



Osher Lifelong Learning Institute, Spring 2023
Contemporary Economic Policy

University of Arizona
May-June, 2023

Jon Haveman, Ph.D.
National Economic Education Delegation

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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

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Course Outline

- **Contemporary Economic Policy**

- Week 1 (5/16): US Economy (Geoffrey Woglom, Amherst College)
- Week 2 (5/23): Monetary Policy (Geoffrey Woglom)
- **Week 3 (5/30): Health Care Economics (Kelley Cullen, E. Washington University)**
- Week 4 (6/6): Trade and Globalization (Alan Deardorff, University of Michigan)
- Week 5 (6/13): Trade Deficits and Exchange Rates (Alan Deardorff)
- Week 6 (6/20): Cryptocurrencies (Jon Haveman, NEED)



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Submitting Questions

- **Please submit questions of clarification in the chat.**
 - I will try to handle them as they come up.
- **We will do a verbal Q&A once the material has been presented.**
- **Slides will be available from the NEED website soon.**
(https://needelegation.org/delivered_presentations.php)



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Health(care) Economics

University of Arizona
May 30, 2023

Kelley Cullen, Ph.D.
Eastern Washington Univ.



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Today's Speaker

Kelley L. Cullen

PhD, Economics
Washington State University



Current Affiliations

Eastern Washington University

- Faculty in Economics & Decision Science
- Policy Analyst, EWU Institute of Public Policy & Economic Analysis

Research Interests

- Health Economics
- Sports Economics
- Education Economics



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Outline

- What is Health(care) Economics?
- Taking the Pulse of the Health Economy
- Health Care Systems and Institutions
- Health Insurance and Reform
- Pharmaceuticals – Big Pharma



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What is Health(care) Economics?

- 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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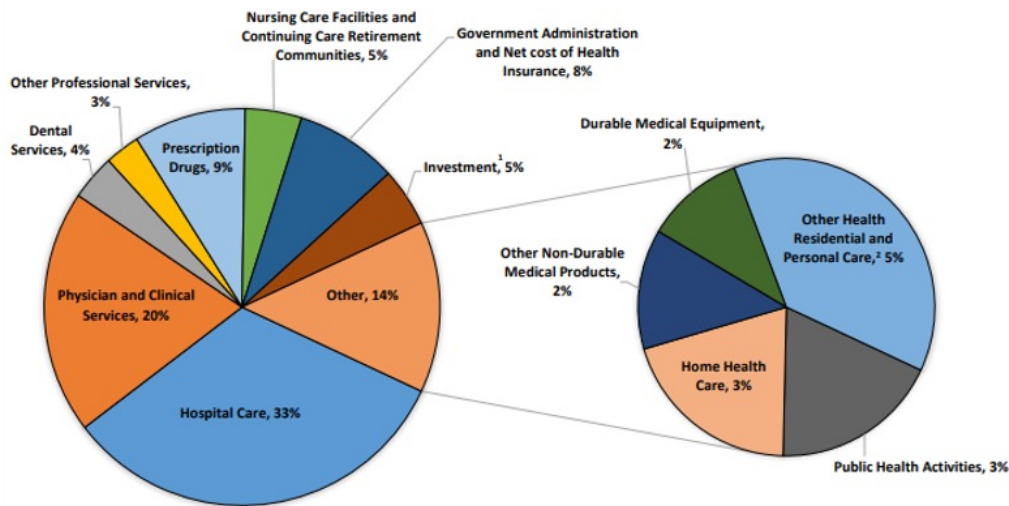
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Health Economics is part of Microeconomics

- Although health economics is part of “micro-” economics, it is actually very big:
 - In 2019, U.S. national health expenditure were **17.7% of GDP**, which is equivalent to around **\$3.8 trillion**.
- 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.

What is Health Economics?

- Health economics studies health care resource **markets** and **health insurance**.
- Healthcare is the biggest industry and the largest employer in the US.



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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 for achieve the best results for **society**.



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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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Pulse of the Health Economy

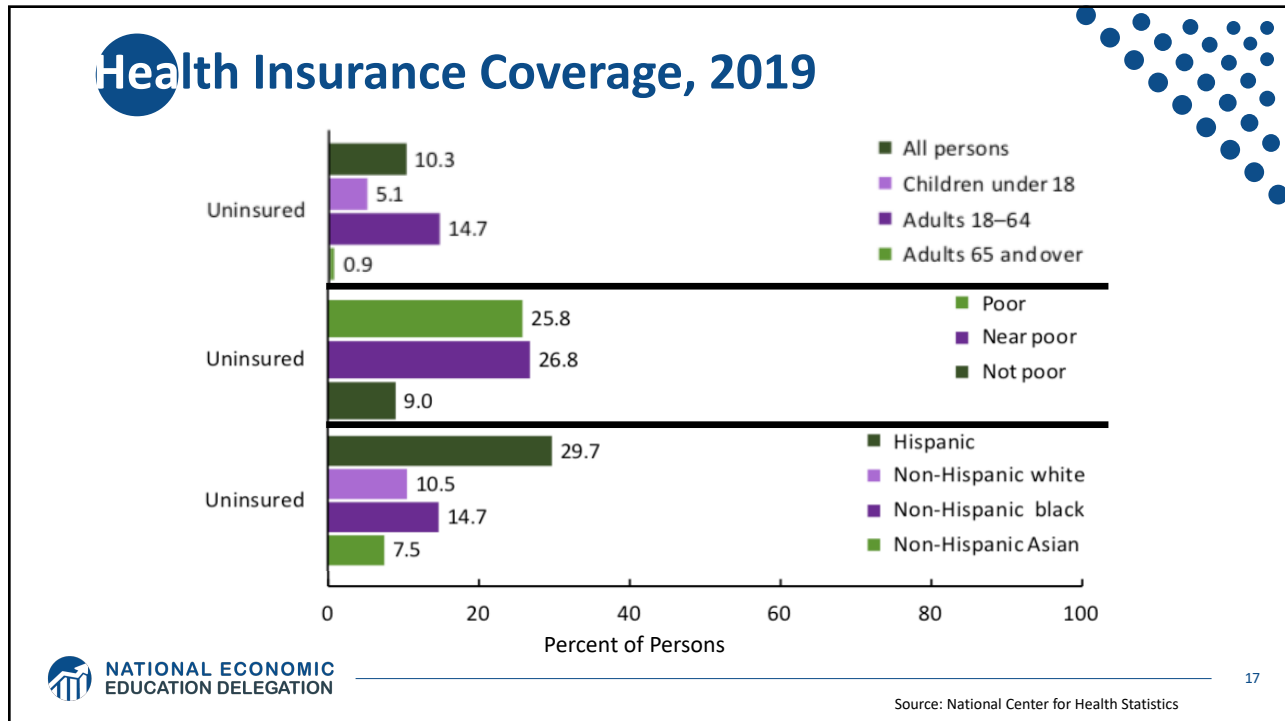


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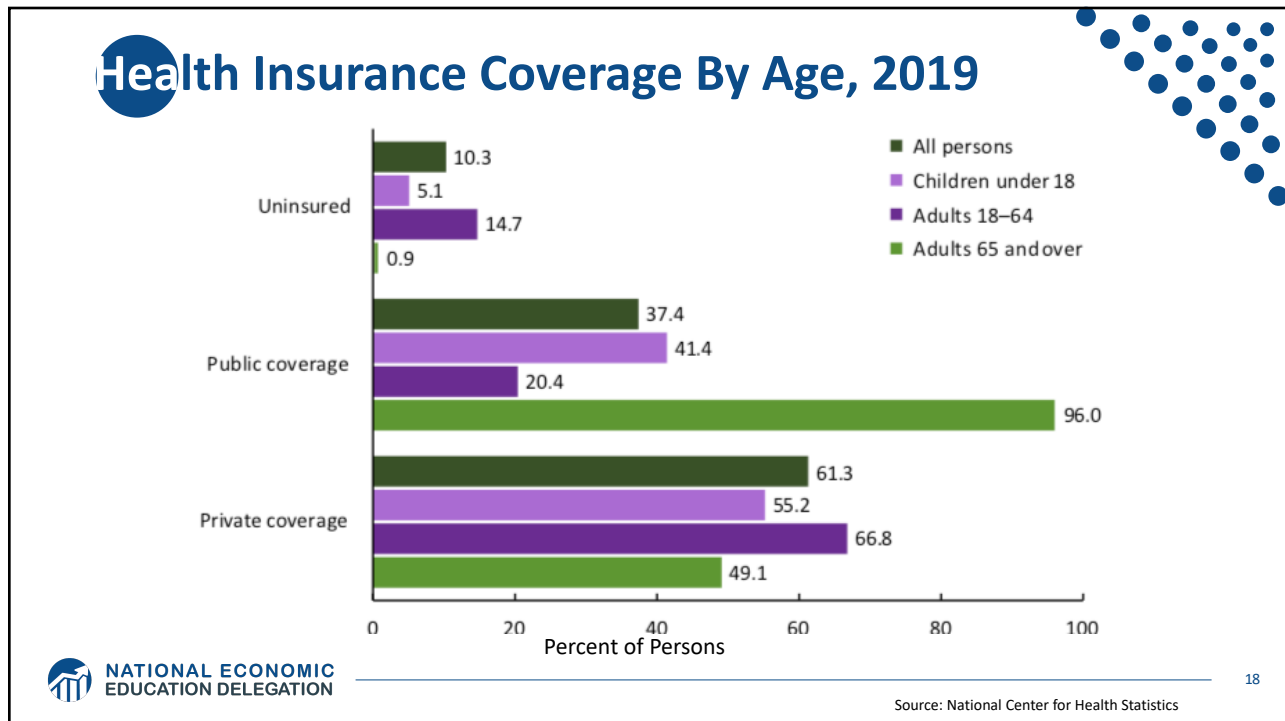
Pulse of the Health Economy

- **Health economy involves activities related to population health:**
 - Production and consumption of goods and services.
 - Distribution of those goods to consumers.
- **Performance indicators of medical care:**
 - Access
 - Quality
 - Cost

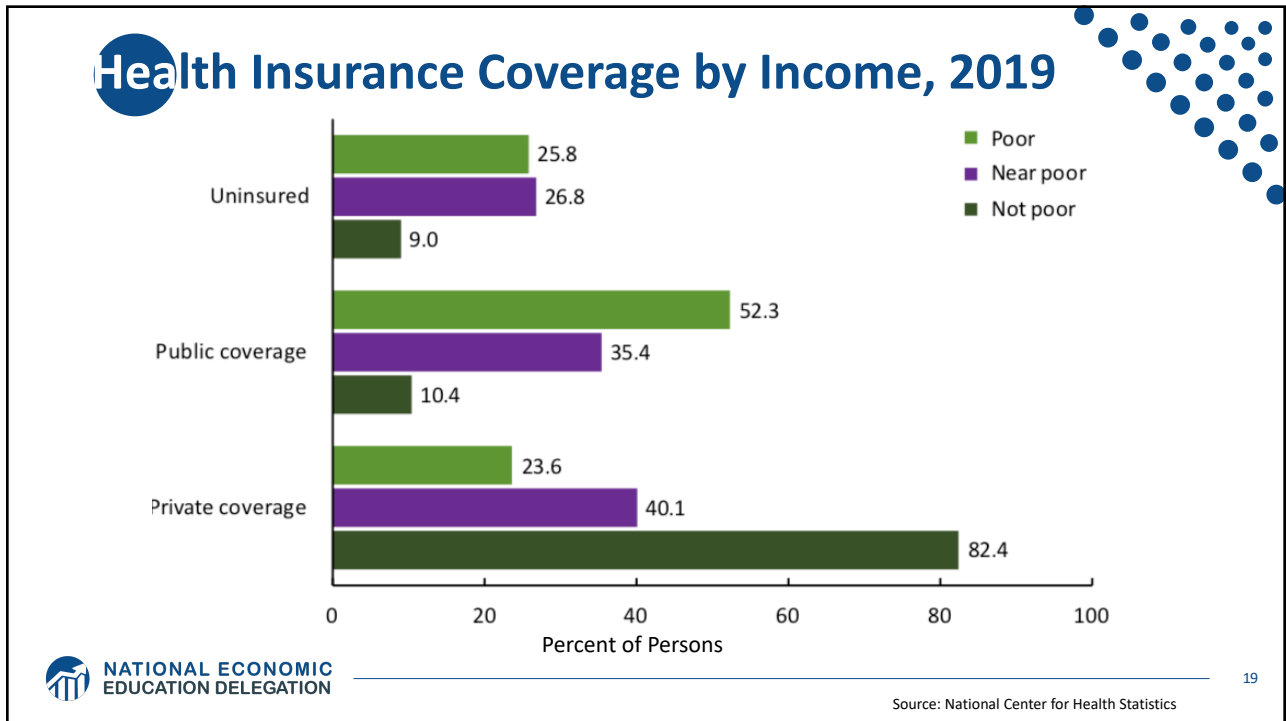
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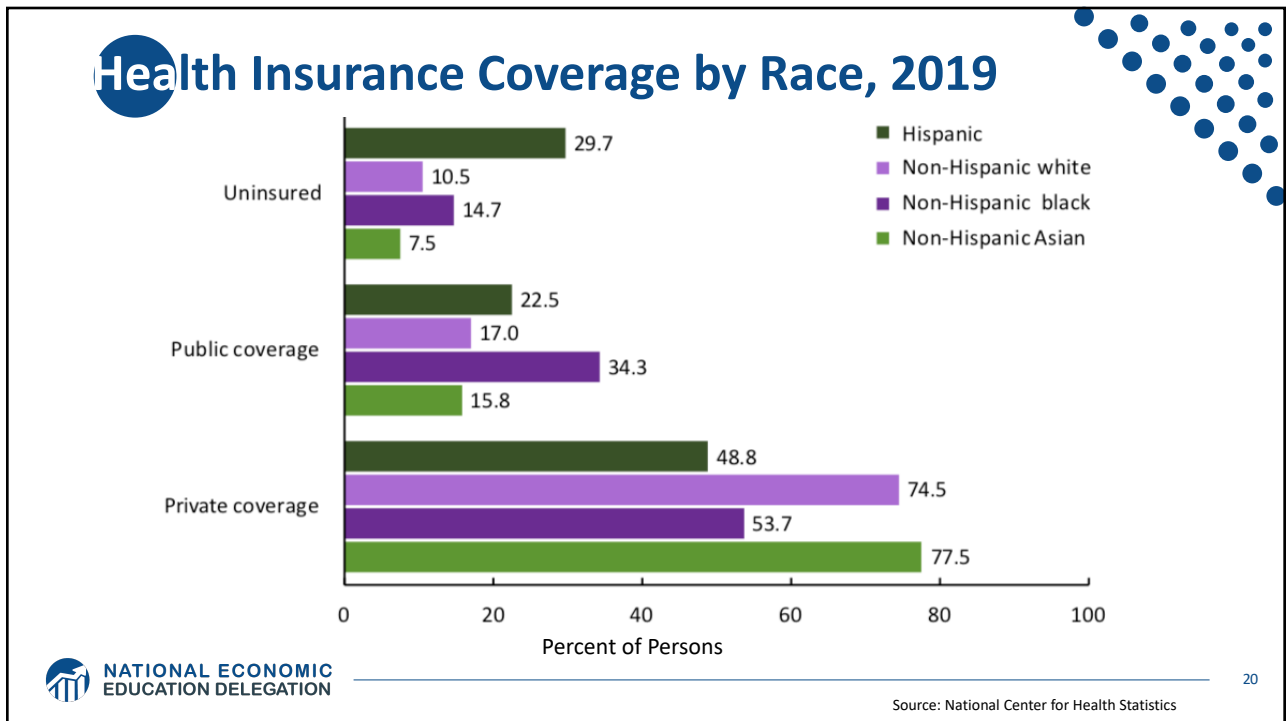
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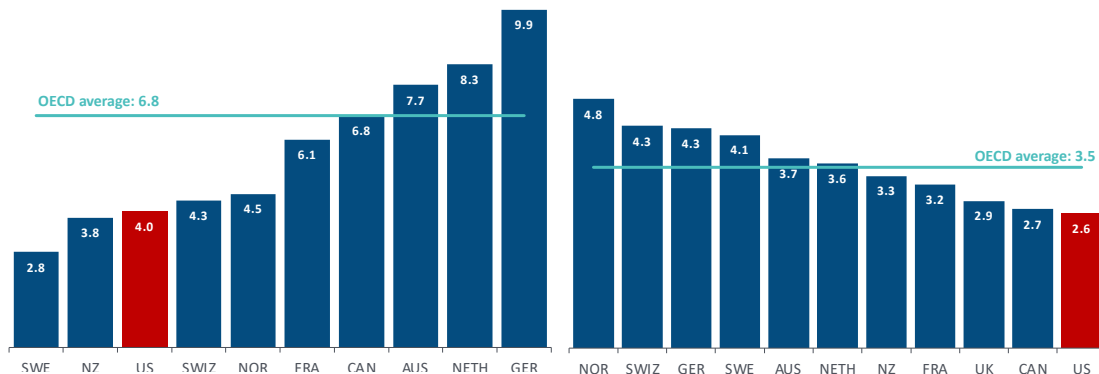


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Physician Visits and Physician Supply

Average physician visits per capita, 2017

Practicing physicians per 1,000 population, 2018



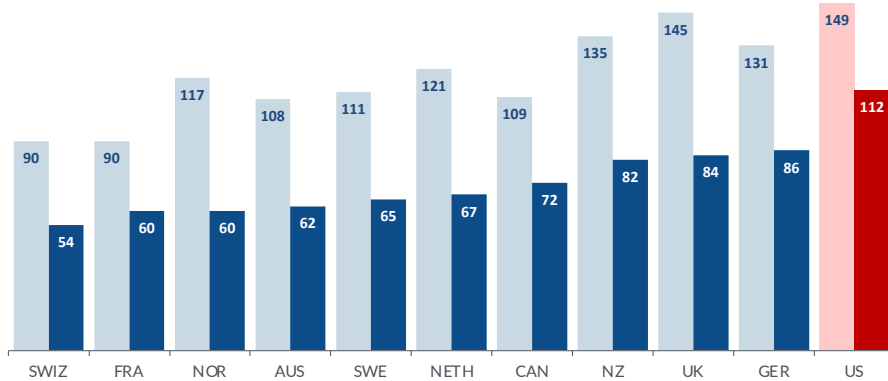
Source: Roosa Tikkanen and Melinda K. Abrams, U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes (Commonwealth Fund, Jan. 2020).

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Avoidable Deaths

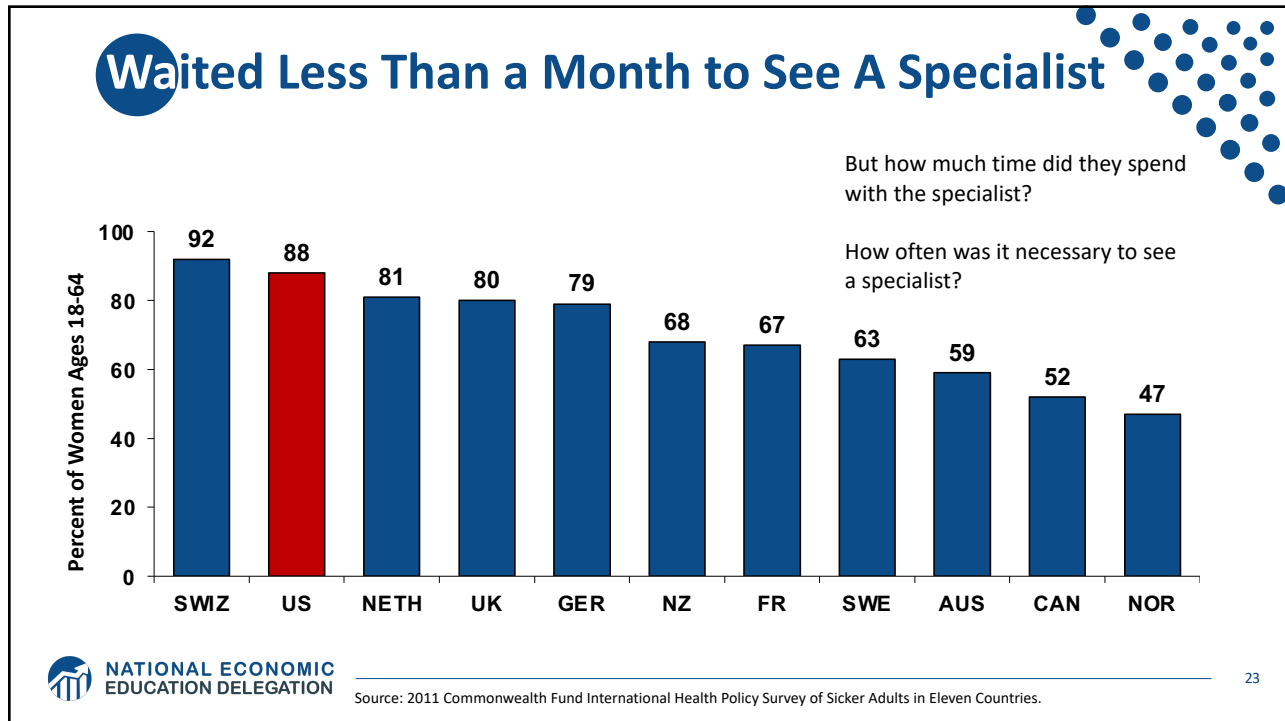
Deaths per 100,000 population.
Heart disease, stroke, hypertension...

■ 2000 ■ 2016

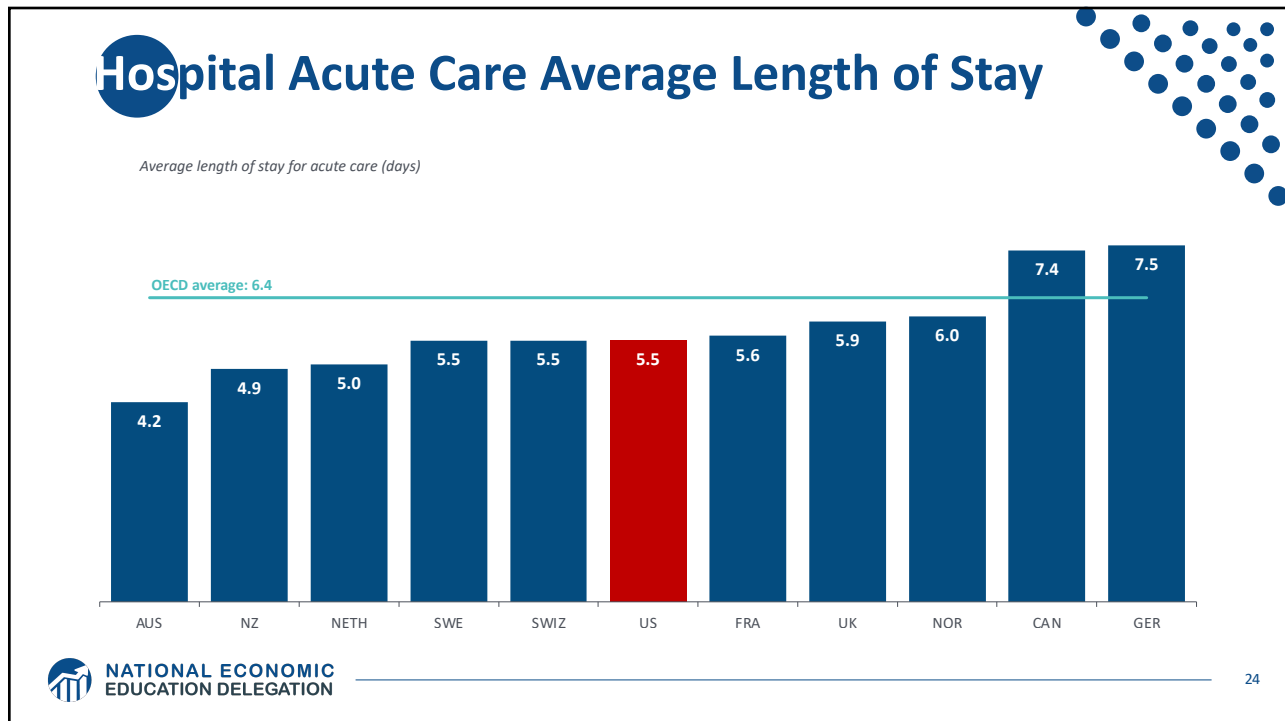


Source: Roosa Tikkanen and Melinda K. Abrams, U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes (Commonwealth Fund, Jan. 2020).

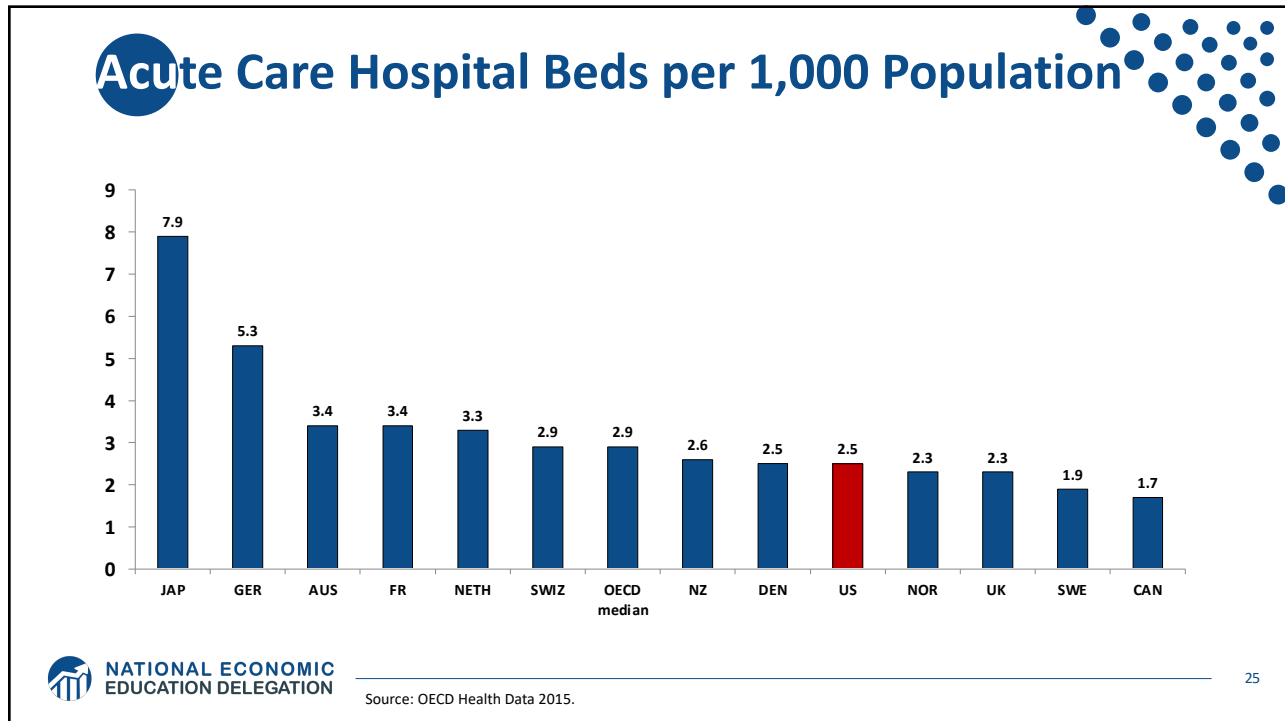
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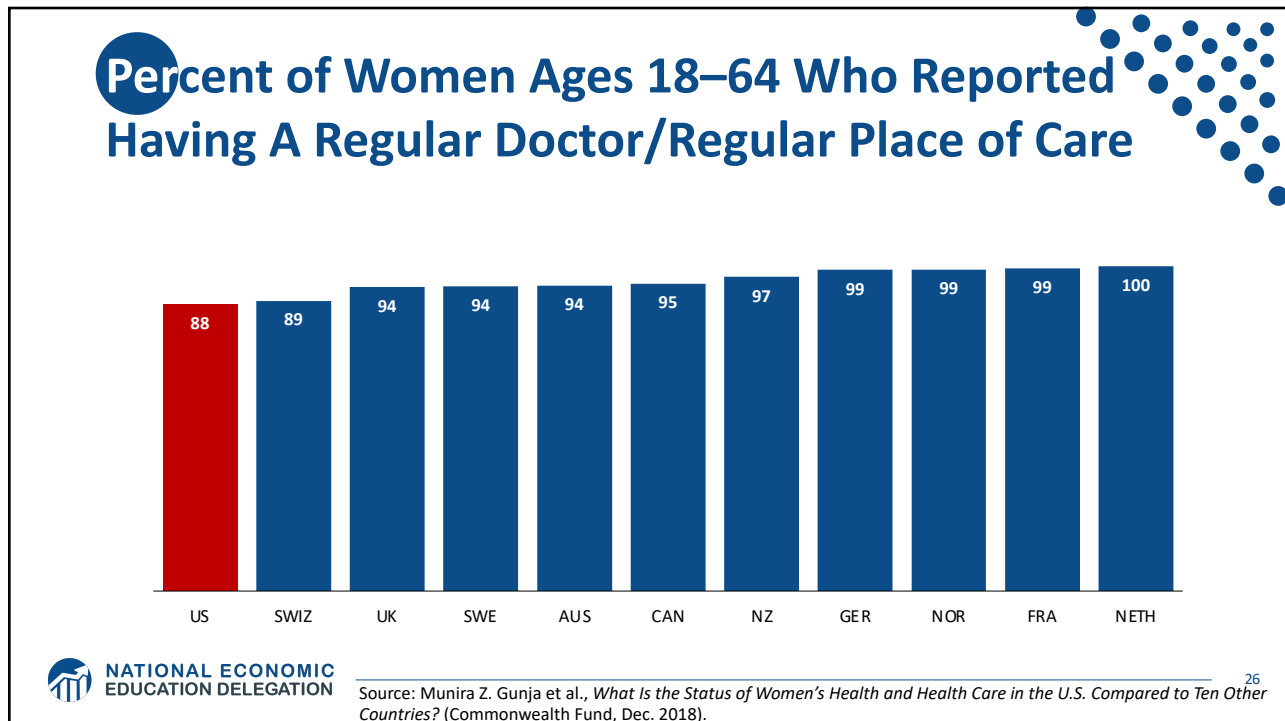
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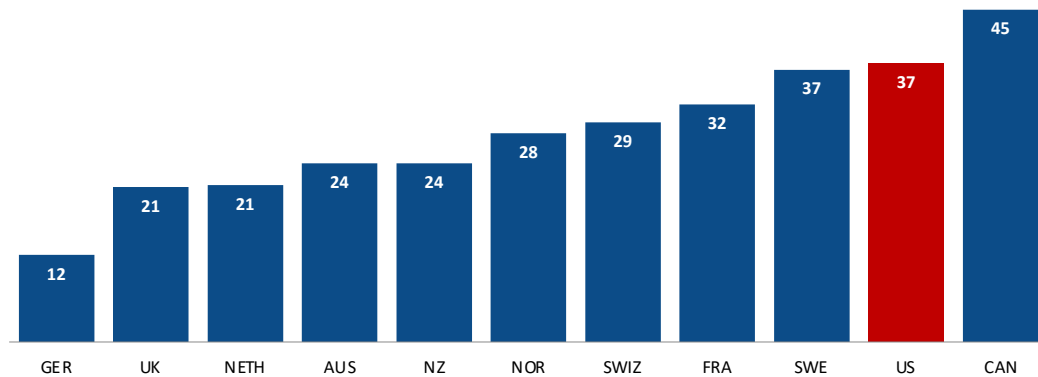


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Percent of Women Ages 18–64 Who Reported Going to the Emergency Room in the Past Two Years



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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). ²⁷

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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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A Bit About Quality

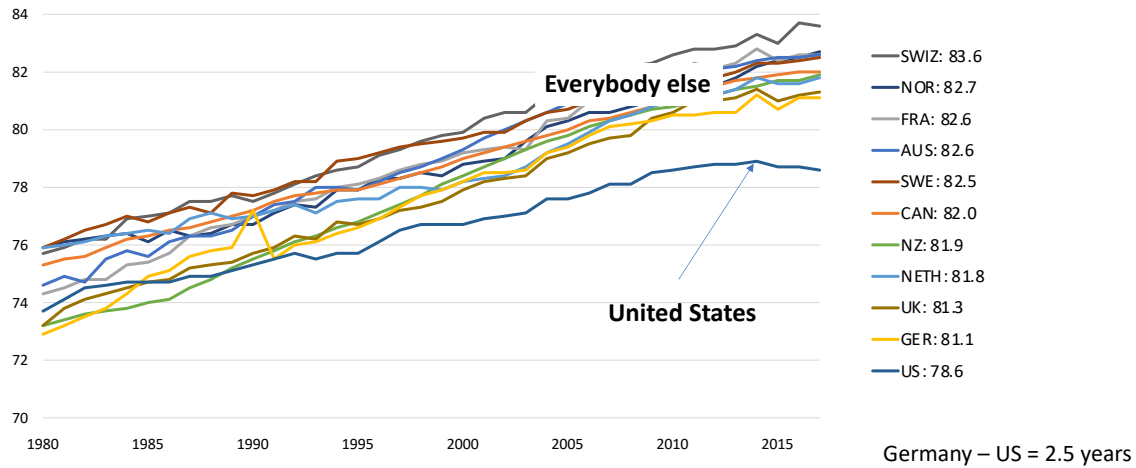
- The U.S. has the **highest chronic disease burden**
 - and an obesity rate that is two times higher than the OECD average.
- Americans had **fewer physician visits** than peers in most countries
 - which may be related to a low supply of physicians in the U.S.
- The U.S. has among the highest # of **hospitalizations from preventable causes**
 - and the highest rate of avoidable deaths.
- Americans use some **expensive technologies**
 - MRIs, and specialized procedures, such as hip replacements, more often than our peers.
- 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.



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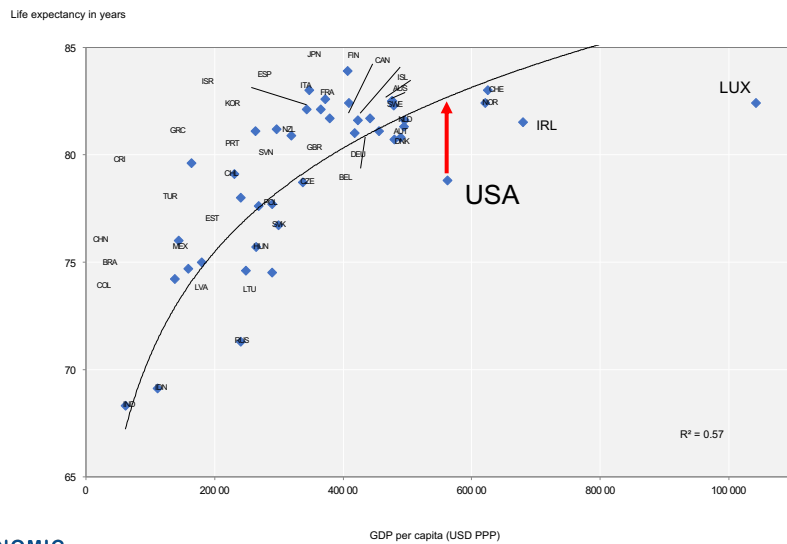
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Life Expectancy: How Does the US Compare?



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Life Expectancy & Per Capita GDP



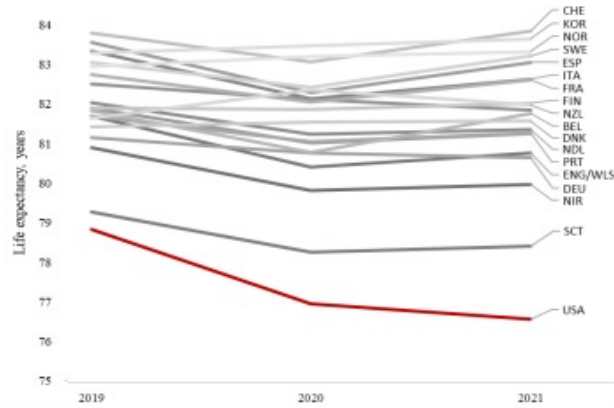
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Life Expectancy & The Pandemic

CHANGES IN LIFE EXPECTANCY BETWEEN 2019 AND 2021: UNITED STATES AND 19 PEER COUNTRIES

Ryan K. Masters, PhD¹, Laudan Y. Aron, MA², Steven H. Woolf, MD, MPH³

Figure 2. Life expectancy, 2019-2021, United States and 19 peer countries. Country codes and names: BEL (Belgium), CHE (Switzerland), DEU (Germany), DNK (Denmark), ENG/WLS (England and Wales), ESP (Spain), FIN (Finland), FRA (France), ITA (Italy), KOR (South Korea), NDL (Netherlands), NIR (Northern Ireland), NOR (Norway), NZL (New Zealand), PRT (Portugal), SCT (Scotland), SWE (Sweden), USA (United States). Life expectancy values for 2021 are estimated from provisional data; see table for credible ranges.

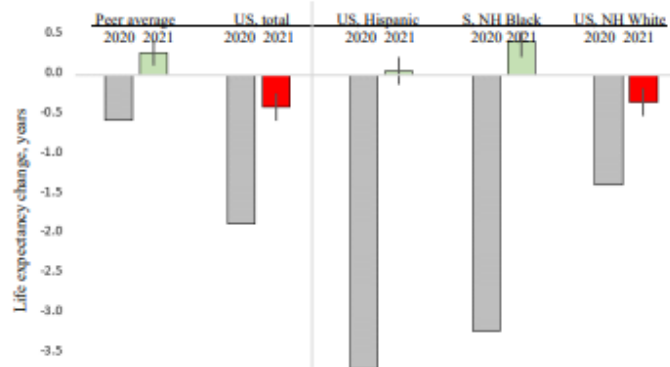


Life Expectancy & The Pandemic

CHANGES IN LIFE EXPECTANCY BETWEEN 2019 AND 2021: UNITED STATES AND 19 PEER COUNTRIES

Ryan K. Masters, PhD¹, Laudan Y. Aron, MA², Steven H. Woolf, MD, MPH³

Figure 1. Changes in US life expectancy and average changes in life expectancy among 19 peer countries, 2019-2020 and 2020-2021. NH = Non-Hispanic. Vertical bars for 2021 estimates depict the credible range based on 10% uncertainty. Separate figures for females and males are in the supplement.

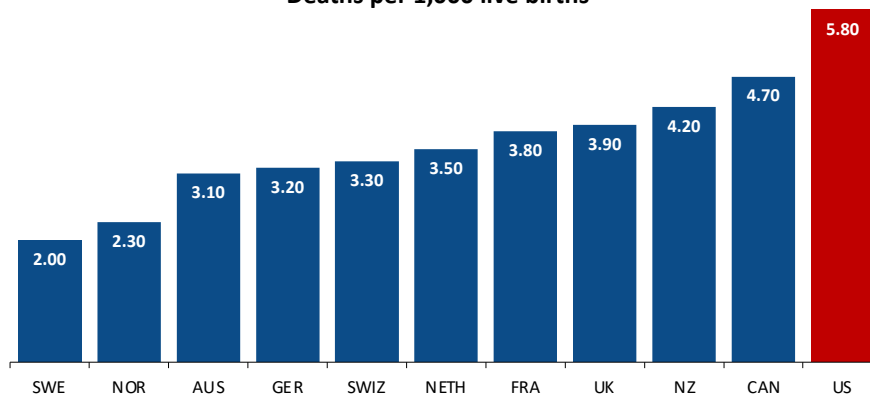


Life Expectancy at Birth by Race, 2017

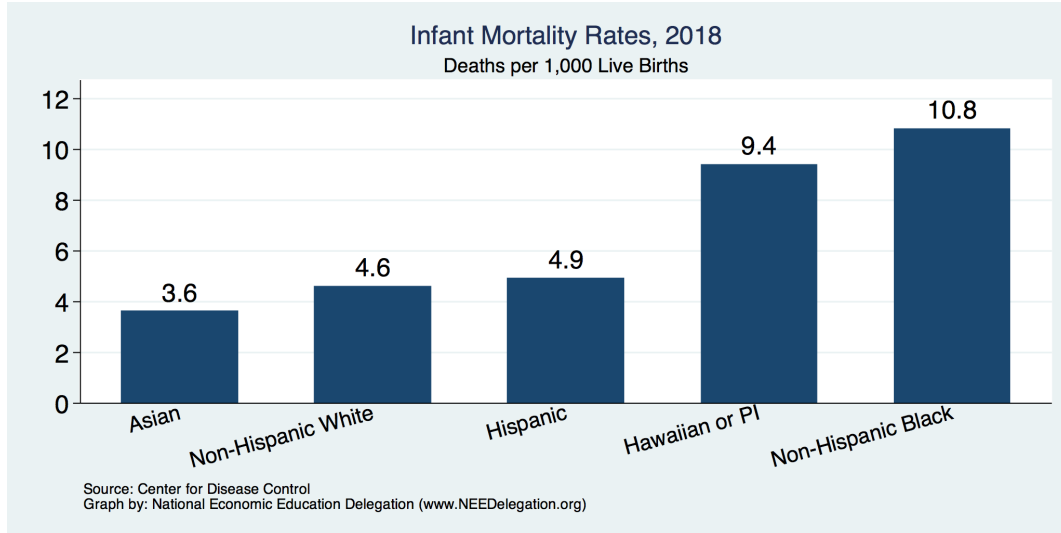
Race/Ethnicity	Life Expectancy (Years)
All Races	78.6
White	78.8
Black	75.3
Hispanic	81.8

Infant Mortality International Comparison

Deaths per 1,000 live births

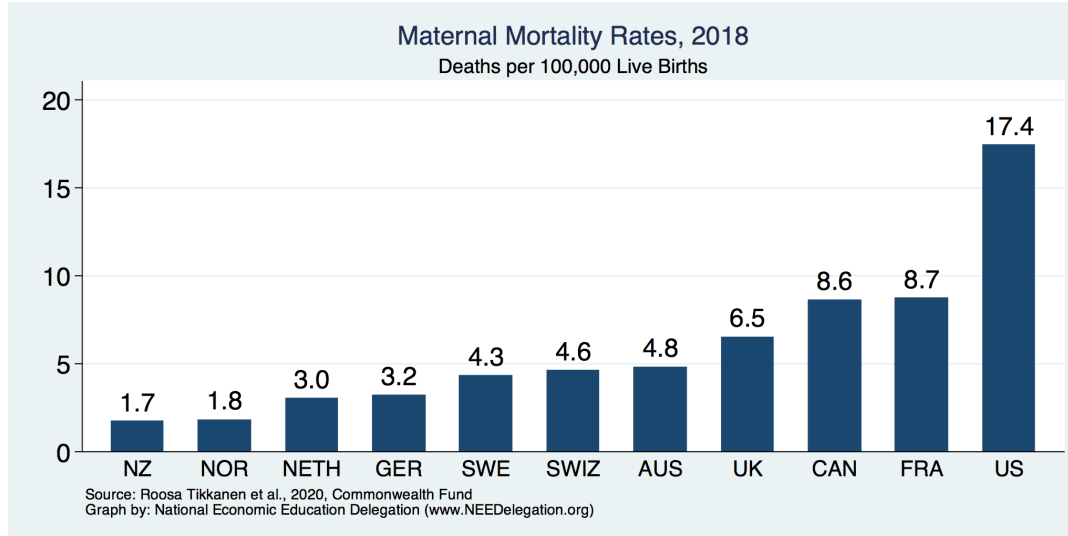


Infant Mortality by Race/Ethnicity

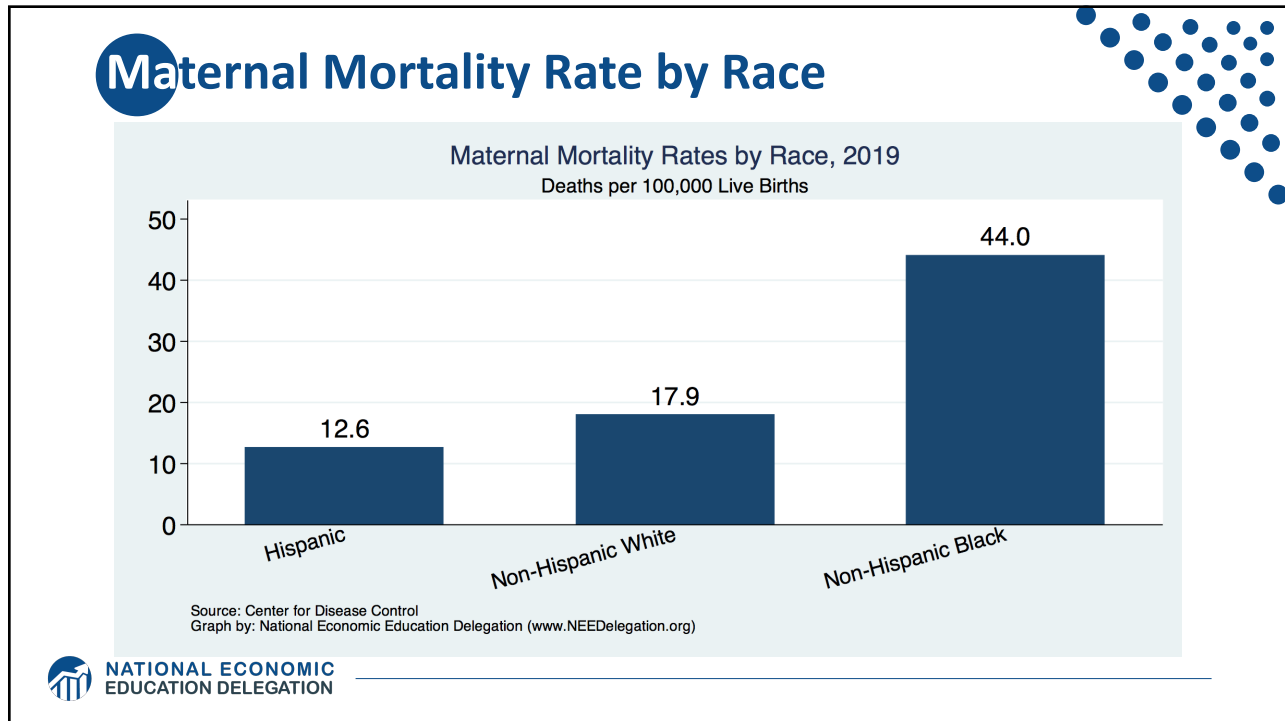


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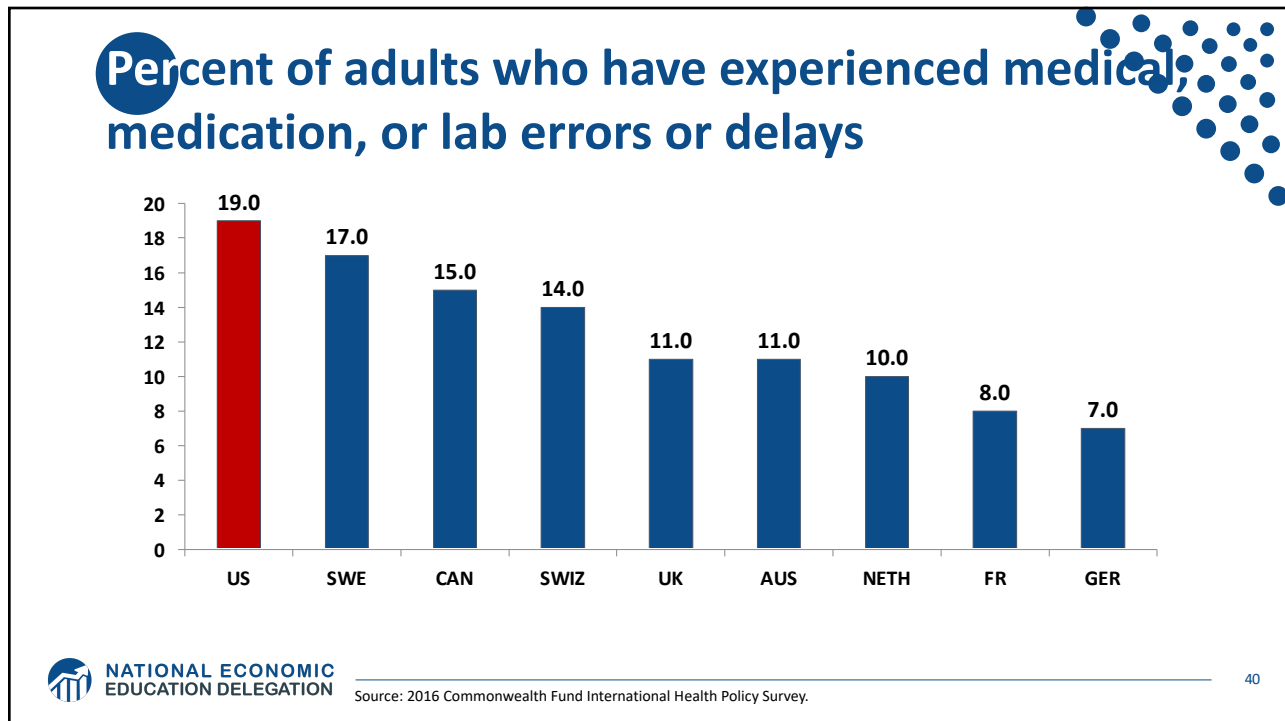
Maternal Mortality Rate



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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.

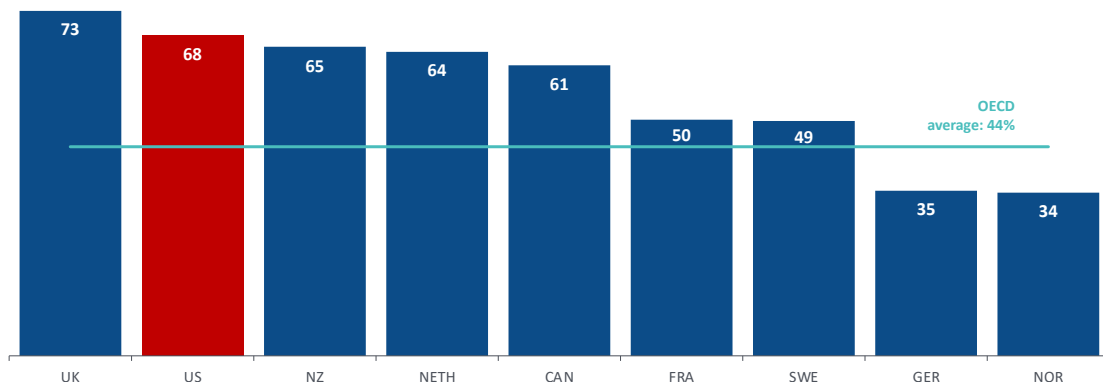


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Flu Immunization

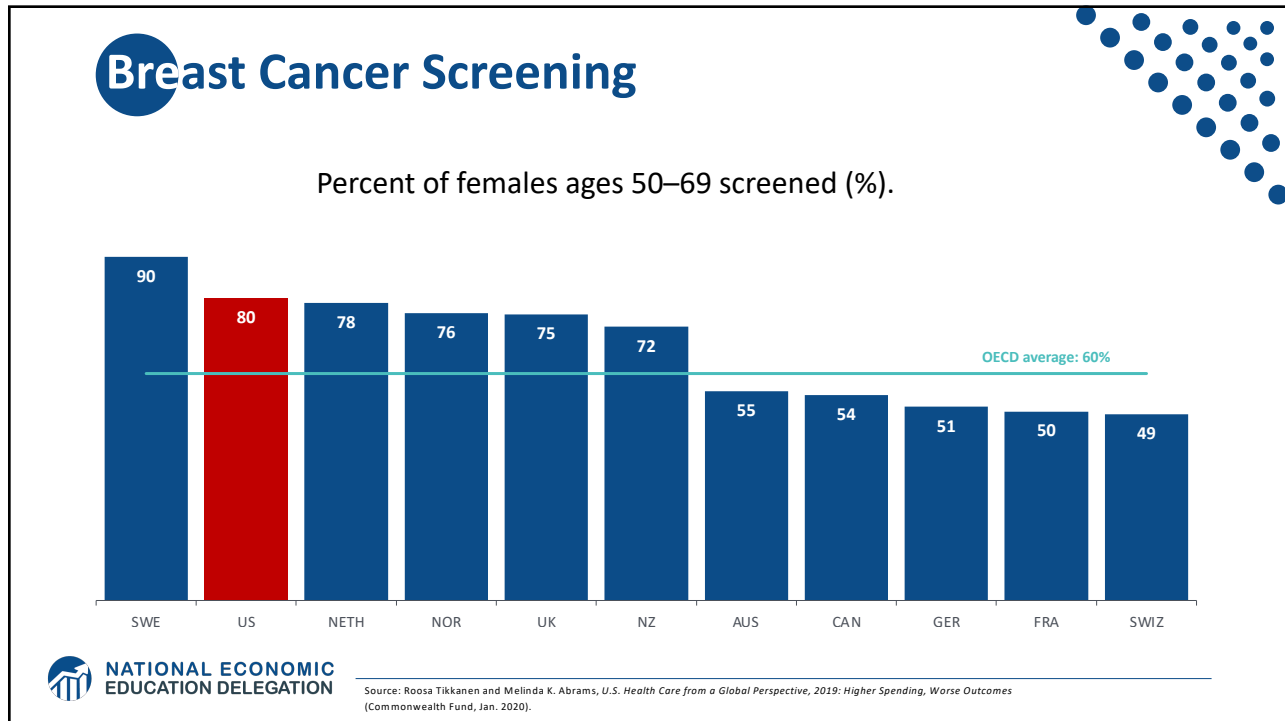
Percent of adults age 65 and older immunized (%).



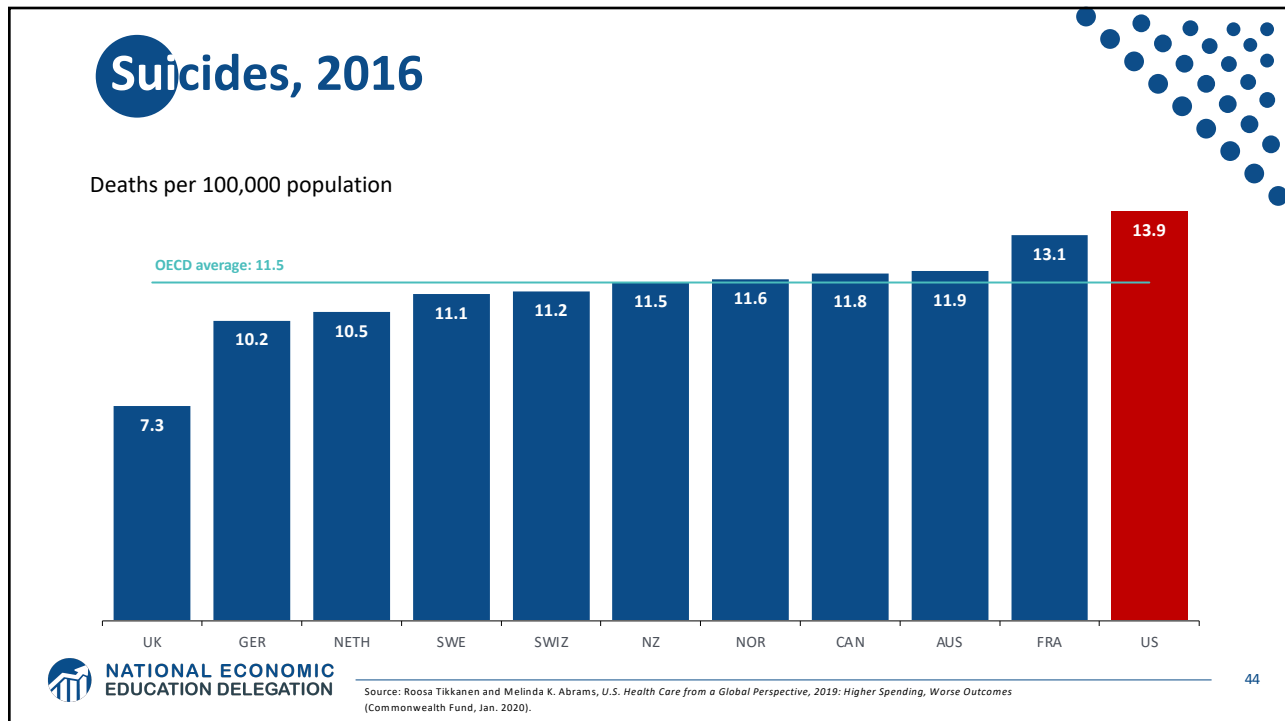
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Source: Roosa Tikkanen and Melinda K. Abrams, *U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes* (Commonwealth Fund, Jan. 2020).

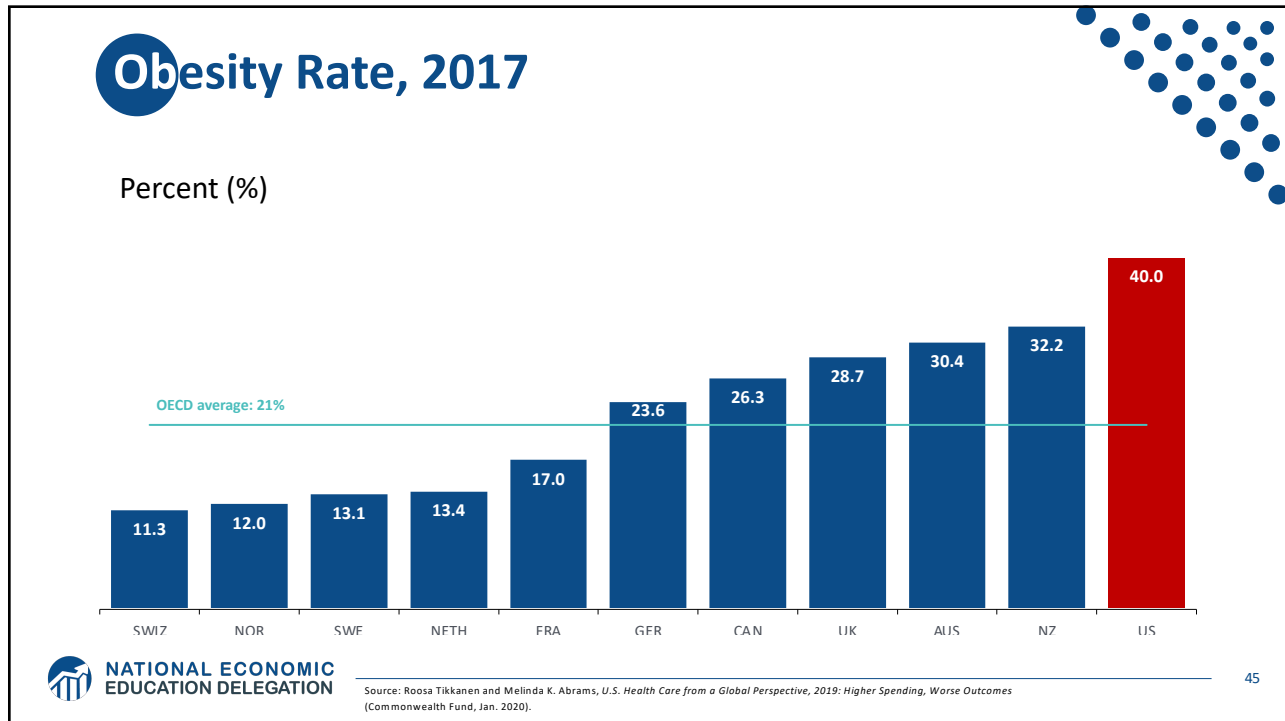
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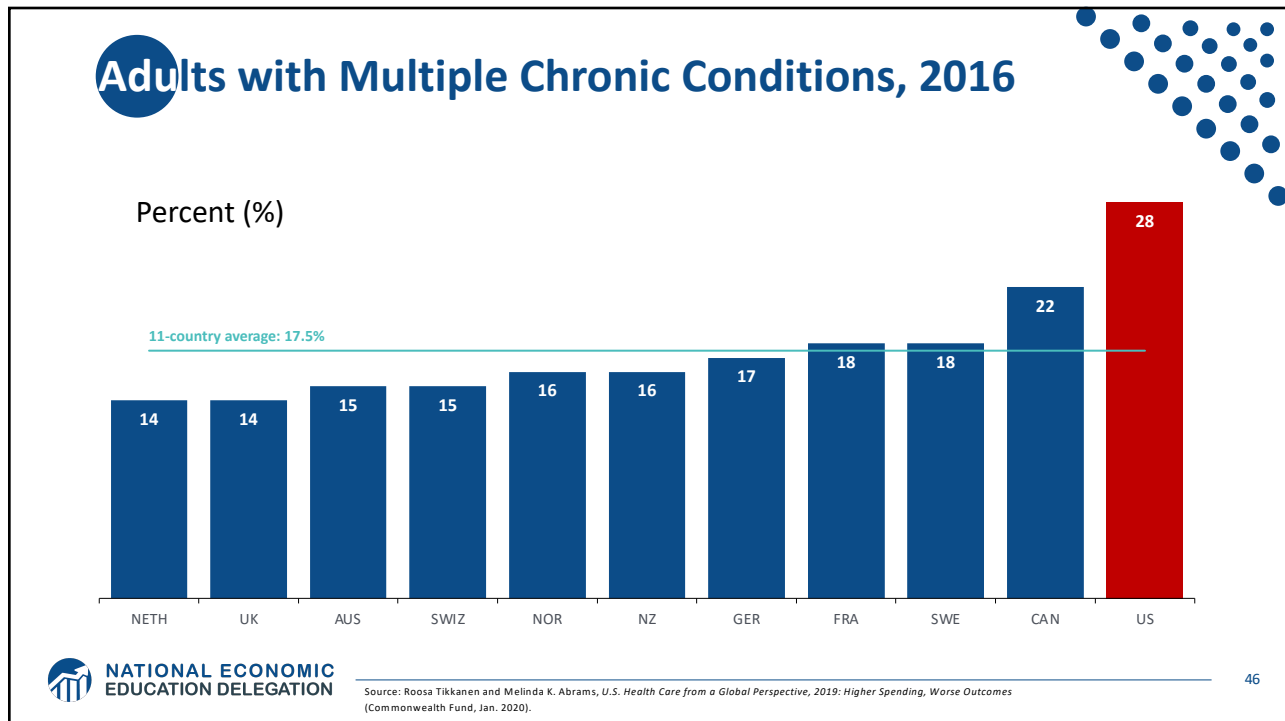
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The World Health Report 2000, *Health Systems: Improving Performance*

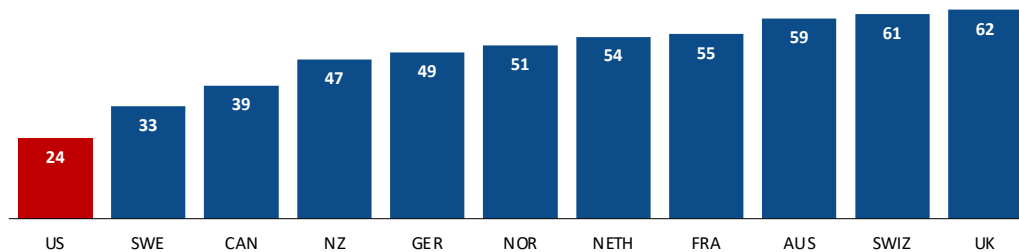
Overall Ranking		Overall Ranking	
30.	Canada	1.	France
31.	Finland	2.	Italy
32.	Australia	3.	San Marino
33.	Chile	4.	Andorra
34.	Denmark	5.	Malta
35.	Dominica	6.	Singapore
36.	Costa Rica	7.	Spain
37.	United States	8.	Oman
38.	Slovenia	9.	Austria
39.	Cuba	10.	Japan



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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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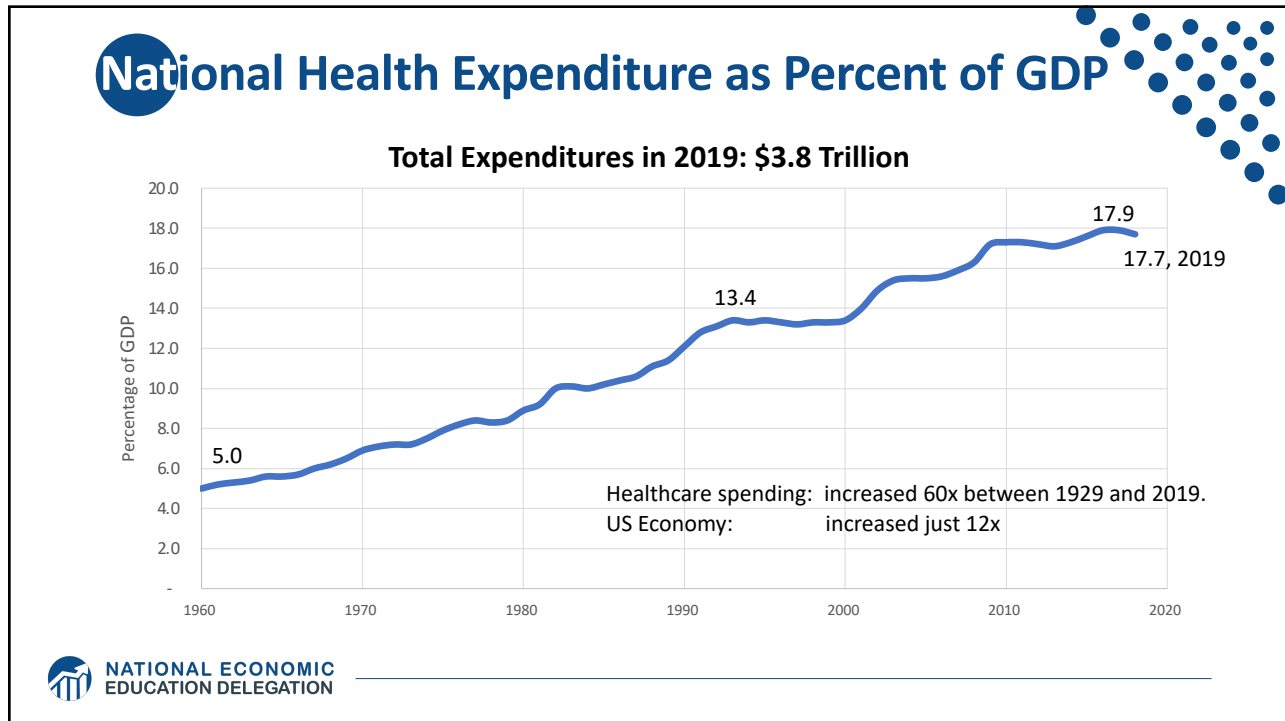
Quality of Care Notes

- 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!

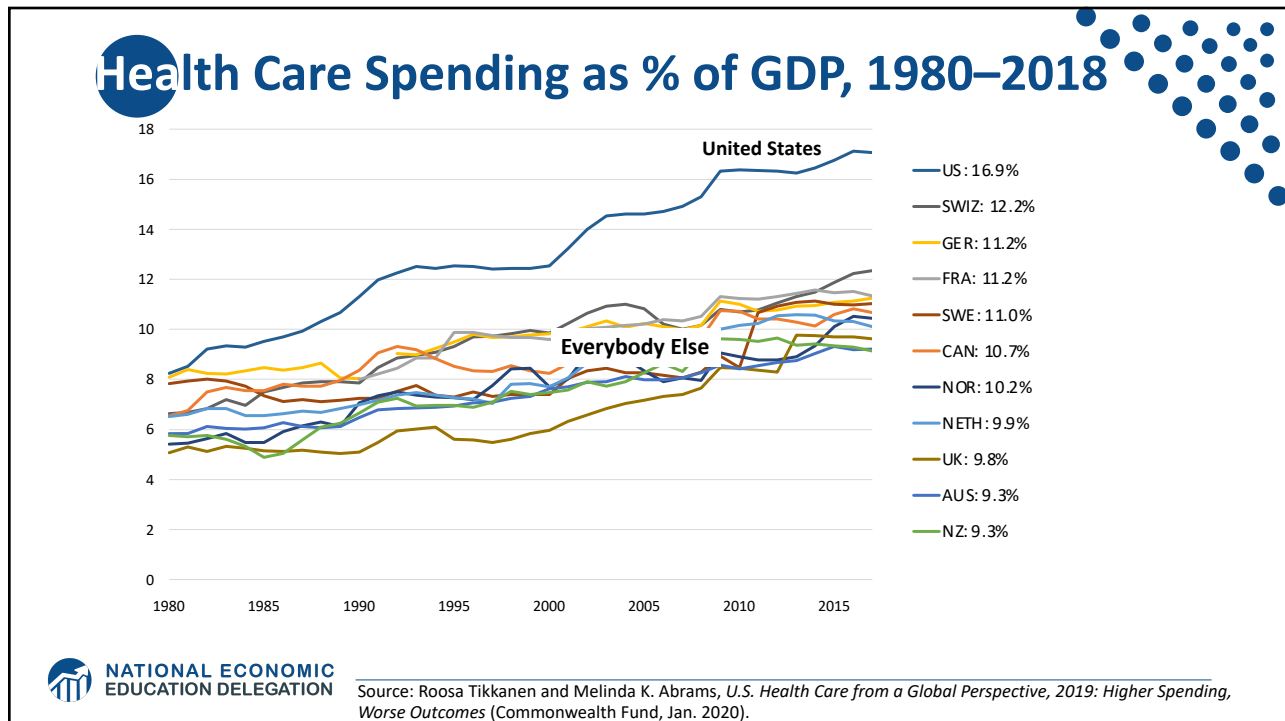
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Costs

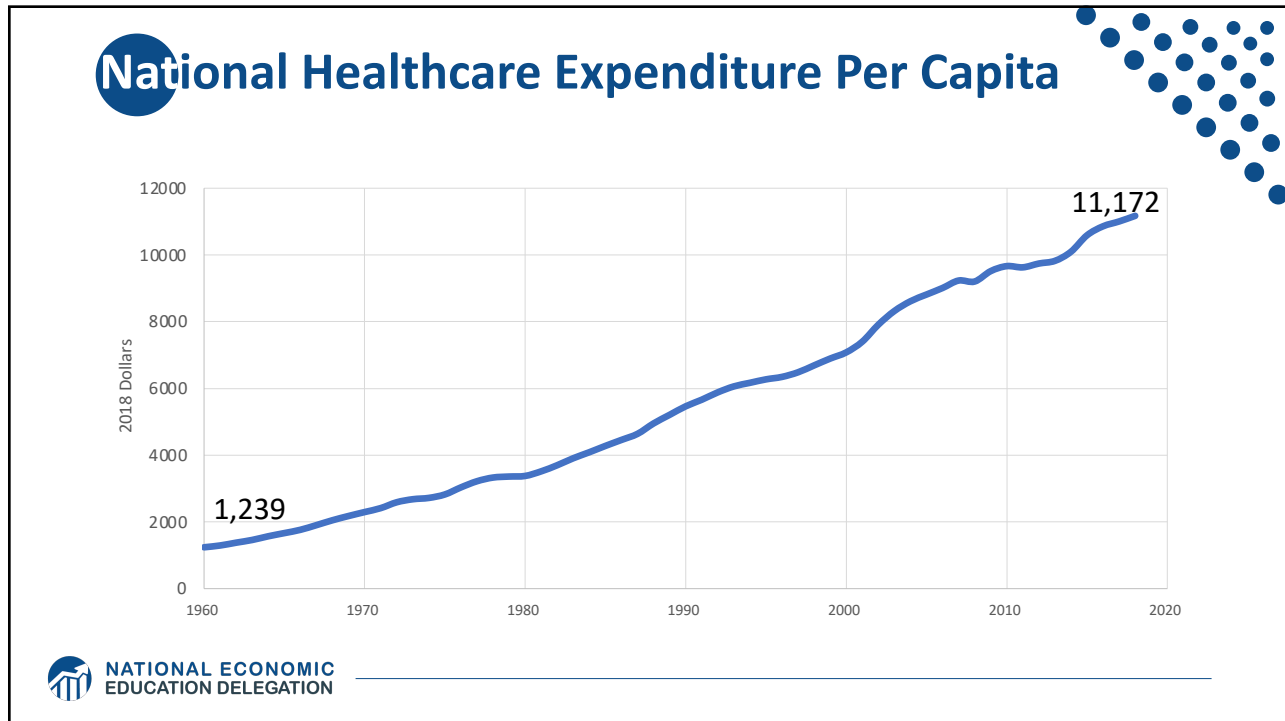
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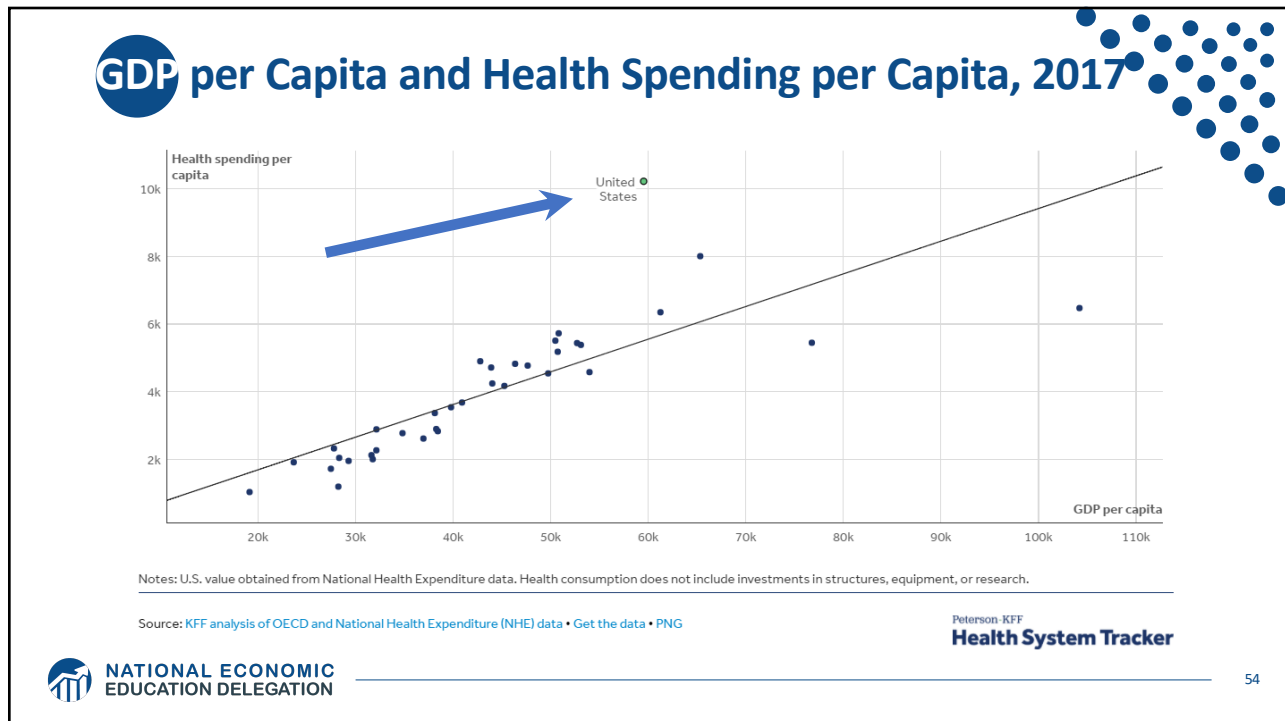
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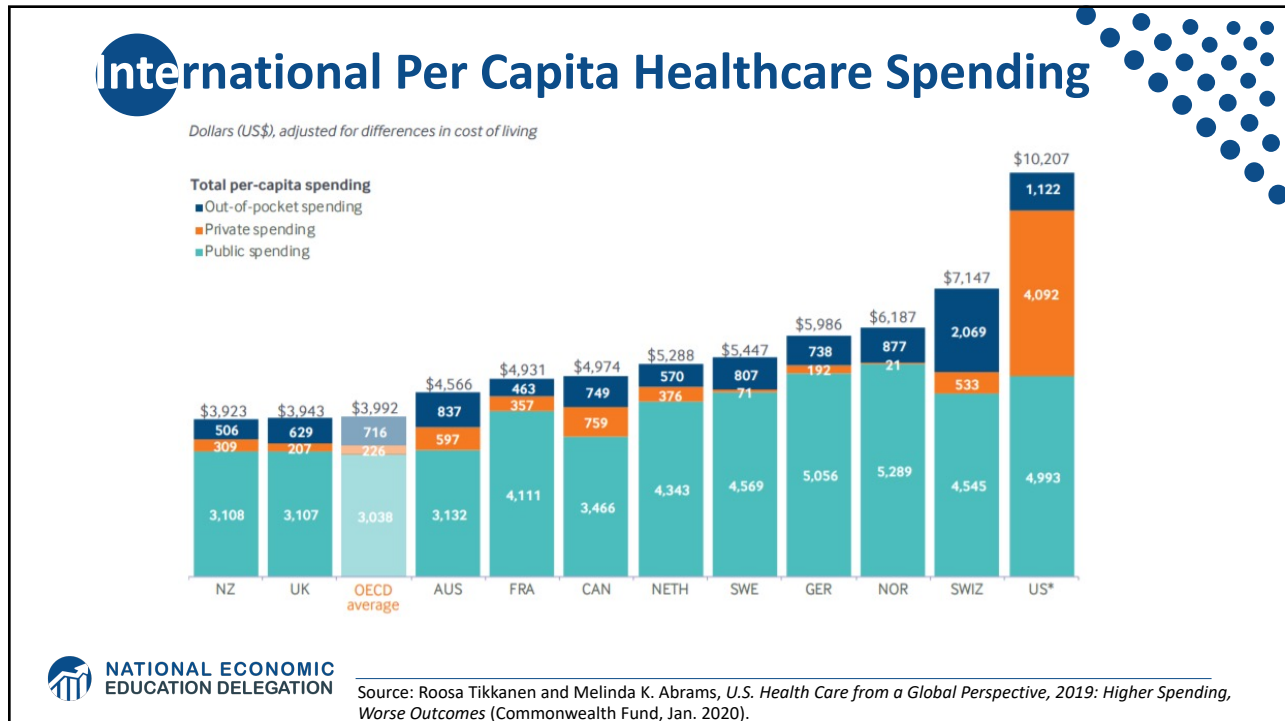
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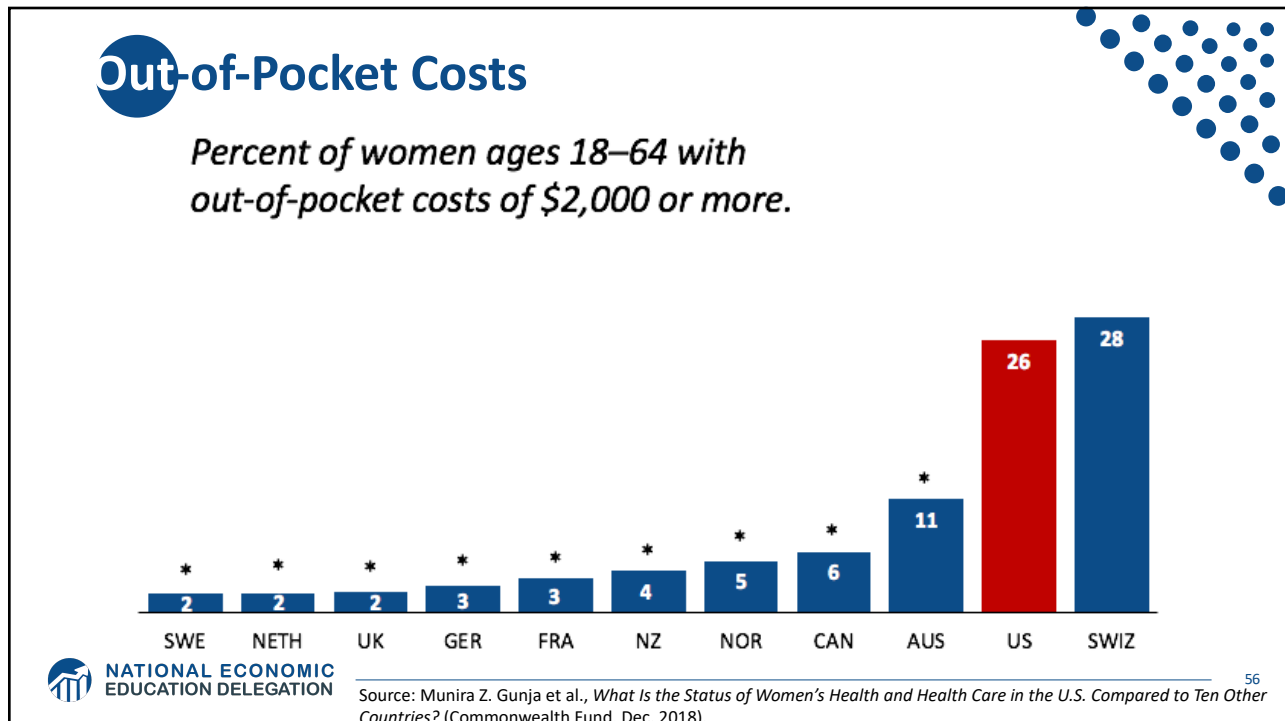
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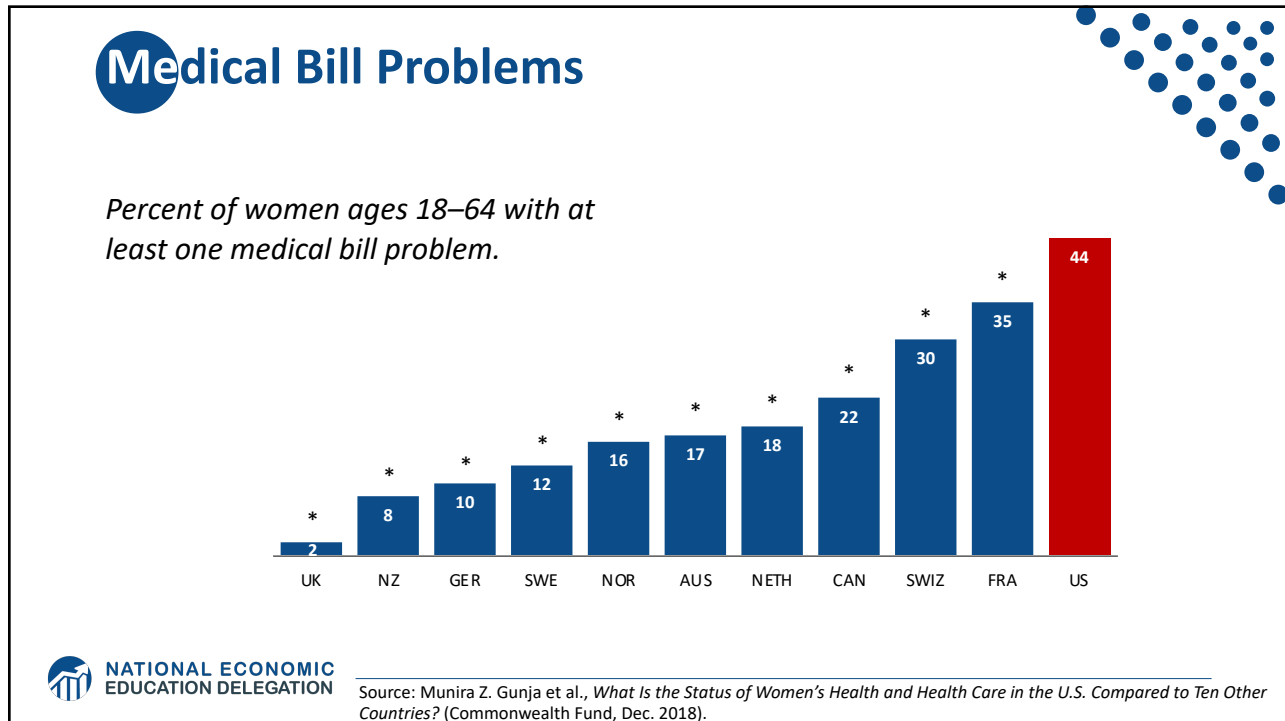
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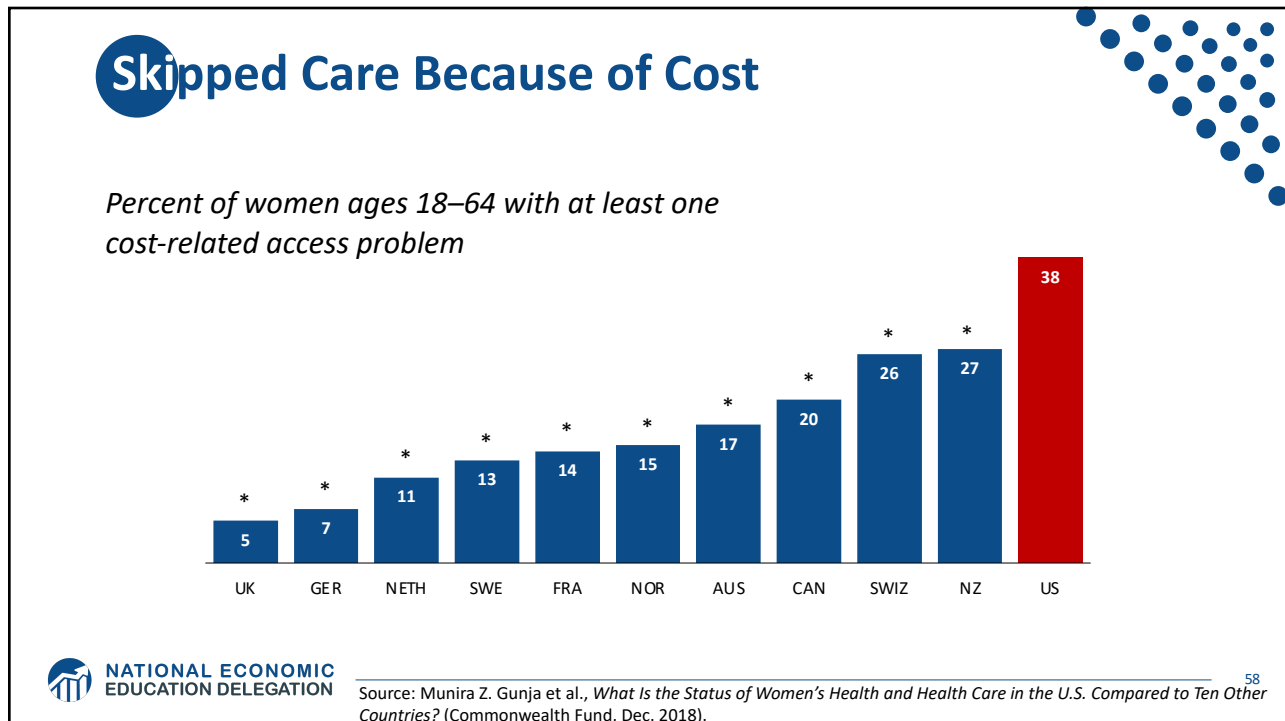
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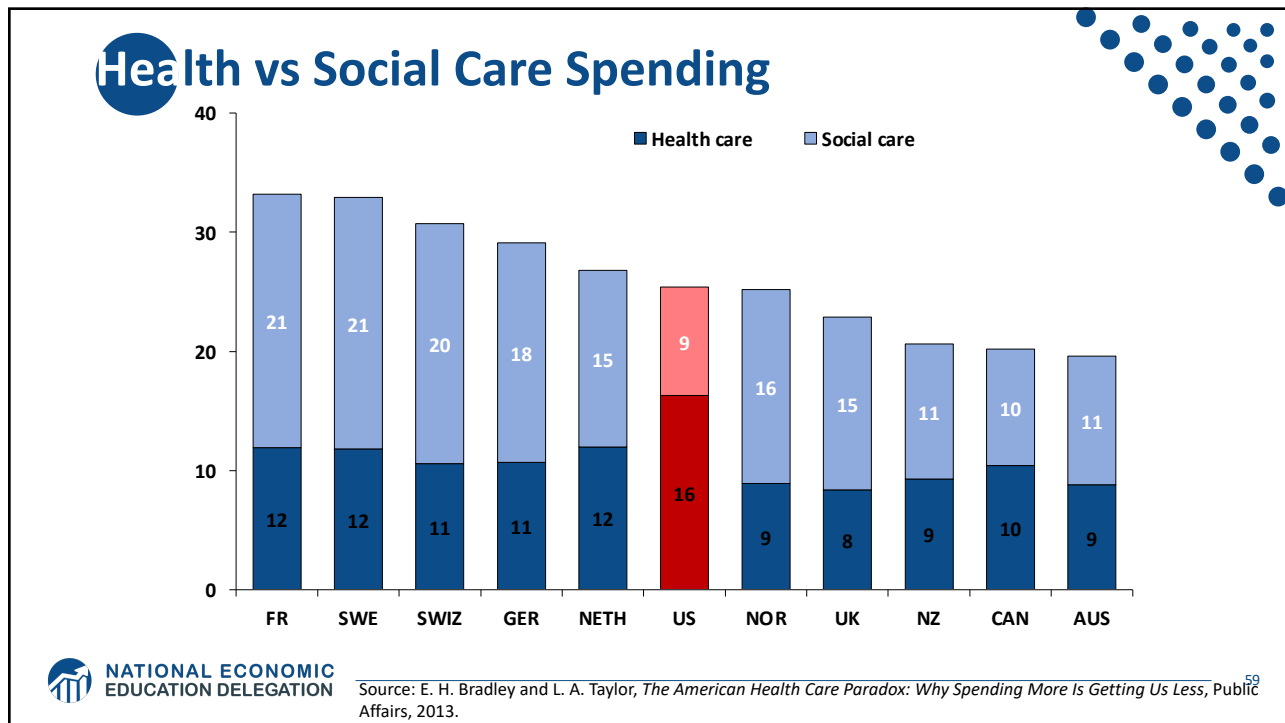
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Health vs Social Care Spending

- A 2013 study by Bradley and Taylor found that the U.S. spent the least on social services—such as retirement and disability benefits, employment programs, and supportive housing—among the countries studied in this report, at just 9 percent of GDP.
- From 2000 to 2011, for every dollar the US spent on health care, the country spent another \$1.00 on social services, whereas across the OECD, for every dollar spent on health care, countries spend an additional \$2.50 on social services

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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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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.

In healthcare in the United States, there are potential opportunities to improve all three simultaneously.

E.g., it is possible that increasing quality can reduce costs.

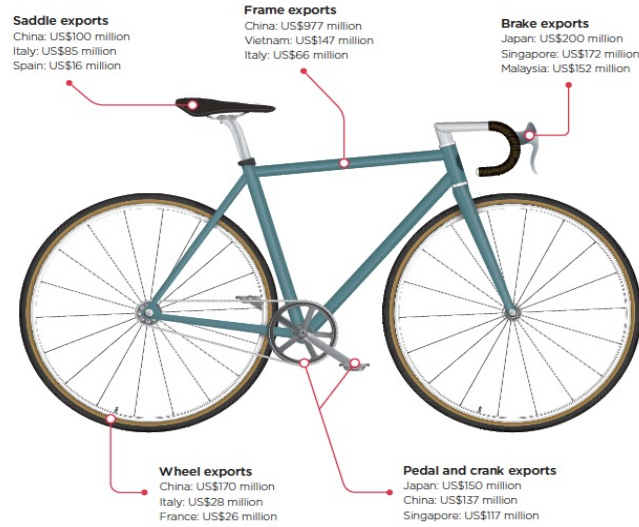


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Trade: Alan Deardorff, University of Michigan

Figure 1.1 Where do bicycles come from?



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Thank you!

Any Questions?

www.NEEDecon.org

Kelley Cullen, Ph.D.

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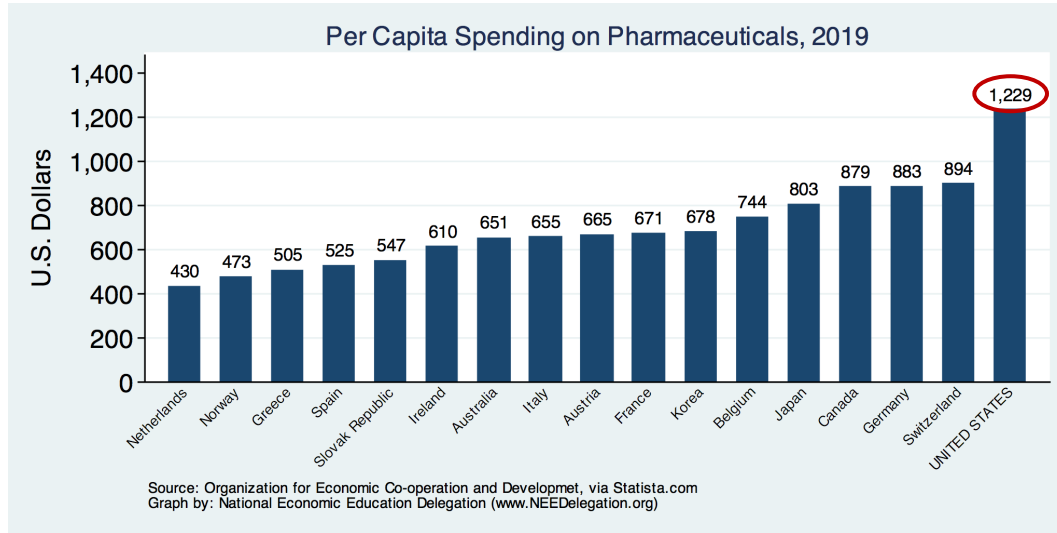
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Spending on Pharmaceuticals

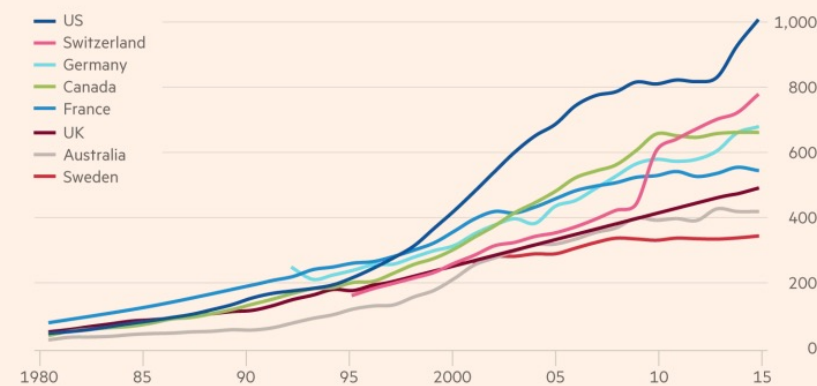


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Drug Prices: Trends Over Time

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

Selected countries (\$)

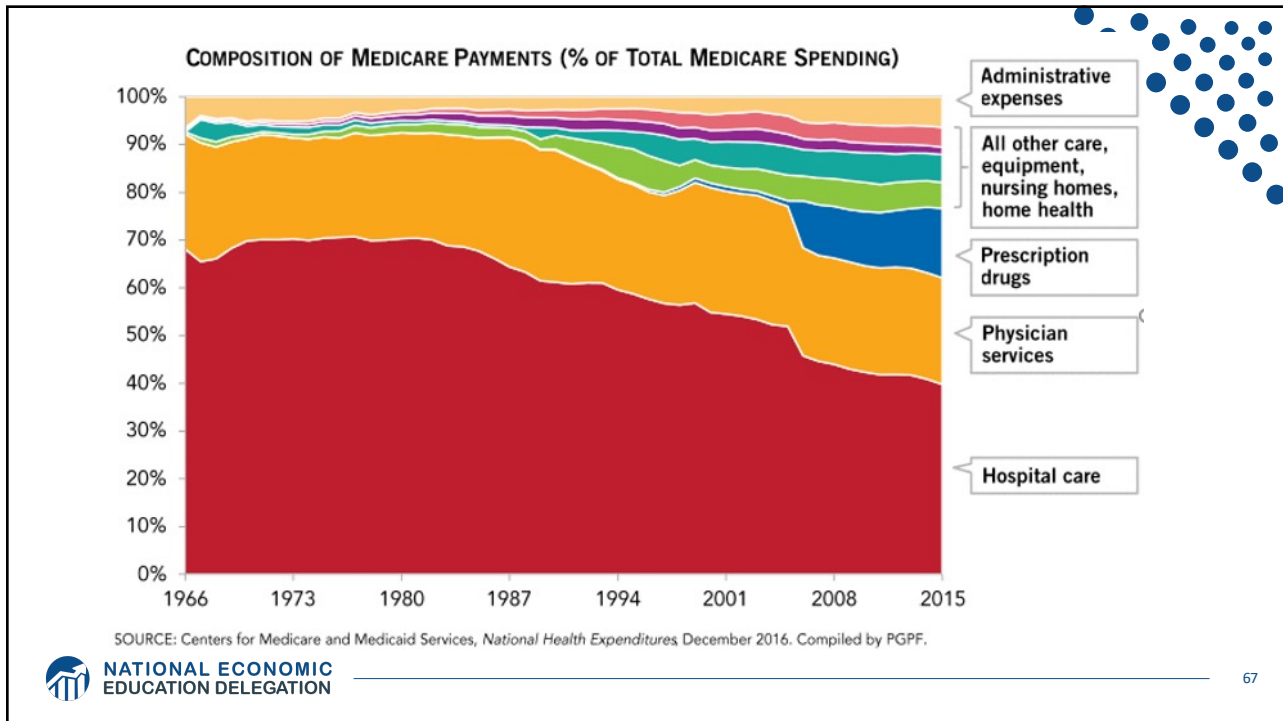


* Figures relate to prescription drugs, not hospital spending

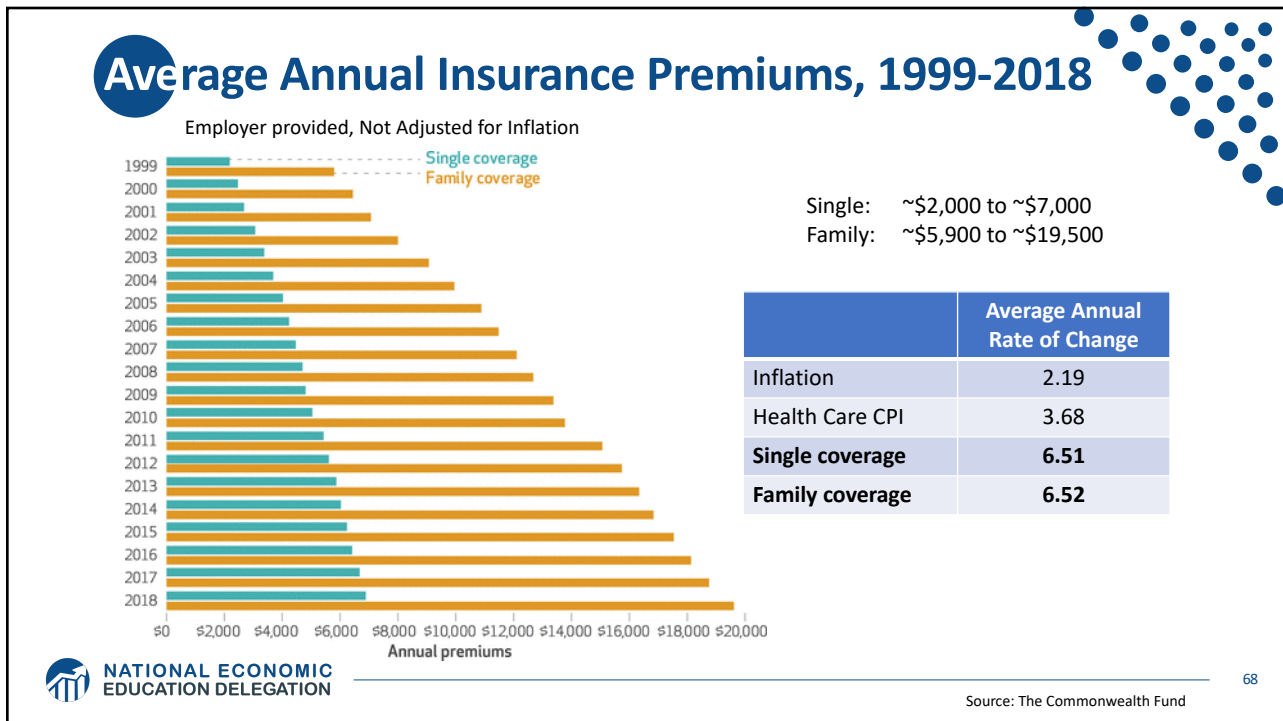
Source: The Commonwealth Fund



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Spending on Deductibles

