



Healthcare, Inc.

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OLLI Fall Course 2023



Course Objectives



Understand the complexities of:

U.S. Healthcare System

Medical Industrial
Complex

Business Models

Government Role



Empower YOU



Encourage critical thinking.

Overview of Class Topics

Outcomes, issues, business model and trends of the major sectors of the system and major companies in each sector:

- 1.Primary Care
- 2.Specialty Care
- 3.Hospitals
- 4.Pharma
- 5.Insurers
- 6.Tech and non-healthcare companies
- 7.Future of Medical Industrial Complex.

What is the product healthcare?

The services and products that are used to promote, maintain, or restore health.

The organizations that provide these services and products.

The people who work in these organizations.

The financing mechanisms that support these services and products.

The policies and regulations that govern these services and products.

Two Categories



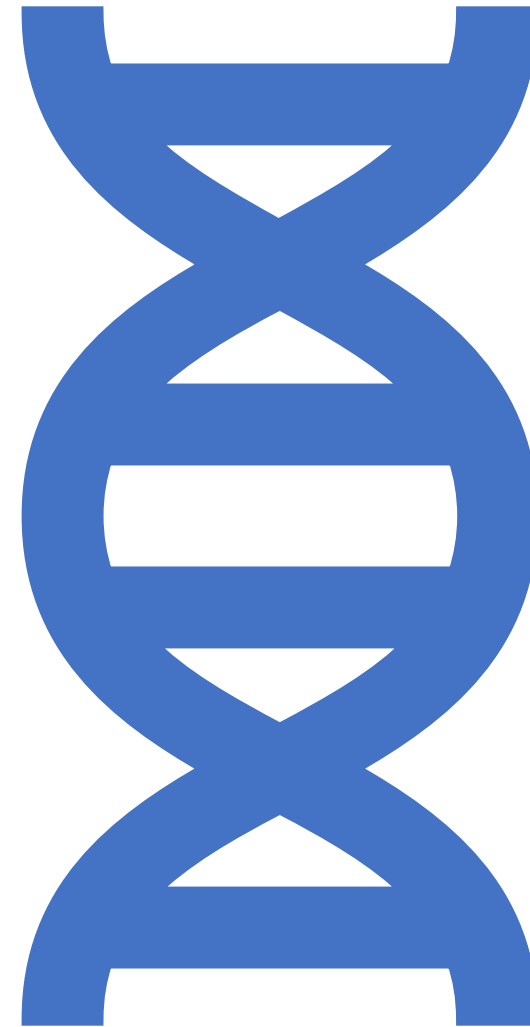
Preventive care



Curative care

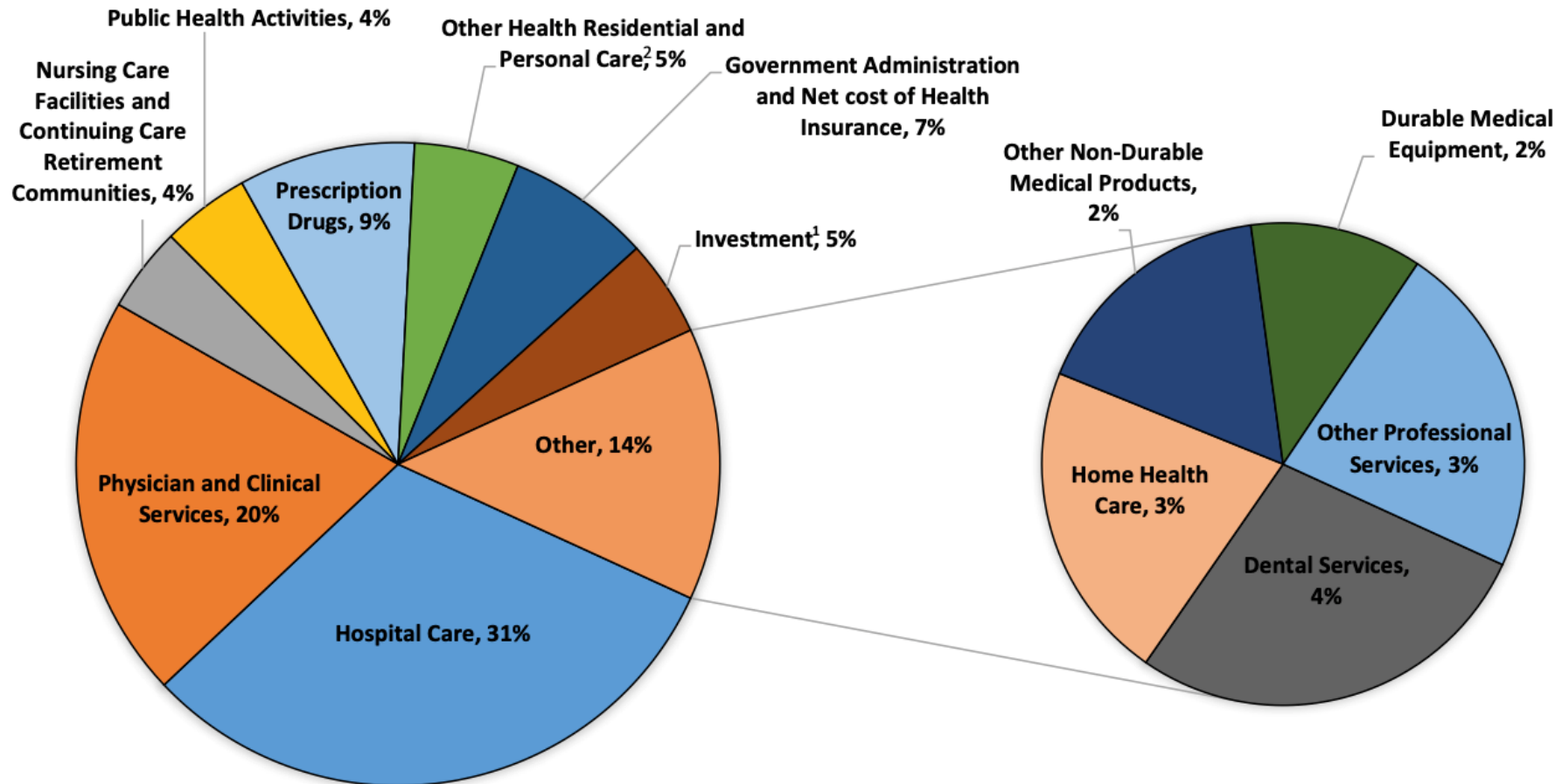
Factors affecting the future of healthcare:

- **Technology**
- **Cost**
- **Access**
- **Quality**
- **Efficiency**
- **Government policies**
- **Payment mechanisms**
- **Antitrust.**



The Nations Health Dollar (\$4.3 Trillion), Calendar Year 2021:

WHERE IT WENT

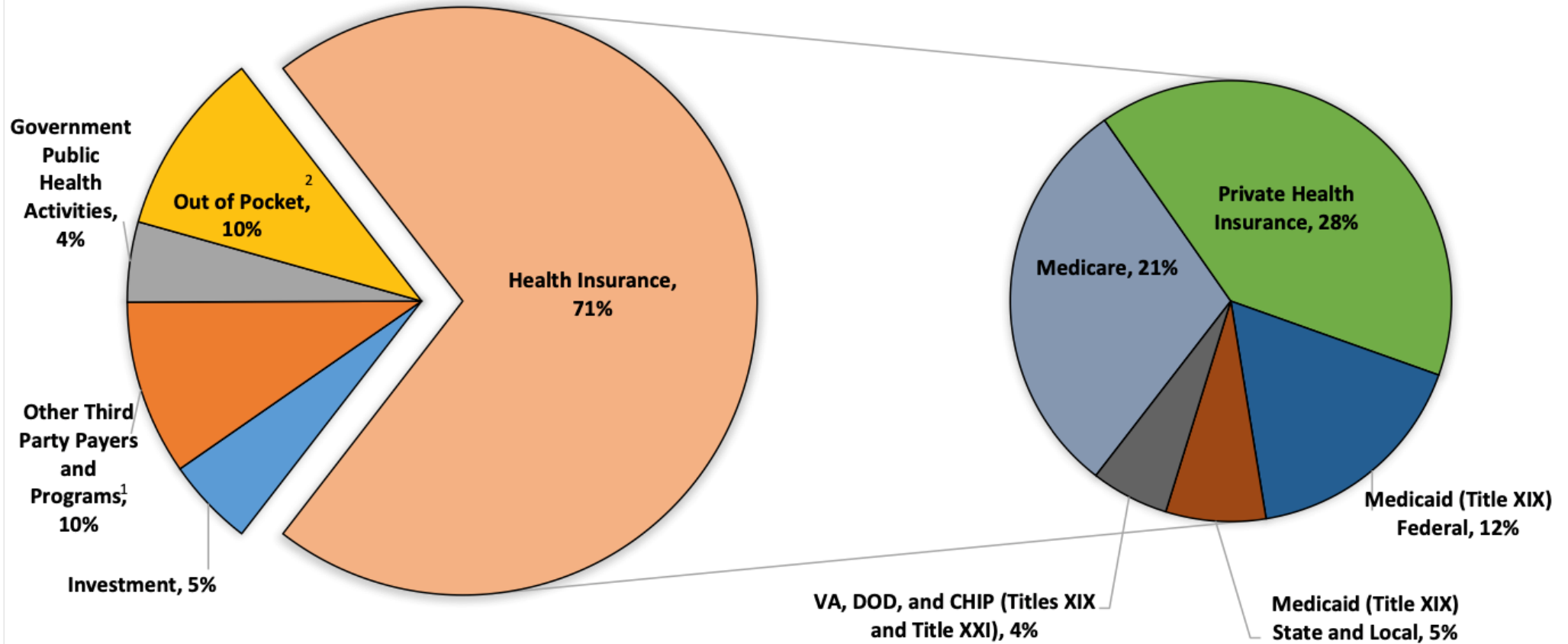


¹ Includes Noncommercial Research and Structures and Equipment.

² Includes expenditures for residential care facilities, ambulance providers, medical care delivered in non-traditional settings (such as community centers, senior citizens centers, schools, and military field stations), and expenditures for Home and Community Waiver programs under Medicaid.
 Note: Sum of pieces may not equal 100% due to rounding.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.

The Nations Health Dollar (\$4.3 Trillion), Calendar Year 2021: WHERE IT CAME FROM



¹ Includes worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, Substance Abuse and Mental Health Services Administration, school health, and other federal and state and local programs.

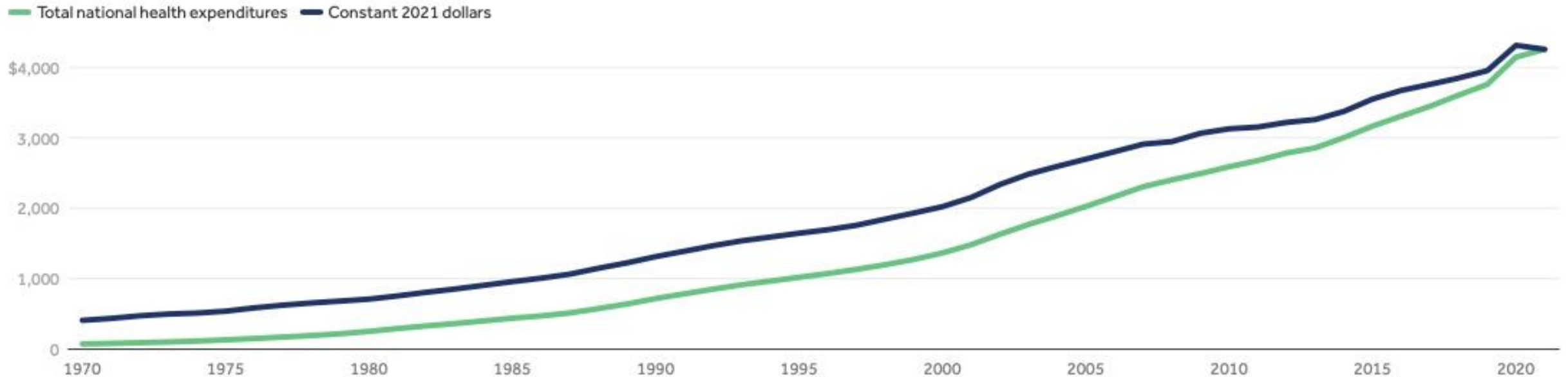
² Includes co-payments, deductibles, and any amounts not covered by health insurance.

Note: Sum of pieces may not equal 100% due to rounding.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.

Total Health Expenditures

Total national health expenditures, US \$ Billions, 1970-2021



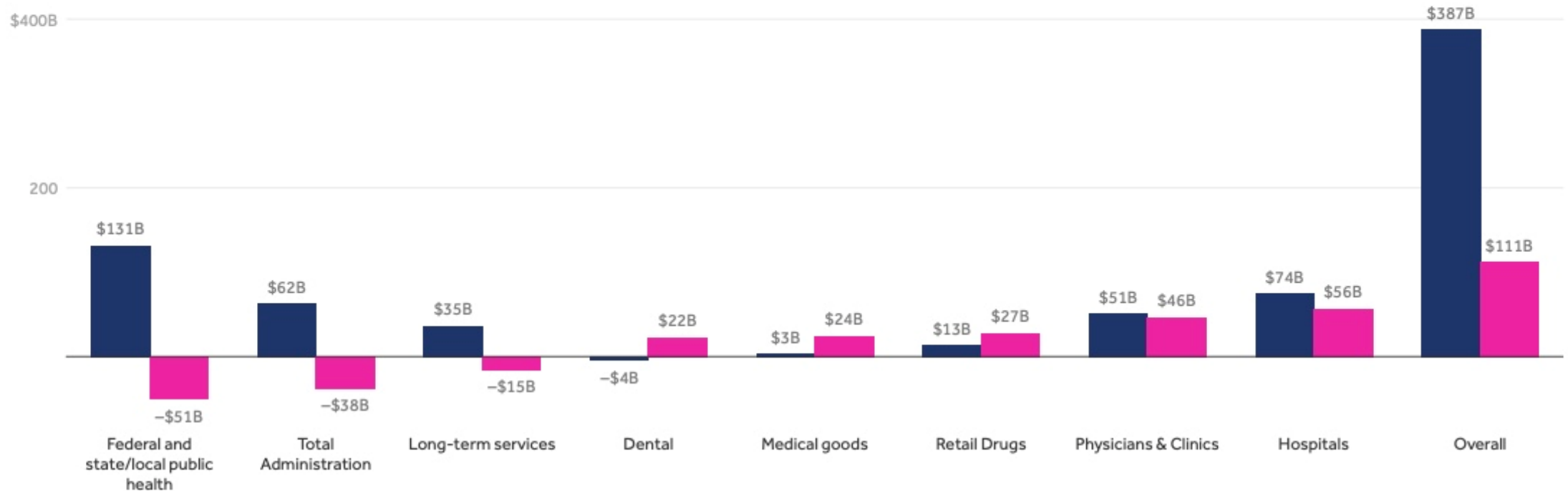
Note: A constant dollar is an inflation adjusted value used to compare dollar values from one period to another.

Source: [KFF analysis of National Health Expenditure \(NHE\) data](#) • [Get the data](#) • [PNG](#)

Change in Spending by Category

Change in national health expenditures, from 2019 to 2020 and from 2020 to 2021, by spending category

■ 2019-2020 ■ 2020-2021



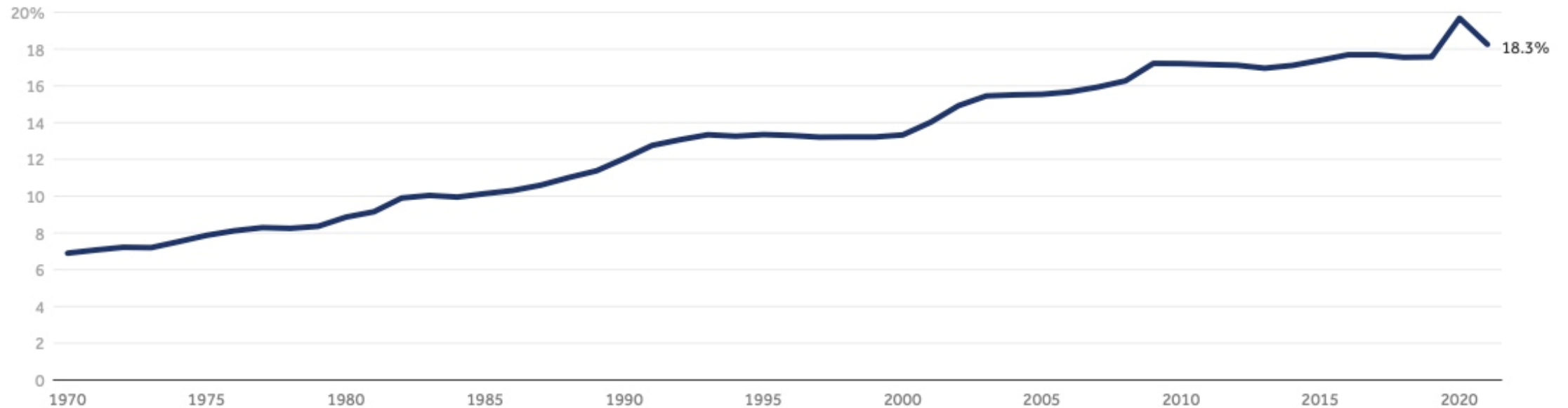
Note: Long term services consists of spending on home health care, nursing care facilities, and continuing care retirement communities. Medical goods consists of spending on durable and non-durable medical goods and equipment. Other health consists of spending on other health, residential, and personal care as well as services from other health care practitioners (such as chiropractors, physical therapists, and others). Administrative costs consist of total administration expenditures and net cost of health insurance expenditures.

Source: [KFF analysis of National Health Expenditure \(NHE\) data](#). • [Get the data](#) • [PNG](#)

Health Spending Growth

Health spending accounts for nearly one-fifth of the U.S. economy

Total national health expenditures as a percent of Gross Domestic Product, 1970-2021

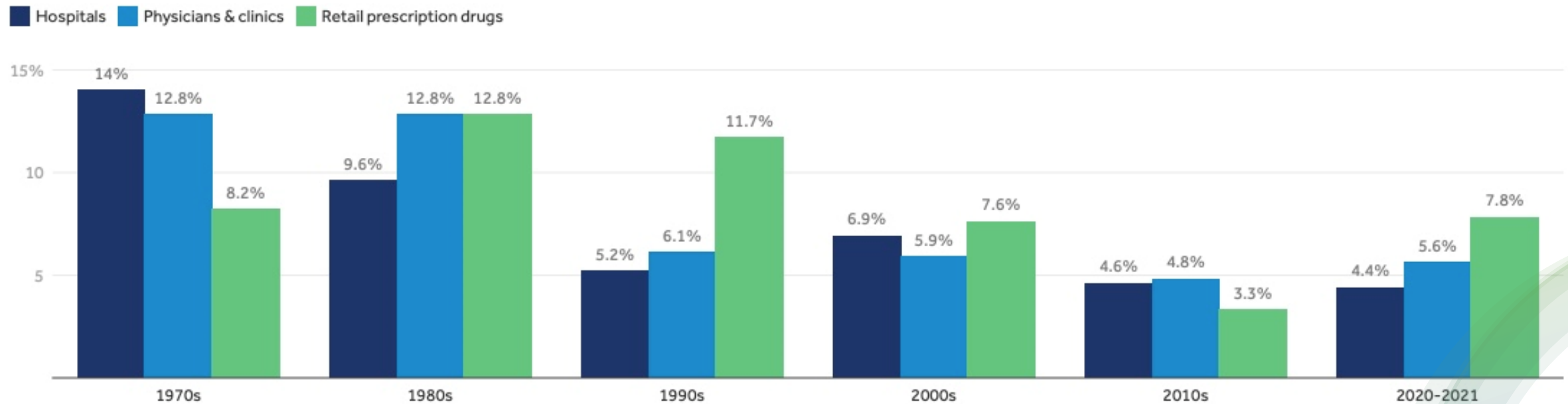


Source: KFF analysis of National Health Expenditure (NHE) data • [Get the data](#) • PNG

Growth Rate for Select Services

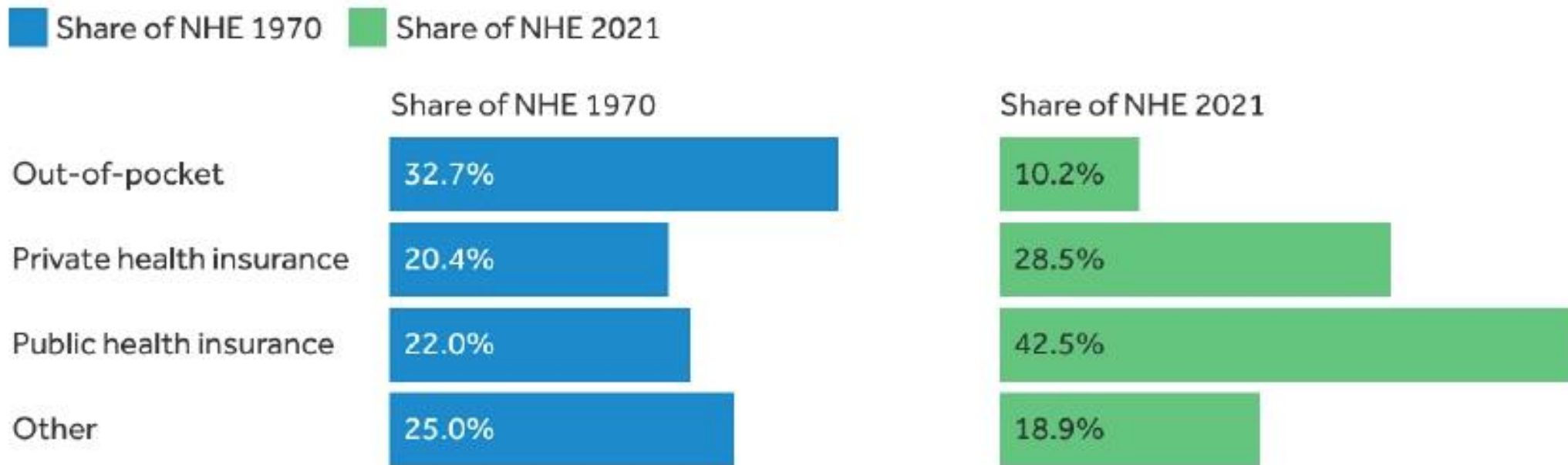
In the last decade, spending growth on hospitals has slowed

Average annual expenditures growth rate for select service types, 1970-2021



Source of Funds

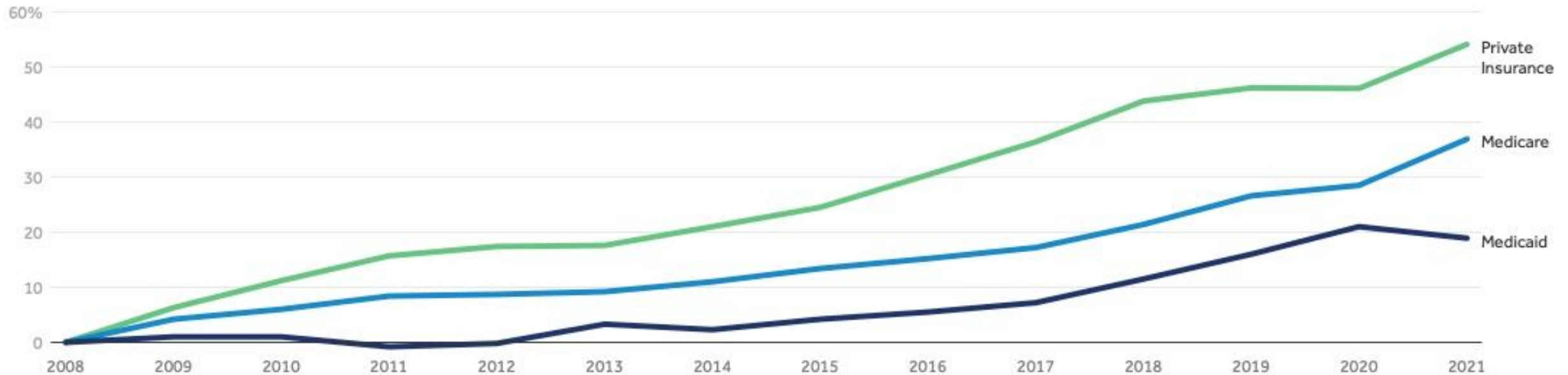
Total national health expenditures, by source of funds, 1970 and 2021



Notes: Public insurance in 1970 includes Department of Veterans Affairs, Department of Defense, Medicare, and Medicaid. In 2021, public insurance includes the same categories listed for 1970, with the addition of CHIP. 'Other' includes spending on public health activities, investment, and third party payers and programs like worksite health care, the Indian Health Service, and other state and local programs.

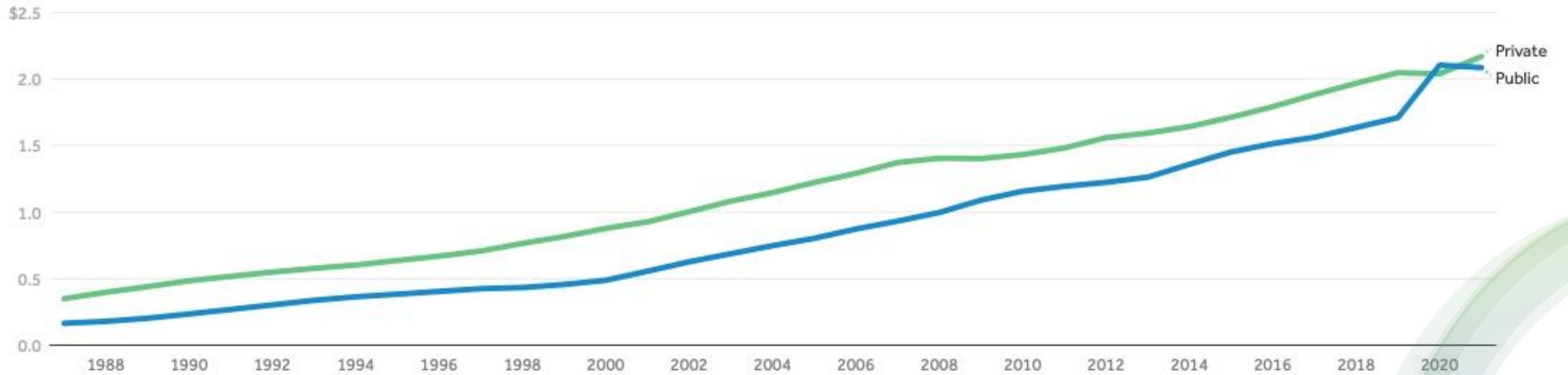
Private Insurance vs. Government Programs

Cumulative growth in per enrolled person spending by private insurance, Medicare, and Medicaid, 2008-2021



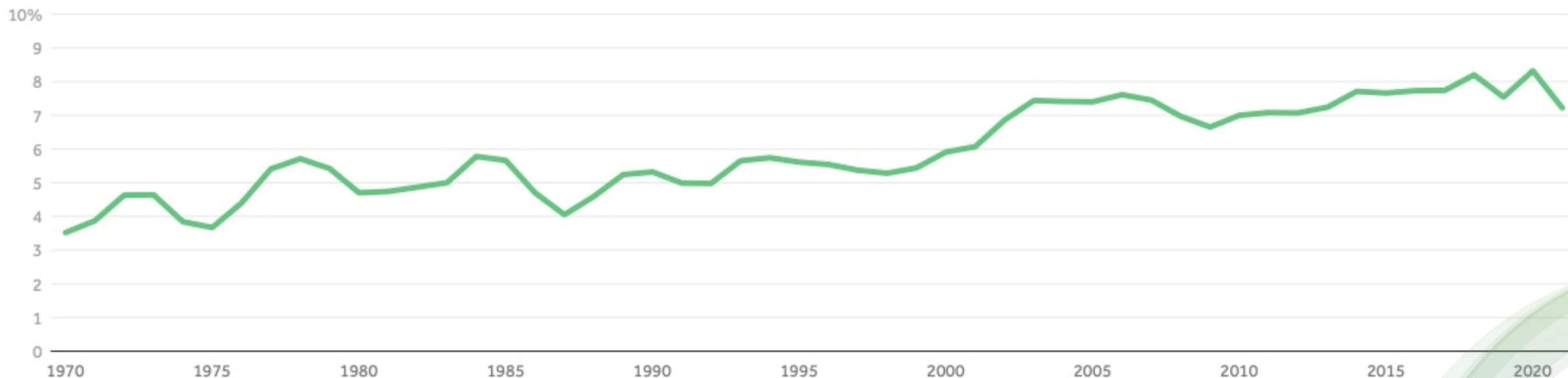
Public vs. Private Spending

Total national health expenditures, US \$ Trillions, 1987-2021



Administrative Spending

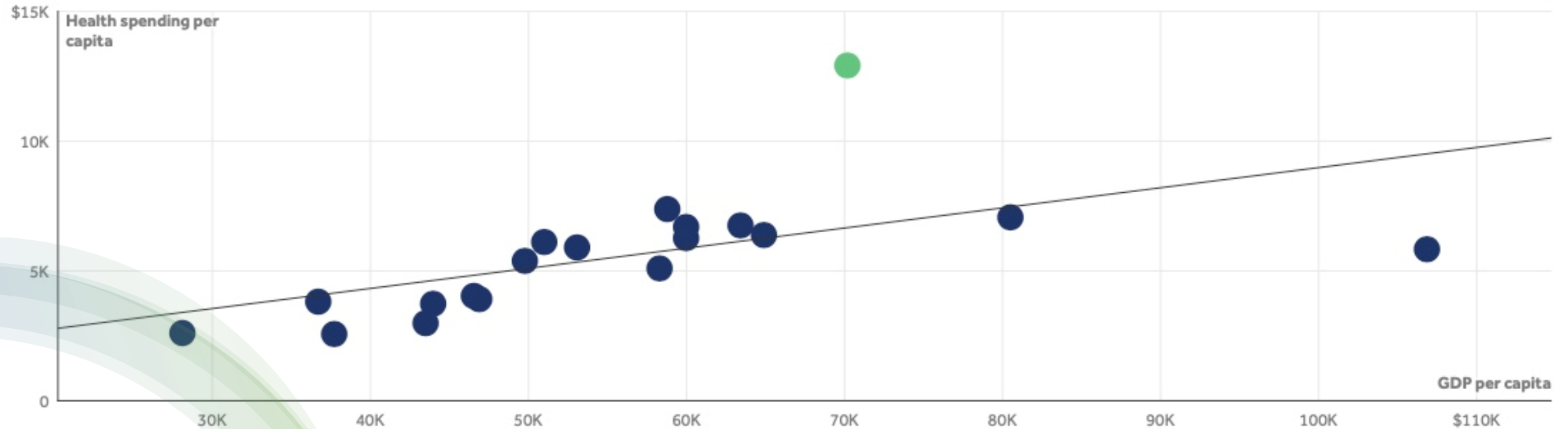
Net cost of health insurance and government administration, as a share of total health expenditures, 1970-2021



Source: [KFF analysis of National Health Expenditure \(NHE\) data](#) • [Get the data](#) • [PNG](#)

GDP Per Capita vs. Health Spending












GDP per capita and health consumption spending per capita, 2021 (U.S. dollars, PPP adjusted)



Notes: U.S. value obtained from National Health Expenditure data. For all other countries except the United States, health spending per capita is provisional. GDP per capita data for France, Germany, Korea, Netherlands, and Portugal are all provisional. Data from Canada represents a difference in methodology from the prior year. Health consumption does not include investments in structures, equipment, or research.

Life Expectancy

Life expectancy (2021) and per capita healthcare spending (2021 or nearest year, PPP adjusted)

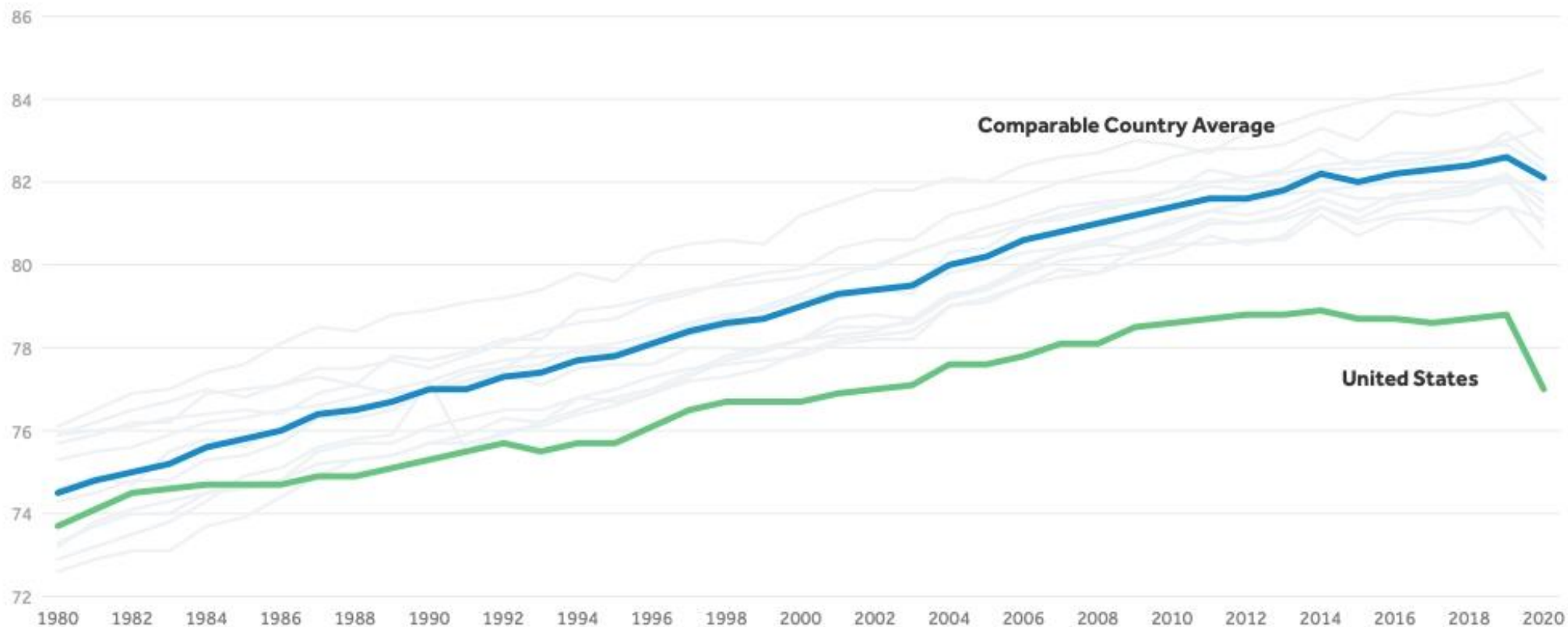
Country	Life expectancy ▲	Health spending, per capita
 United States	76.1	\$12,914
 United Kingdom	80.8	\$5,387
 Germany	80.9	\$7,383
 Austria	81.3	\$6,693
 Netherlands	81.5	\$6,190
 Belgium	81.9	\$5,274
Comparable Country Average	82.4	\$6,003
 France	82.5	\$5,468
 Sweden	83.2	\$6,262
 Australia	83.4	\$5,627
 Switzerland	84.0	\$7,179
 Japan	84.5	\$4,666

Notes: See Methods [section](#) of "How does U.S. life expectancy compare to other countries?"

Source: KFF analysis of [CDC](#), [OECD](#), [Japanese Ministry of Health, Labour, and Welfare](#), [Australian Bureau of Statistics](#), and [UK Office for Health Improvement and Disparities](#) data • [Get the data](#) • [PNG](#)

Life Expectancy at Birth

Life expectancy at birth in years, 1980-2020



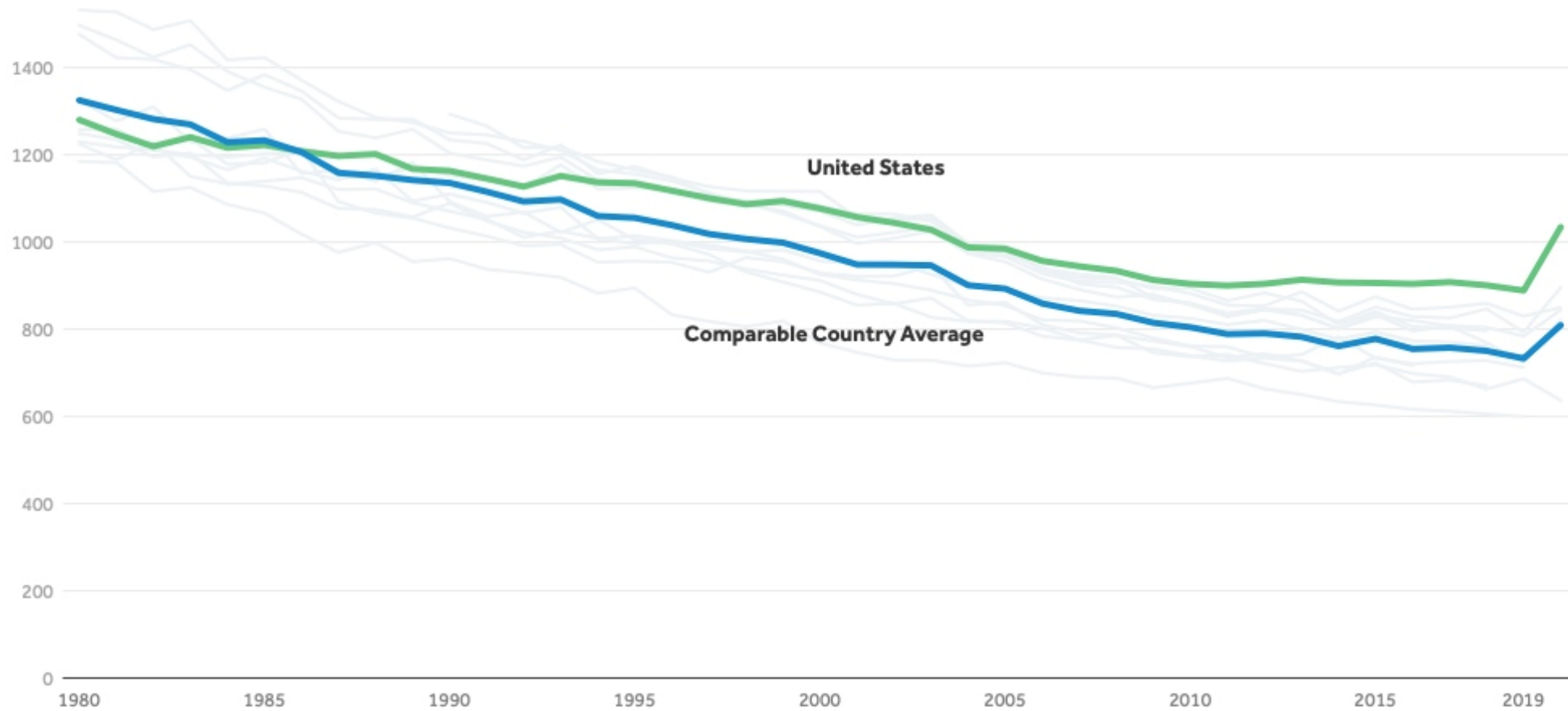
Notes: 2019 & 2020 data for the United States is from CDC. 2020 life expectancy value for Australia is the unweighted average of male and female life expectancy from the Australian Bureau of Statistics. Break in series for Canada in 1982, Germany in 1991, Switzerland and Belgium in 2011, and France in 2013. 2020 values for Germany and United Kingdom are provisional.

Source: KFF Analysis of [CDC](#), [Australian Bureau of Statistics](#) and [OECD](#) data • [Get the data](#) • [PNG](#)

Peterson-KFF
Health System Tracker

Life Expectancy

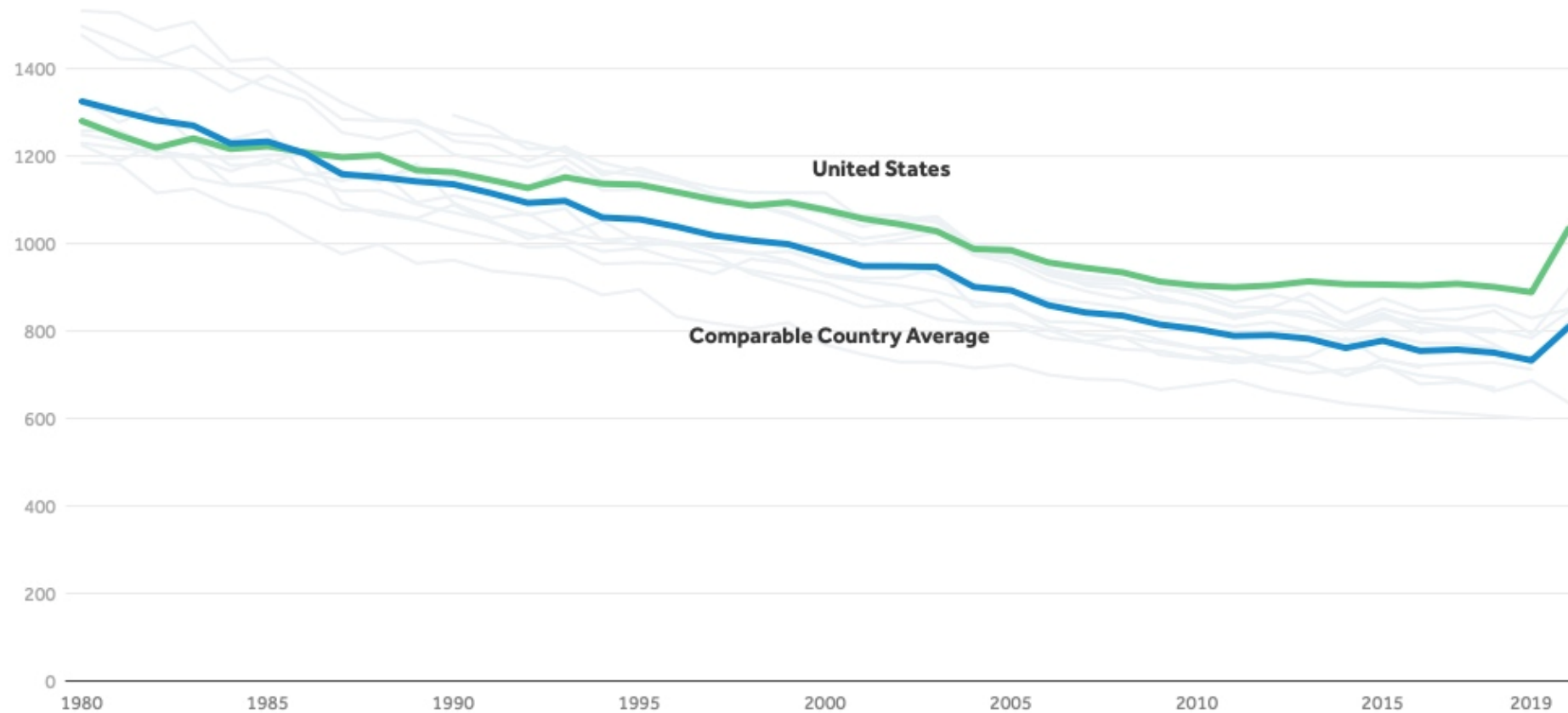
All cause age-adjusted mortality rate per 100,000 population, 1980-2020



Notes: Data for Canada and Switzerland not available in 2020. Data for Belgium and Sweden not available from 2019-2020. Data for France not available from 2018-2020. Data not available for Germany from 1980-1989, for the United Kingdom in 2000, and Australia in 2005.

Gap Widens

All cause age-adjusted mortality rate per 100,000 population, 1980-2020

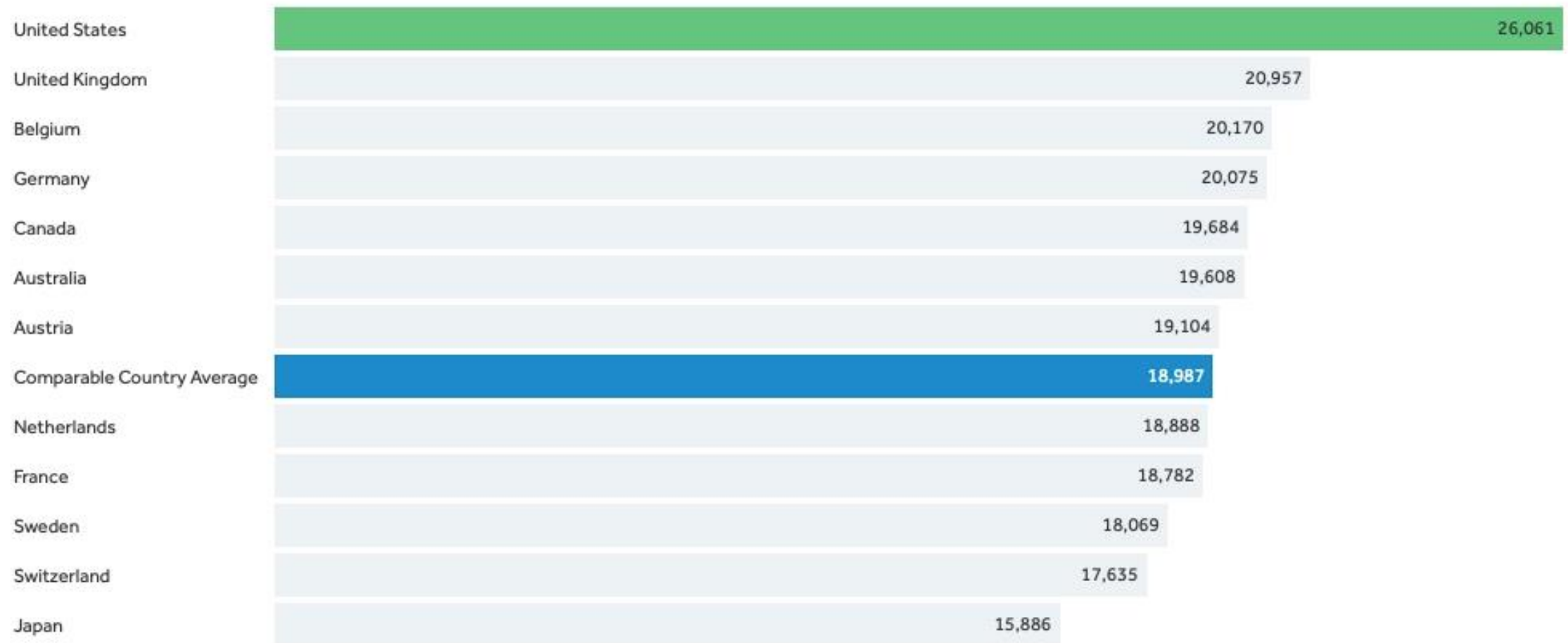


Notes: Data for Canada and Switzerland not available in 2020. Data for Belgium and Sweden not available from 2019-2020. Data for France not available from 2018-2020. Data not available for Germany from 1980-1989, for the United Kingdom in 2000, and Australia in 2005.

Source: [KFF Analysis of OECD Data](#) • [Get the data](#) • [PNG](#)

Disease Burden

Age-standardized disability adjusted life year (DALY) rate per 100,000 population, 2019



Maternal Mortality

Maternal mortality rate (deaths per 100,000 live births), 2020 or latest year

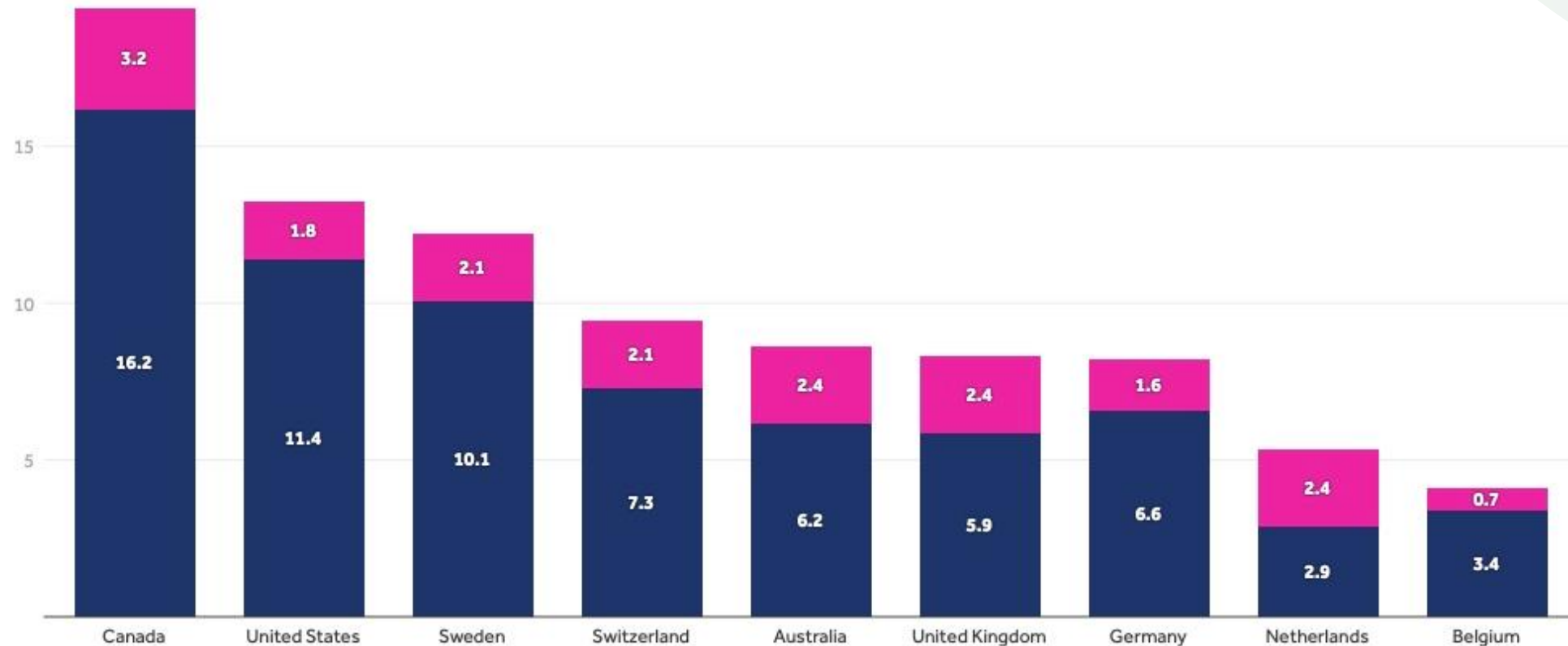


Note: Belgium and France are excluded due to the unavailability of recent data. Switzerland data is from 2019 and United Kingdom data is from 2017.

Obstetric Trauma

Obstetric trauma during vaginal delivery with and without an instrument, crude rate per 100 vaginal deliveries, ages 15 and older, 2018 or nearest year

■ Obstetric trauma vaginal delivery with instrument ■ Obstetric trauma vaginal delivery without instrument

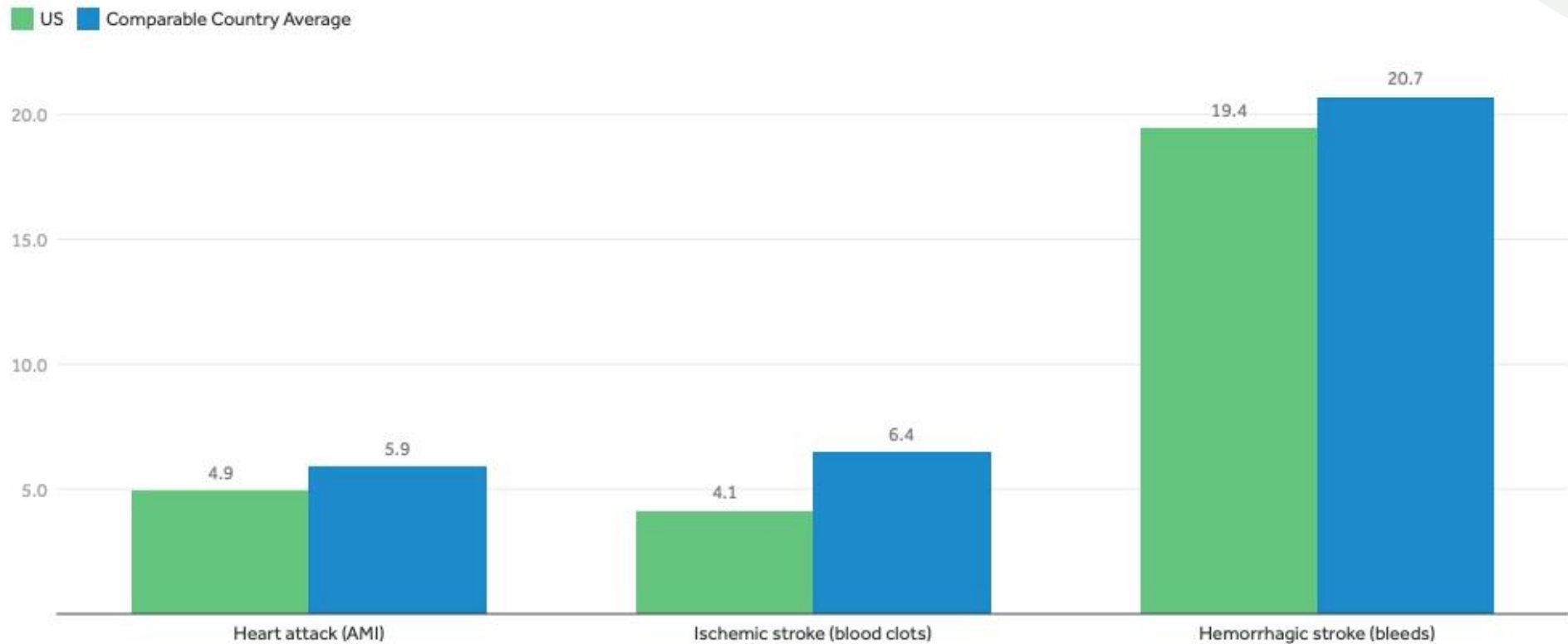


Note: Data for Germany and the Netherlands are from 2017. Data from Belgium is from 2014.

Source: [KFF Analysis of OECD Health Statistics \(Database\)](#) • [Get the data](#) • PNG

Mortality for Heart Attacks and Strokes

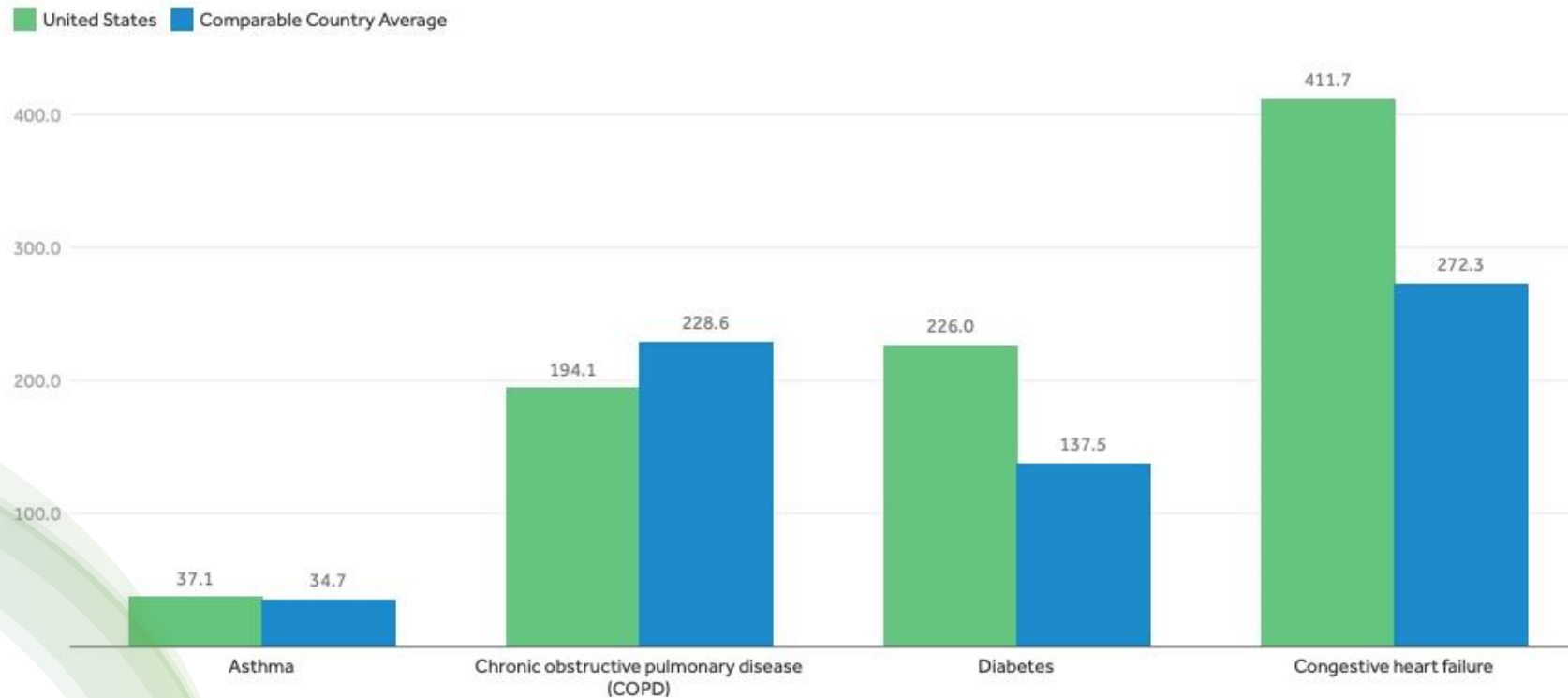
Age-standardized 30-day mortality rate per 100 patients after admission to the hospital for acute myocardial infarction, ischemic stroke, and hemorrhagic stroke, ages 45 and older, 2018 or nearest year



Note: AMI is acute myocardial infarction. Data from Germany and Japan is from 2017. Data from the Netherlands is from 2016. Data from France is from 2015. Data from Switzerland is from 2014.

Hospital Admissions for Diabetes and Congestive Heart Failure

Age standardized hospital admission rate per 100,000 population for asthma, COPD, diabetes, and congestive heart failure, ages 15 and over, 2018 or nearest year



Note: Data from Germany is from 2017. Data from the Netherlands is from 2016. Data from France is from 2015.

Source: KFF Analysis of OECD Health Statistics (Database) • [Get the data](#) • PNG

Post-operative Complications

Crude rate per 100,000 hospital discharges for post-operative pulmonary embolism or deep vein thrombosis after hip or knee surgery, ages 15 and older, 2018 or latest year available

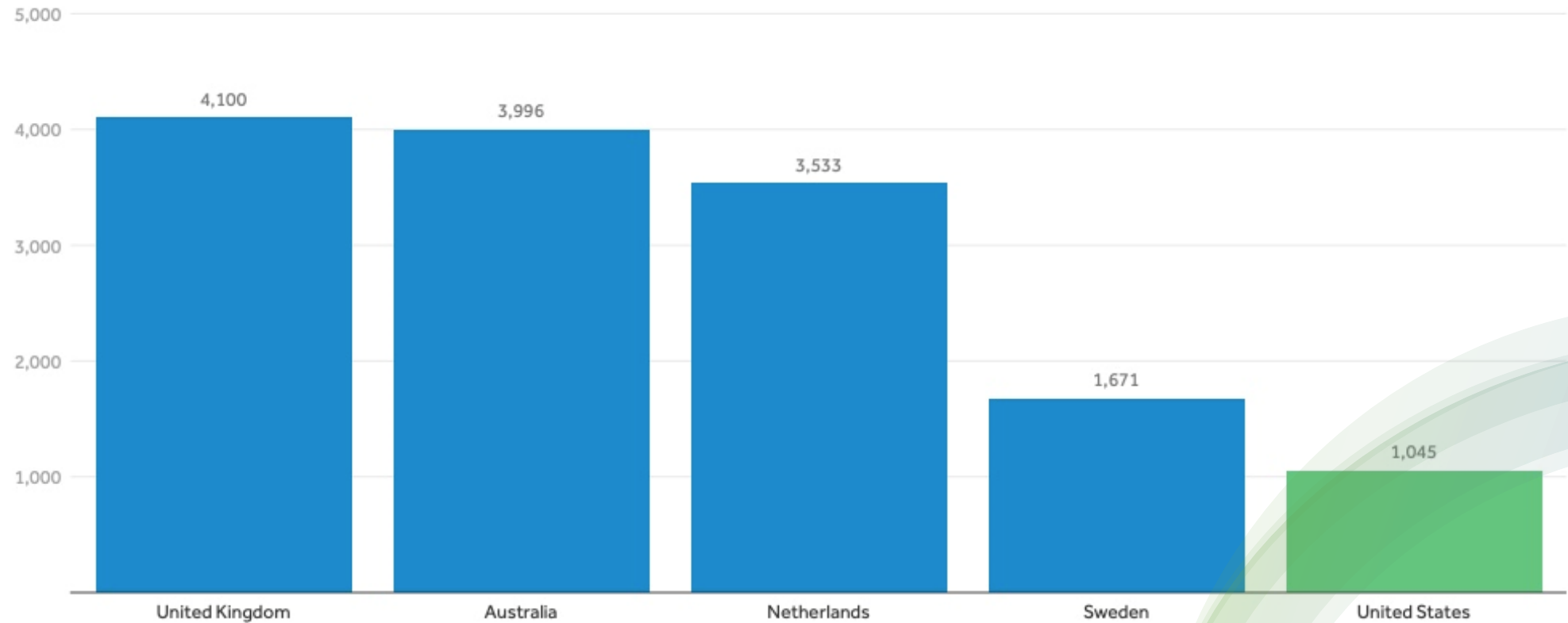


Note: Data for the Netherlands on both indicators is from 2016. Data for Belgium for post-operative embolism after hip or knee surgery is from 2016, and 2017 for post-operative deep vein thrombosis.

Source: [KFF analysis of OECD data](#). • [Get the data](#) • [PNG](#)

Post-operative Sepsis

Crude rate per 100,000 hospital discharges for post-operative sepsis after abdominal surgery, ages 15 and older, 2018 or nearest year

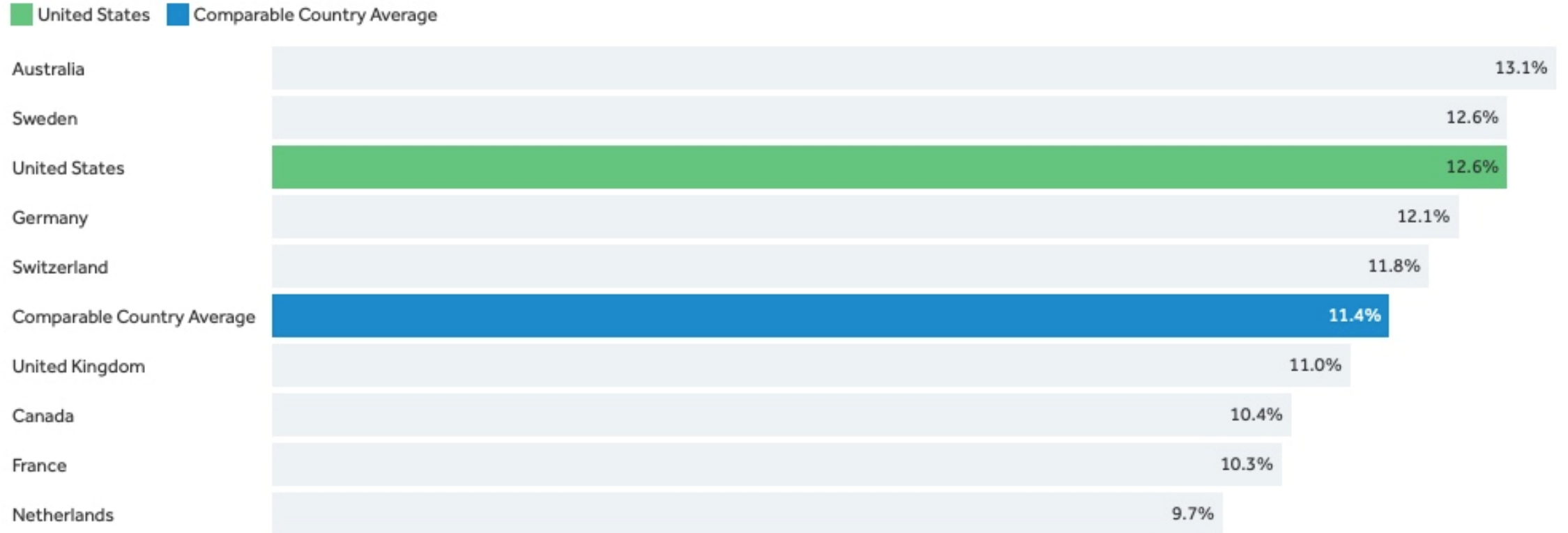


Notes: Hospital discharges are for a surgical episode-related method. Data for the Netherlands is from 2016.

Source: [KFF Analysis of OECD Health Statistics \(Database\)](#) • [Get the data](#) • [PNG](#)

Medication and Treatment Errors

Percent of adults who report having experienced medication or treatment errors in the past two years, 2020

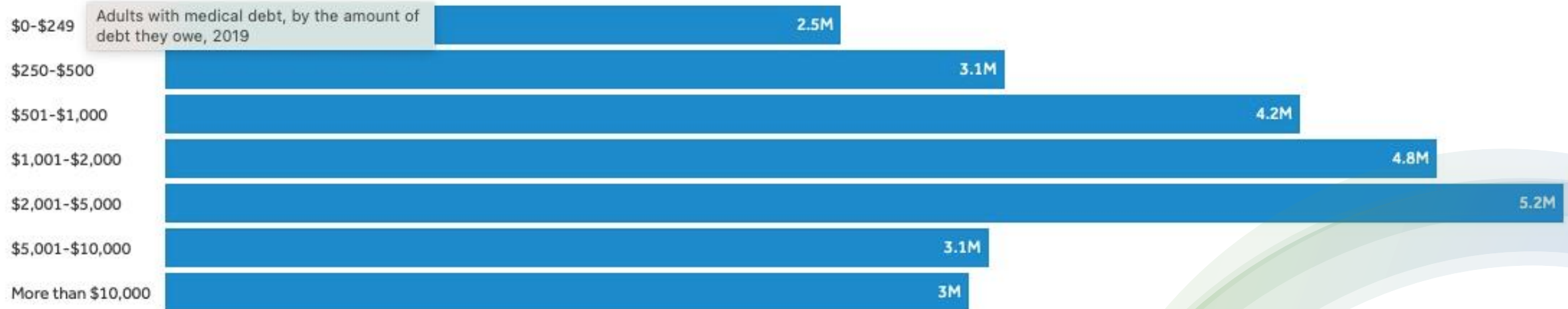


Note: Share responding that in the past 2 years, they had been given the wrong medication or wrong dose by a doctor, nurse, hospital or pharmacist, or if there a time they thought a medical mistake was made in their treatment.

Source: [Unpublished data from 2020 Commonwealth Fund International Health Policy Survey](#) • [Get the data](#) • PNG

23 Million People \$195 Billion in Medical Debt

Adults with medical debt, by the amount of debt they owe, 2019

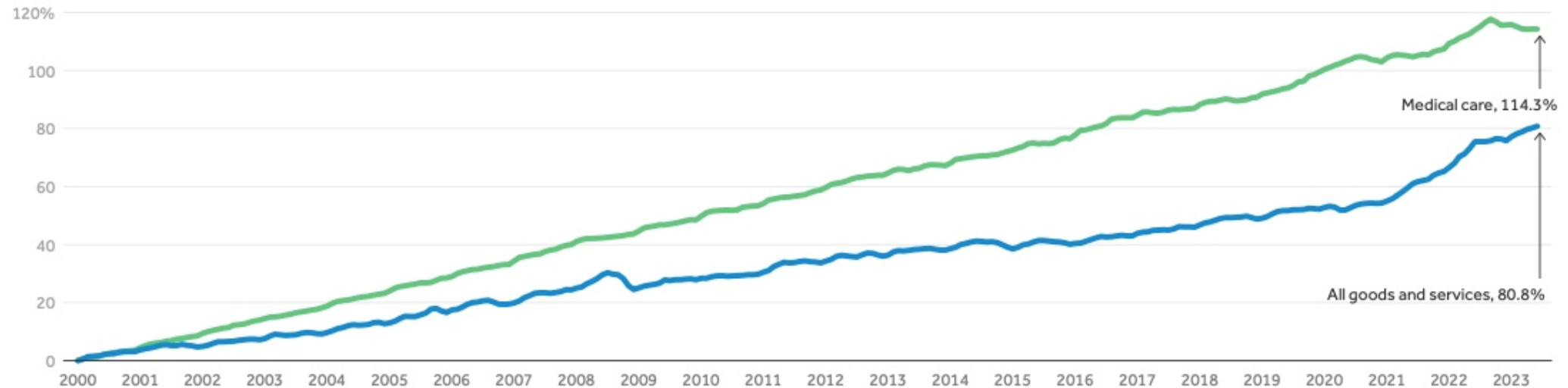


Source: KFF Analysis of U.S. Survey and Income and Program Participation (SIPP) data • PNG

Price Index

Medical care prices have generally grown faster than overall consumer prices

Cumulative percent change in Consumer Price Index for All Urban Consumers (CPI-U) for medical care and for all goods and services, January 2000 - June 2023



Note: Medical care includes medical services as well as commodities such as equipment and drugs.

Source: KFF analysis of Bureau of Labor Statistics (BLS) Consumer Price Index (CPI) data • [Get the data](#) • PNG



Standard Theory of Supply and Demand



- Buyers and sellers
- Buyers' discernment
- Buyers pay sellers directly.
- Market pricing
- Invisible hand.



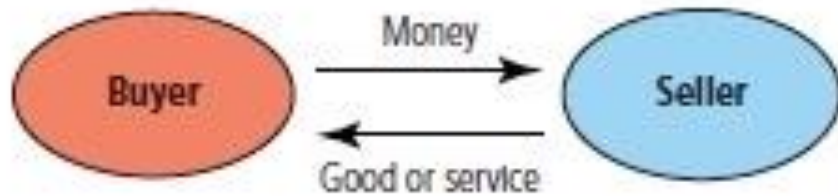


Why None of These Apply?

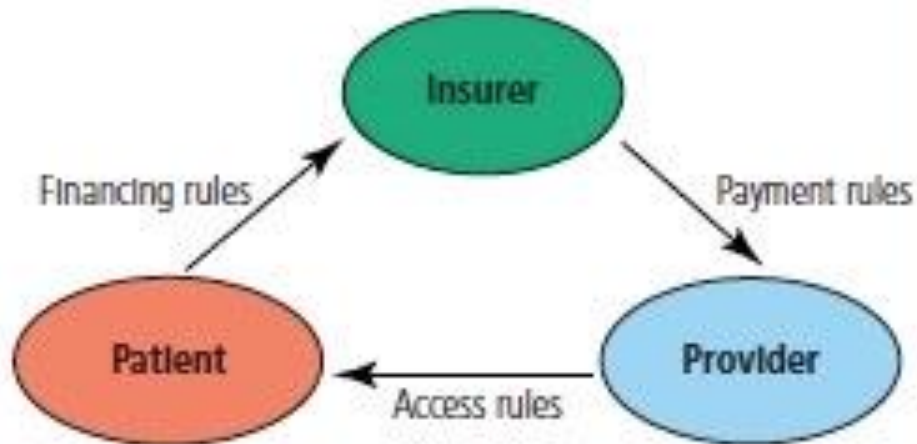
- Third-party interest
- Patients cannot evaluate
- No direct payment to seller
- Rules set prices
- Inefficient allocation of resources.

Rules Governing Marketplace

(a) Model of the typical market



(b) Model of a healthcare market with an Insurer

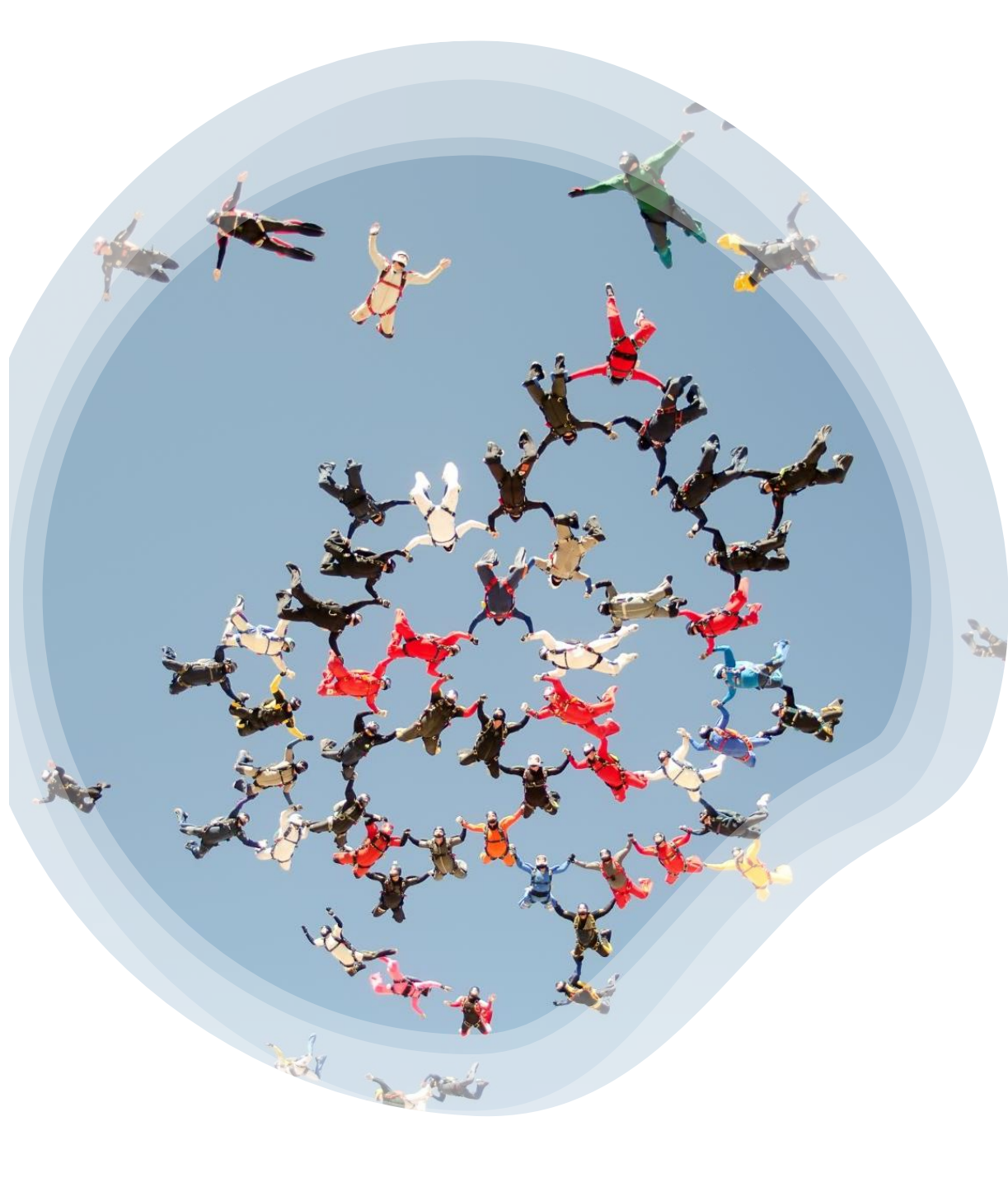


- Provider provides service to patient
- Provider paid by insurer
 - Government
 - Private Insurer
- Funds from:
 - Premiums
 - Taxes
- Requires extensive rules for:
 - Financing
 - Access
 - Payment
- Leads to regulations which shape the US system.

Difficulty of Monitoring Quality

- Consumer
 - Correlation vs. Causation
- Leads to regulations
- Self Monitoring
- Role of not-for-profits
- Create monopolies
- Public safety vs Freedom to choose.





Imperfect Insurance Marketplace

- Episodic
- Cost unknown
- Dealing with uncertainty
- Development of health institutions.

Value of Insurance

- Risk Adversity
- Randomness of spending
- Pay a fee (premium) to contract away all or a part of risk.

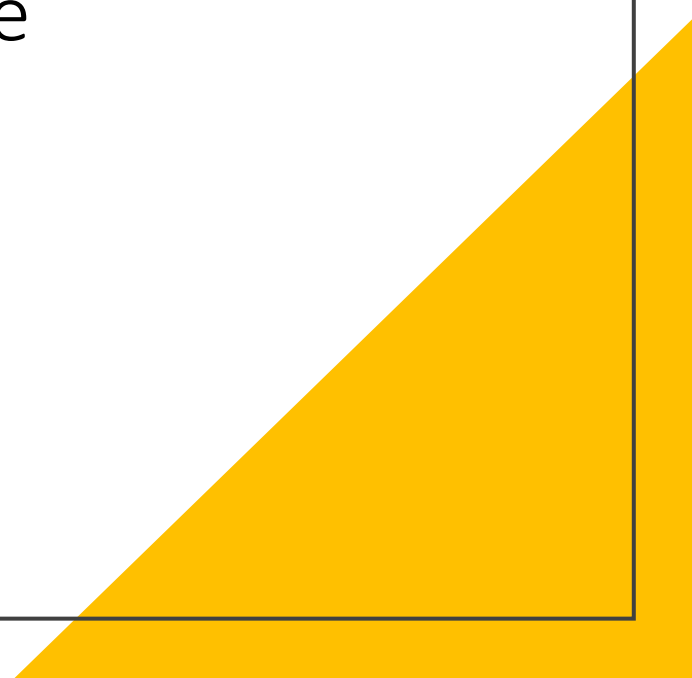
But a Problem: Moral Hazard

- Less incentive to take action (behavior) to prevent risk or increase cost
- Patient go to doctor too often if low copay
- Doctor order too many tests if someone else is paying
- Has led to deductibles and prior authorization

Adverse Selection

- Only people who feel they need it buy
- Others wait until they perceive a need
- Basing on health information led to death spiral
- Led to ACA requiring all preexisting covered
- Still a possible death spiral
- Led to requiring all or pay a penalty for not enrolling-mandate
- Increasing number of healthy people covered by insurance
- Uninsured fell from 19% to 9%.

Healthcare as a Right

- Consequences of avoidance due to cost
 - Ability to pay a requirement
 - Continuous debate
 - Costs
 - Food % down
 - Healthcare % up.
- 
- A yellow triangular graphic is located in the bottom right corner of the slide, pointing towards the top right.

U.S. Response

- Medicare
- Medicaid
- VA
- ACA Marketplace
- Private insurance mostly Employer-based
- Tax loss
- Unique among OECD countries.



500

1000

2007



Summary

- Health Care Cost growth > GDP
- No abatement
 - Rising wages
 - Productivity growth
 - Tech advances Increase spending
 - Increased demand
 - Lower birthrate
 - Increased longevity
 - Live longer - spend more on healthcare
 - Spend on consumables
- Stalemate
- US system - Value?
 - Highest cost
 - Problematic outcomes
- Economics different
- Behaviors –regulations
- Complexity and inefficiencies.

The Debate



Expanded Government Role

Profits vs people

Community of health

Inefficient markets

Public option

Universal Healthcare

Single Payor – No

U.S. version of OECD



Reduced Government Role

Regulated Market-less heavy handed

Increase competition for consumers

Individual freedom

Winners and losers

Rationing care

Encourage innovation

Decrease complexity



Common Issues:

How to pay

Broader picture of health

Are we paying for all care now?

NEXT CLASS:

History

Terms

Laws

Regulations

THANK YOU

