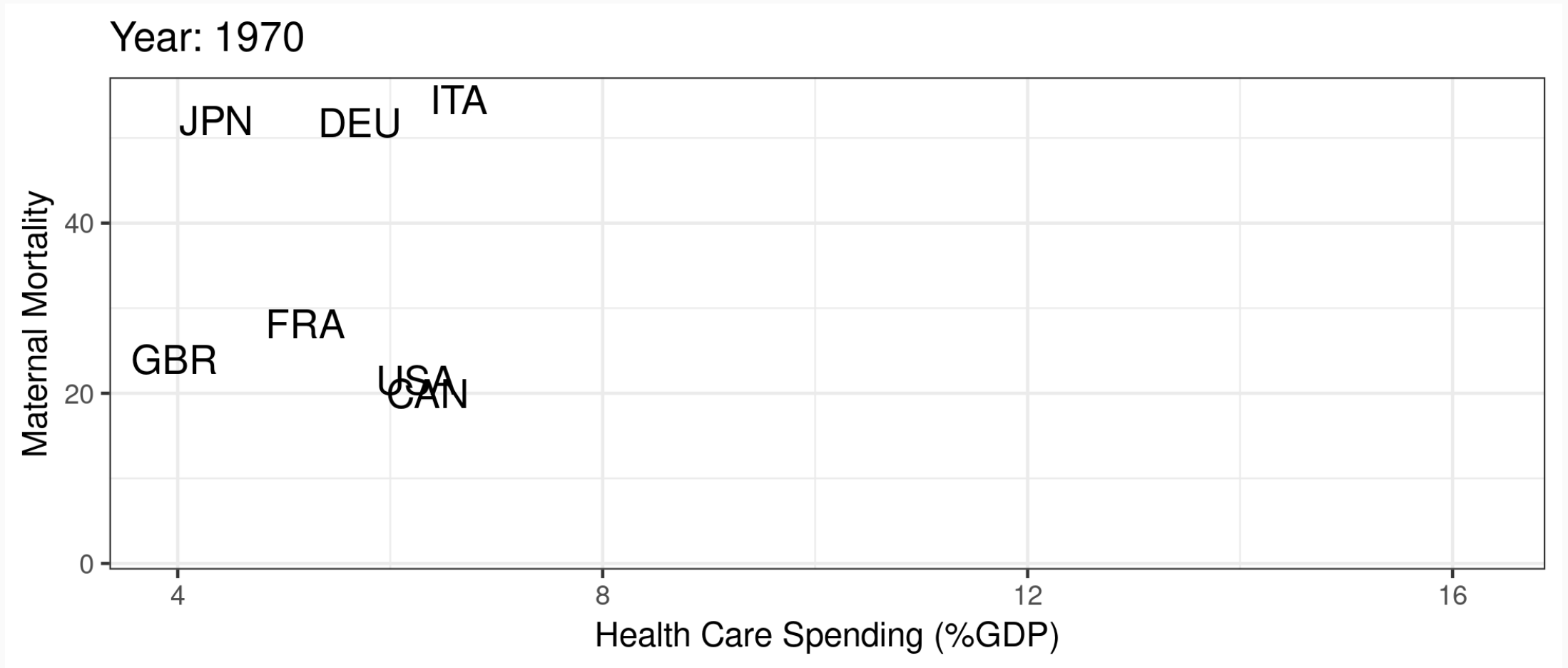
Health Care Spending over Time



And our spending doesn't pay off in some areas



And our spending doesn't pay off in some areas



Why? U.S. Healthcare is SO Confusing!

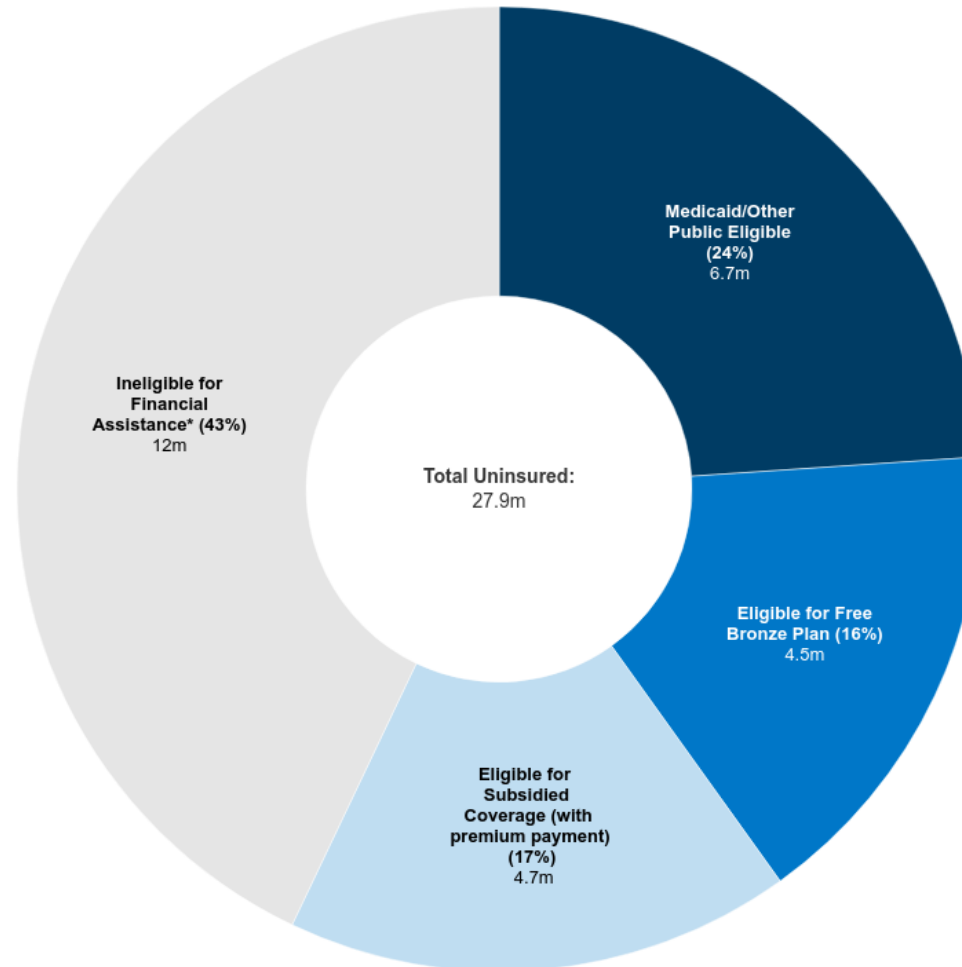
Fragmented

- 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

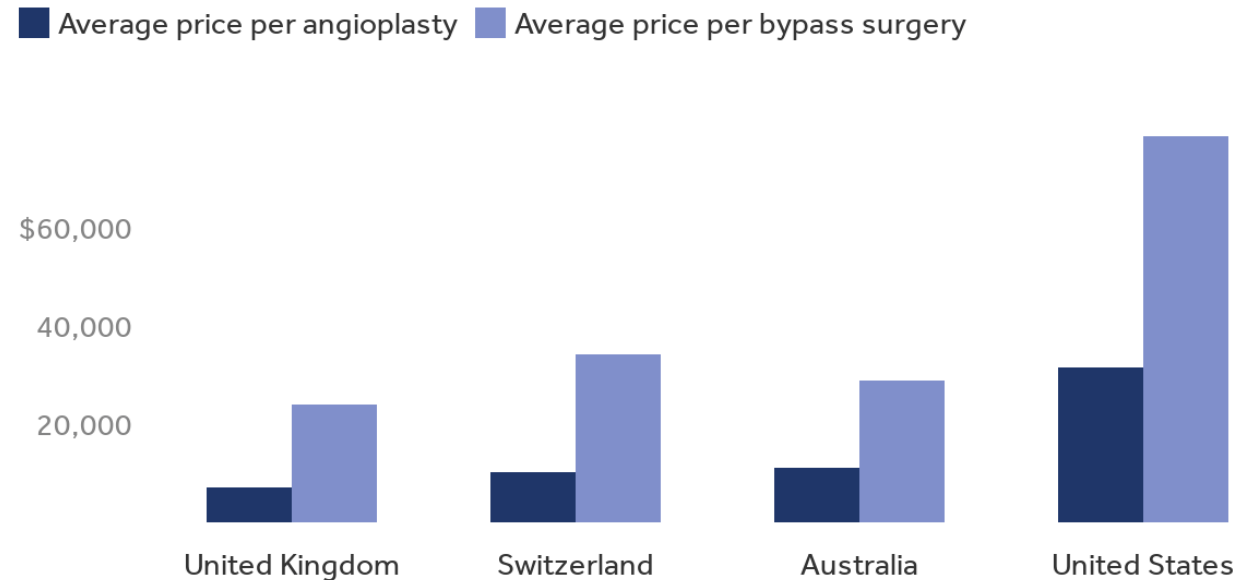
Distribution of Eligibility for ACA Health Coverage Among the Non-elderly Uninsured Before the Pandemic



NOTE: *Ineligible for Financial Assistance includes people in the Medicaid Coverage Gap and those ineligible for tax credits due to income, ESI offer, or citizenship status.
SOURCE: KFF analysis based on 2019 Medicaid eligibility levels and 2018 American Community Survey.

2. Really high prices

Average price of an Angioplasty, 2014; Average price of coronary bypass surgery, 2014



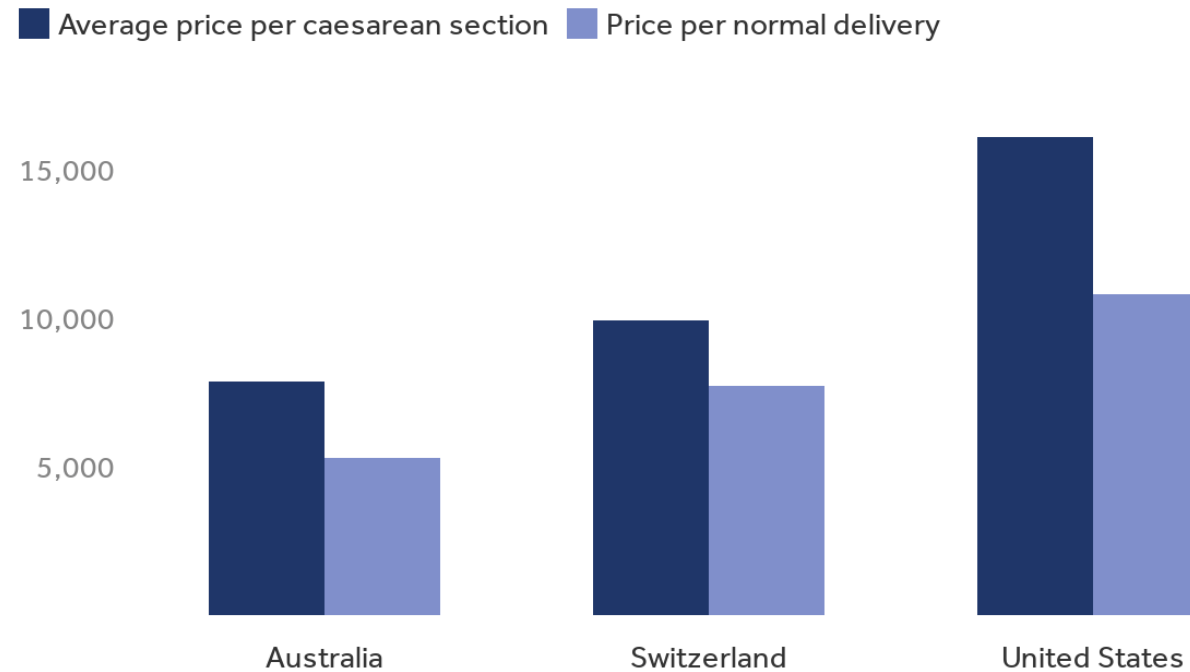
Note: Data for United States represents average cost in employer-sponsored plans. Data from Australia, Switzerland and the United Kingdom represent average private sector costs.

Source: International Federation of Health Plans (2015), "2015 Comparative Price Report, Variation in Medical and Hospital Prices by Country" (Accessed on January 30, 2018).

Peterson-KFF
Health System Tracker

2. Really high prices

Average price of caesarean section and of normal delivery, 2014



Note: Data for United States represents average cost in employer-sponsored plans. Data from Australia, Switzerland and the United Kingdom represent average private sector costs.

Source: International Federation of Health Plans (2015), "2015 Comparative Price Report, Variation in Medical and Hospital Prices by Country" (Accessed on January 30, 2018).

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2. Really high prices

Average price of an MRI, 2014



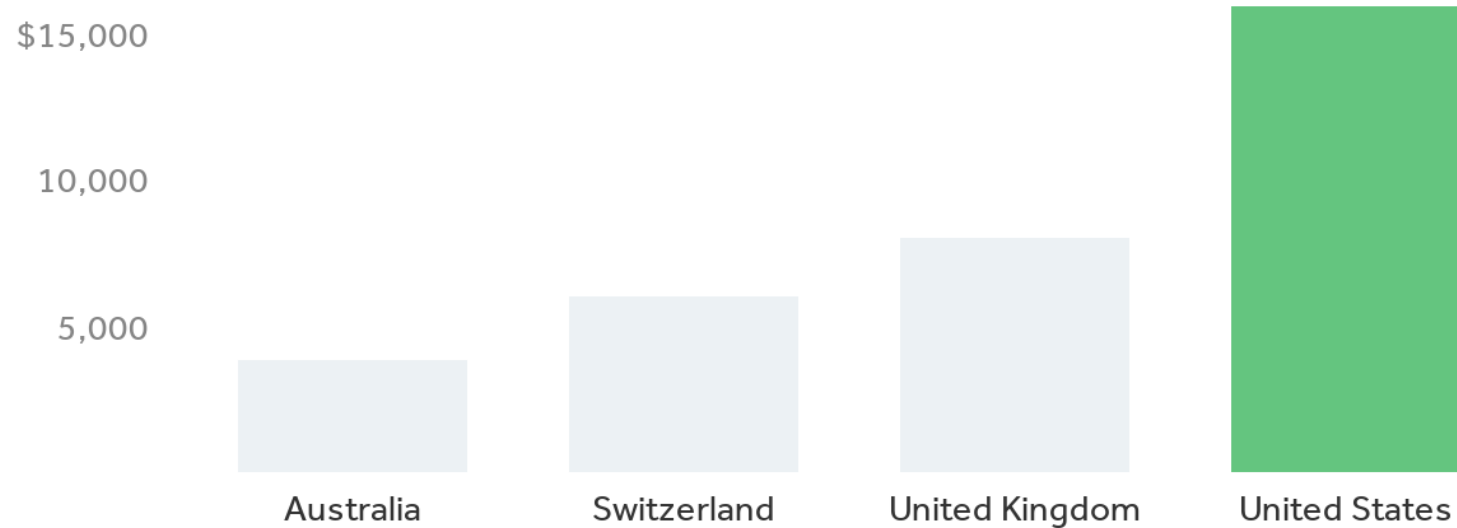
Note: Data for United States represents average cost in employer-sponsored plans. Data from Australia, Switzerland and the United Kingdom represent average private sector costs.

Source: Kaiser Family Foundation analysis of data from International Federation of Health Plans (2015), "2015 Comparative Price Report, Variation in Medical and Hospital Prices by Country"

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2. Really high prices

Average price of appendectomy, 2014



Note: Data for United States represents average cost in employer-sponsored plans. Data from Australia, Switzerland and the United Kingdom represent average private sector costs.

Source: Kaiser Family Foundation analysis of data from International Federation of Health Plans (2015), "2015 Comparative Price Report, Variation in Medical and Hospital Prices by Country"

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2. Really high prices

Average price Xarelto, 30 capsules, 20mg, 30 day supply, 2014

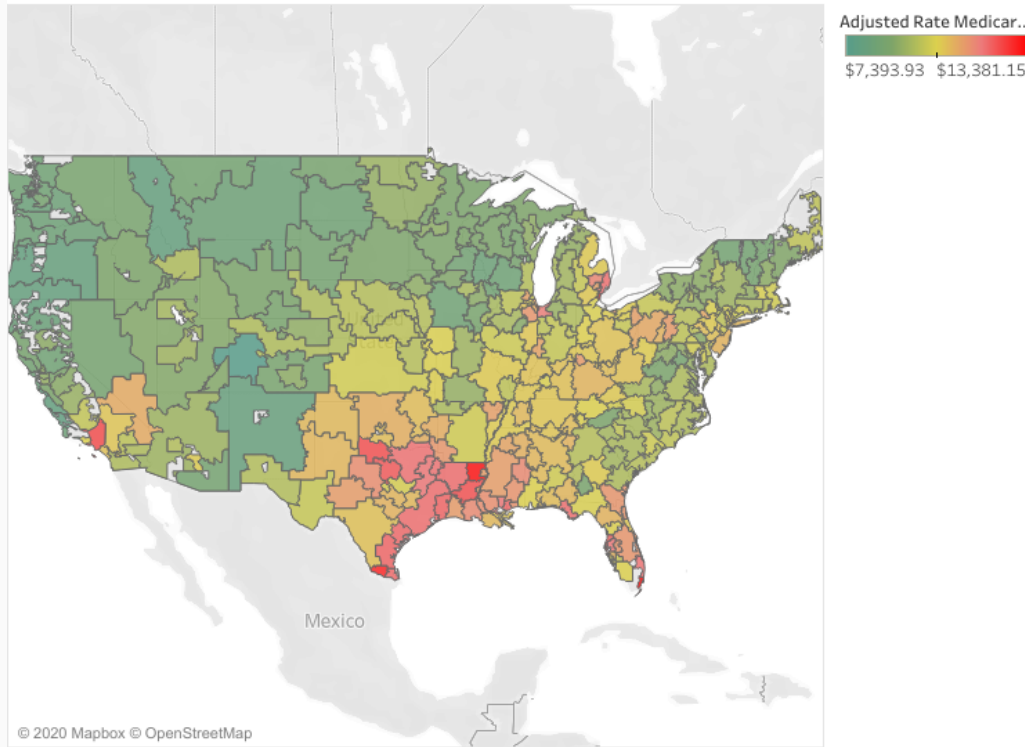


Source: International Federation of Health Plans 2015
Comparative Price Report

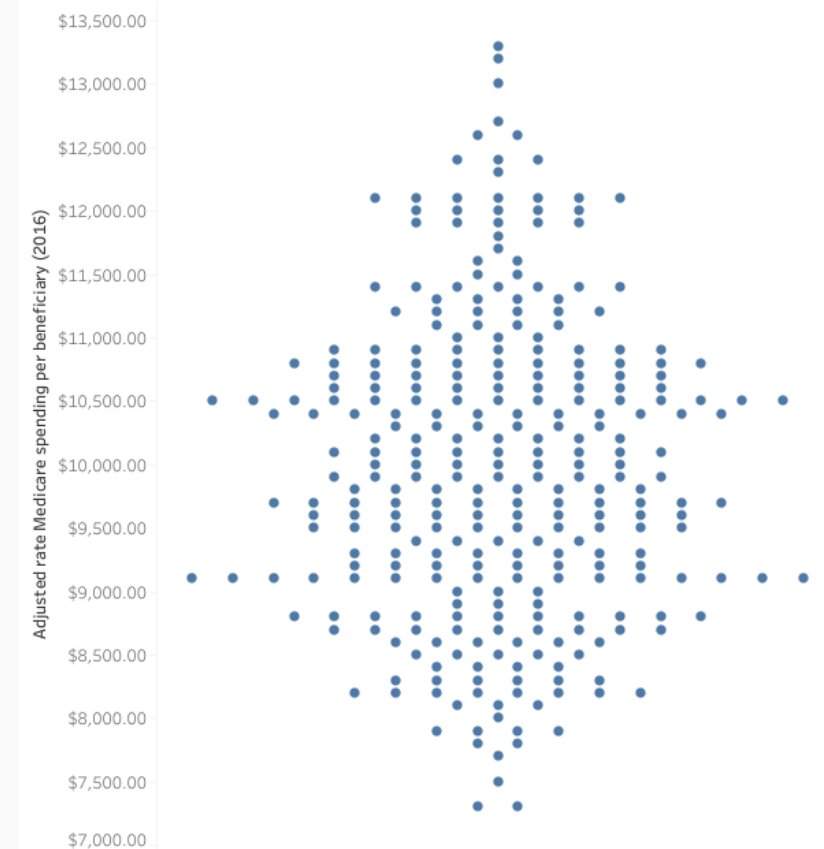
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3. Variation in quantity

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)
(Price, Age, Sex, and Race adjusted)



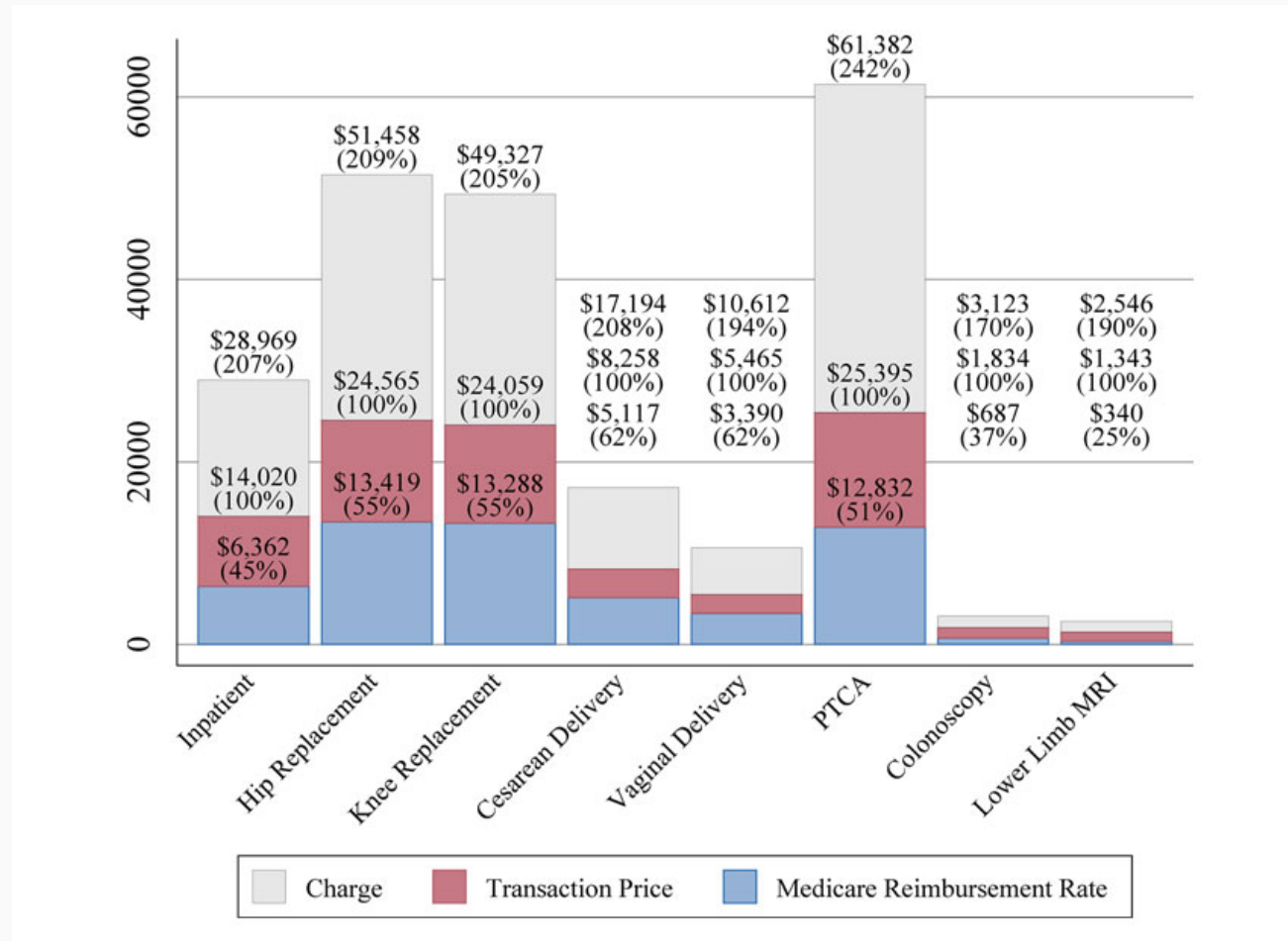
4. Variation in prices

Some variation due to different "prices" for different people

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

Price \neq charge \neq cost \neq patient out-of-pocket spending

4. Variation in prices

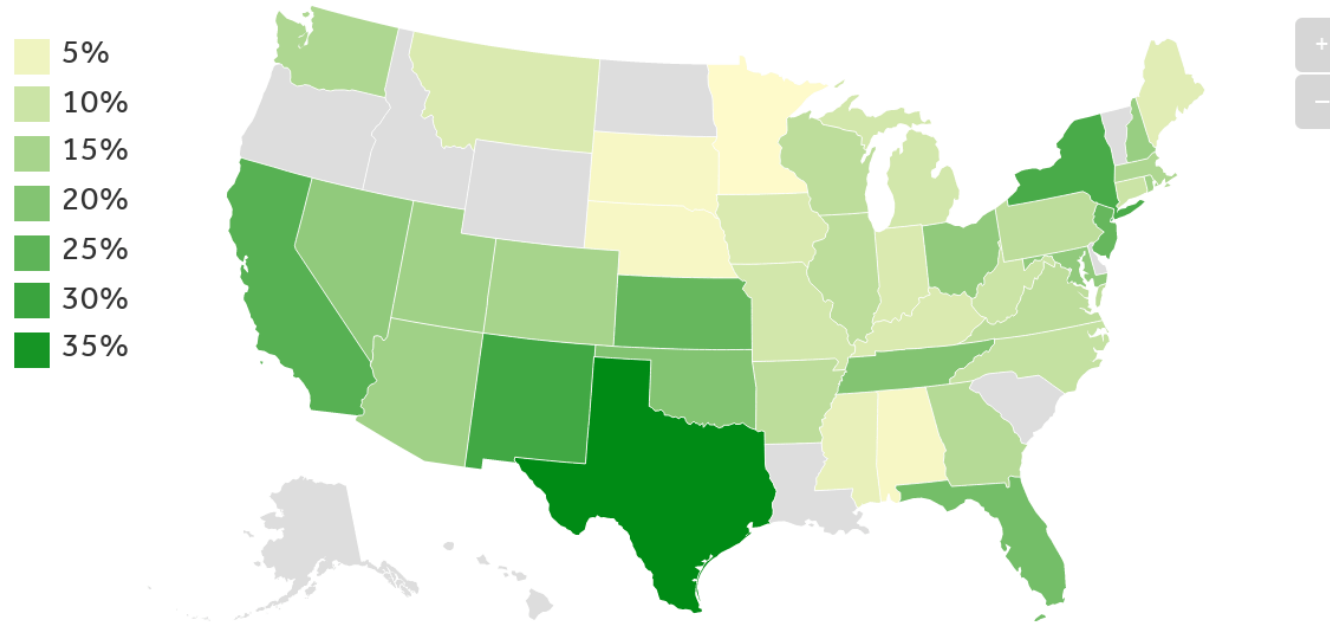


Source: Health Care Pricing Project

4. Variation in prices

5. Crazy billing practices

Among people with large employer coverage, the share of emergency visits with at least one out-of-network charge, 2017



States shaded gray have insufficient data

Source: KFF analysis of IBM MarketScan 2017 data

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5. Crazy billing practices

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...

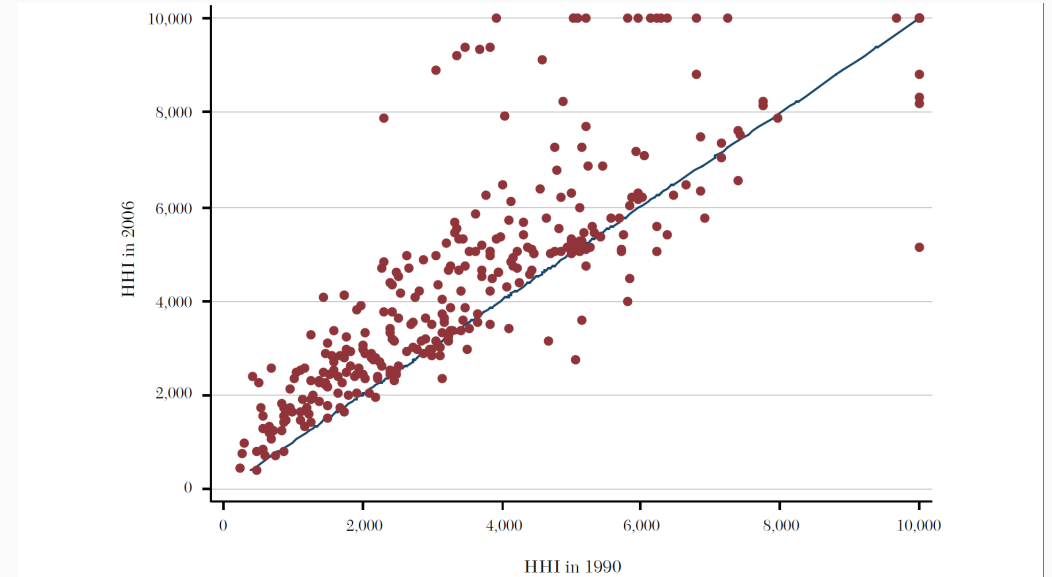
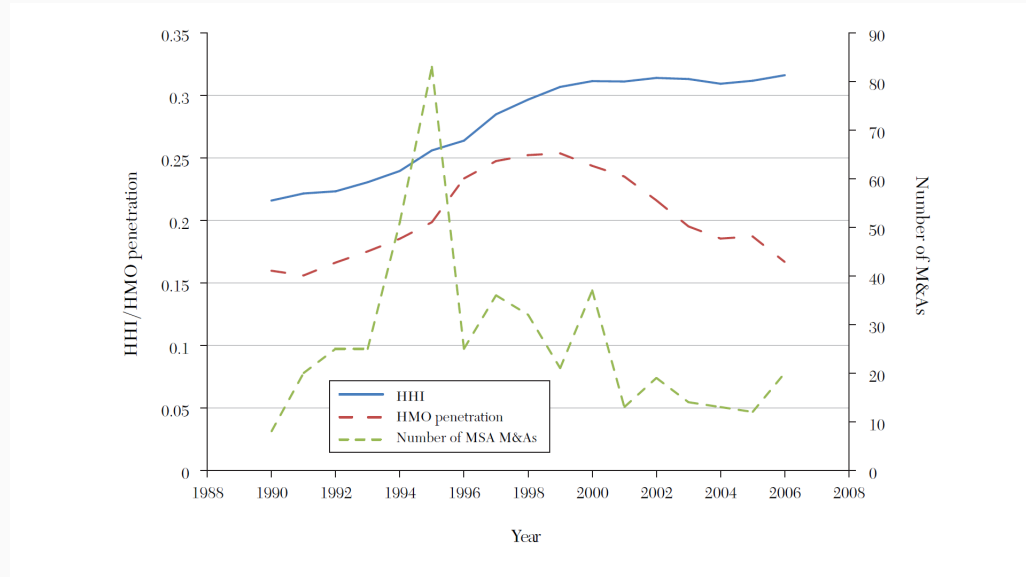
- Health care is unique in the combination of these issues
- U.S. is unique in the extent of these issues in health care (policy problems)
- We have a market based system but **without much competition...**

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.

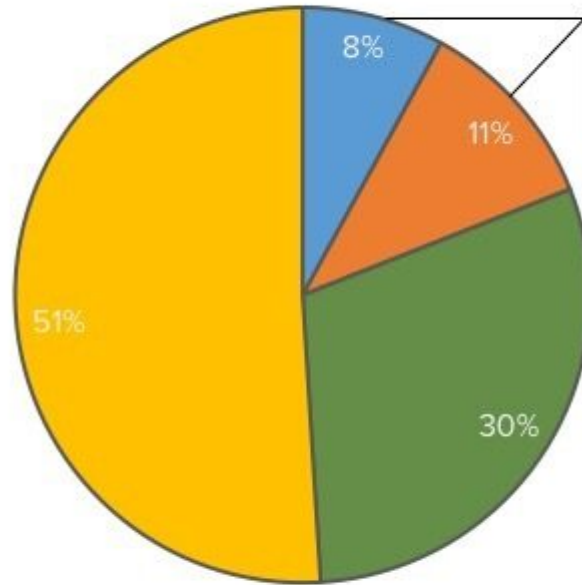
Hospital concentration over time

- More recent data on hospital market concentration from the [Health Care Cost Institute](#)

Types of hospitals involved in mergers



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

■ > \$1B ■ \$500M - \$1B ■ \$100M - \$500M ■ < \$100M

Annual Revenue of Seller or Smaller Partner in Transaction

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 from here?

1. Adopt sensible policies
2. Antitrust enforcement

What are we doing at Emory?

Health economics at Emory

Graduate program:

- Economics program focus on health as a subfield of economics
- 20-30% of our graduate students are specifically interested in health

Undergraduate program:

- Significant interest in health policy and pre-med
- Recent launch of joint major in economics and human health

Rollins School

- Strong collaboration with Department of Health Policy and Management

Some success stories