

Module 0: Introduction

Why study health economics?

Ian McCarthy | Emory University
Econ 372

Health and Health Care



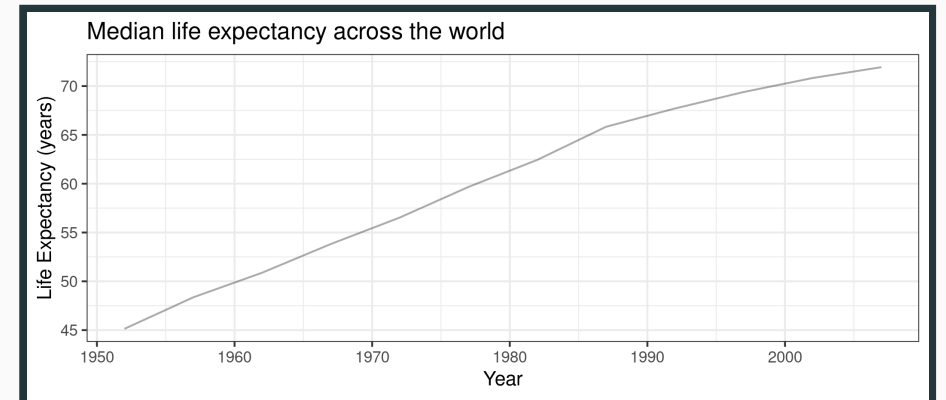
Health and Health Care

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

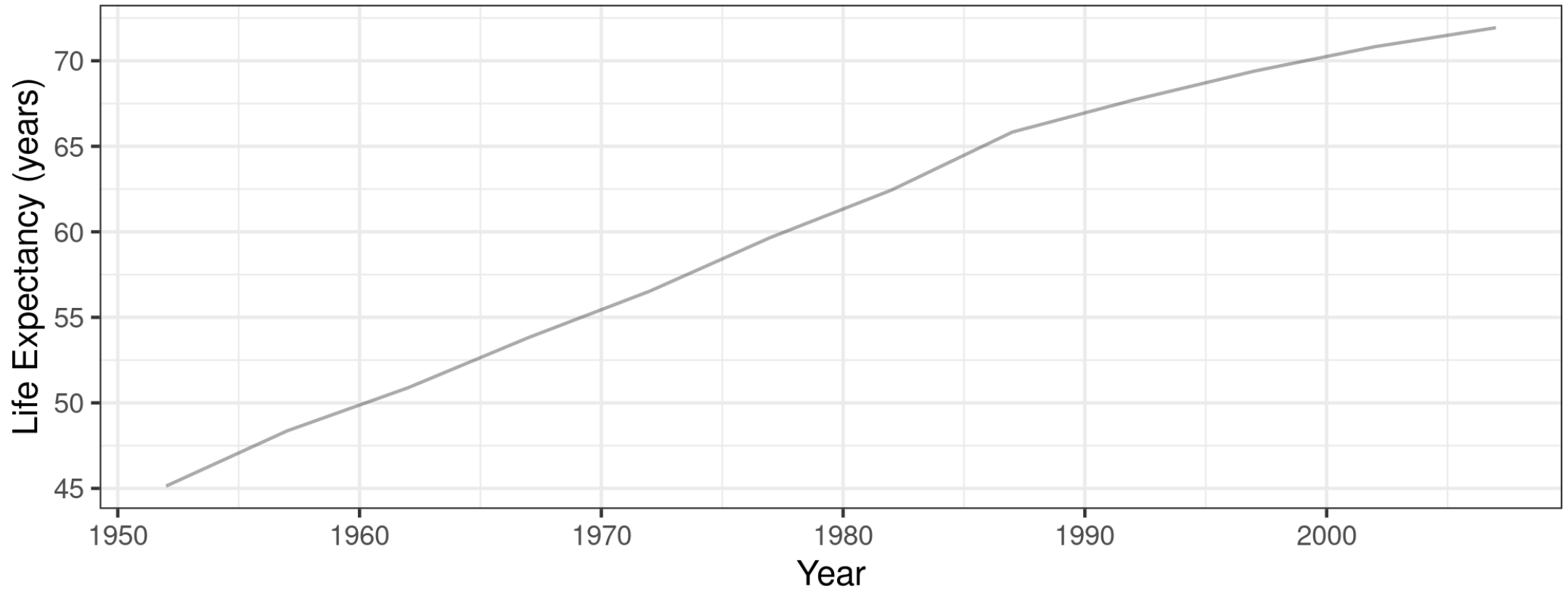
Evidence of better health

```
library(gapminder)
gapminder %>%
  group_by(year) %>%
  summarize(lifeExp = median(lifeExp),
            gdpMed = median(gdpPercap)) %>%
  ggplot(aes(year, lifeExp)) + geom_line(alpha = 1/3) + theme_bw() +
  labs(x = "Year",
       y = "Life Expectancy (years)",
       title = "Median life expectancy across the world")
```



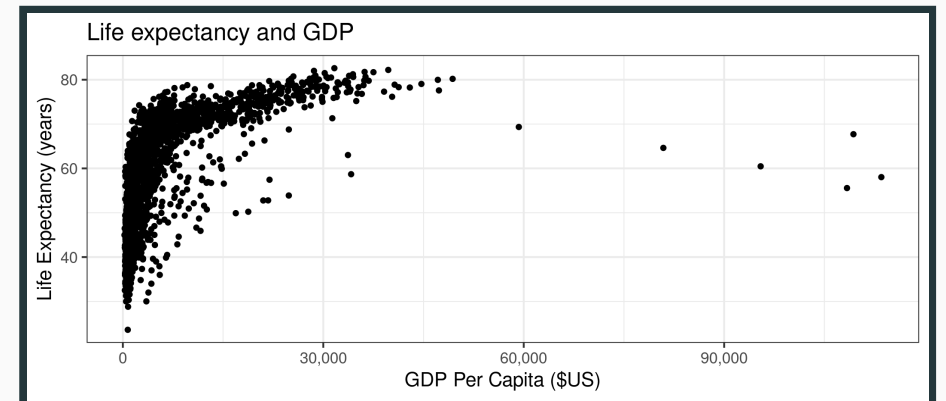
Evidence of better health

Median life expectancy across the world

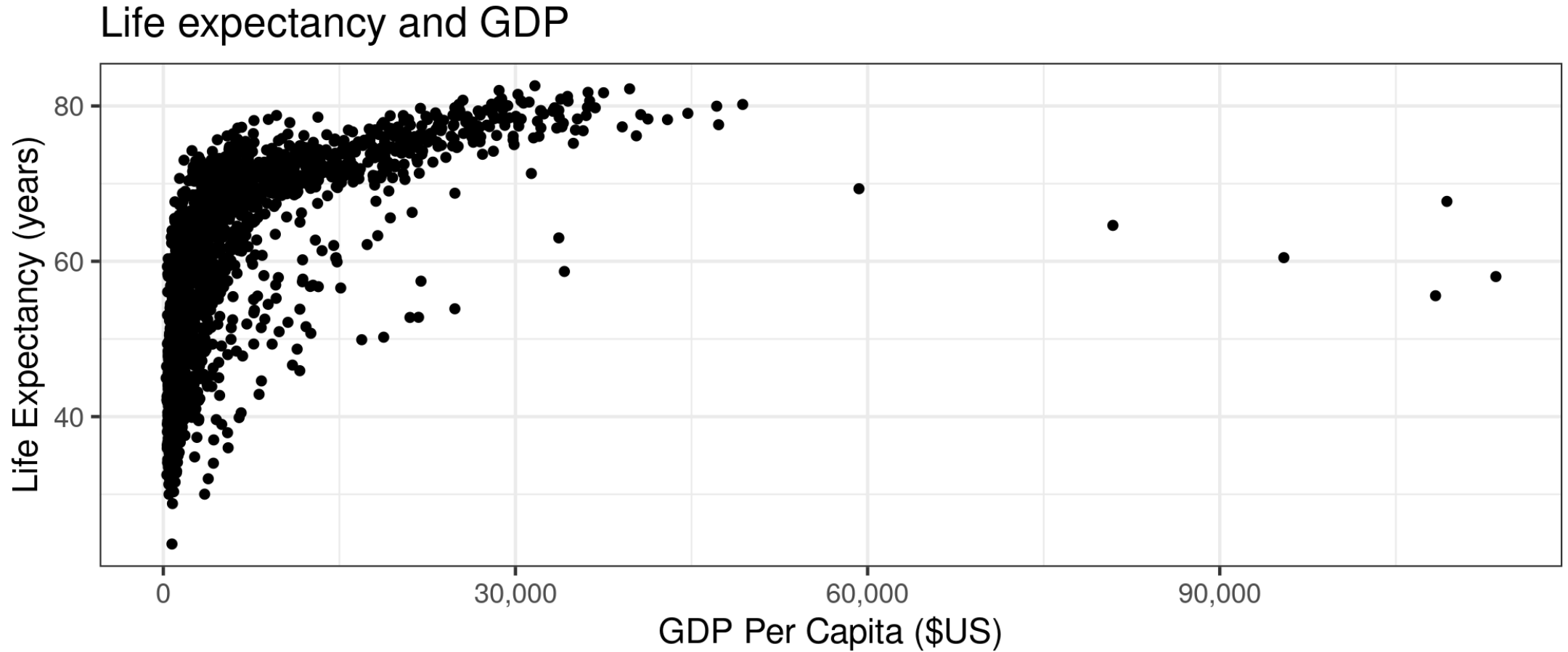


GDP and Health

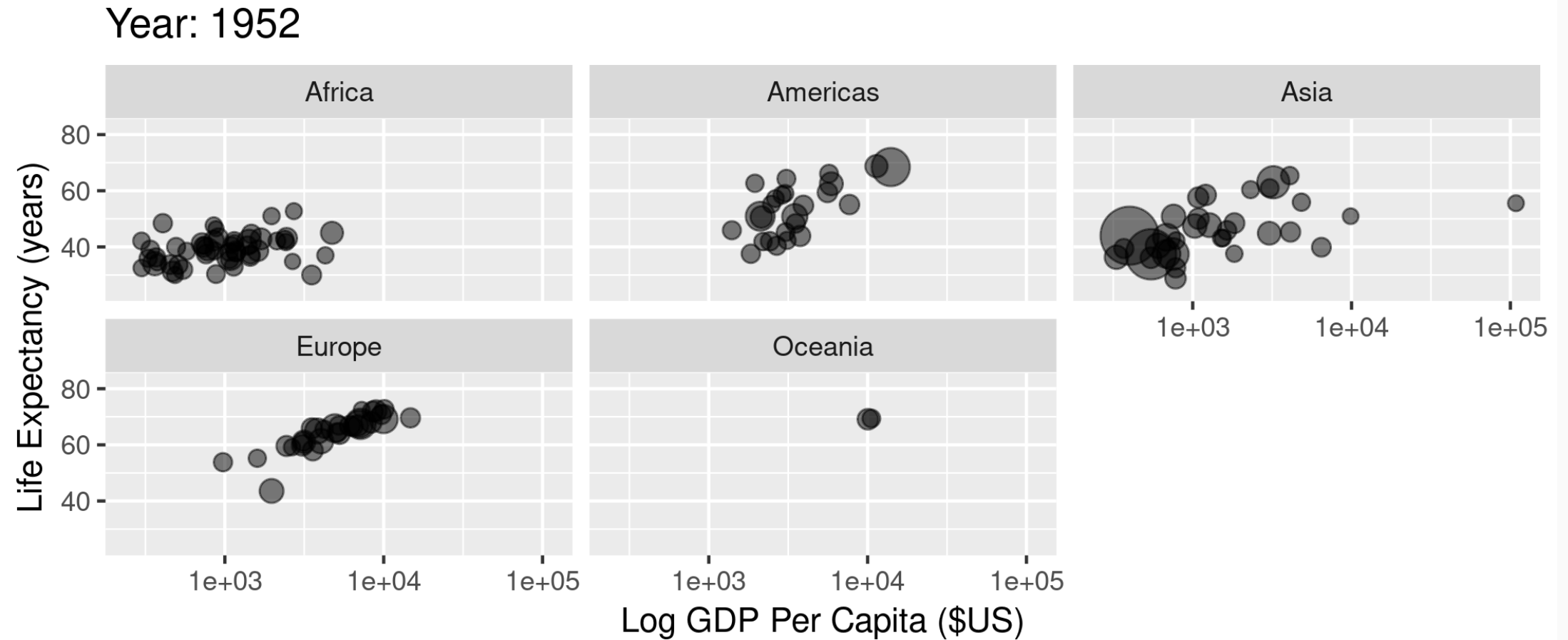
```
library(gapminder)
ggplot(data = gapminder, mapping = aes(x = gdpPercap, y = lifeExp)) +
  geom_point(size = 1) + theme_bw() + scale_x_continuous(label = comma) +
  labs(x = "GDP Per Capita ($US)",
       y = "Life Expectancy (years)",
       title = "Life expectancy and GDP")
```



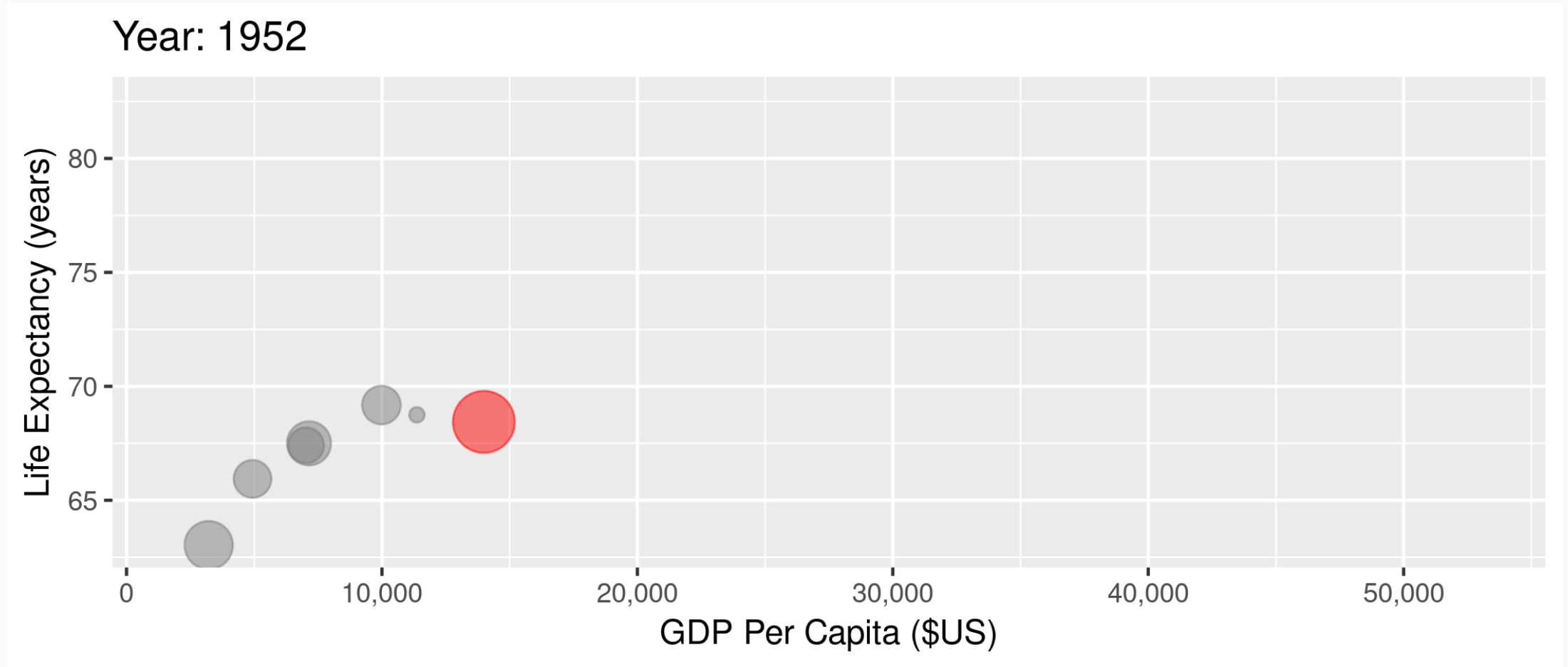
GDP and Health



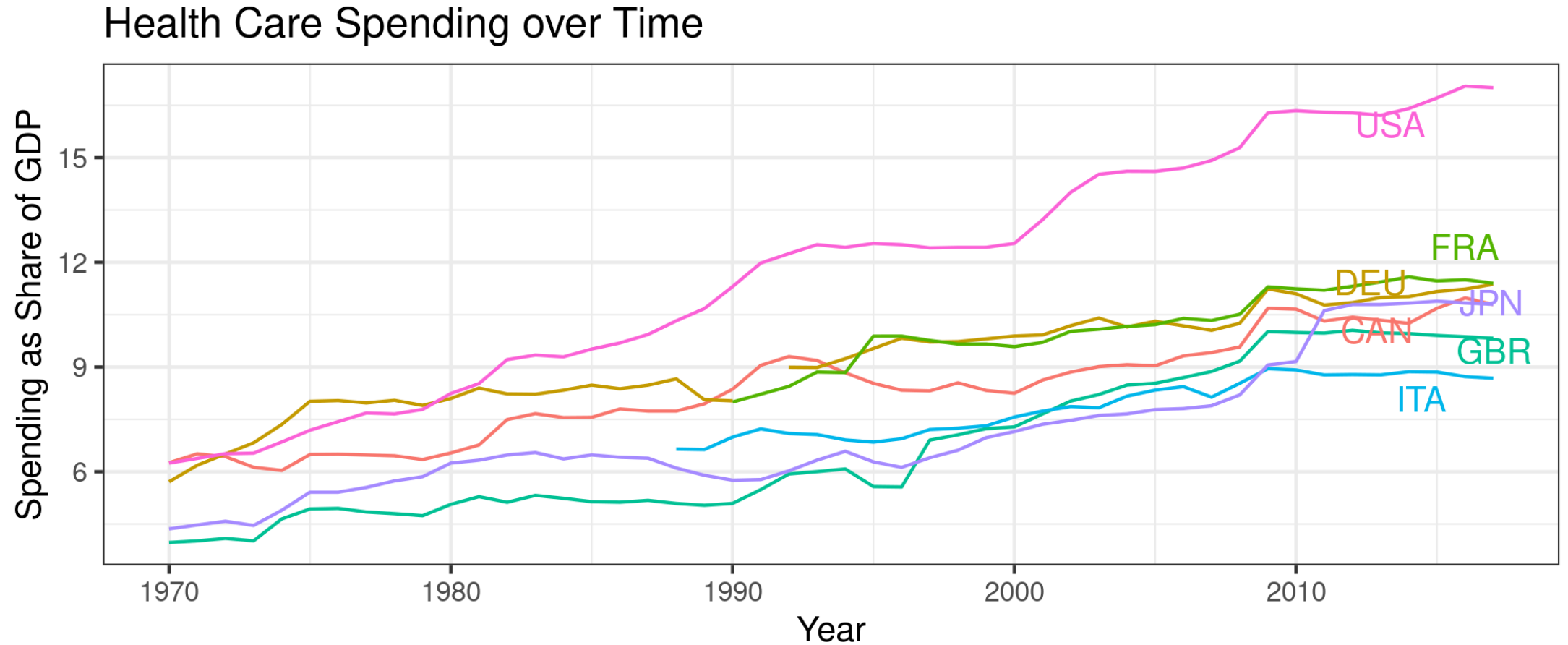
GDP and Health over Time



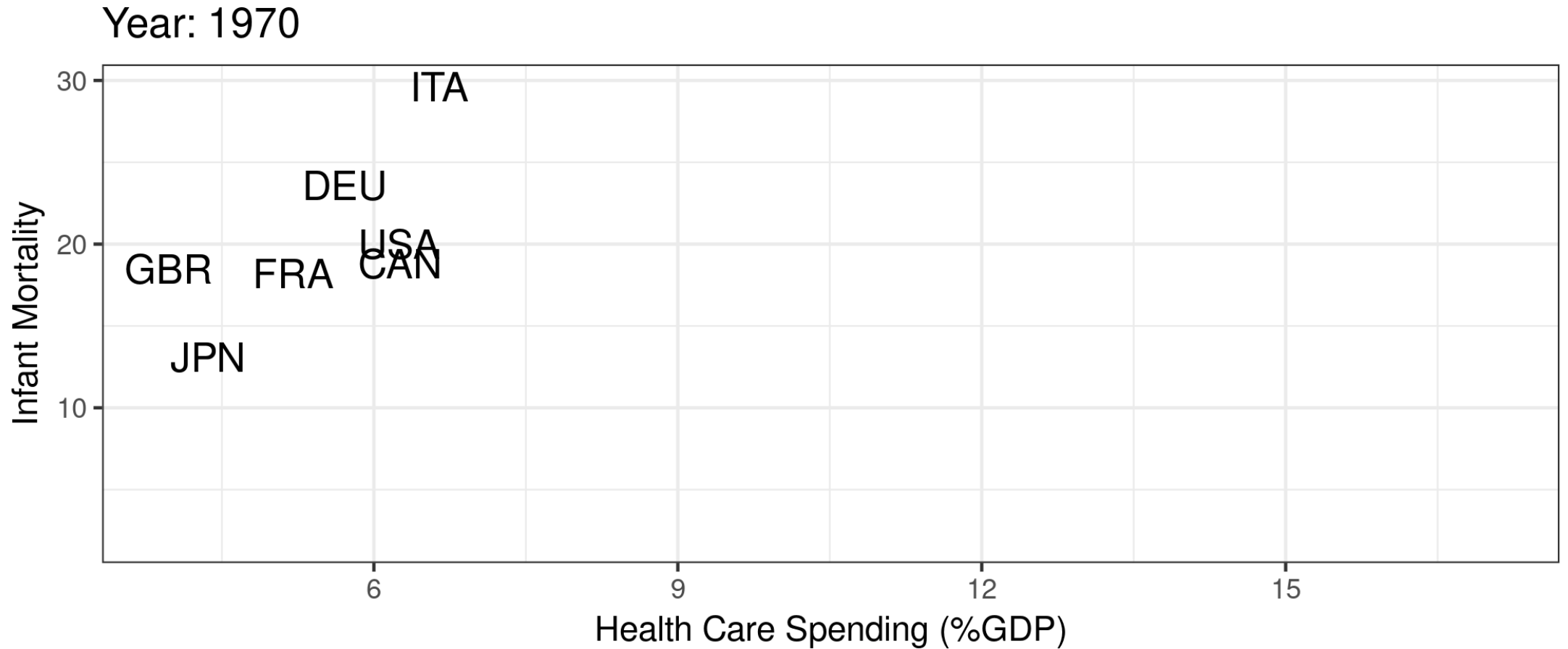
But the US is unique



Health care spending

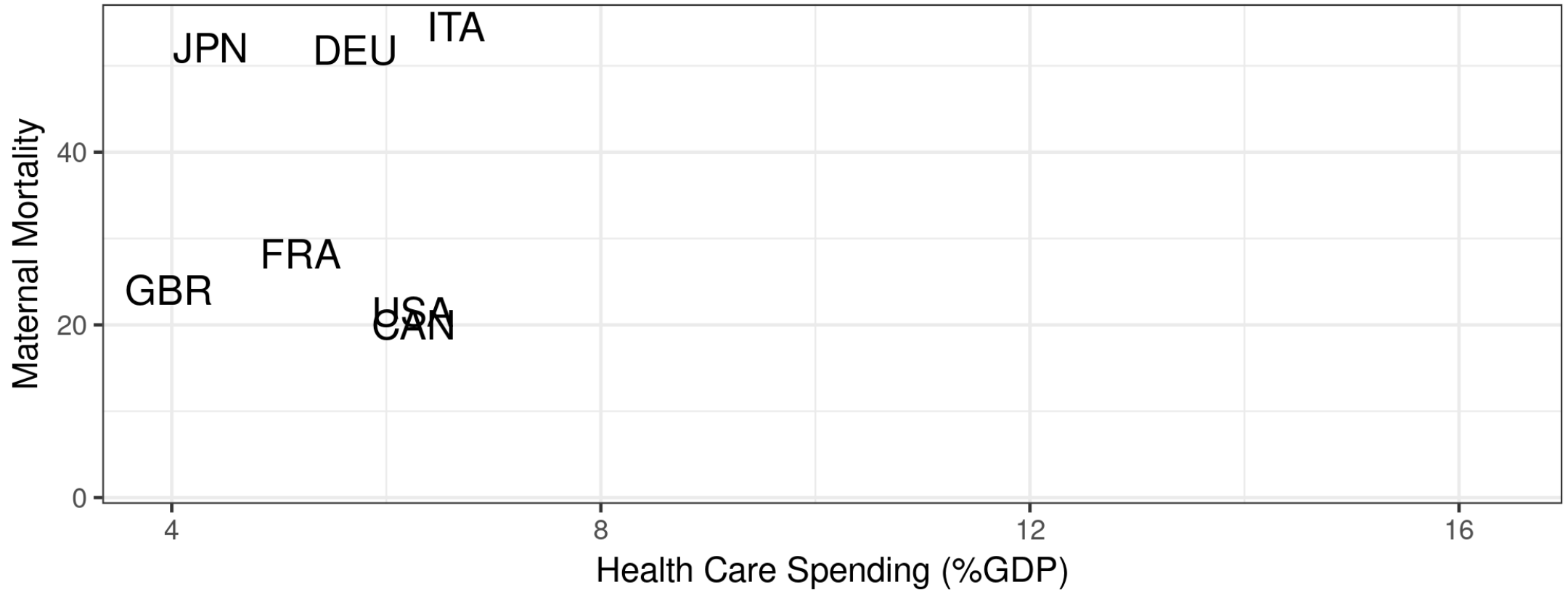


Spending and infant mortality



Spending and maternal mortality

Year: 1970



What does that mean?

- Are we just woefully inefficient?
- The right answer is probably more complicated
 - U.S. very good in some areas (breast cancer treatment, interventional cardiology)
 - Let's look at some more graphs from the [Commonwealth Fund](#)

Why study U.S. health care

1. Health and health care are constantly changing
2. Health expenditures in 2019: \$3.8 trillion, 17.7% of GDP, \$11,582 per person (from [NHE Fact Sheet](#))
3. U.S. health care is uniquely inefficient in many ways

"Nobody knew health care could be so complicated"

-- Donald Trump