

# U.S. Medical Care

Healthcare costs; Pharma Costs; Oncology

# Affordable Care Act of 2010

- Patient Protection & Affordable Care Act (ACA) of 2010
  - Benefits include:
    - Covers uninsured, subsidizing purchase to make it affordable
    - Covers those with pre-existing conditions
    - Allows individuals up to 26 years age to stay on parents' plans
  - Adverse consequences:
    - Likely significant dependence on young and healthy to pay higher premiums to subsidize elderly
    - Bottlenecks in access to primary care, at least in short run. An additional 25+ million people covered.
    - Some employers likely to drop insurance for their employees
    - Some seniors must leave Medicare Advantage for conventional Medicare as payments to insurers shrink

# Delivery of Medical Care – 1

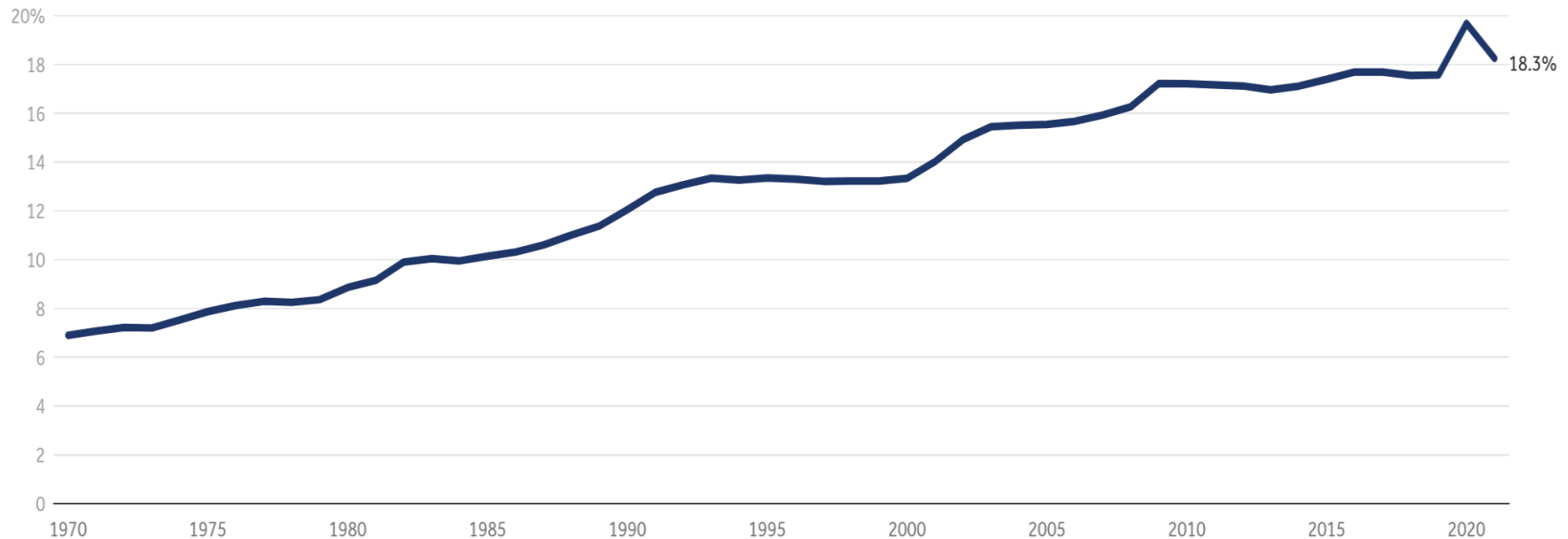
- High insurance premiums and high treatment costs
- High 'level' and 'growth rate' of health care spending
- Average cost of a health insurance policy for a family of four in the \$15K-\$18K range
- Americans how spend almost 18% of GDP on healthcare
- US spends more on medical care by virtually every measure than any other country in the world

# Delivery of Medical Care – 2

- Postwar Experience
  - Medical spending in the post-World War II period has been high and growing
  - During 1950s, spending increased at the rate of 8% per year, doubling spending, and increasing medical care as a percent of GDP from 4.5 to 5.2%.
  - 1960-1990: period of rapid growth.
    - In 1960, medical care spending was 27.4 billion (5% of GDP), and \$147 per capita.
    - By 1990, it stood at \$724.3 billion, 12.1% of GDP and \$2,855 per capita.
  - Current: about 18% of U.S. GDP

# U.S. Health Care Spending

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

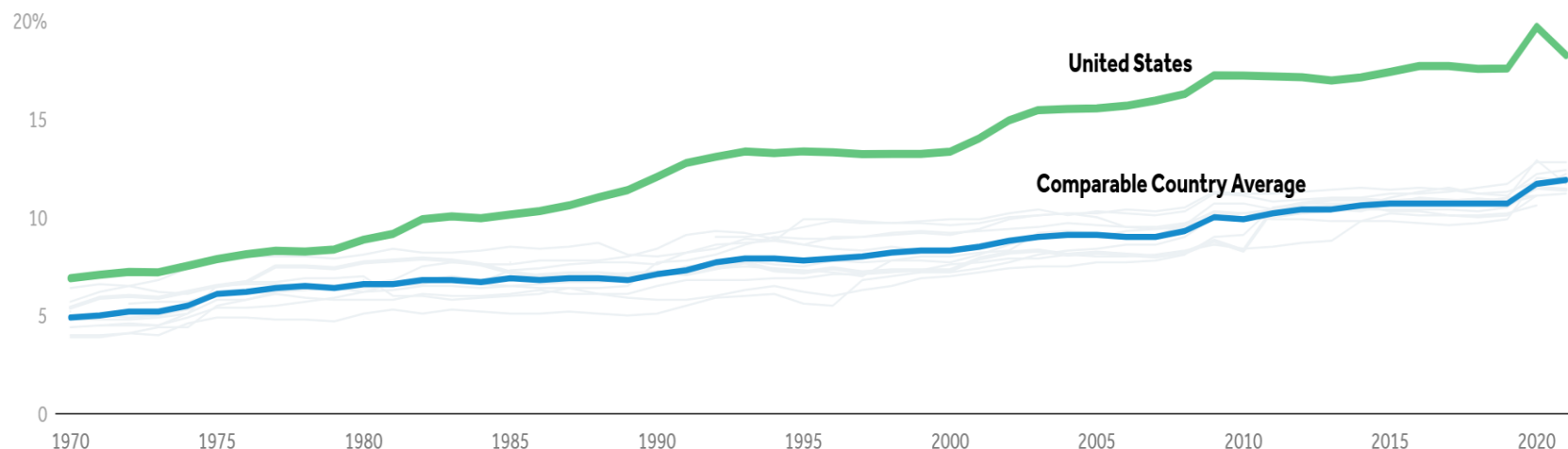
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**Health System Tracker**

# U.S. Health Care Spending

See notes below for comparable countries

Health consumption expenditures as percent of GDP, 1970-2021



Notes: U.S. values obtained from National Health Expenditure data. Health consumption does not include investments in structures, equipment, or research. 2021 data not yet available for Australia, Belgium, Japan or Switzerland. Provisional 2021 data for Austria, Germany, Netherlands, Sweden, France, United States and the United Kingdom. Provisional 2020 data for Sweden, Japan, Australia and Canada. Difference in methodology for Canada in 2020 and 2021.

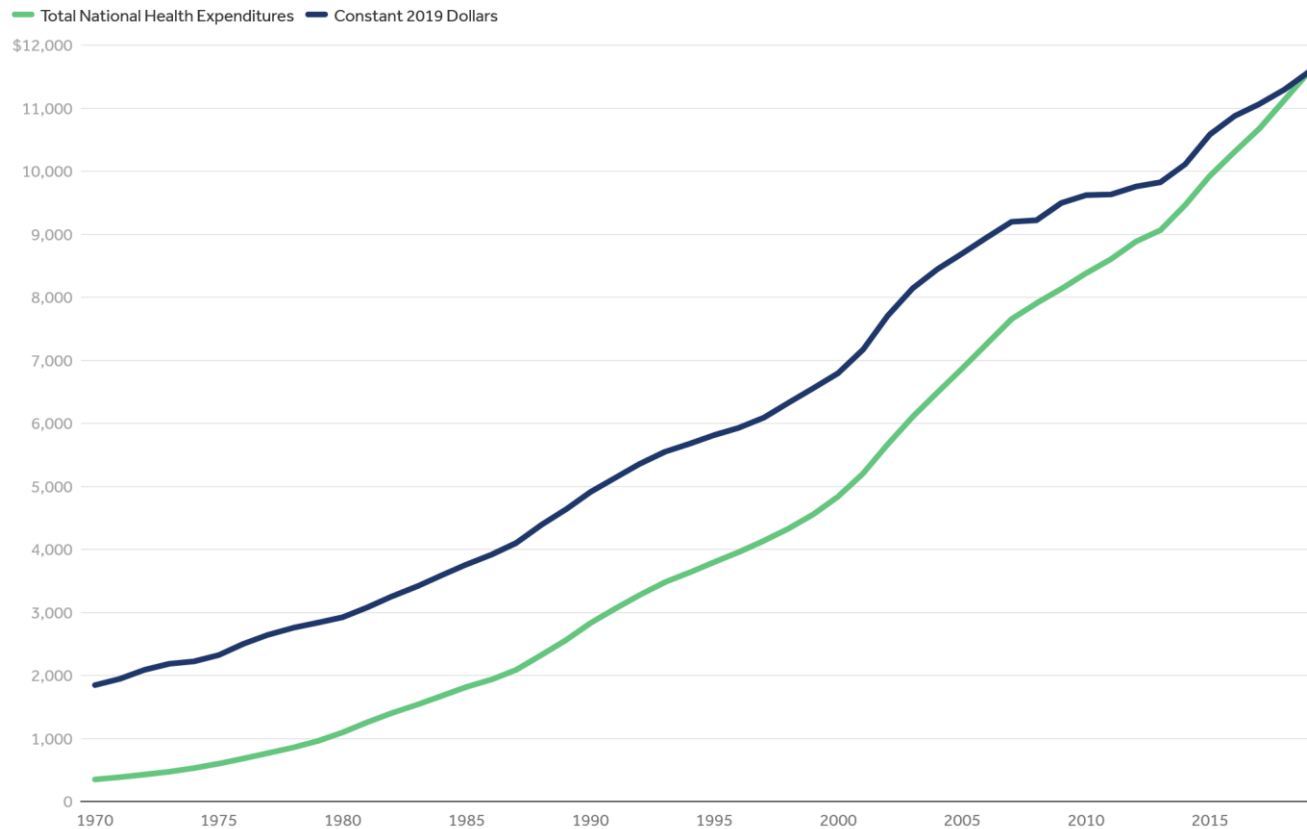
# Concern Over High Spending

- US growth of health care spending is unsustainable
- Health care has grown at an annual compound rate of 6.4%.
- If the trend continues, health care will absorb almost 30% of GDP by 2040
- Much of the increased spending is the result of supply-side advances in medicine and changing mode of delivery of care
- Demand side spending will depend on health conditions, an aging population, economic growth, and policy changes made to Medicaid and Medicare

# Per Capita Spending – Rate of Growth

On a per capita basis, health spending has grown substantially

Total national health expenditures, US \$ per capita, 1970-2019



Notes: 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

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**Health System Tracker**



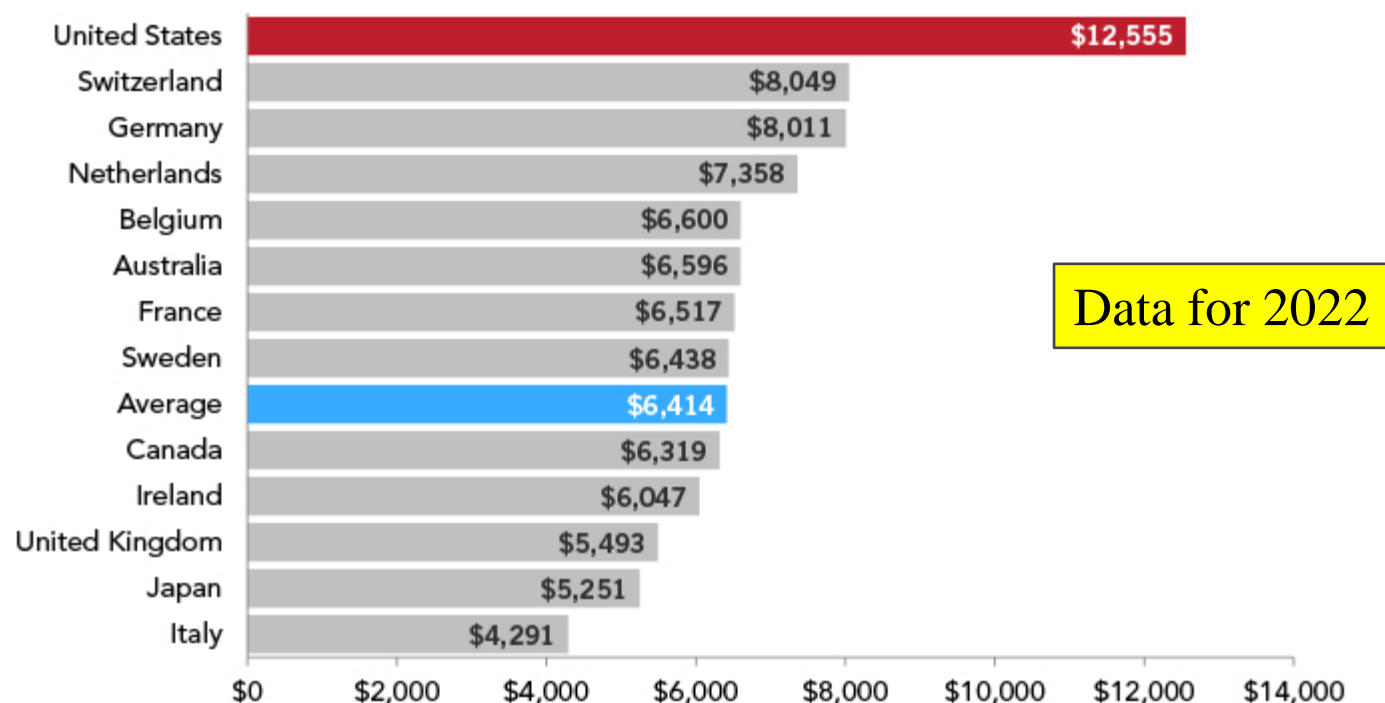
# Per Capita Spending – Level



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U.S. per capita healthcare spending is over twice the average of other wealthy countries

## Healthcare Costs per Capita (Dollars)



SOURCE: Organisation for Economic Co-operation and Development, *OECD Health Statistics 2023*, July 2023.

NOTES: Data are from 2022 and include provisional values from some countries. Average does not include the United States. The five countries with the largest economies and those with both an above median GDP and GDP per capita, relative to all OECD countries, were included. Chart uses purchasing power parities to convert data into U.S. dollars.

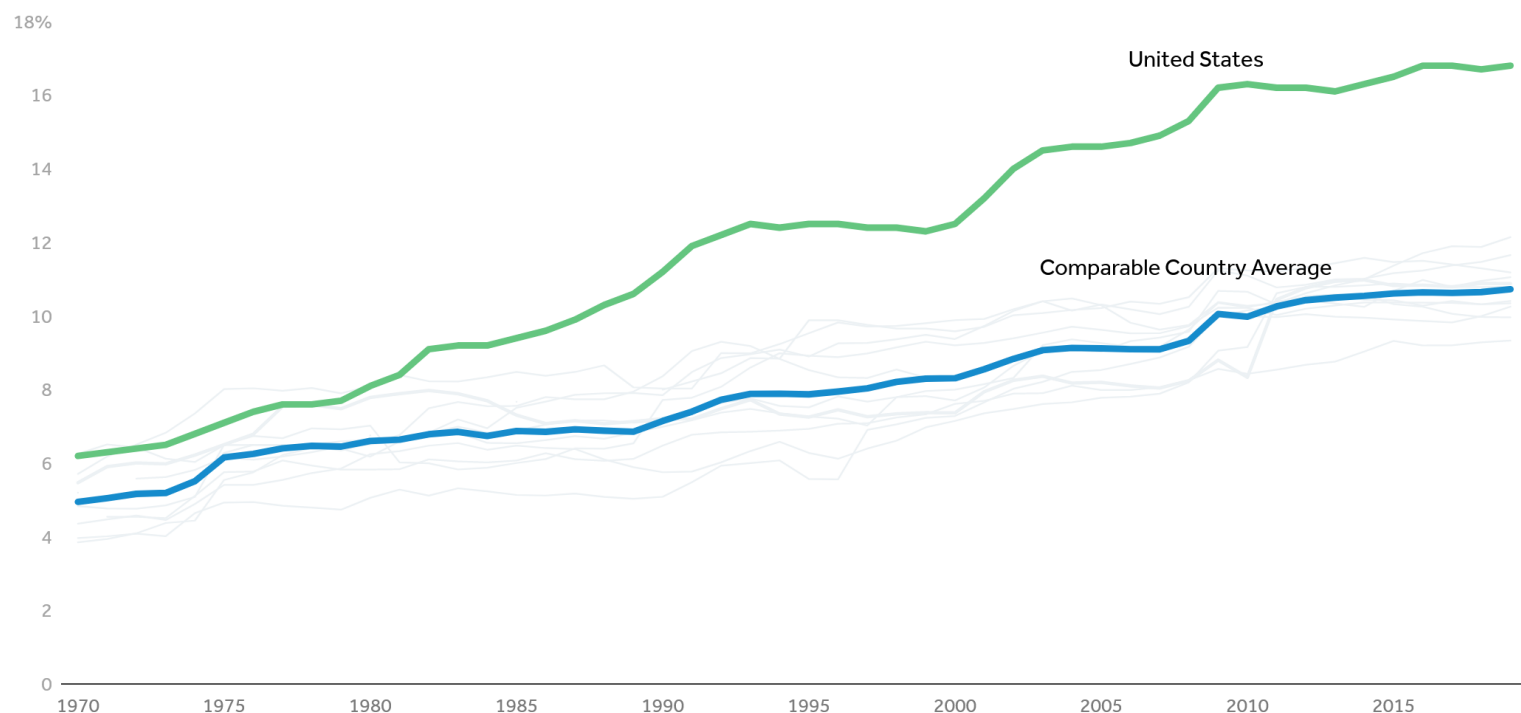
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# Cross Country Comparison

Since 1980, the gap has widened between U.S. health spending and that of other countries

Health consumption expenditures as percent of GDP, 1970-2019

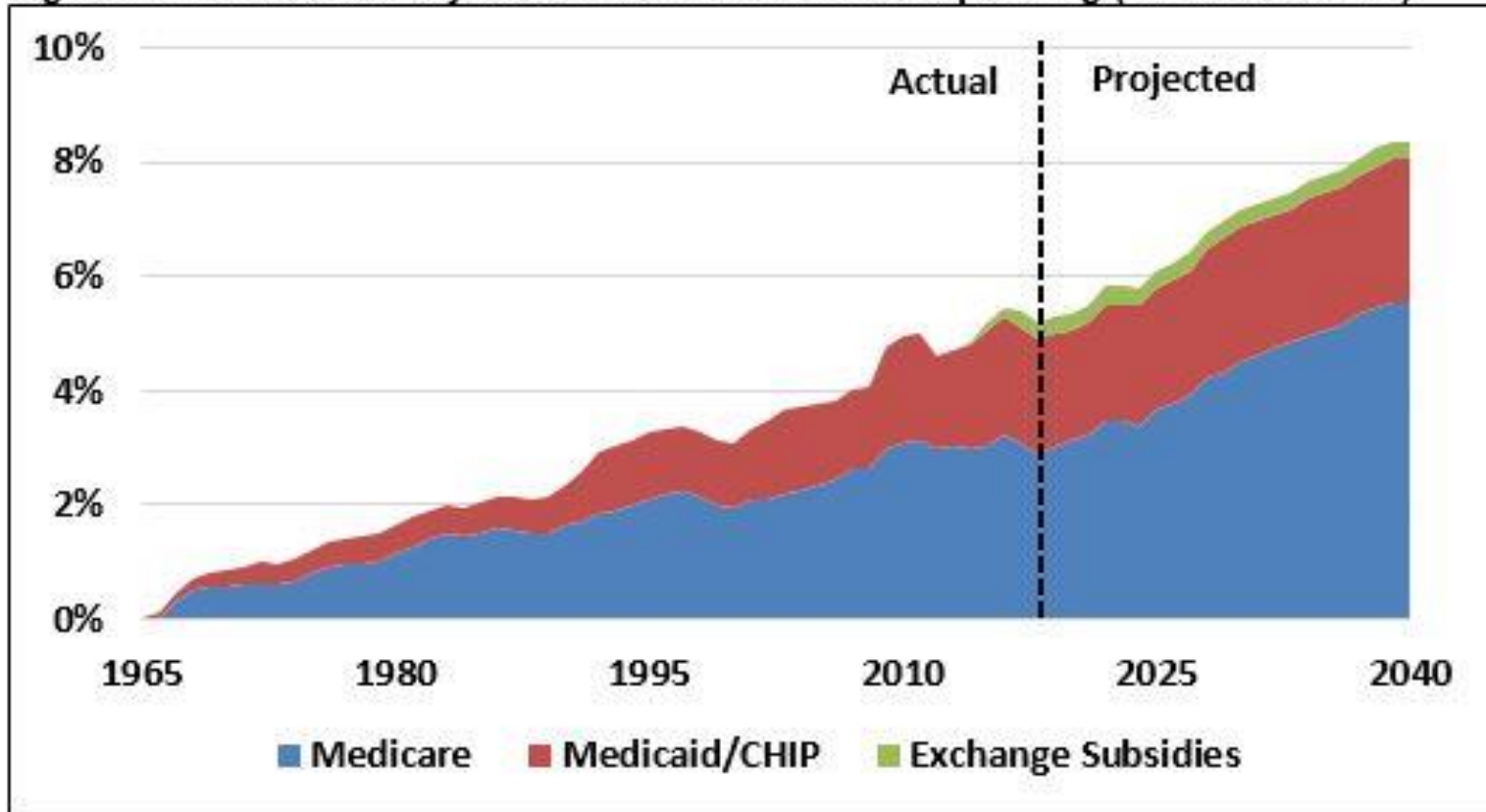


Notes: U.S. values obtained from National Health Expenditure data. Health consumption does not include investments in structures, equipment, or research.

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

# Federal Healthcare

Fig. 2: Historical and Projected Federal Health Care Spending (Percent of GDP)

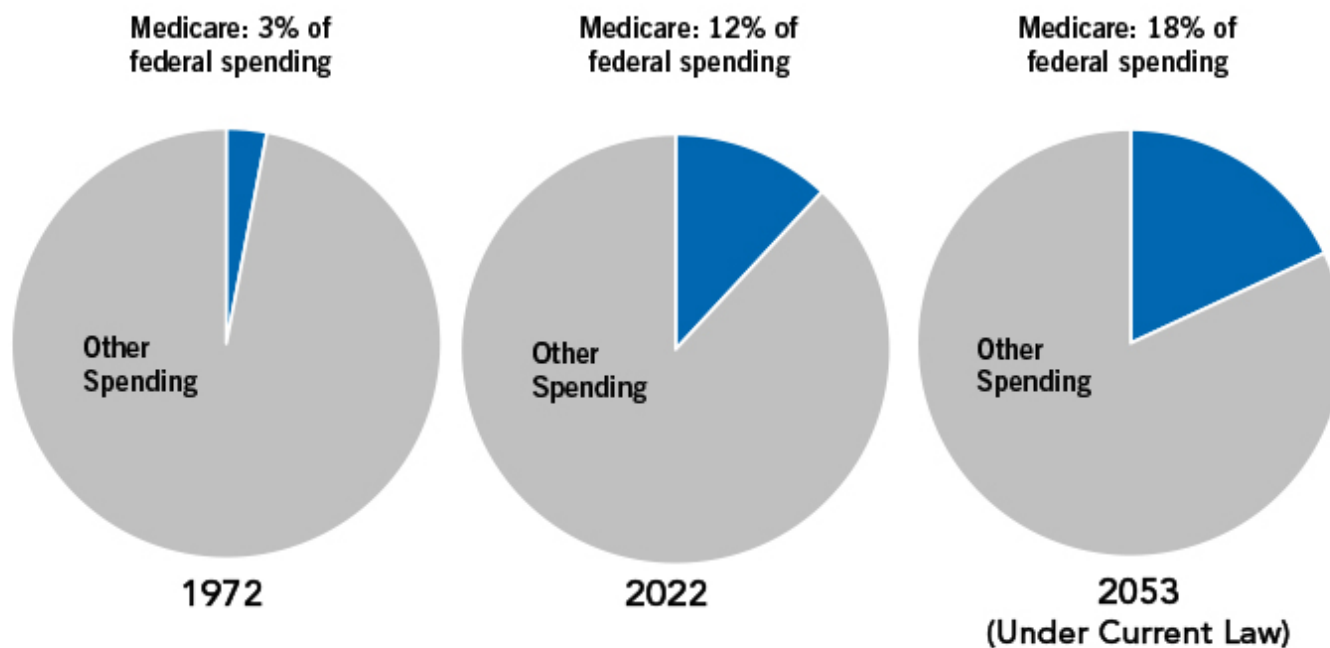


Source: Office of Management and Budget, Congressional Budget Office, CRFB calculations.

# Federal Healthcare



Medicare represents a growing share of the federal budget



SOURCES: Office of Management and Budget, *Historical Tables, Budget of the United States Government, Fiscal Year 2024*, March 2023; and Congressional Budget Office, *The Budget and Economic Outlook: 2023 to 2033*, February 2023.

NOTE: Pies represent total federal spending.

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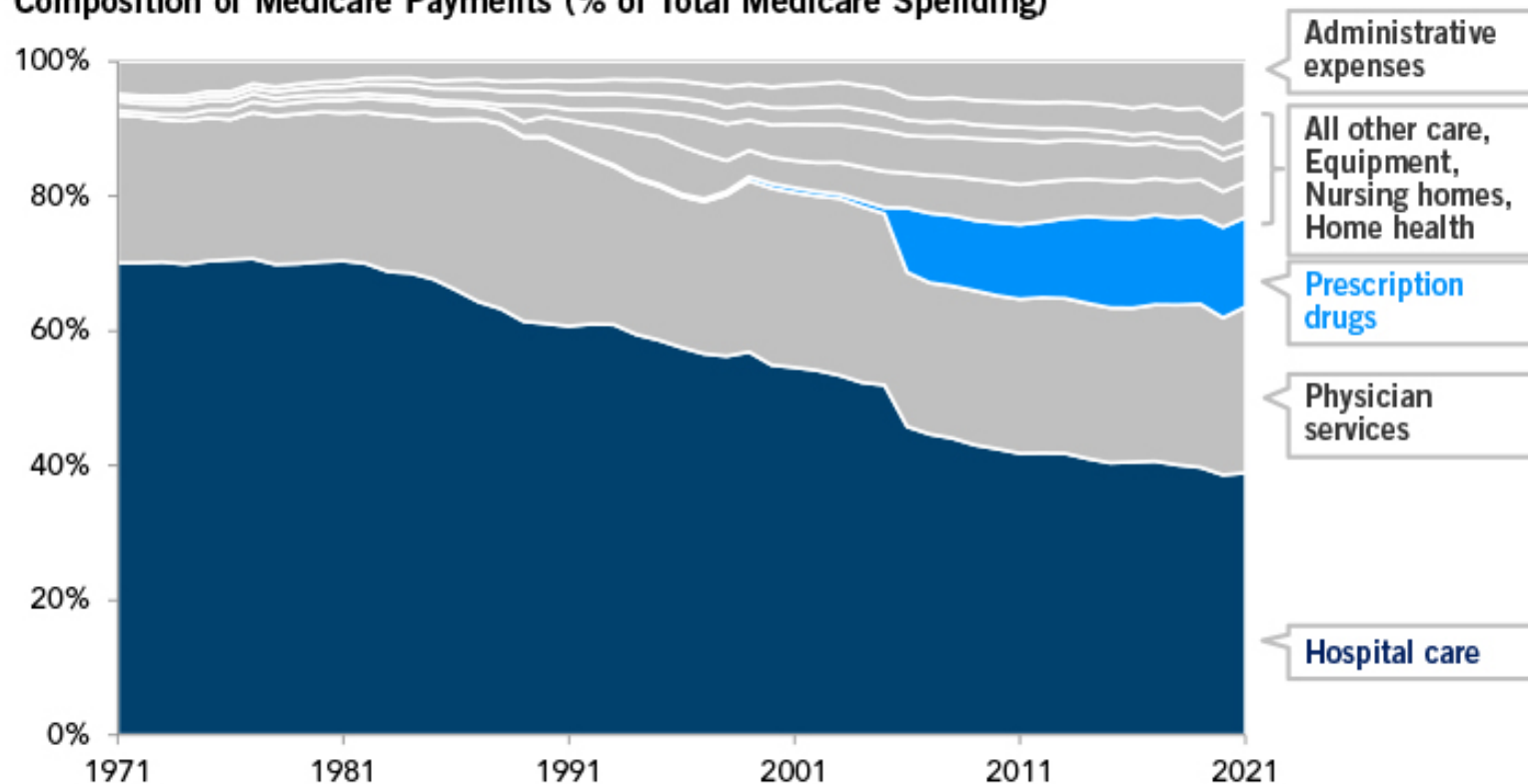
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# Federal Healthcare



Over the past 50 years, the share of Medicare spending on hospital expenses has declined the most while the share spent on prescription drugs has increased the most

Composition of Medicare Payments (% of Total Medicare Spending)



SOURCE: Centers for Medicare & Medicaid Services, *National Health Expenditure Data*, December 2022.

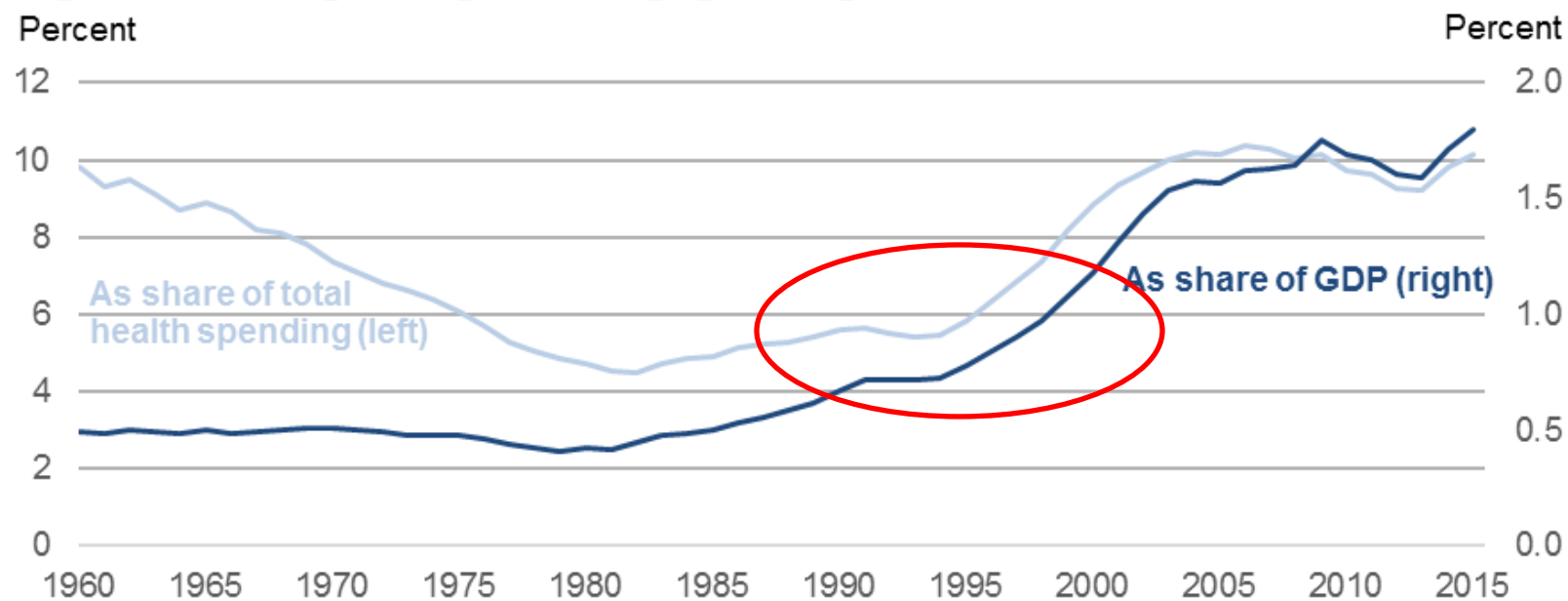
NOTES: "Equipment" includes both durable medical equipment and other non-durable medical products. "All Other Care" includes dental services, other professional services, and other health, residential, and personal care expenditures. "Administrative Expenses" includes government administrative expenses and the total net cost of health insurance expenditures.

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# Prescription Pharma \$\$ Share

Figure 1: Retail prescription drug spending

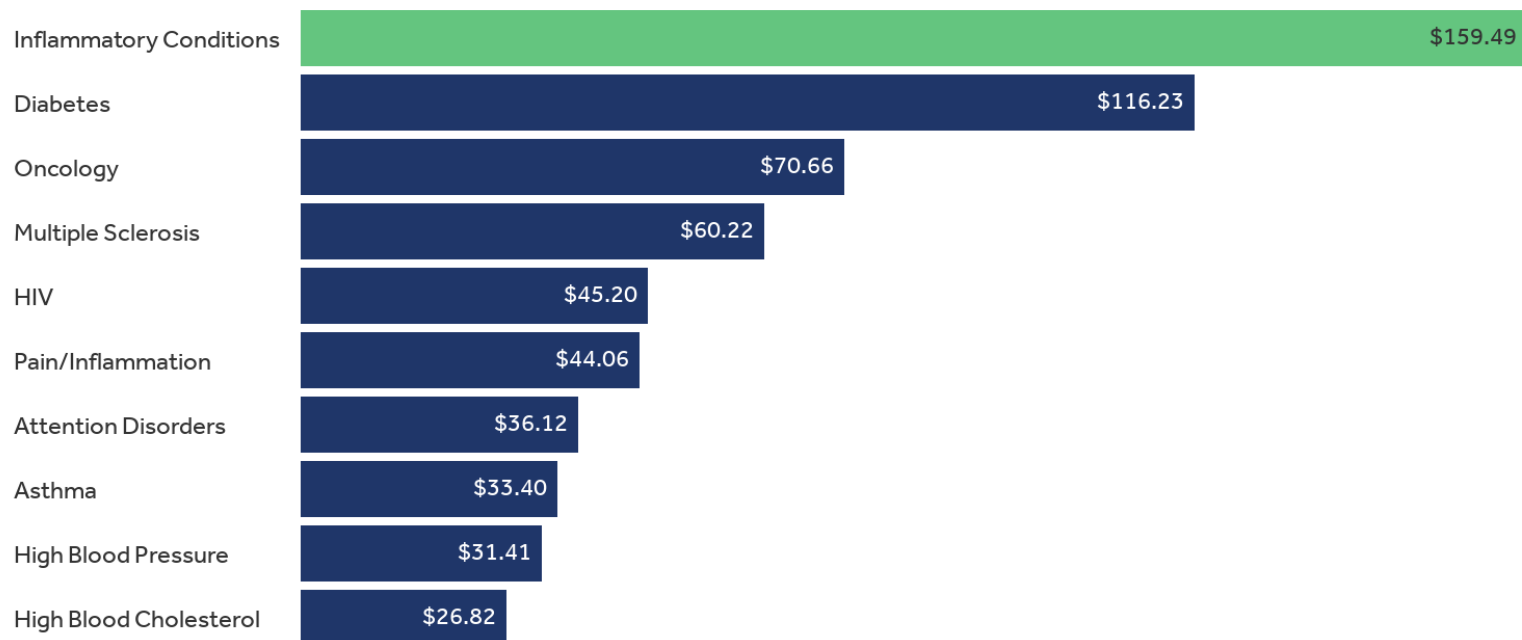


Source: The National Health Expenditure Accounts, Centers for Medicare & Medicaid Services; BEA.

BROOKINGS 

# Prescription Pharma \$\$ Categories

Express Scripts per-member-per-year spending on top 10 therapy class drugs, Private Insurance, 2017



Source: Kaiser Family Foundation analysis of data from Express Scripts 2017 Drug Trend Report

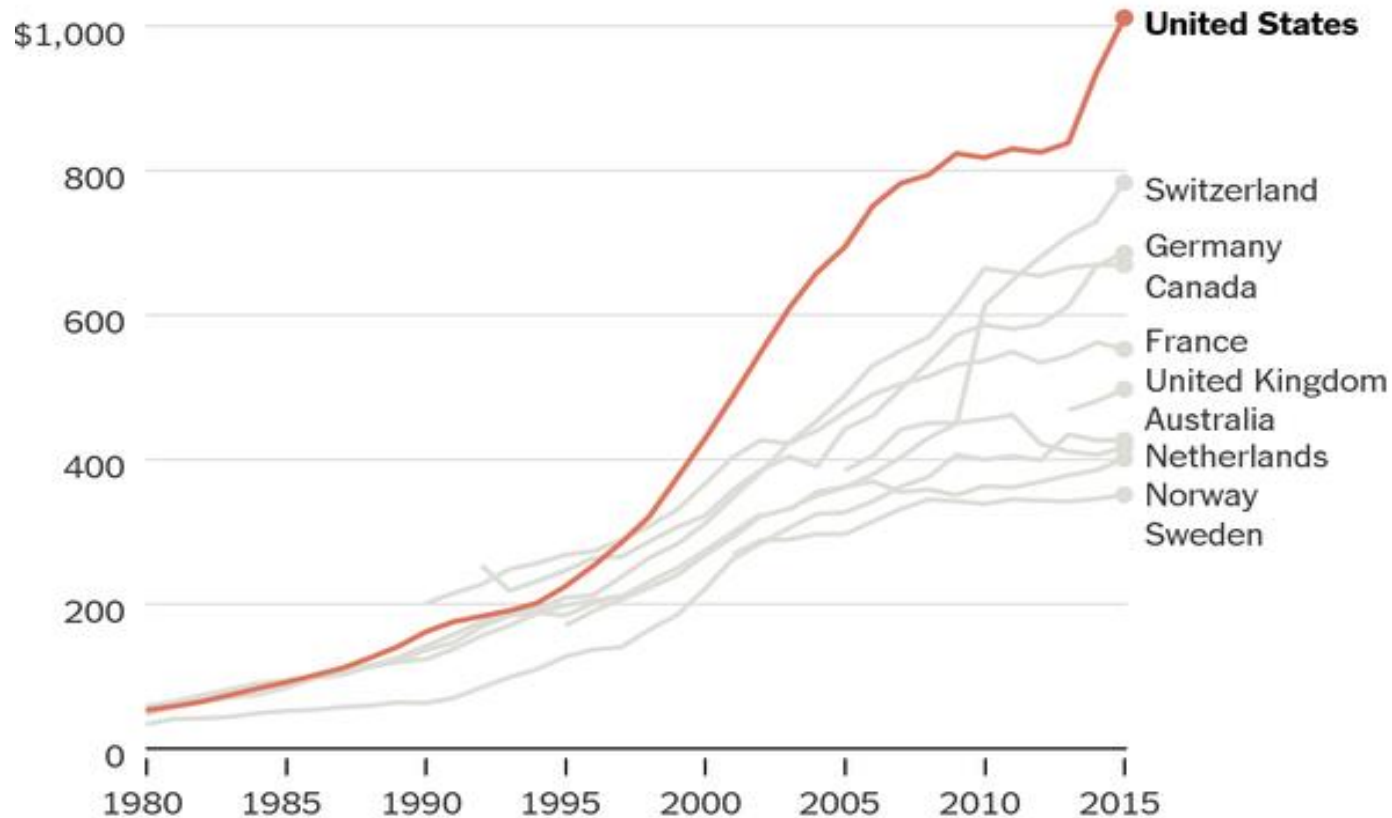
• [Get the data](#) • [PNG](#)

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**\*Total Claims in 2017: 1,401.1 million**

# Pharma Cost Comparisons



**Annual retail prescription drug spending per person**

<https://www.nytimes.com/2018/11/12/upshot/why-prescription-drug-spending-higher-in-the-us.html>

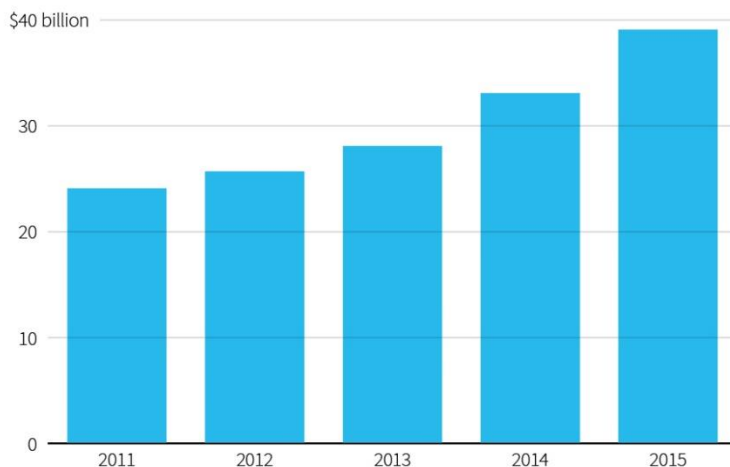


# Oncology Pharma \$\$

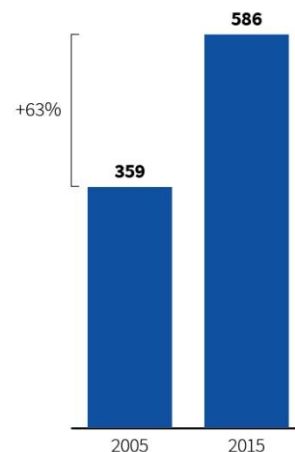
## Oncology drug prices

Scientific progress, pricing power, drive pharmaceutical companies to emphasize oncology research.

### U.S. SPENDING ON ONCOLOGY MEDICINES



### NUMBER OF CANCER DRUGS IN CLINICAL DEVELOPMENT



### PD1/PDL1 CHECKPOINT INHIBITOR PRICES

Estimated average per month\*

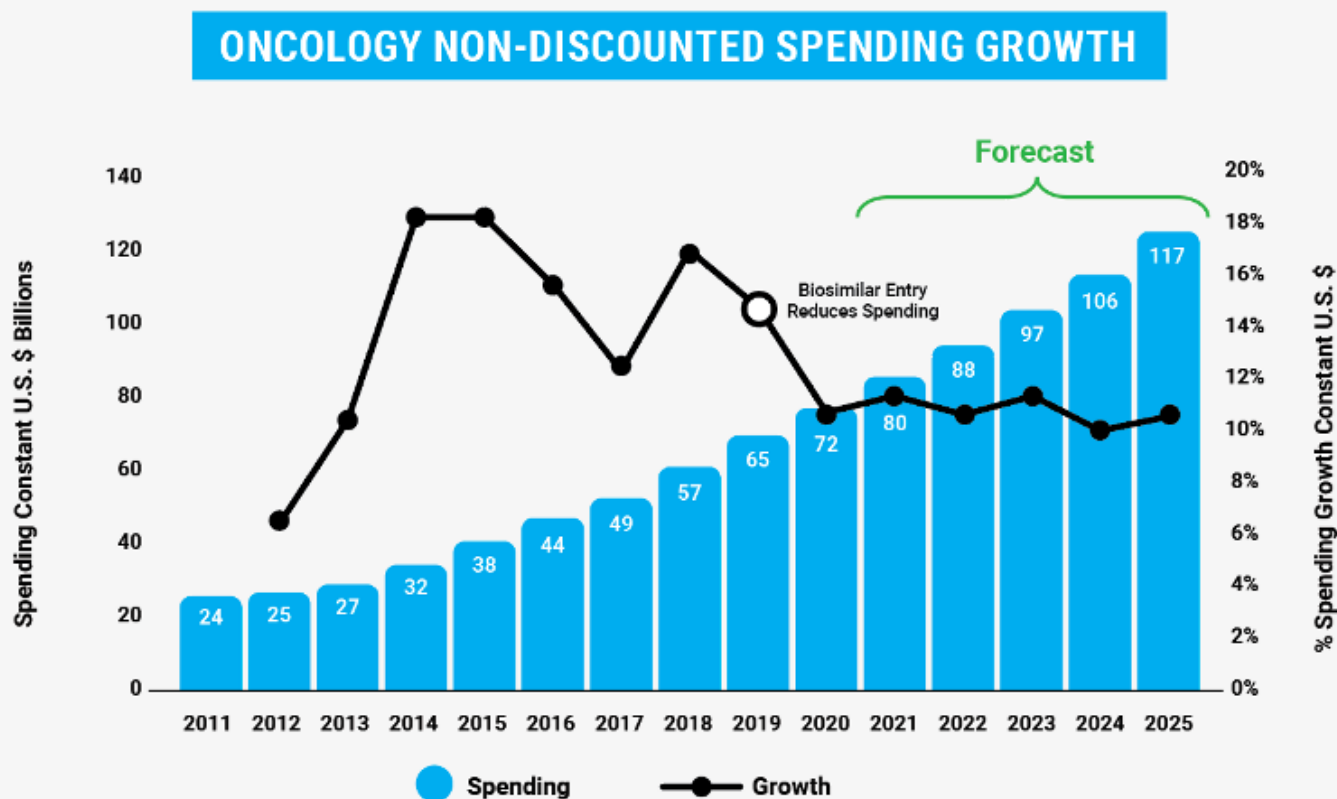
Opdivo BRISTOL-MYERS SQUIBB \$13,100	Keytruda MERCK \$13,000	Bavencio** PFIZER \$13,000	Tecentriq ROCHE HOLDING \$12,500
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\* Drug price is based on the milligrams of medicine used and varies with the weight of the individual patient.

\*\* Bavencio's price is the wholesale acquisition cost for an average patient.

Sources: QuintilesIMS Institute ; Reuters

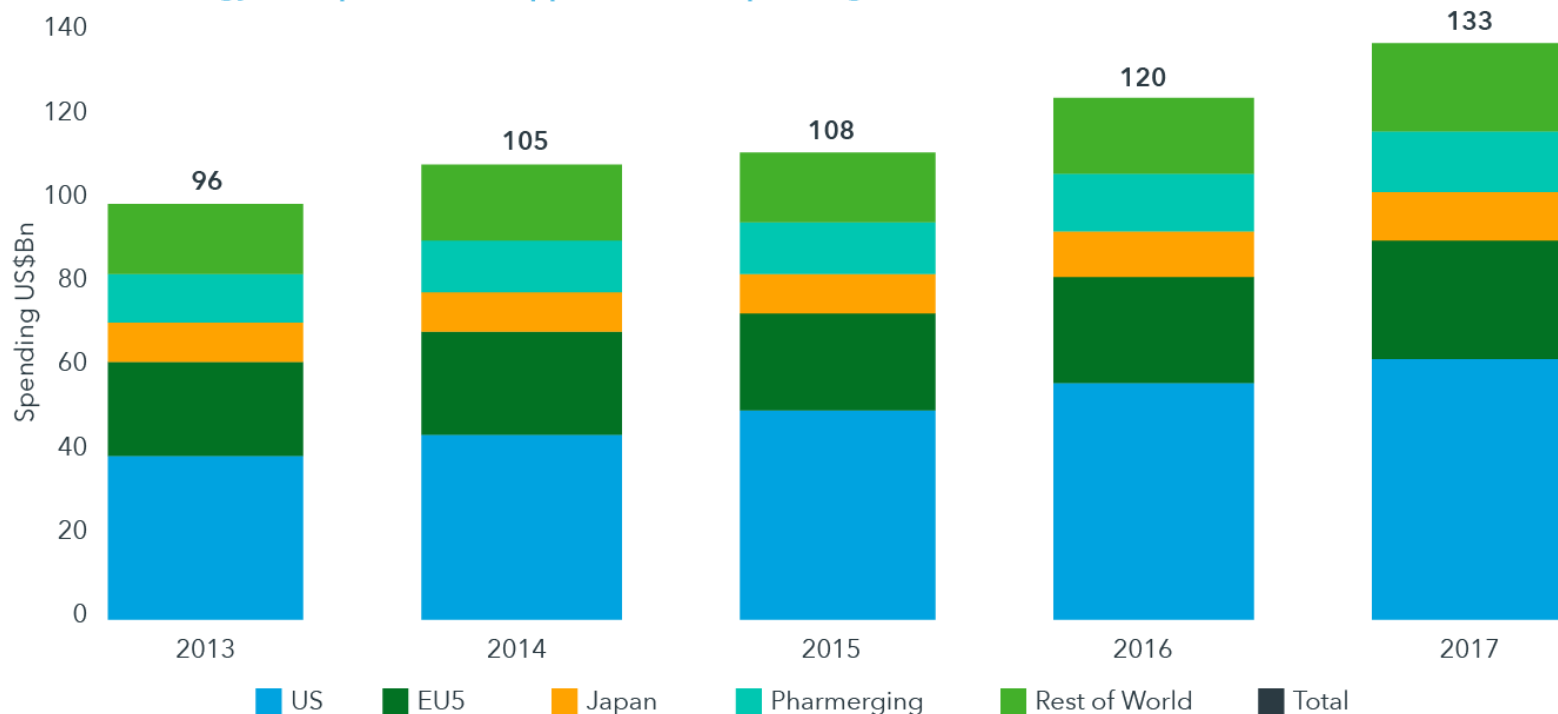
# Oncology Pharma \$\$



Source: IQVIA Institute for Human Data Science, May 2021. "The Use of Medicines in the U.S.: Spending and Usage Trends and Outlook to 2025."

# Oncology Pharma Spending

Global Oncology Therapeutic and Supportive Care Spending, US\$Bn, 2013–2017



Source: IQVIA MIDAS; IQVIA Institute, Dec 2017

Notes: Therapeutic oncologics include those classified by EphMRA (European Pharmaceutical Market Research Association) as cytotoxics in the L1 or L2 classes, as well as radiotherapeutics (V3C) and specific molecules classified elsewhere but used primarily in cancer (lenalidomide, aldesleukin, pomalidomide). Supportive care includes anti-nauseants and cancer detox agents (A4A and V3D), erythropoietins (B3C), GM-CSF white blood cell boosters (L3A), other interferon therapies used in cancer (L3B excluding multiple sclerosis drugs), and bisphosphonates used to prevent bone metastases (M5B4).

Report: Global Oncology Trends 2018: Innovation, Expansion and Disruption. IQVIA Institute for Human Data Science, May 2018

# Oncology Pharma Spending

Good site for prescription drug spending data.

Look through the figures. We will discuss some in class.

<https://www.healthsystemtracker.org/chart-collection/recent-forecasted-trends-prescription-drug-spending/#Nominal%20and%20inflation-adjusted%20per%20capita%20spending%20on%20retail%20prescription%20drugs,%201960-2021>

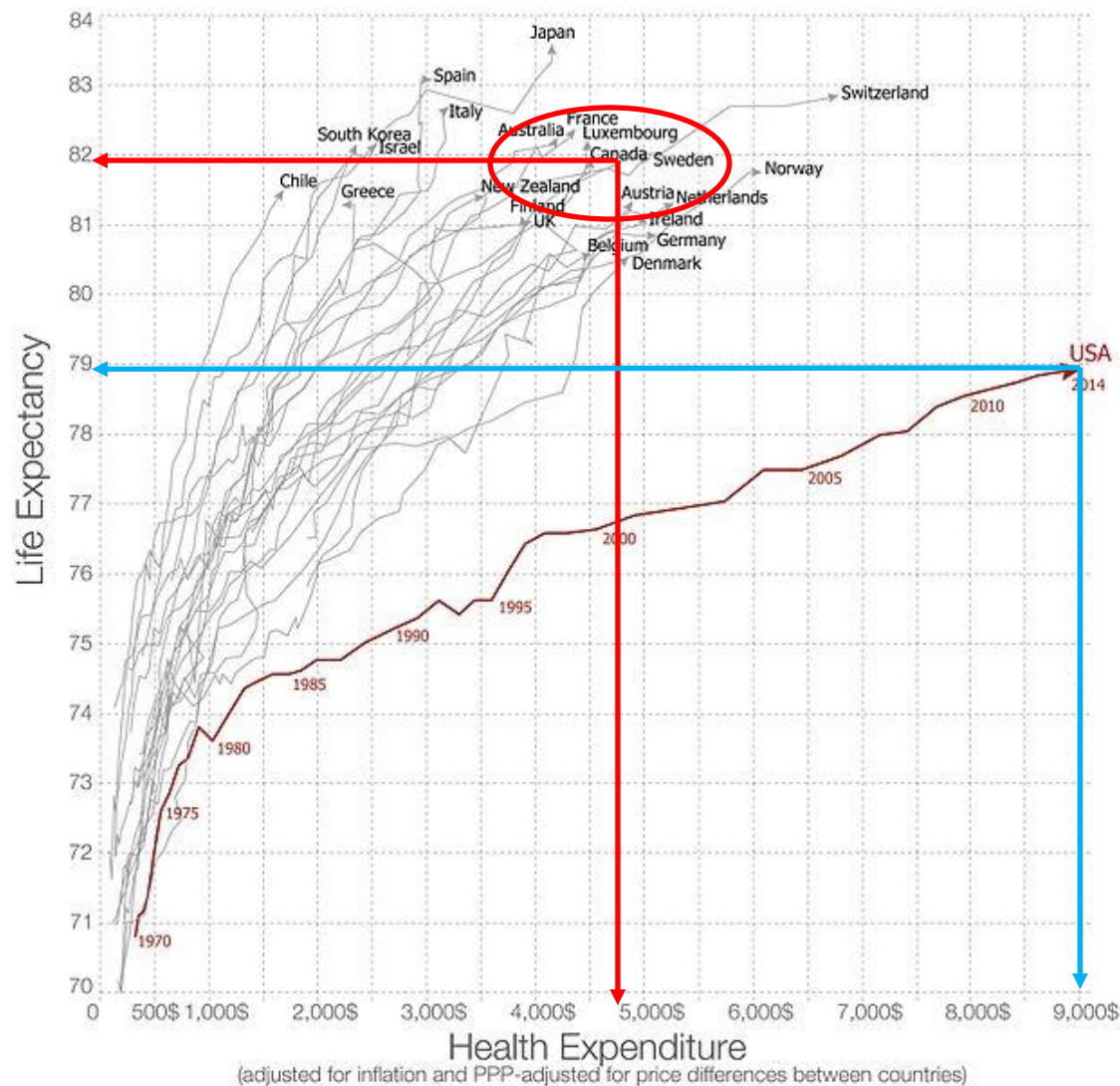
# Financing Healthcare

OECD Comparative Figures:

<https://ourworldindata.org/financing-healthcare>

Provides a lot of information on various metrics

# Spending v. Life Expectancy

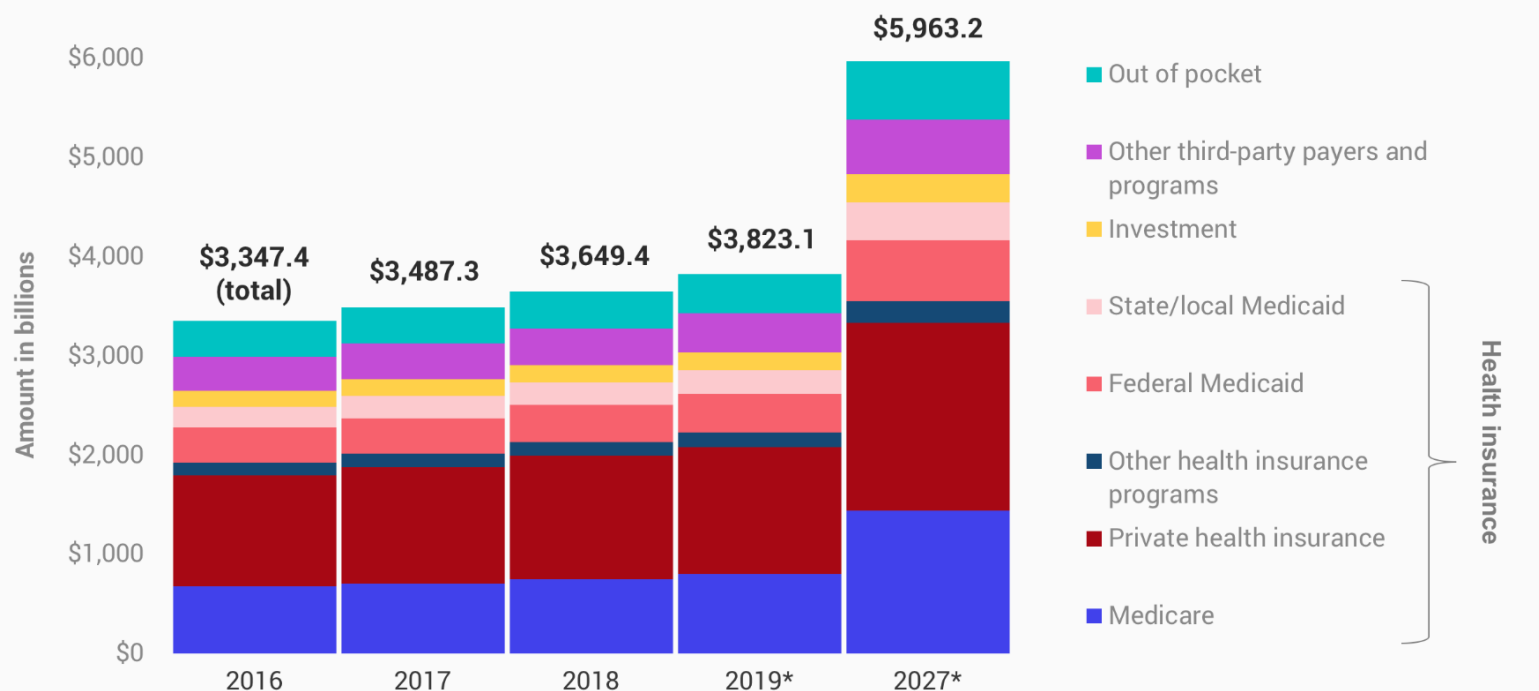


# Medical Care Delivery

- Private and public financing
- Changes in hospital usage and pricing
- Growth in managed care
- U.S. Insurance programs
  - Private – e.g., employer based: BCBS, Aetna, United Health, etc.
  - Medicare
  - Medicaid

# Financing of Health Care

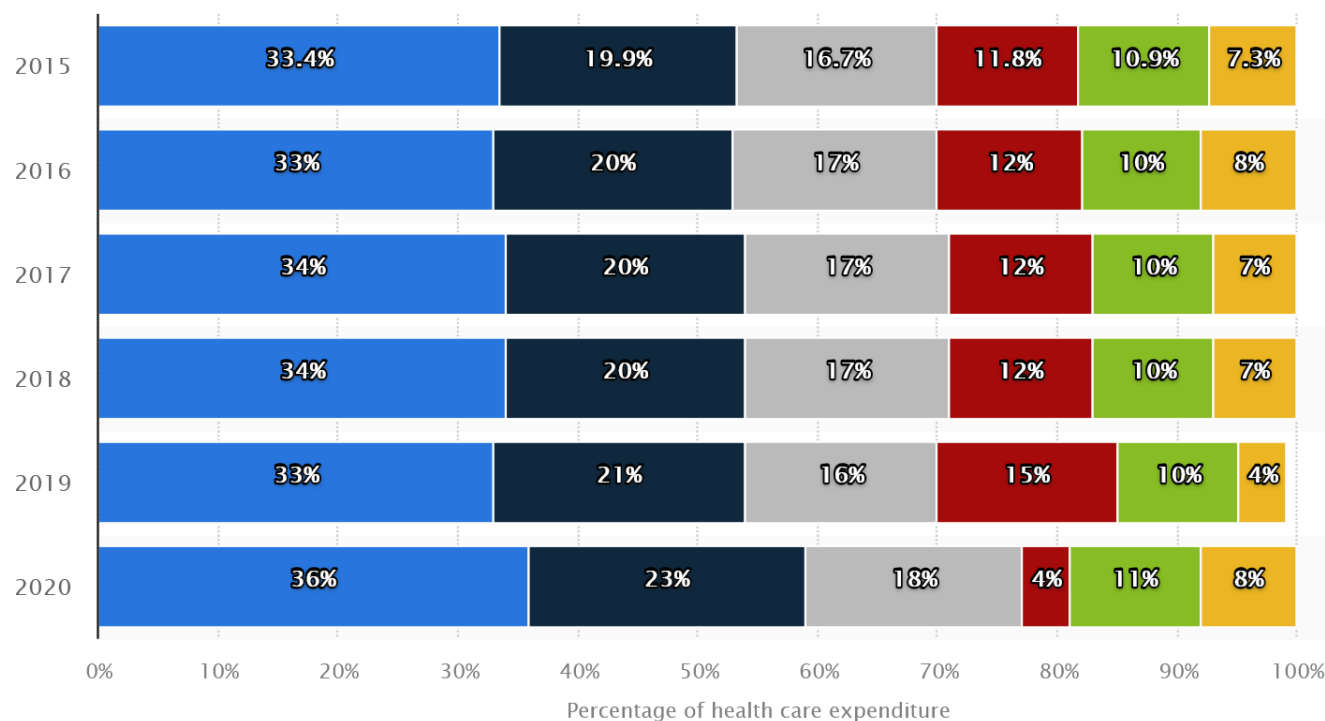
## National Health Expenditures by Source of Funding



\*Projected figures



# Financing of Health Care



● Private insurance      ● Medicare      ● Medicaid  
● Other government programs      ● Out-of-pocket      ● Other private

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Distribution of U.S. health care expenditure from 2015 to 2020, by payer