



Osher Lifelong Learning Institute, Winter 2022 **Contemporary Economic Policy**

Dartmouth College
April-May, 2023

Host: Jon Haveman, Ph.D.
National Economic Education Delegation



Available NEED Topics Include:

- US Economy
- Healthcare Economics
- Climate Change
- Economic Inequality
- Economic Mobility
- Trade and Globalization
- Minimum Wages
- Immigration Economics
- Housing Policy
- Federal Budgets
- Federal Debt
- Black-White Wealth Gap
- Autonomous Vehicles
- Healthcare Economics



Course Outline

- **Contemporary Economic Policy**

- Week 1 (4/3): US Economic Update (Geoffrey Woglom, Amherst College)
- Week 2 (4/10): Monetary Policy (Geoffrey Woglom)
- **Week 3 (4/17): Healthcare Economics (Jon Haveman, NEED)**
- Week 4 (4/24): Trade and Globalization (Alan Deardorff, University of Michigan)
- Week 5 (5/1): Trade Deficits and Exchange Rates (Alan Deardorff)
- Week 6 (5/8): Cryptocurrencies (Jon Haveman)

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Submitting Questions

- **Please submit questions in the chat, or by raising your digital “hand.”**
 - I will try to handle them as they come up.
- **We will do a verbal Q&A once the material has been presented.**
 - I will also try to take some verbal questions during the break.
- **Slides will be available from the NEED website tomorrow (https://NEEDEcon.org/delivered_presentations.php)**

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Health(care) Economics

OLLI – Dartmouth College
April 17, 2023

Jon Haveman, Ph.D.
NEED



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Credits and Disclaimer

- **This slide deck was authored by:**
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 - Robert Hansen, Dartmouth College
- **Disclaimer**
 - NEED presentations are designed to be nonpartisan.
 - It is, however, inevitable that the presenter will be asked for and will provide their own views.
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Outline

- What is Health(care) Economics?
- Health Insurance and Outcomes
- Health Care Systems and Institutions



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What is Health(care) Economics?

- Economics has 2 primary fields: Micro and Macro
- Health Economics is a field of **MICRO**economics that focuses on the health care industry.
- Examples of other subfields of microeconomics include:
 - labor economics, industrial organization, economics of education, public economics, and urban economics.



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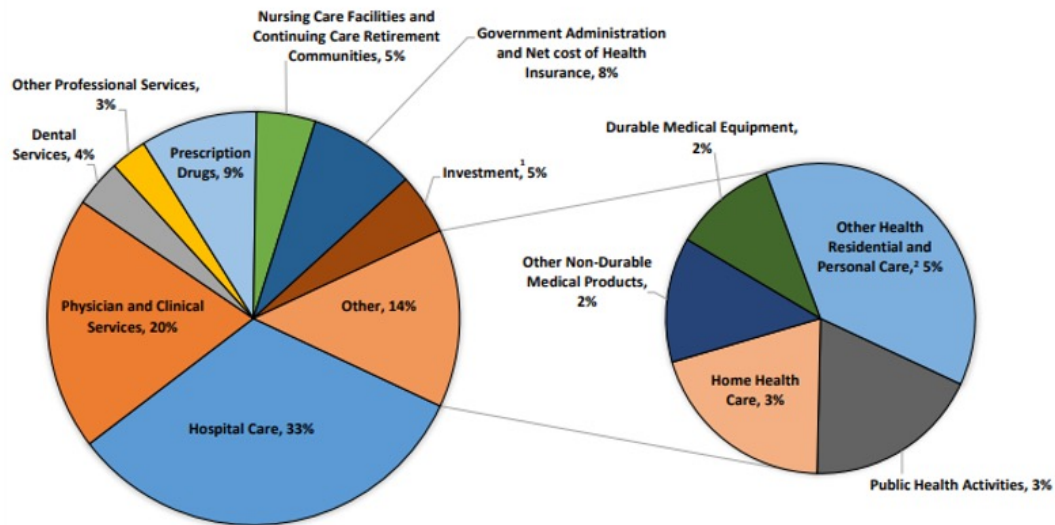
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Health Economics is part of Microeconomics

- Although health economics is part of “micro-” economics, it is actually very big:
 - In 2019, U.S. national health expenditures were **17.7% of GDP**, which is equivalent to around **\$3.8 trillion**.
 - U.S. Healthcare is the 5th largest economy in the world.
- For comparison, GDP in each country in 2019:
 - Germany: \$3,845 trillion (4th largest economy)
 - UK: \$2,827 trillion (6th largest economy)
 - France : \$2,715 trillion (7th largest economy)



Where the money goes?



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

Markets Studied in Health Economics

- **Markets for:**

- Physicians
- Nurses
- Hospital facilities
- Nursing homes
- Pharmaceuticals
- Medical supplies (such as diagnostic and therapeutic equipment)
- **Health Insurance**



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Why Are We Talking About the Market for Health Insurance?



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The Three Legs of the Healthcare Stool

- The market for Health Insurance is where they all come together.

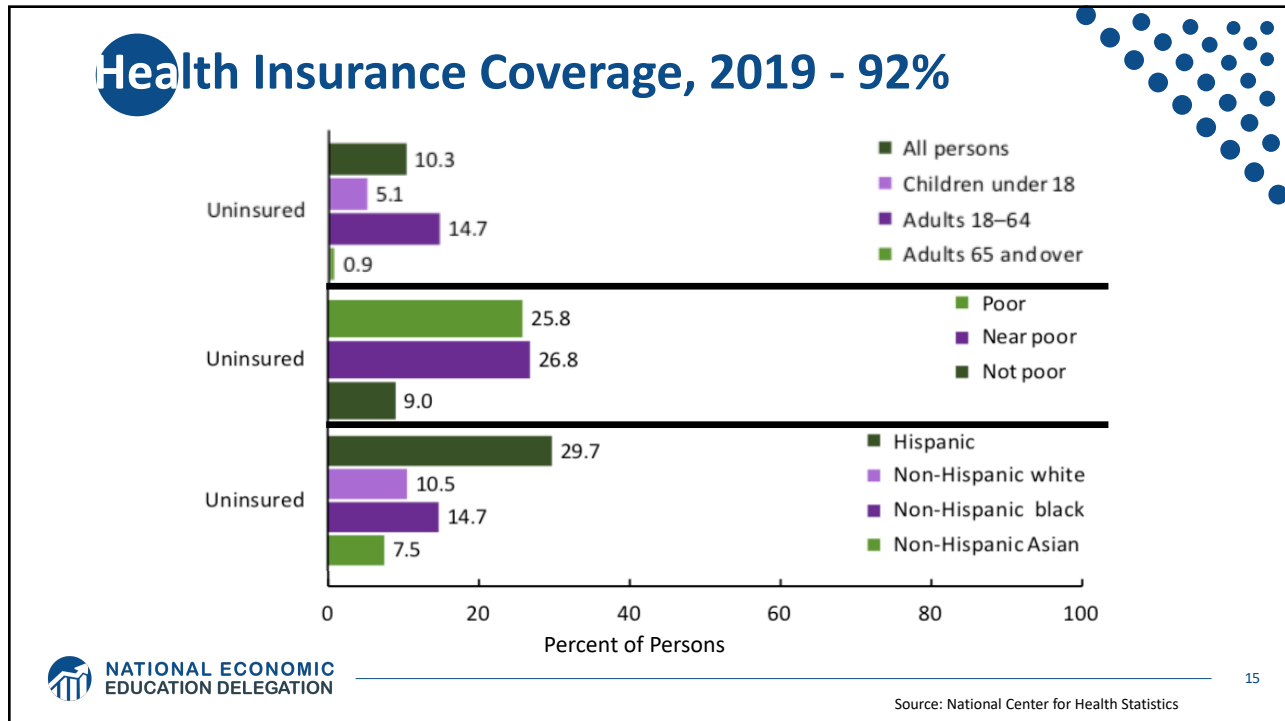
- Access
- Quality
- Cost

- We will discuss metrics of performance for each leg.

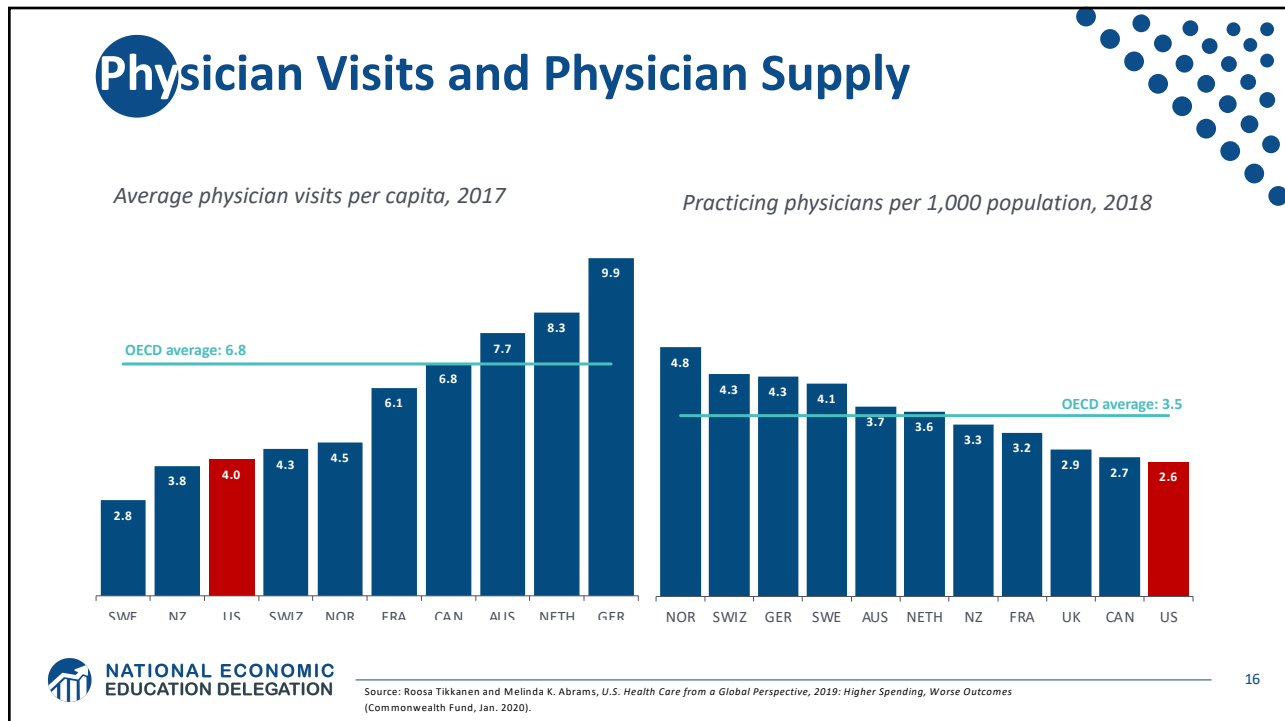
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Access

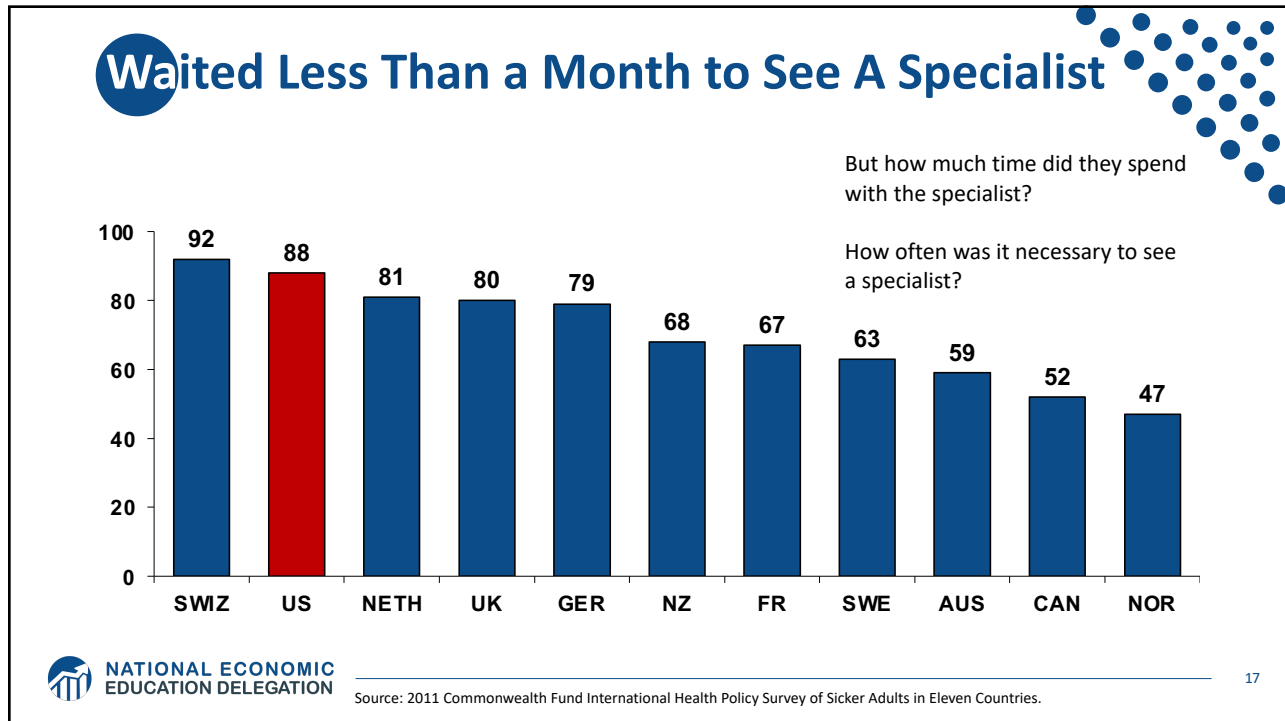
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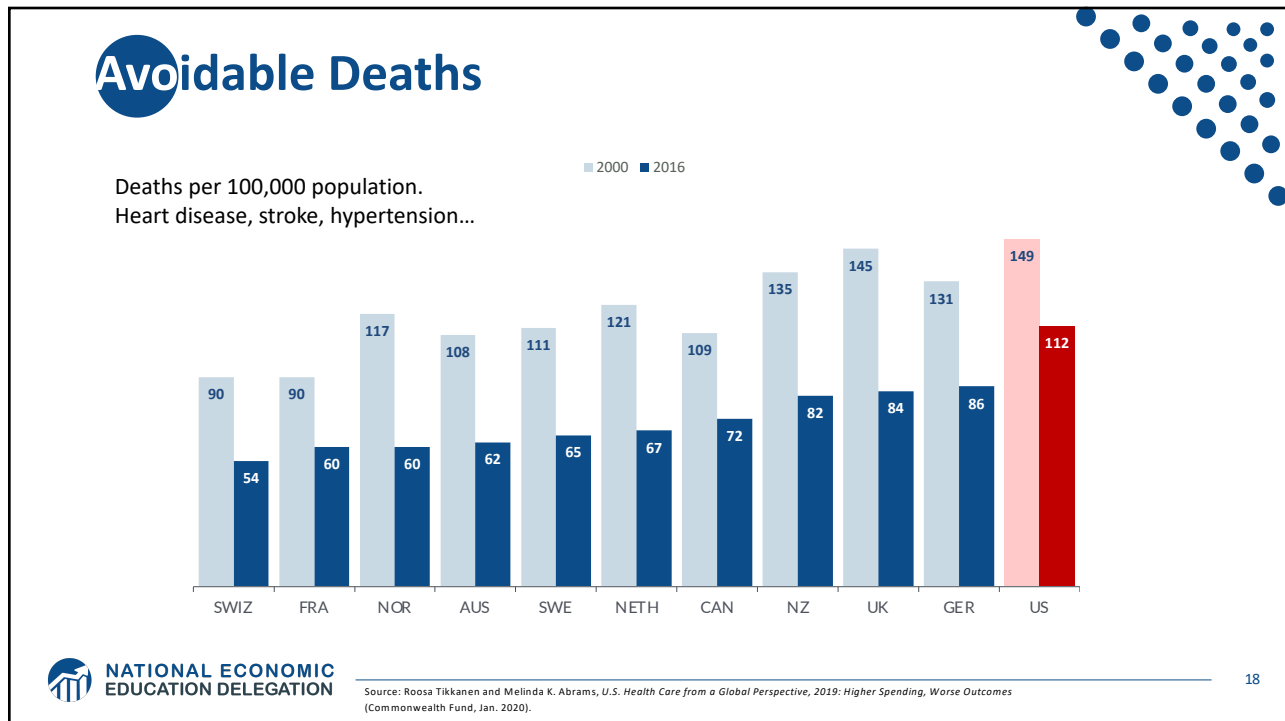
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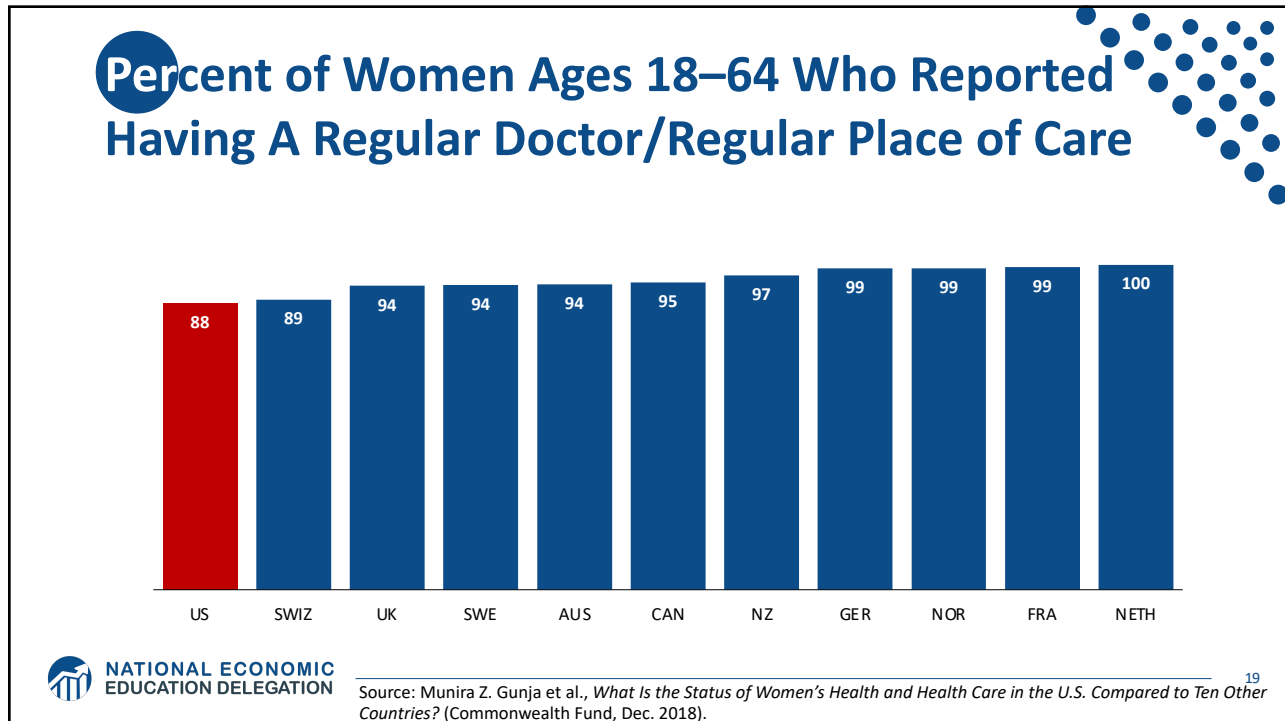
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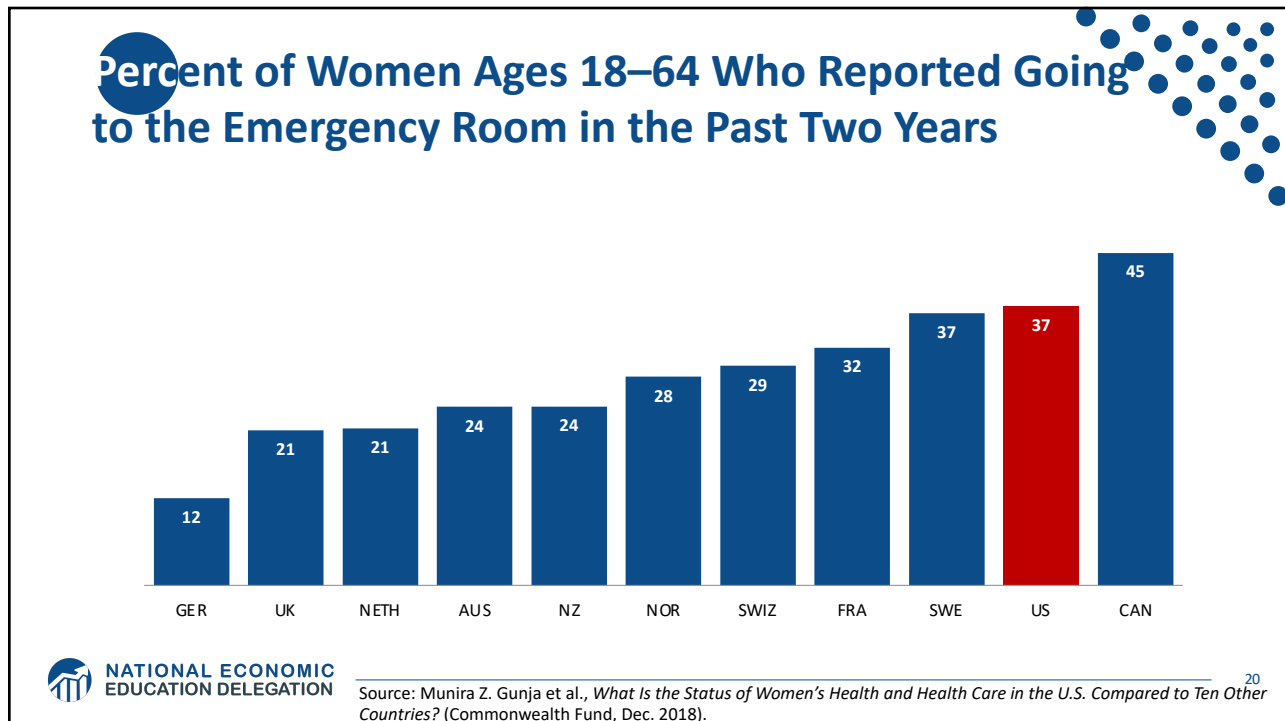
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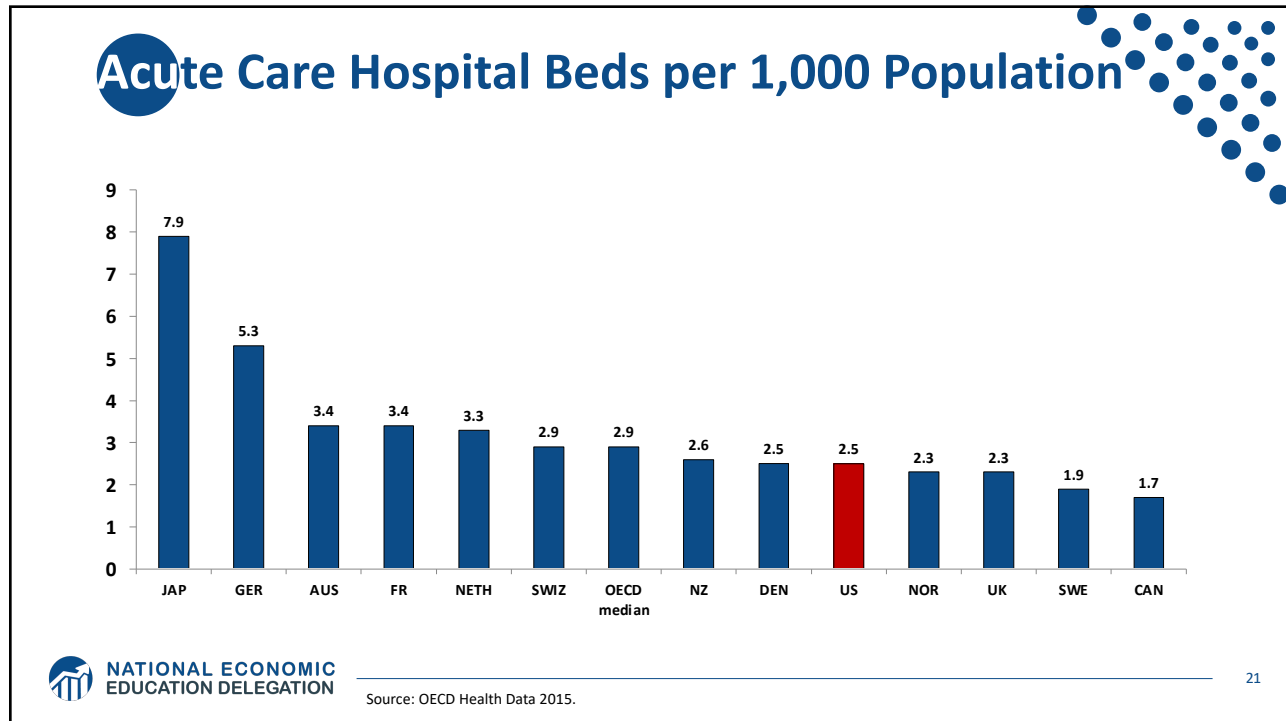
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Access Notes

- Insurance coverage in the U.S. is not universal.
- Supply of medical personnel and equipment may be lower than elsewhere.
- Avoidable (amenable) deaths are higher, perhaps indicating less access to care.
- Emergency room use is higher in the U.S. than elsewhere.
- Specialized medicine is more accessible.

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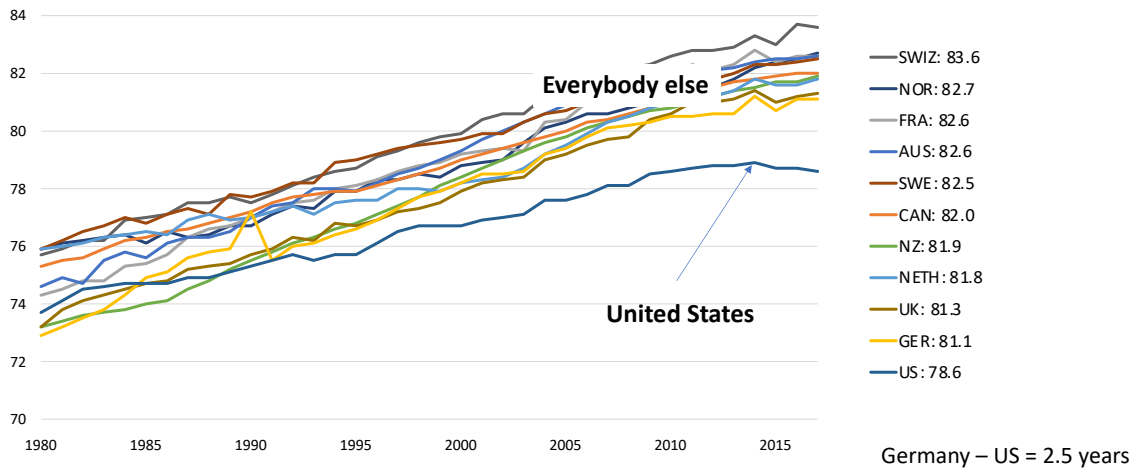
Quality



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Life Expectancy: How Does the US Compare?



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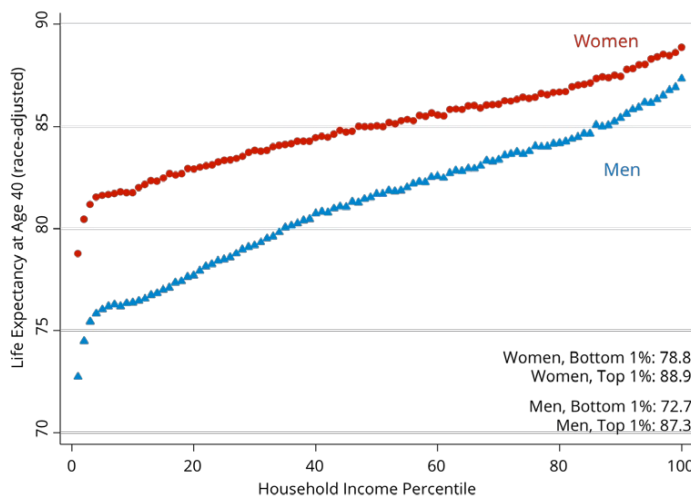
Source: Roosa Tikkanen and Melinda K. Abrams, *U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes* (Commonwealth Fund, Jan. 2020).

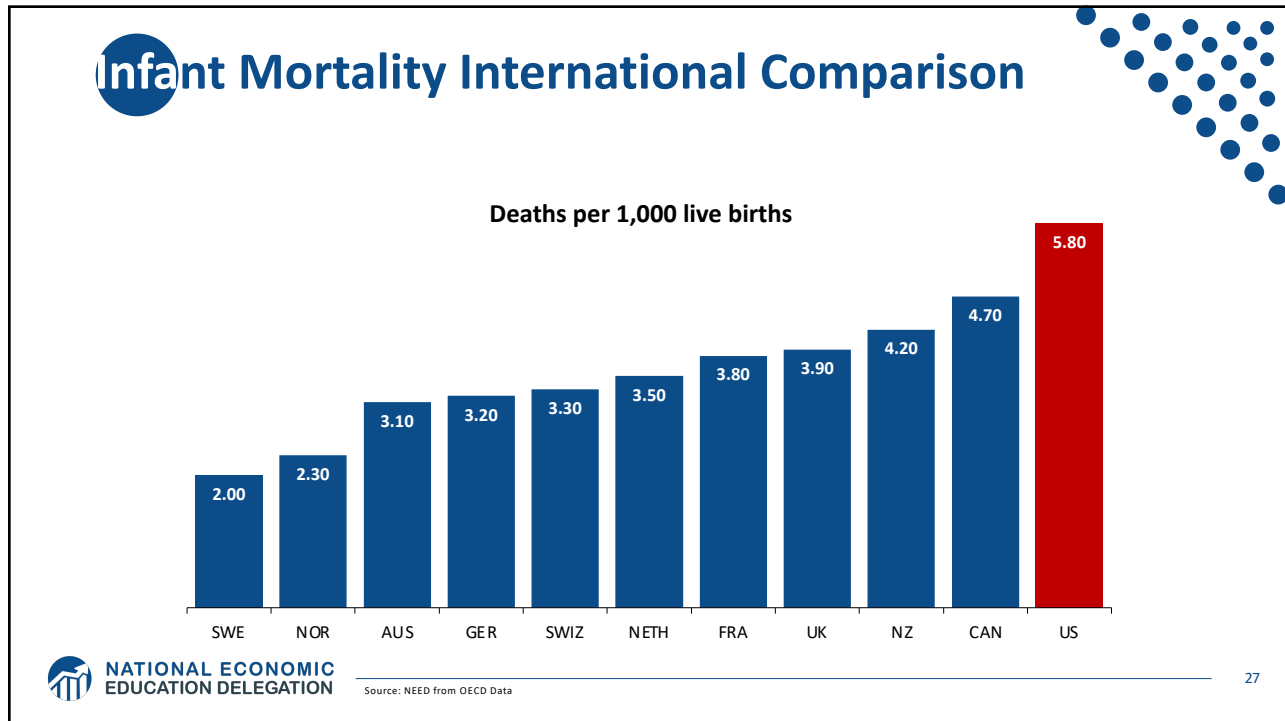
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Life Expectancy at Birth by Race, 2017

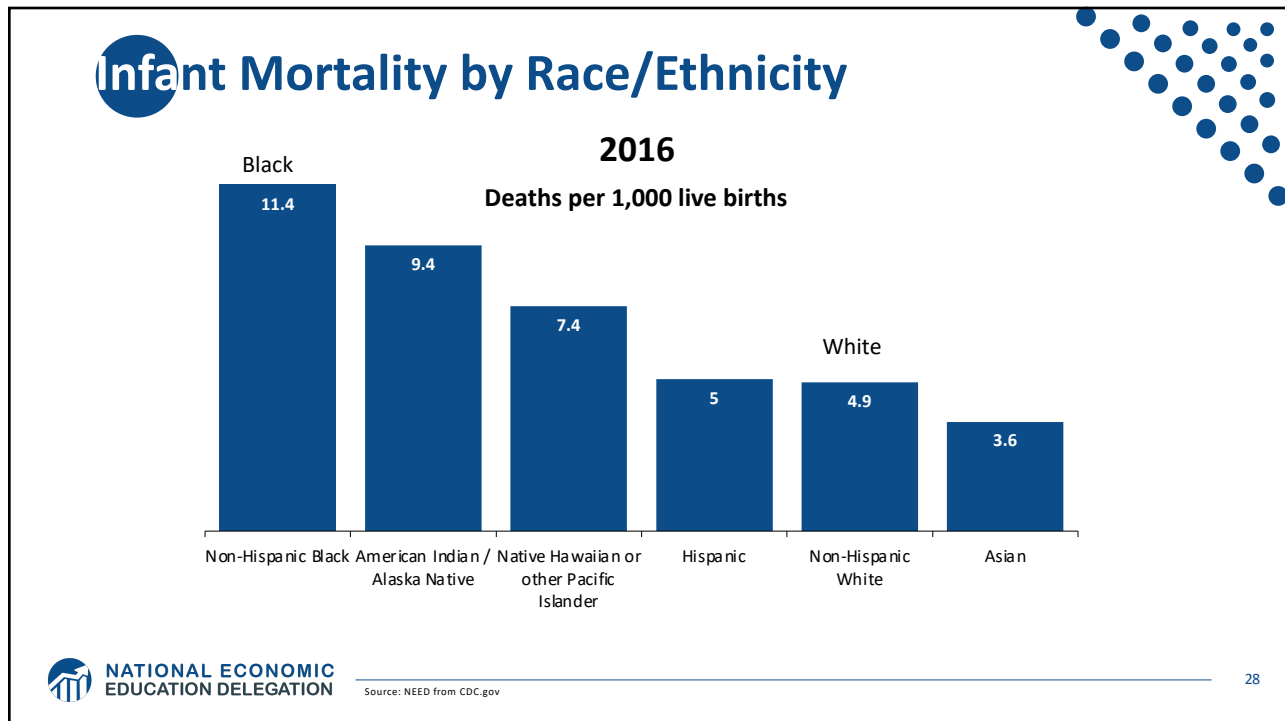
Race/Ethnicity	Life Expectancy (Years)
All Races	78.6
White	78.8
Black	75.3
Hispanic	81.8

Income Also Matters – Reflecting Access?

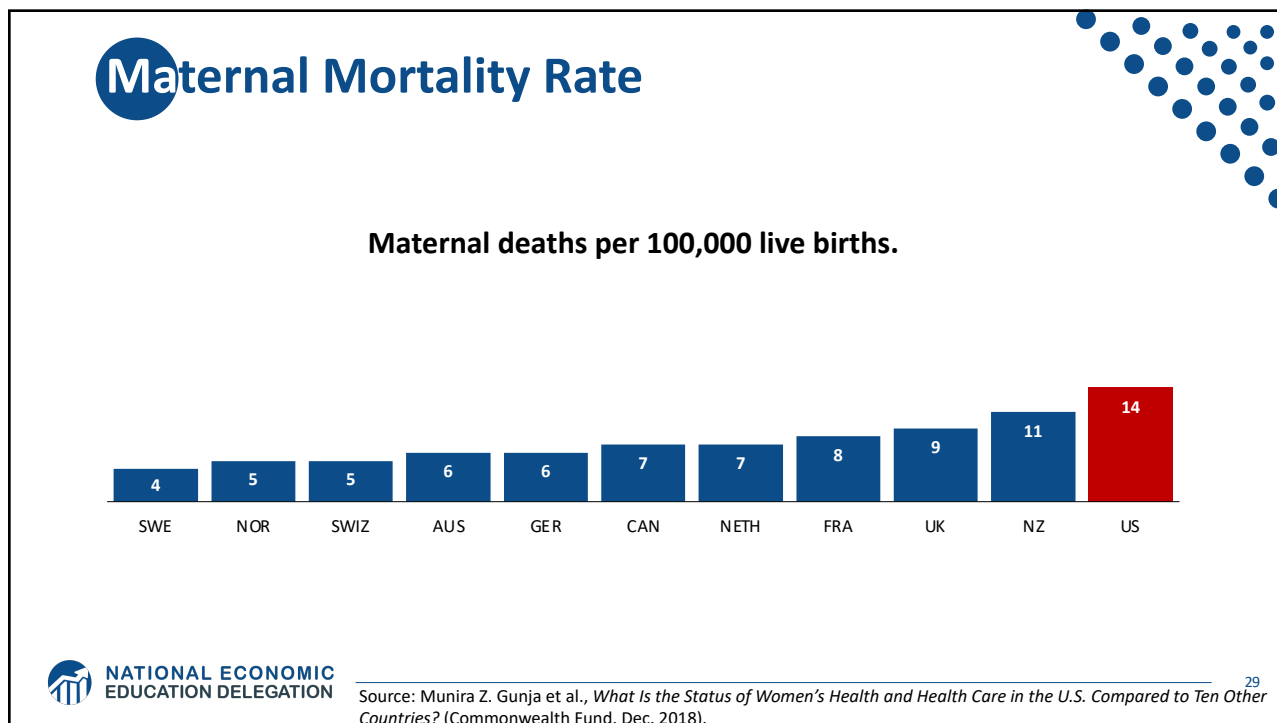




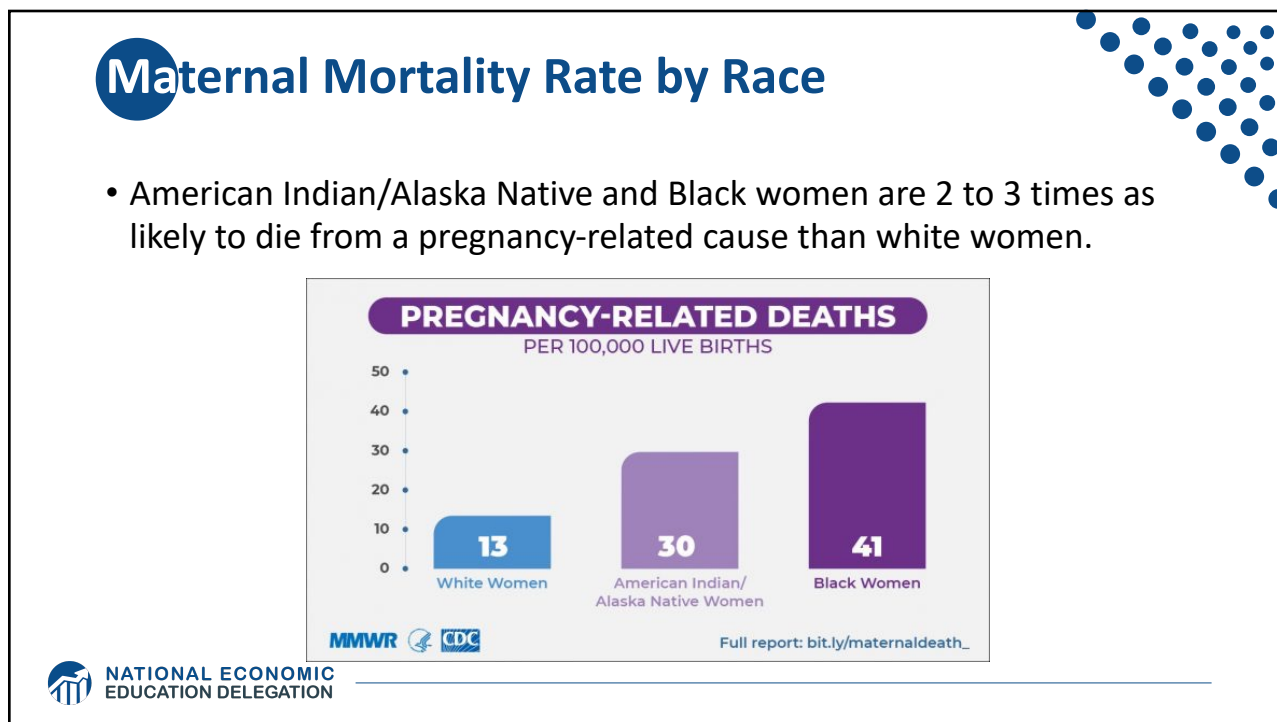
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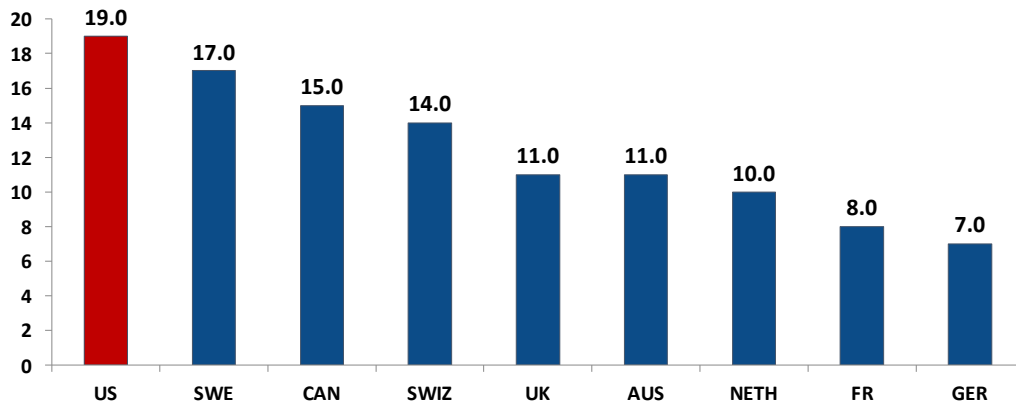


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Percent of adults who have experienced medical, medication, or lab errors or delays



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Source: 2016 Commonwealth Fund International Health Policy Survey.

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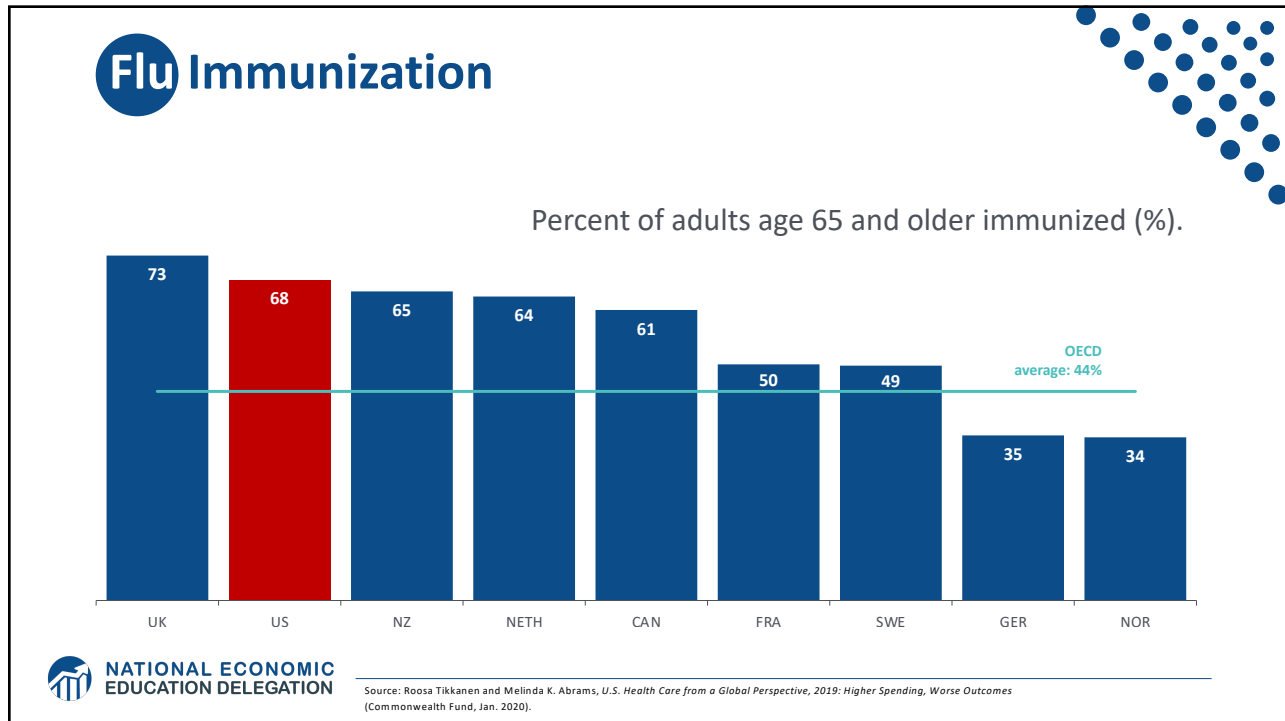
Prevention and Screening

- The U.S. excels in **some** prevention measures:
 - including flu vaccinations and breast cancer screenings.
- The U.S. has:
 - The highest average five-year survival rate for breast cancer,
 - but the Lowest for cervical cancer.

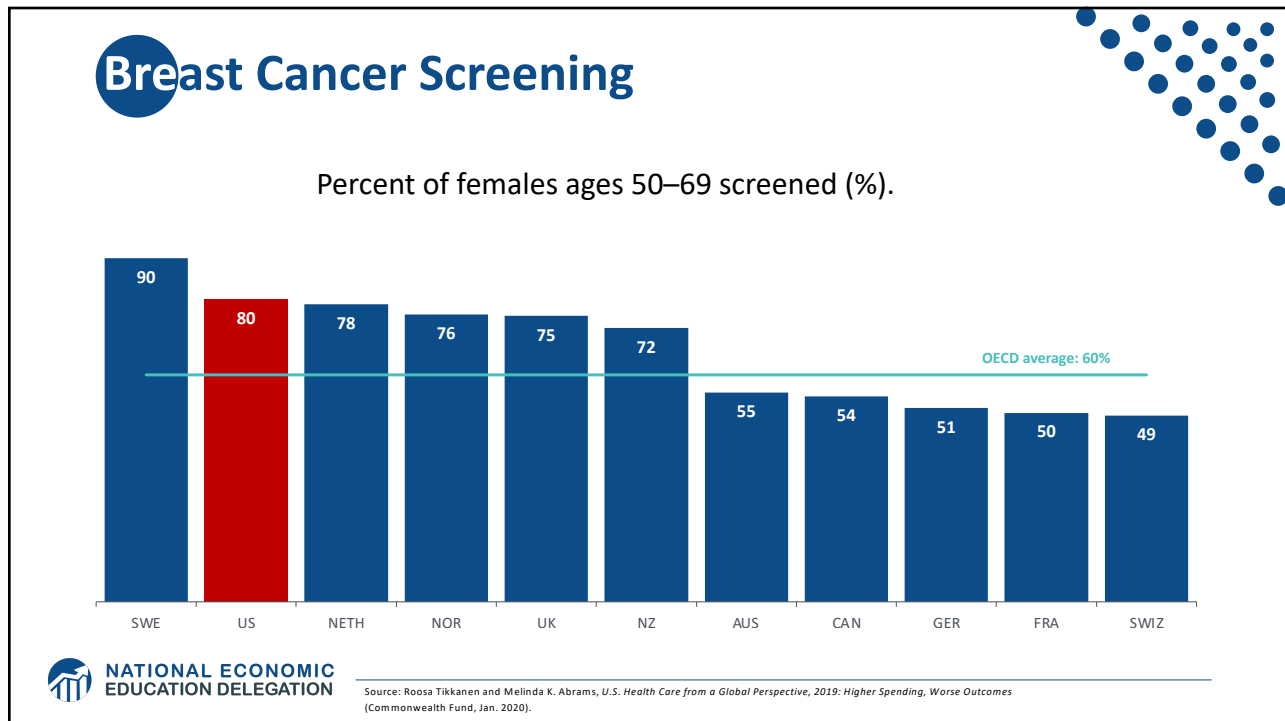


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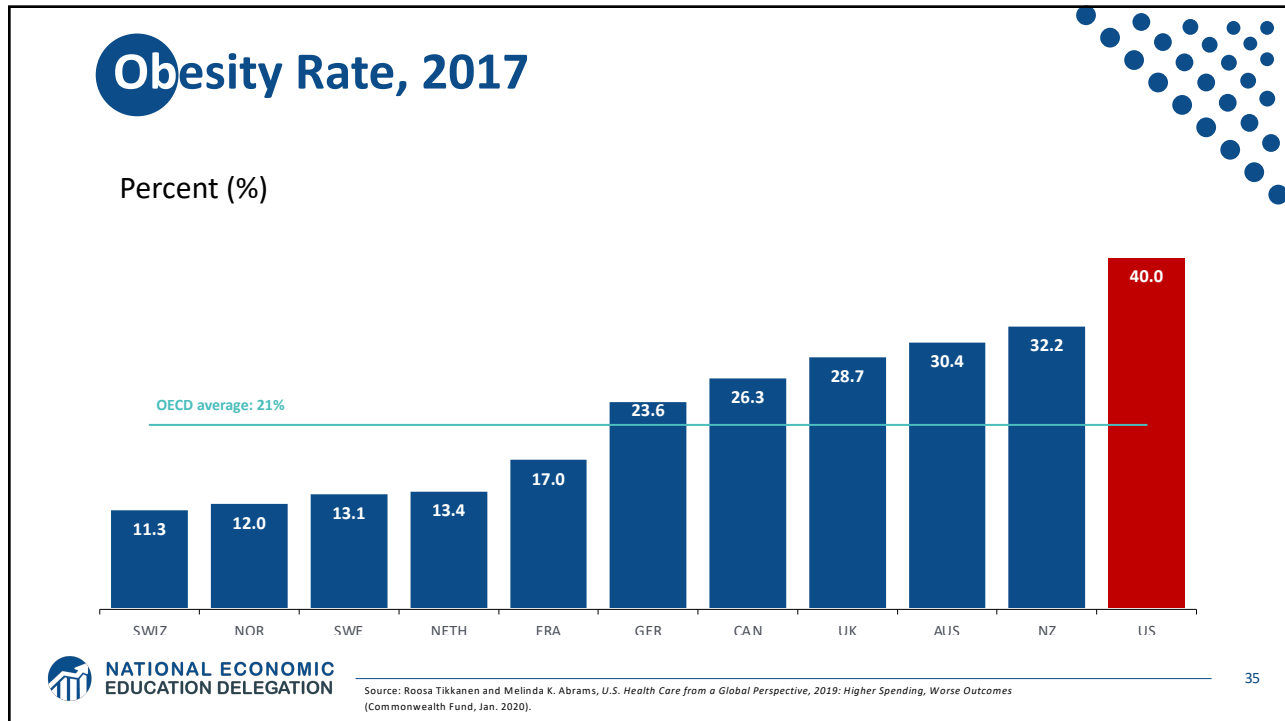
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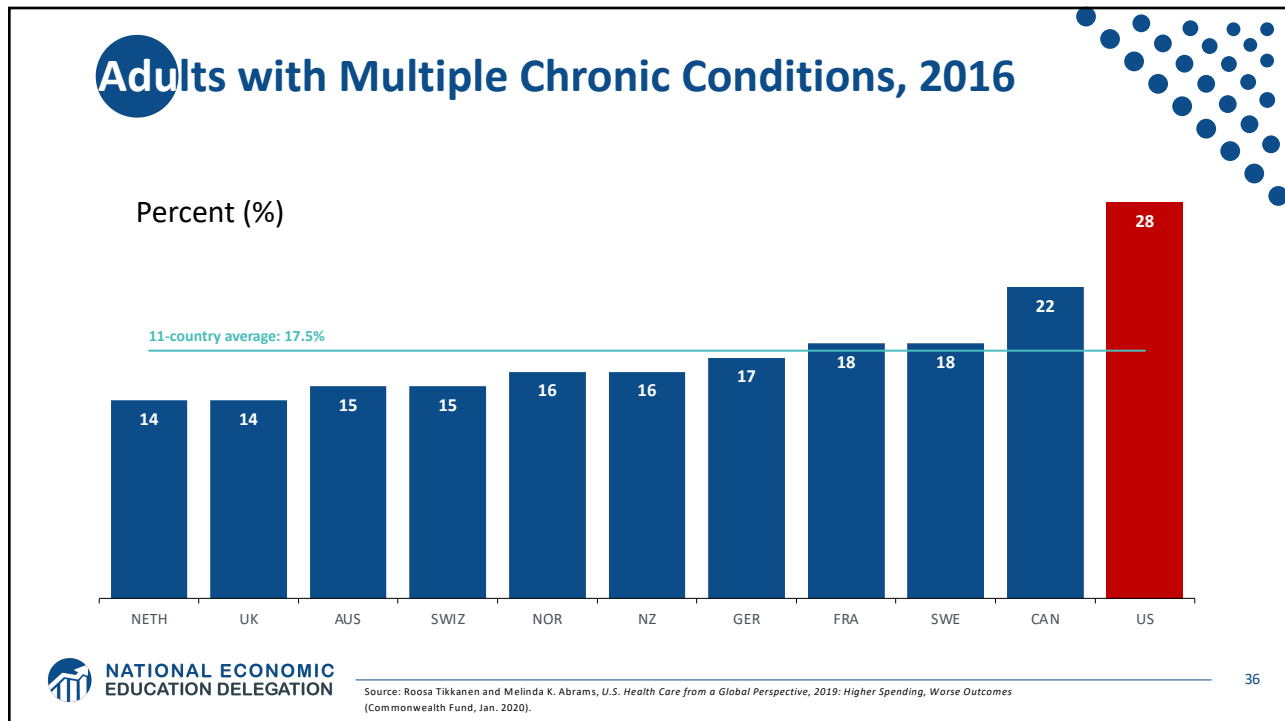
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The World Health Report 2000, *Health Systems: Improving Performance*

	Overall Ranking
1.	France
2.	Italy
3.	San Marino
4.	Andorra
5.	Malta
6.	Singapore
7.	Spain
8.	Oman
9.	Austria
10.	Japan

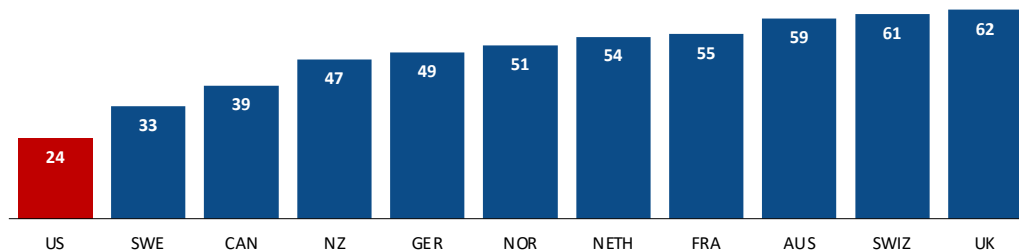
	Overall Ranking
30.	Canada
31.	Finland
32.	Australia
33.	Chile
34.	Denmark
35.	Dominica
36.	Costa Rica
37.	United States
38.	Slovenia
39.	Cuba



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Perception of Quality of Medical Care

Percent of women ages 18–64 who rated their quality of medical care as *excellent or very good*.



Source: Munira Z. Gunja et al., *What Is the Status of Women's Health and Health Care in the U.S. Compared to Ten Other Countries?* (Commonwealth Fund, Dec. 2018).

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Quality of Care Notes

- **Metrics of quality in the U.S. are not very good.**
- **Quality of care is not considered very good in the U.S.**
- **The system has challenges: obesity/lifestyle.**
- **The system has bright spots!**



A Bit About Quality

- The U.S. has the **highest chronic disease burden.**
 - and an obesity rate that is two times higher than the OECD average.
- Americans had **fewer physician visits** than peers in most countries.
 - which may be related to a low supply of physicians in the U.S.
- The U.S. has among the highest # of **hospitalizations from preventable causes.**
 - and the highest rate of avoidable deaths.
- Americans use some **expensive technologies more often than our peers.**
 - MRIs, and specialized procedures, such as hip replacements.
- The U.S. outperforms its peers in terms of **preventive measures.**
 - One of the highest rates of breast cancer screening among women ages 50 to 69.
 - Second-highest rate (after the U.K.) of flu vaccinations among people age 65 and older.



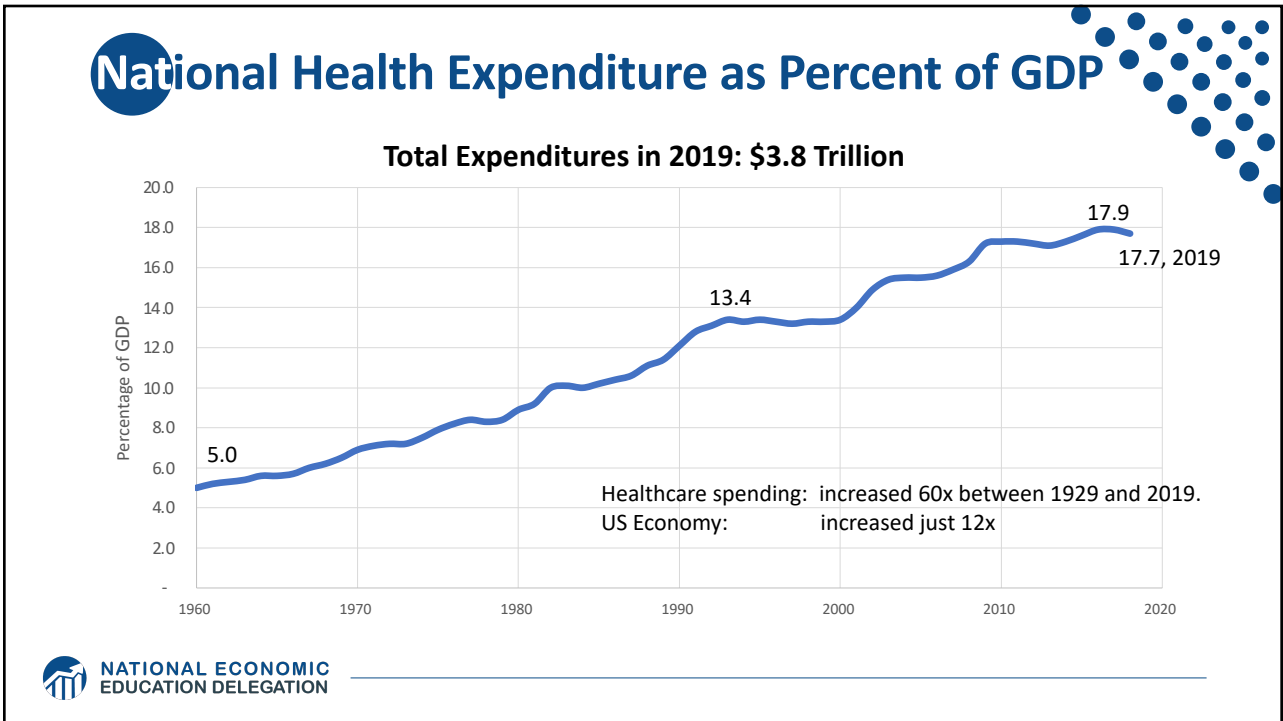
Costs



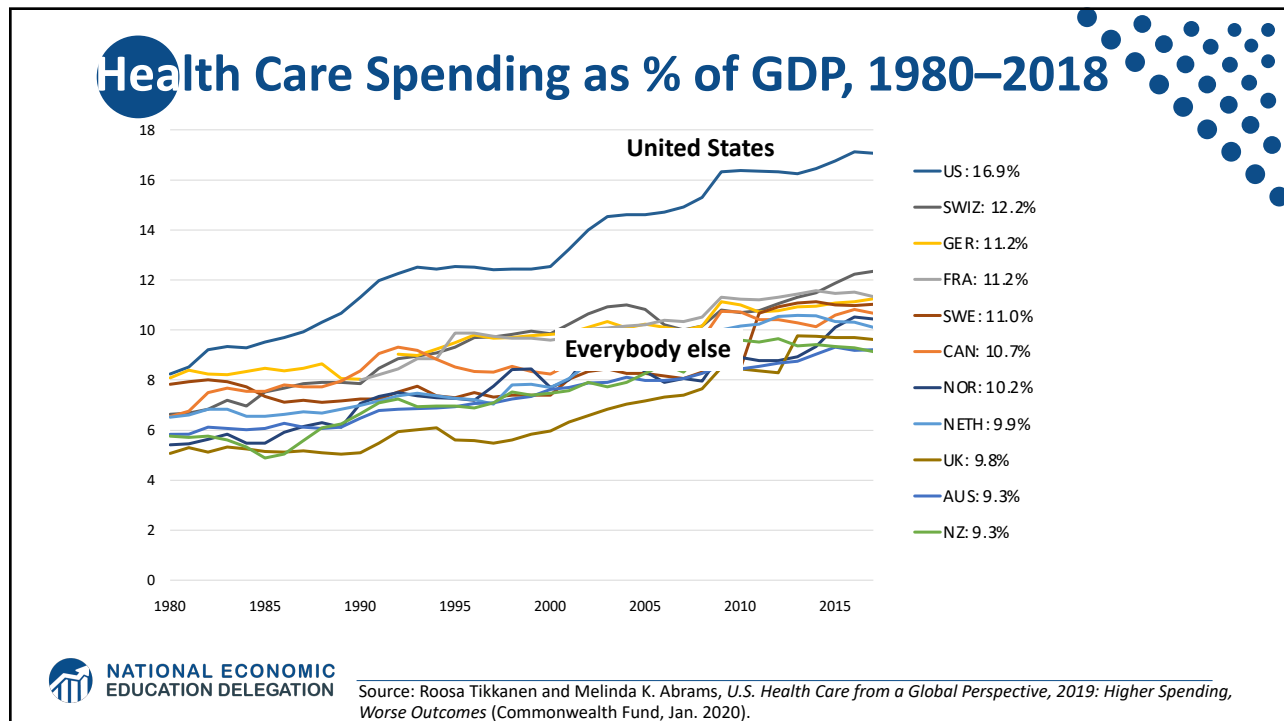
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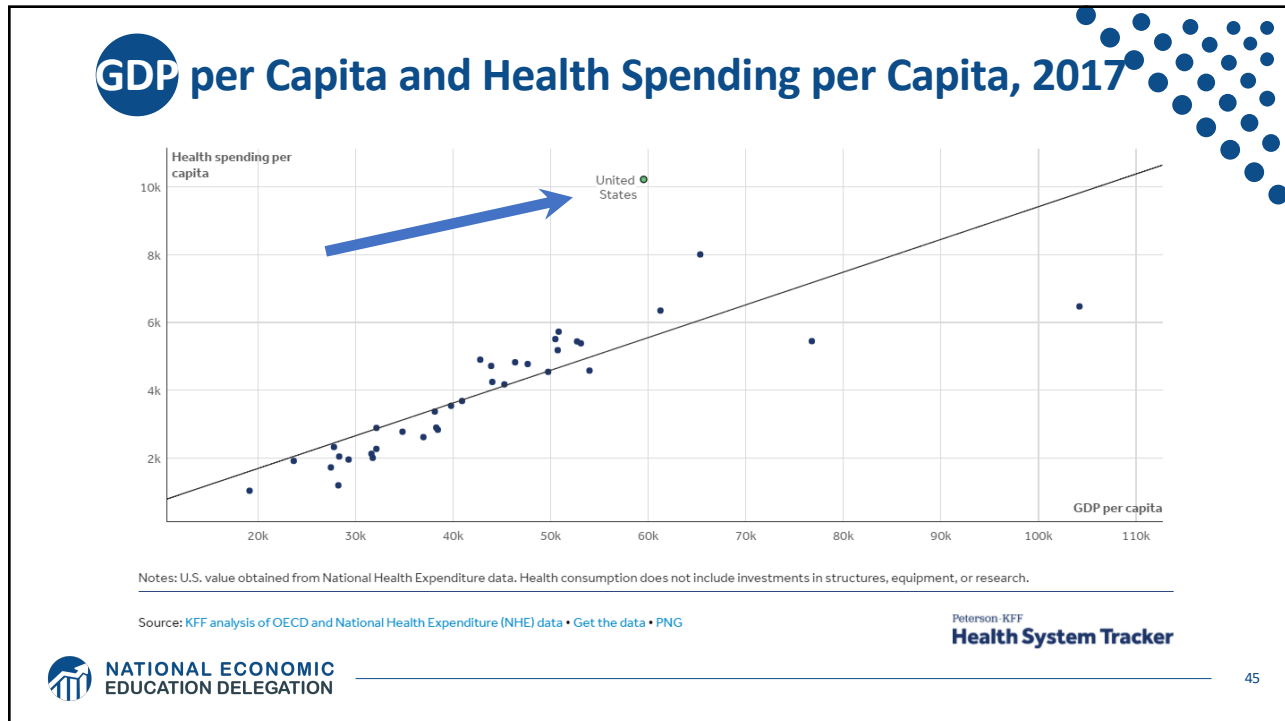
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Why is Healthcare Spending Increasing?

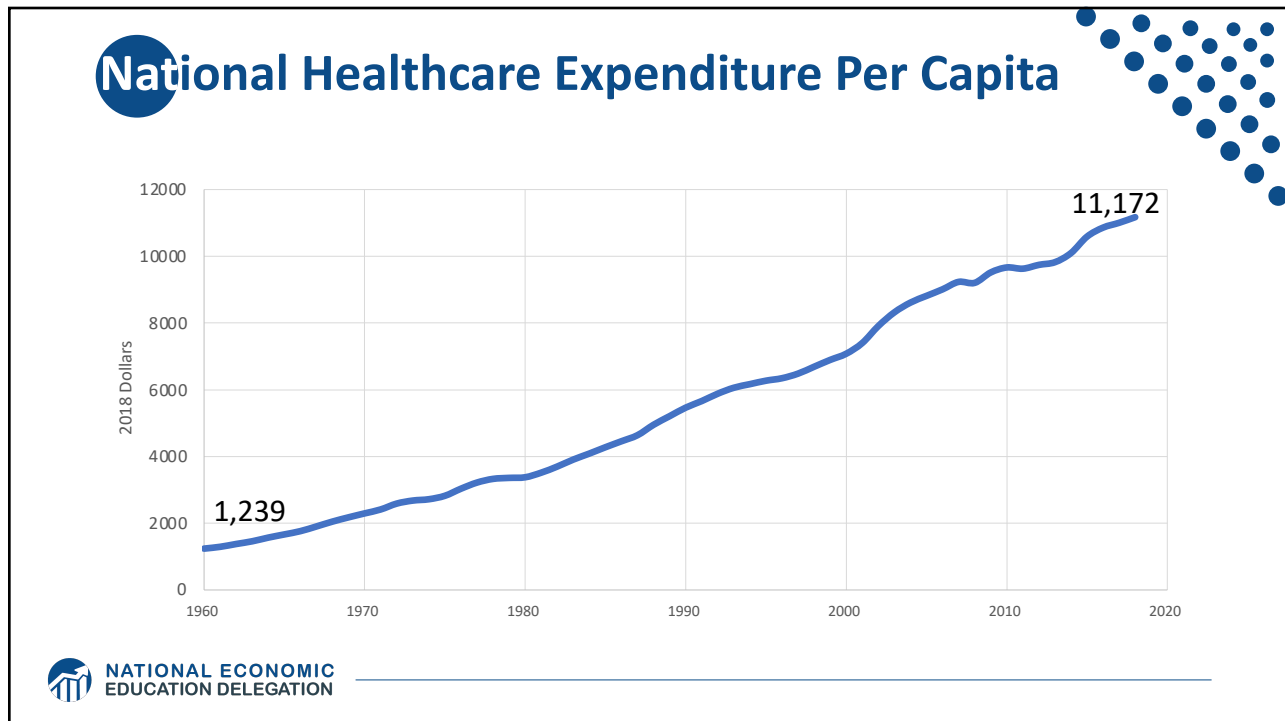
- Costs in the United States, and elsewhere are increasing rapidly.
- The share of economic spending on health care has been steadily increasing for all countries because:
 - Health spending growth has outpaced economic growth.
 - Richer countries demand more services, like attention to health.
- Also because of
 - Advances in medical technologies.
 - Increased demand for services.
 - Rising prices in the health sector – why?

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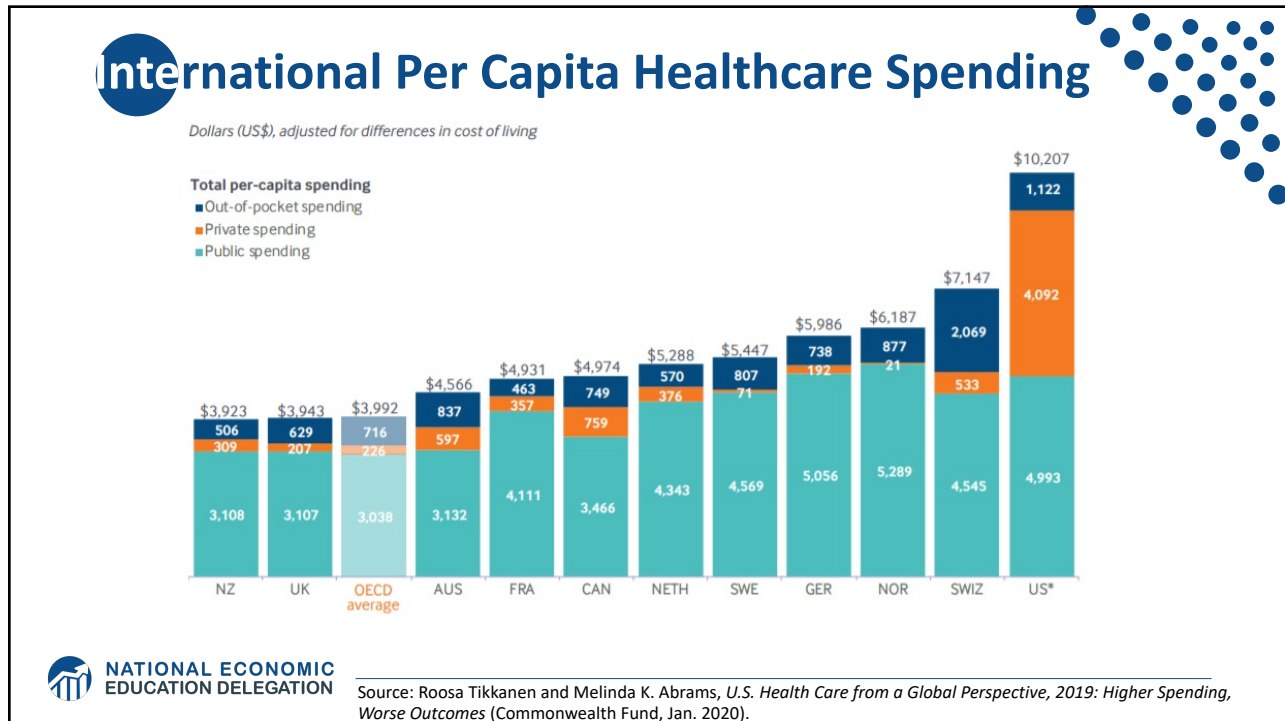
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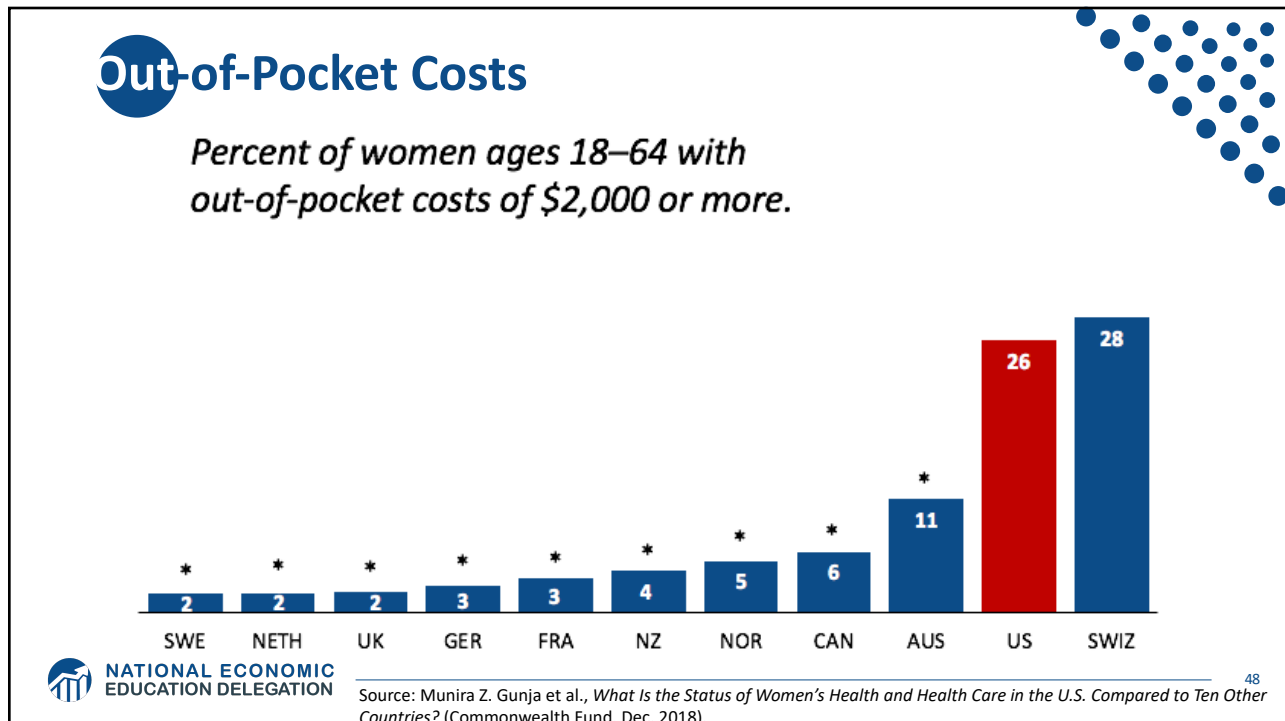
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Why Are Costs so High in the US?

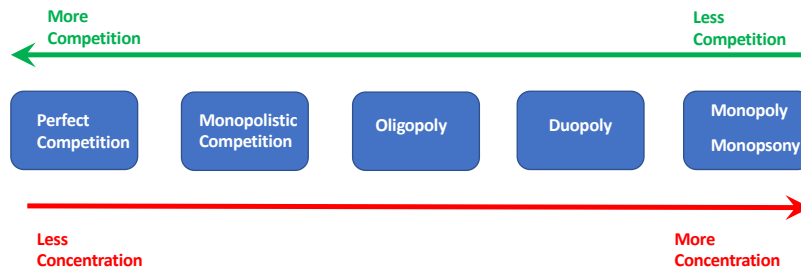
One Reason:

The United States is the only profit-motivated healthcare system in the world.

Markets Matter for Costs

What types of markets are there?

The important thing: competition very often means lower prices!



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Are Health Care Markets Special?

- Market Structure
- Types of products and services
- Principal-Agent Problem
- Asymmetric Information
- Moral Hazard
- Moral Imperative (?)

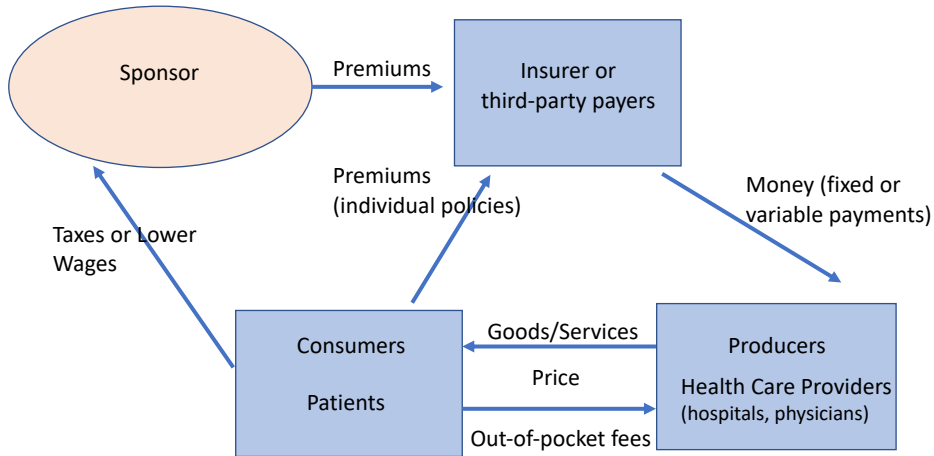


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Health Care Markets are Different



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Policy Matters for Costs

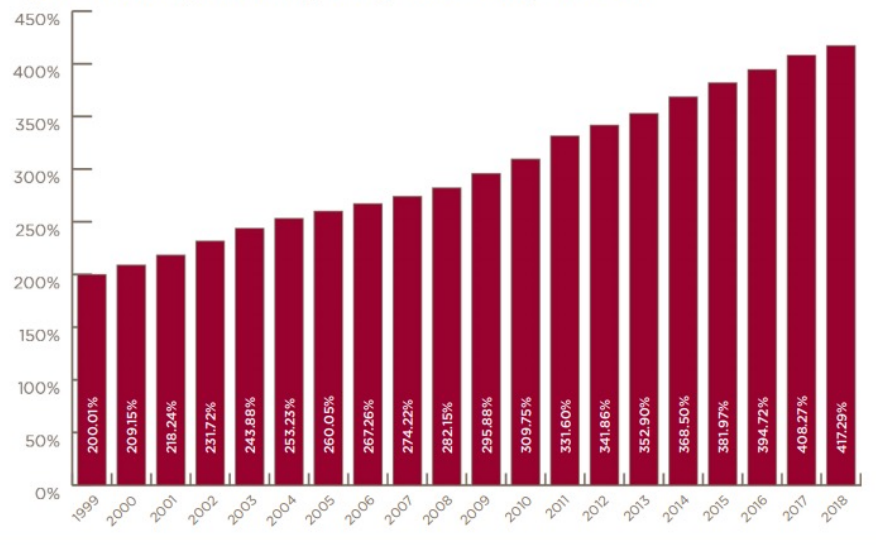
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Hospital Monopolization

- Market consolidation among and between health systems, hospitals, medical groups, and health insurers has surged over the last decade.
- Over an 18-month period between July 2016 and January 2018:
 - Hospitals acquired 8,000 more medical practices.
 - 14,000 more physicians left independent practice to become hospital employees.

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Figure 10. U.S. Hospitals' Average Charge-to-Cost Ratio, 1999 - 2018



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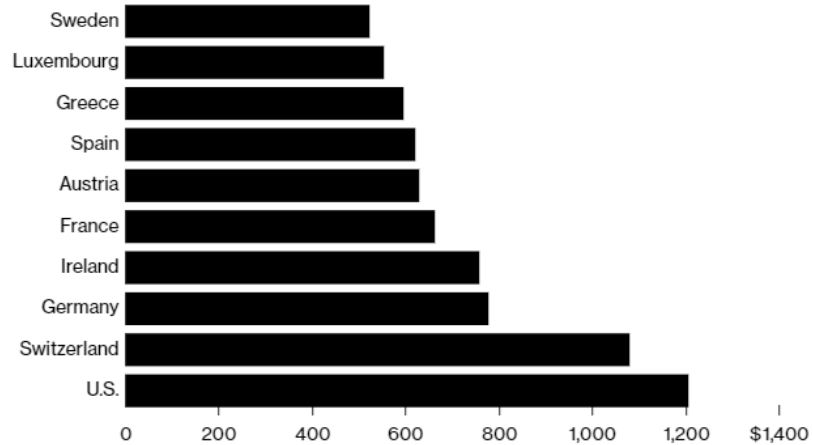
Hospital Monopolization Across the Nation

- Most of the top 100 most expensive hospitals are located in states in the west and south.
 - Florida had the highest number, with 40 hospitals.
 - Other top states included Texas with 14 hospitals, Alabama with eight, Nevada with seven, and California with six.
- Hospitals Charge Patients More Than Four Times the Cost of Care.
- The most expensive hospitals cost of care range from 1,808 % at the high end to 1,129 % at the low end.

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Spending on Pharmaceuticals

Top spenders per capita on drugs in 2016, in U.S. dollars



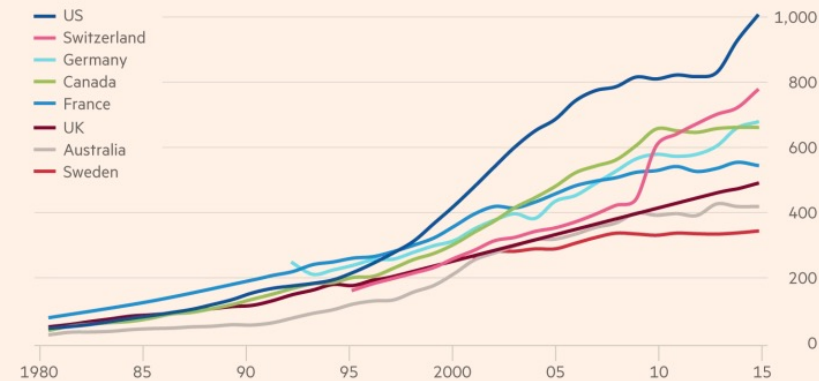
Source: Organisation for Economic Co-operation and Development

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Drug Prices: Trends Over Time

US prescription drug spending per capita has increased faster than in other countries*

Selected countries (\$)



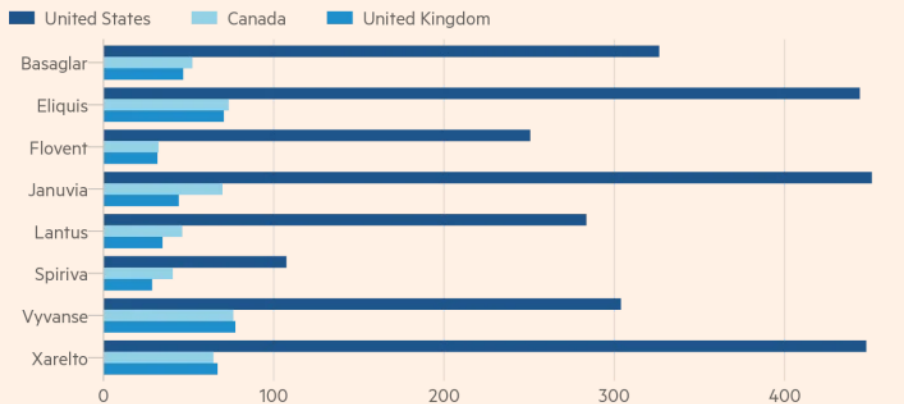
* Figures relate to prescription drugs, not hospital spending



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Drugs in the US cost much more than their equivalent in the UK and Canada

Eight bestselling brand drugs for conditions ranging from diabetes to asthma and ADHD. Drug price (\$)



Note: Their equivalents may be generic versions. Prices have been converted to US dollars using exchange rates available on September 17th, 2019



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Drug Price Comparisons

Drug Prices for 30 Most Commonly Prescribed
Brand-Name and Generic Drugs, 2006–07
US is set at 1.00

	AUS	CAN	FR	GER	NETH	NZ	SWITZ	UK	US
US Higher									
Brand-name drugs	0.40	0.64	0.32	0.43	0.39	0.33	0.51	0.46	1.00
US Lower									
Generic drugs	2.57	1.78	2.85	3.99	1.96	0.90	3.11	1.75	1.00

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Medicare Modernization Act

- Prescription Drug Component
- Medicare Part D, **by law**, cannot negotiate drug prices like other governments do.
- In 2017, Medicare spent nearly \$8 billion on insulin.
 - The researchers said that if Medicare were allowed to **negotiate** drug prices like the U.S. Department of Veterans Affairs (VA) can, Medicare could **save about \$4.4 billion just on insulin**.

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Concentration in Pharmaceutical Companies

- The number of mergers and acquisitions involving one of the top 25 firms more than doubled:
 - 29 in 2006 to 61 in 2015
- Between 1995 and 2015, 60 drug companies merged into 10.



Reasons for higher drug prices

- The Medicare Prescription Drug, Improvement, and Modernization Act, also called the **Medicare Modernization Act** or MMA, is a federal law of the United States, enacted in 2003.
 - Prohibits government negotiation of lower prices.
- Growing concentration of pharmaceutical companies.

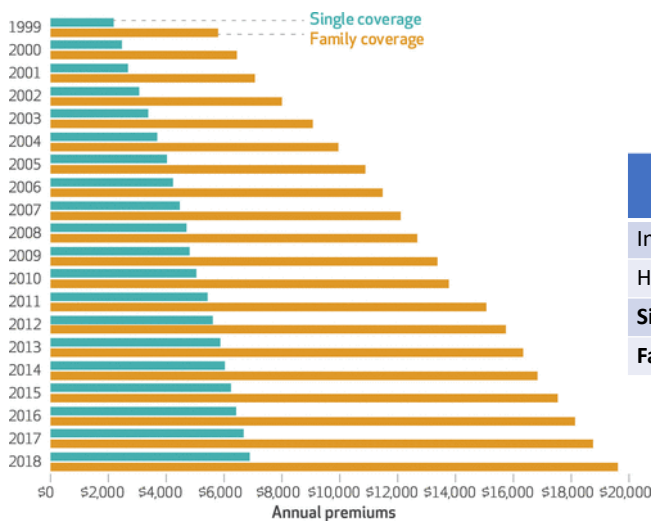


Monopolization of Health Insurance Markets

- As of 2011, there were close to **100 insurers** in **Switzerland** competing for consumer health care dollars, **forcing firms to compete** by setting prices to just cover costs.
- In the United States, **markets are state specific** and consumers may choose from plans available in the state in which they reside.
- In 2014, of the 50 states and the District of Columbia:
 - 11 had only 1 or 2 insurers
 - 21 had 3 or 4, and
 - only 19 states had 5 or more. (CA had 11)
- As of July 2019, the number of states with only 1 or 2 insurers had increased from 11 to 20.

Average Annual Insurance Premiums, 1999-2018

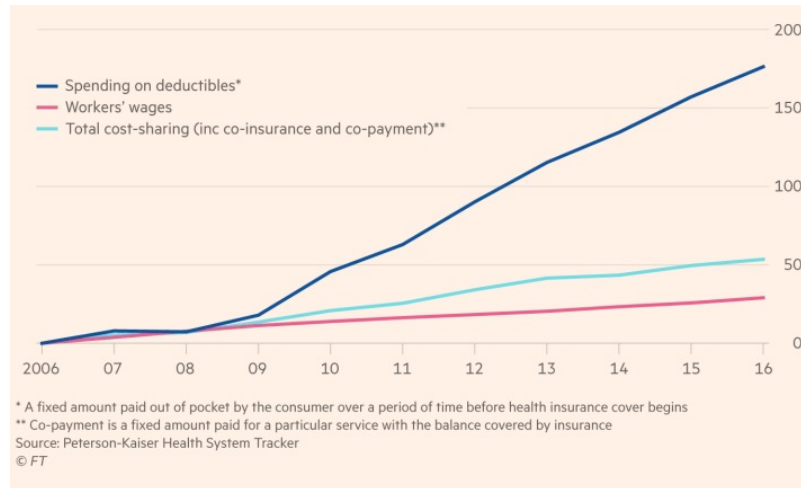
Employer provided, Not Adjusted for Inflation



Single: ~\$2,000 to ~\$7,000
 Family: ~\$5,900 to ~\$19,500

	Average Annual Rate of Change
Inflation	2.19
Health Care CPI	3.68
Single coverage	6.51
Family coverage	6.52

Spending on Deductibles



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Reason for Higher Health Insurance Rates

- Rising prices in the health sector
- Advances in medical technologies
- Increased demand for services
- Concentration of insurance companies

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Health Care Systems and Institutions



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Definition: Universal Coverage

- **Universal coverage** – refers to health care systems in which *all* individuals have insurance coverage.
- Generally, this coverage includes:
 - Access to all needed services and benefits.
 - Protects individuals from excessive financial hardships.
 - Medical indebtedness is the #1 cause of bankruptcies in the United States.
- Canada has universal coverage, the United States does not.



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Definition: Single-Payer

- **Single-payer** - refers to financing a health care system by making one entity solely and exclusively responsible for paying for medical goods and services.
 - Not necessarily the government.
- **It is only the financing component that is socialized.**
 - The money for the payment can be either collected by:
 - Taxes collected by the government.
 - Premiums collected by National or Public Health Insurance.
- **Single-payer systems: 17 countries**
 - Norway, Japan, United Kingdom, Kuwait, Sweden, Bahrain, Brunei, Canada, United Arab Emirates, Denmark, Finland, Slovenia, Italy, Portugal, Cyprus, Spain, and Iceland.



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Good reading: https://www.urban.org/sites/default/files/publication/99918/pros_and_cons_of_a_single-payer_plan.pdf

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Definition: Socialized Medicine

- **Socialized medicine** – this model takes the single-payer system one step further.
 - Government not only pays for health care but operates the hospitals and employs the medical staff.
- This has NEVER been a part of the debate in the United States.



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Good reading: <https://www.americanprogress.org/article/the-specter-of-socialized-medicine/>

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Definition: Third-Party Payer

- A **third-party payer** is an entity that pays medical claims on behalf of the insured. Examples of third-party payers include government agencies, insurance companies, health maintenance organizations (HMOs), and employers.
 - Employer-sponsored health plans
 - Individual market health plans
 - National health insurance



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Health System Classification

- **Developed countries of the world have each taken a different approach for their health care delivery systems.**
- **5 basic models:**
 - Bismarck (France, Germany, Japan, Switzerland)
 - Beveridge – socialized medicine (United Kingdom, Spain, New Zealand)
 - National health insurance (Canada)
 - Out of pocket model – self insurance
 - Mixed (United States)



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Model 1: Bismarck

- **In this model, health insurance is paid for through PREMIUMS.**
 - Everybody must have insurance, only poor don't have to pay premiums.
 - Premiums are paid into the "gov't sickness fund" or directly to private insurers.
 - All insurers are private, but can't make money off the sickness fund.
- **Pros:**
 - Everybody is covered and can avoid expensive healthcare bills.
 - Administrative costs are much lower than in the U.S.
 - Little waiting time to receive basic services.
- **Cons:**
 - Focus on low costs can mean fewer services are available in rural areas.
 - Mandatory premiums are high.
 - Longer waiting times for elective services.



Model 2: Beveridge

- **In this model, health insurance is paid for through TAXATION.**
 - Everybody has insurance, universal coverage. Everybody receives care at no cost.
 - All insurers are public.
 - Supplemental insurance is available in the private market.
- **Pros:**
 - Universal coverage.
 - Government controls quality of care, so cost of care may be low.
 - No medical bills or co-pays.
- **Cons:**
 - Taxes are high, regardless of use of healthcare.
 - Government controls quality of care, so service availability might be low.
 - Longer waiting times for non-emergency care.
 - Potential for excessive use of the system.



Model 3: National Health Insurance

- **This model has elements of both Beveridge and Bismarck.**
 - Like Beveridge: government is the single payer and paid for through taxes.
 - Like Bismarck: All health-care insurers are in the private sector.
- **Pros:**
 - Lowers the cost of healthcare for the economy – bargaining power.
 - Low administrative costs for care.
 - No incentive to deny claims.
 - Healthier workforce.
- **Cons:**
 - Everybody pays regardless of health care received.
 - May stop people from being careful about their health.
 - Limits payouts to doctors.
 - May affect technology adoption.



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<https://www.ahaap.org/national-health-insurance-model>

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US Health Care System

- **Medicare – National Health Insurance**
- **Military Veteran Care – Beveridge model (socialized medicine)**
- **Employer-sponsored insurance – Bismarck model**
- **Individual market health plans – Bismarck model**
- **Uninsured – Out of pocket model**



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Tradeoffs

Tradeoffs take place among the three legs:

- Increasing quality in health care may lead to higher health care costs.
 - This means a compromise in access (affordability).
- I.e., with increasing quality, access may suffer.
- By increasing access, quality may suffer.
- By decreasing costs, quality may suffer.



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Summary

- US HealthCare system is not performing well.
 - Very expensive with low quality and access.
- One of the main reasons for very high costs is the monopolization of healthcare markets.
 - Hospitals, health insurance, big pharma, physicians, etc.
- A few simple solutions could drastically reduce costs:
 - Enforcement of antitrust laws in this sector.
 - Introduction of a public option in the health insurance market.
 - Ability for the US government to negotiate drug prices like most every other nation.
- Universal health insurance would increase access and perhaps also reduce costs.
- But there are always tradeoffs: you can pick two, but the third may suffer.



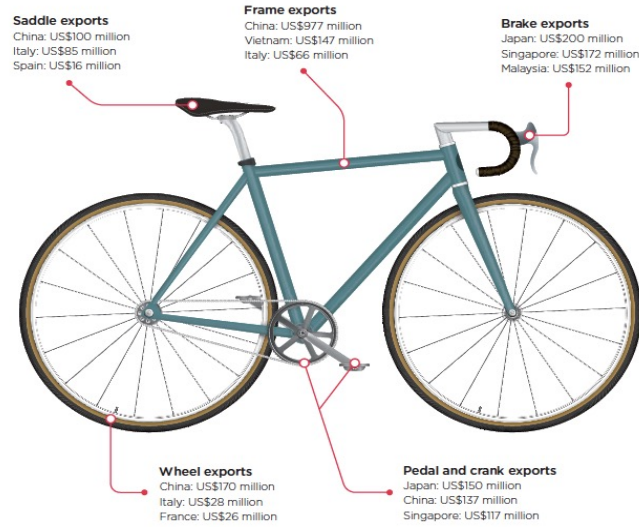
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Trade: Alan Deardorff, University of Michigan

Figure 1.1 Where do bicycles come from?



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Thank you!

Any Questions?

www.NEEDecon.org

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What is a Market?

- A **market** is a group of buyers and sellers of a particular product in the area or region under consideration. The area may be the earth, or countries, regions, states, or cities.
- The concept of a market is any structure that allows buyers and sellers to exchange any type of goods, services, and information.
- Markets can be physical and non-physical.
- There are **many different types of markets** and depending on the type, different rules should be set up to achieve the best results for **society**.

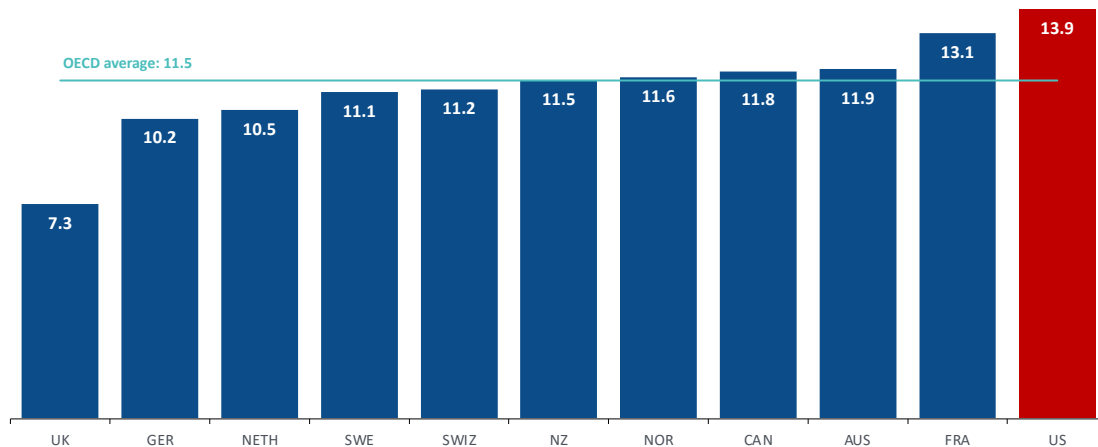


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Suicides, 2016

Deaths per 100,000 population



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Source: Roosa Tikkanen and Melinda K. Abrams, *U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes* (Commonwealth Fund, Jan. 2020).

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Big Pharma



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Price Hikes

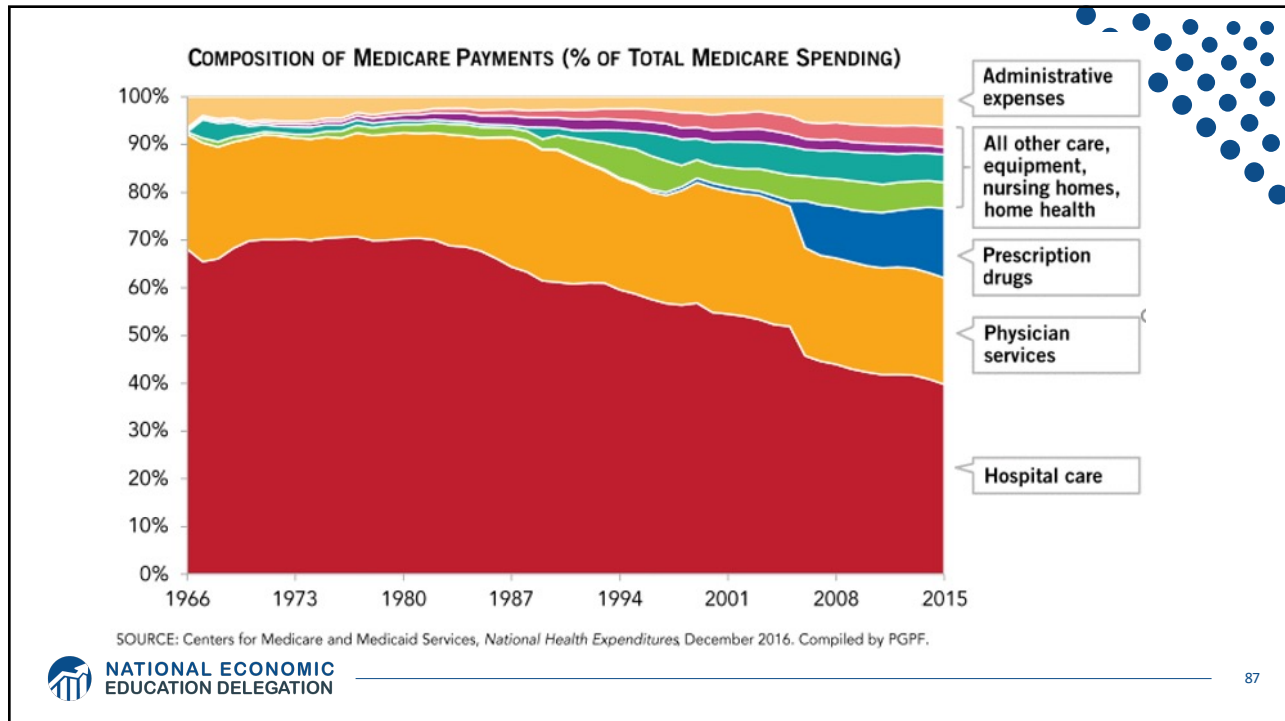
- **Turing Pharmaceuticals' 5,555% price increase of Daraprim in 2015 and Mylan's 500% increase of EpiPen prices...**
- **More than 3,400 drugs boosted their prices in the first six months of 2019, an increase of 17% in the number of drug hikes from a year earlier.**
 - The average price hike is 10.5%, or 5 times the rate of inflation.
- **About 41 drugs boosted their prices by more than 100% in 2019.**
- **Over 10 years, the net cost of prescription drugs in the United States rose more than THREE TIMES FASTER than the rate of inflation.**



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Prescription Drug Savings in Build Back Better

CBO's Estimates of Prescription Drug Policies in the Build Back Better Act

Policy	Ten-Year Savings
Medicare Drug Price Negotiations	\$76 billion
Part B and D Inflation Rebates (Medicare and Medicaid)	\$49 billion
Commercial Drug Inflation Rebates	\$34 billion
Part D Benefit Formula Redesign	\$2 billion*
Medicare Insulin and Cost Sharing Cap	-\$1 billion
Repeal of Rebate Rule	\$143 billion
Total Savings of Prescription Drug Proposals	\$303 billion

Sources: Congressional Budget Office and Committee for a Responsible Federal Budget.
*Includes payments for biosimilar biological products

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