Our Amazing, Crazy, Uneven and Expensive Healthcare System

Seattle Economics Council

June 5, 2019



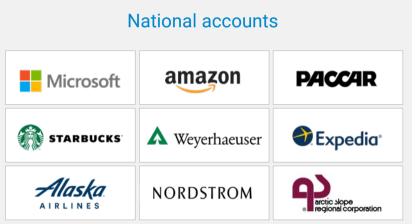


Company profile

86 YEARS SERVING THE PNW \$11B REVENUE

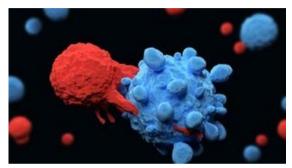
1300%
RISK-BASED CAPITAL







The US healthcare system does amazing things



Seattle cancer trial 'very good news' for young patients





'It was amazing': New technology allows paralyzed man to move arm by thinking about it

The Washington Post



A US drugmaker offers to cure rare blindness





Amazing and Unique

The US focus, assets and incentives are unique

- Intense focus on individual diagnostics and conditions vs system as a whole
- World leading science community
- Abundant investable capital
- Capable entrepreneurs seeking enormous financial and social rewards



Healthcare is uneven, and crazy, too

Quality of care

is inconsistent and lags behind other developed countries

Quantity of care

is widely varied and excessive

Cost of care

of care differs dramatically within markets and internationally

Why? Low need and willingness to change

- Data is overlooked, ignored and inaccessible
- Care is not standardized and slow to adapt
- Information is asymmetrical and opaque while consumer interest is low
- Healthcare is largely unshoppable
- Market power and economic value are high: hospitals = 6% of GDP
- Costs borne by third parties









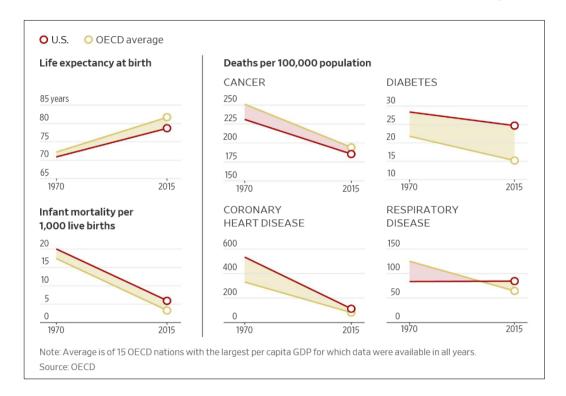
The US population, as a whole, is less healthy

System-related factors

- Quality
- Access
- Prevention

Societal issues

- Nutrition
- Lifestyle
- Obesity
- Violence



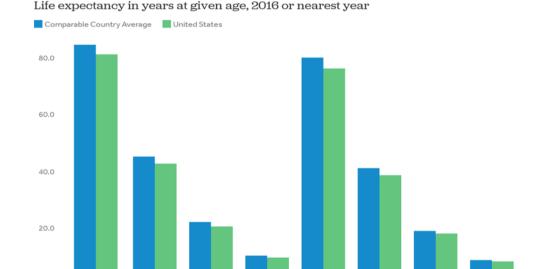


At every age, US life expectancy lags

IN 1980, peer nations had comparable lifespans to US

SINCE 1980 US has gained 4.9 years while peers have gained 7.7 years

IN 2015 AND 2016, US life expectancy dropped, the first 2-year decline since 1964



age 80 Notes: Canada & France data for 2016 are not available. Data for the nearest year are used in the comparable country average for 2016.

Women at

Men at

birth

Men at age

40

Source: Kaiser Family Foundation analysis of 2018 OECD data: "OECD Health Data: Health status: Health status indicators", OECD Health Statistics (database) (Accessed on January 25, 2019).

Women at

age 65

Women at

age 40

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Women at

birth

Peterson-Kaiser **Health System Tracker**

Men at age

Menatage

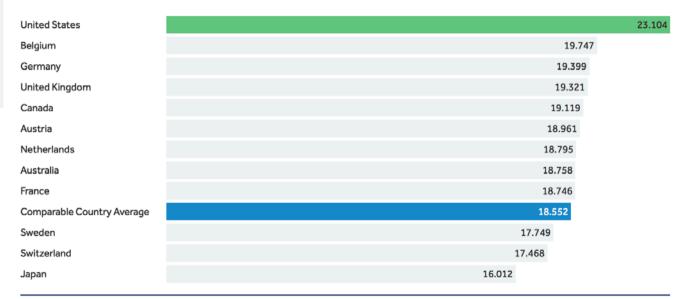
65



Americans have fewer highly functional years

24% higher rate of disability and premature death in the United States

Age standardized disability adjusted life year (DALY) rate per 100,000 population, 2015



Source: Kaiser Family Foundation analysis of data from Institute for Health Metrics and Evaluation. Global Burden of Disease Study 2015 (GBD 2015) Data Downloads

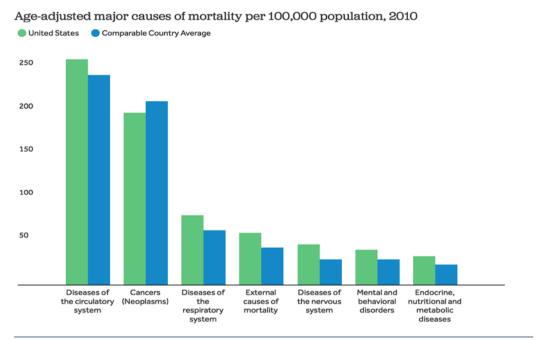
Peterson-Kaiser

Health System Tracker



Incidence of mortal disease

The US mortality rate is lower only on cancer



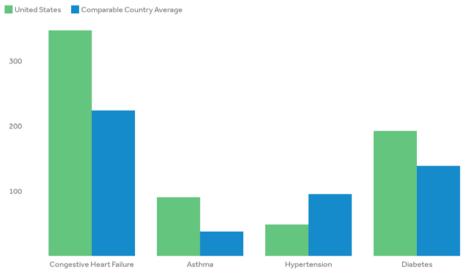
Source: Kaiser Family Foundation analysis of 2013 OECD data: "OECD Health Data: Health status: Health status indicators", OECD Health Statistics (database) (Accessed on November 6, 2014).



And spend more time in the hospital

Admission rates higher than peer countries

Age standardized hospital admission rate per 100,000 population for asthma, congestive heart failure, hypertension, and diabetes, ages 15 and over, 2015 or nearest year



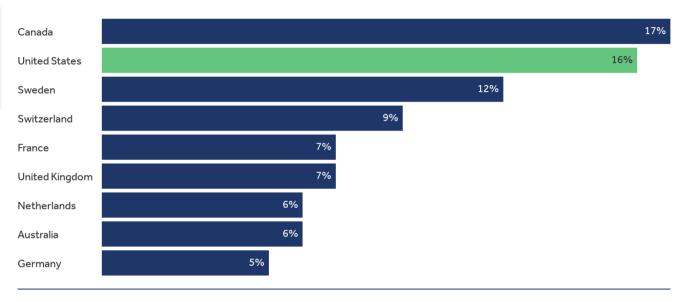
Data for Australia, Belgium, and the US are from 2014. Diabetes admission rates for Austria are also from 2014.

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



Emergency room utilization

Expensive ER is used inappropriately nearly twice as often



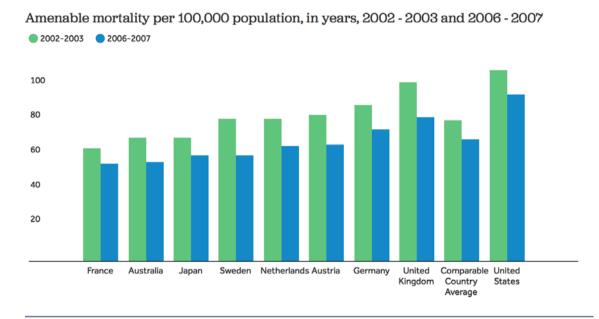
Source: 2016 Commonwealth Fund International Health Policy Survey in Eleven Countries

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Quality of care – preventable deaths

For conditions with recognized health care interventions expected to prevent death, US ranks lowest



Source: Nolte E, McKee C. Martin. Health Affairs "Measuring the Health of Nations: Updating an Earlier Analysis" Peterson-Kaiser

Health System Tracker



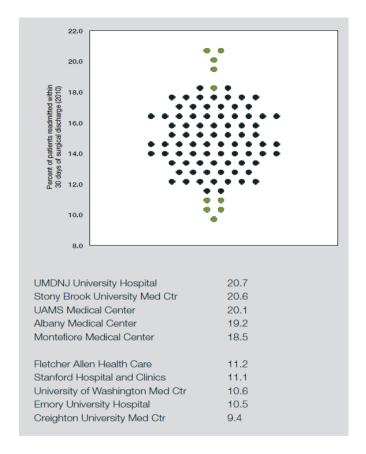
Quality of care – readmissions

1 in 8 readmitted following surgery

- National average of 12.4%
- Range from 7.6% Bend—18.3% Bronx

1 in 6 readmitted after non-surgical procedure

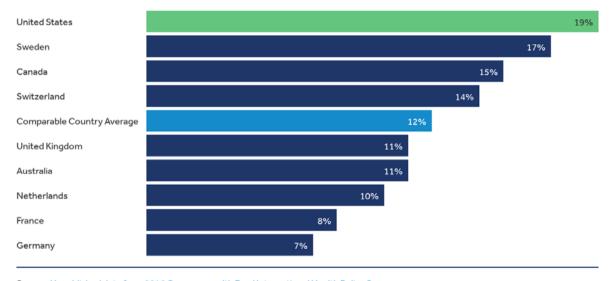
- National average of 15.9%
- Range between 11.4% Ogden—18.1% Bronx





Quality of care – errors and delays

US is more prone to medical mistakes, incorrect medications or dosages, lab test errors, or delays receiving abnormal test results Percent of adults who have experienced medical, medication, or lab errors or delays in past two years, 2016



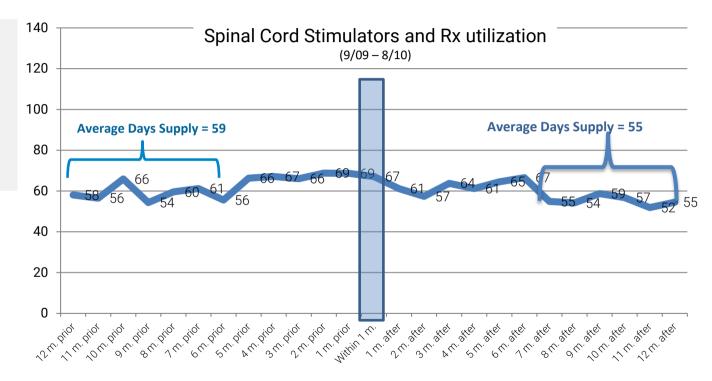
Source: Unpublished data from 2016 Commonwealth Fund International Health Policy Survey

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Care efficacy and appropriateness

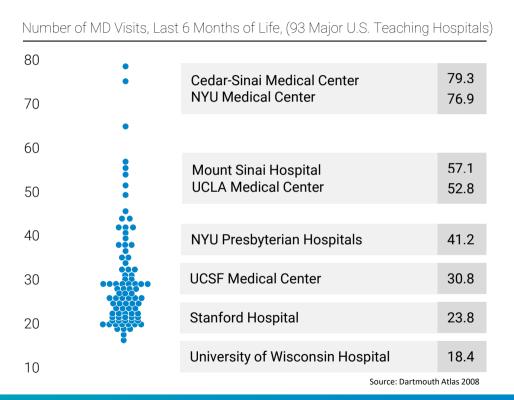
No significant difference in the use of pain medications after the use of a spinal cord stimulator





Quantity of Care

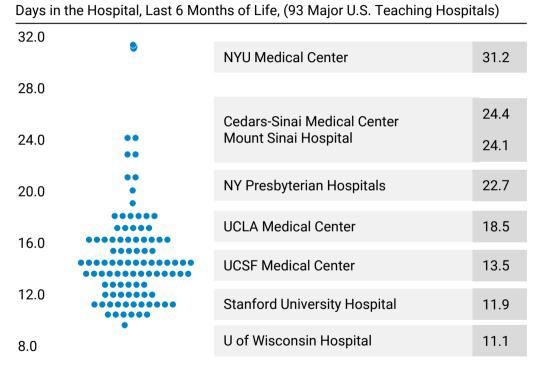
End of life care varies, from 18 doctor visits to almost 80 in last 6 months





Quantity of Care

Almost a 3x multiple in days in the hospital during end of life care

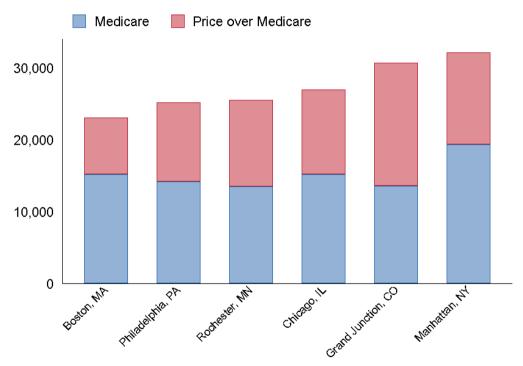


Source: Dartmouth Atlas 2008



Uneven prices from market to market

Knee replacements are more expensive in South Dakota than Manhattan



© Cooper, Craig, Gaynor, and Van Reenen



Knee replacement

Knee replacement prices varied by as much as 1700%

Colonoscopies and MRIs are similar



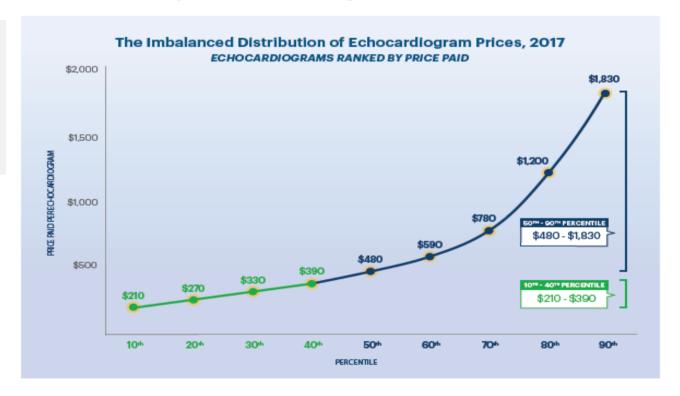
Note: Each column is a hospital. Prices are regression-adjusted, measured from 2008 – 2011, and presented in 2011 dollars.

© Cooper, Craig, Gaynor, and Van Reenen



Enormous opportunity for savings

\$1.7 billion EKG spend, with \$970 million in savings if paid at 40th percentile

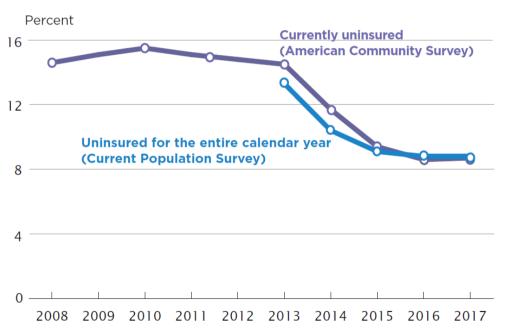




Uneven coverage

Highest uninsured rates are among 'young invincibles' (15.6%) and Hispanics (21%)





Healthcare is expensive

The United States spends double that of peer countries

Total health expenditures per capita, U.S. dollars, PPP adjusted, 2016



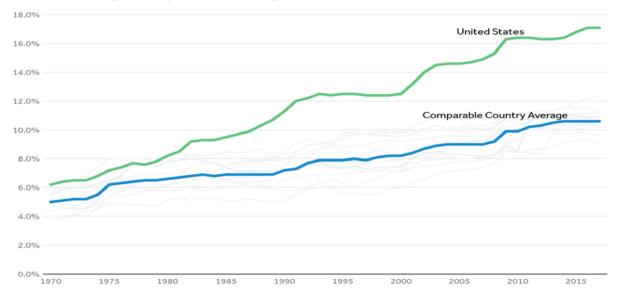
Source: Source: U.S. data are from the 2016 National Health Expenditures Account. Comparable country data are from OECD (2017), "OECD Health Data: Health expenditure and financing: Health expenditure indicators", OECD Health Statistics (database). DOI: 10.1787/health-data-en (Accessed on March 19, 2017) • Get the data • PNG



GDP spend

At more than \$3 trillion annually, healthcare is 17% of GDP

Health consumption expenditures as a percent of GDP, 1970 - 2017



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

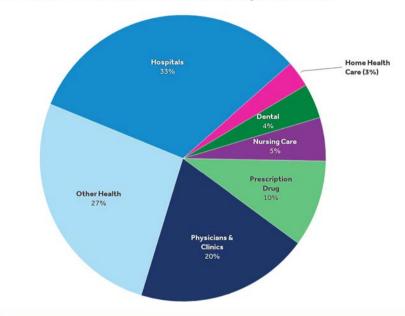
Source: KFF analysis of OECD and National Health Expenditure (NHE) data • Get the data • PNG



Healthcare spending

Hospitals dominant total spend

Relative contributions to total national health expenditures, 2017



Source: Kaiser Family Foundation analysis of National Health Expenditure (NHE) data • Get the data • PNG

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Healthcare premiums



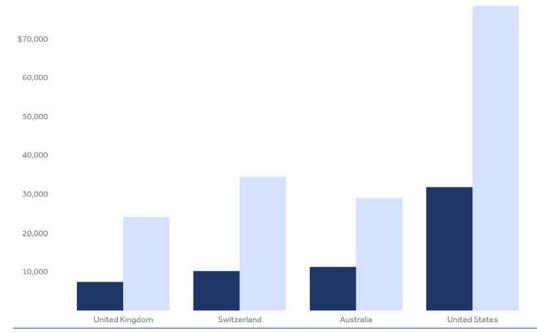


Prices drive spend

Many studies demonstrate that prices, not utilization or even health, drive spend

Average price of Angioplasty and Coronary Bypass Surgery, 2014

Angioplasty
Coronary Bypass Surgery



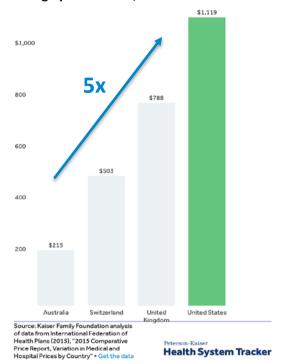
Source: International Federation of Health Plans (2015), "2015 Comparative Price Report, Variation in Medical and Hospital Prices by Country" (Accessed on January 30, 2018).

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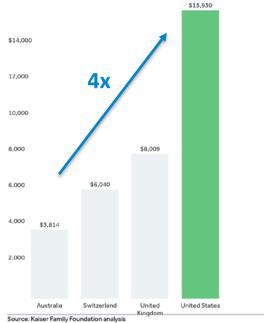


Price variation

Average price of MRI, 2014



Average price of Appendectomy, 2014



Source: Kaiser Family Foundation analysis of data from International Federation of Health Plans (2015), "2015 Comparative Price Report, Variation in Medical and Hospital Prices by Country'* • Get the data



Pharmacy costs

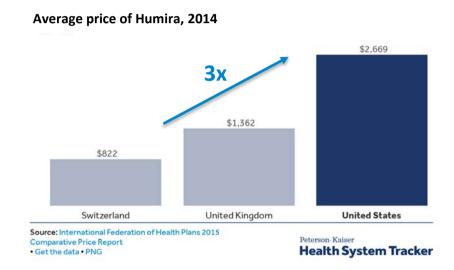
US Rx per capita spending is more than double peer countries*

Americans average 12% fewer days/year

Just 16% of prescriptions are brand

Regulation limits prices around the world and is often price/value based

Biologics lack competition

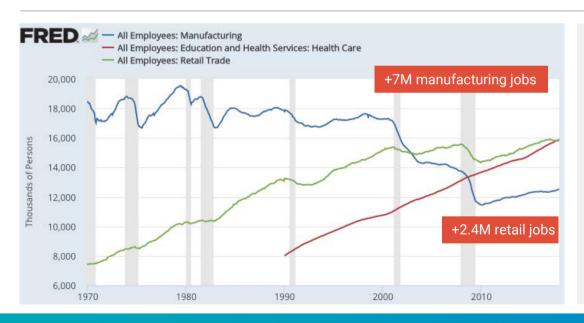


* Commonwealth Fund



Healthcare employment

Employment increased every quarter following Great Recession



- 4 million more jobs by 2026
- 14 of 30 fastest growing job
- Shortage of 1.2M nurses by 2022
- Physician burnout costs \$4.6 billion annually or \$7,600 per employed physician

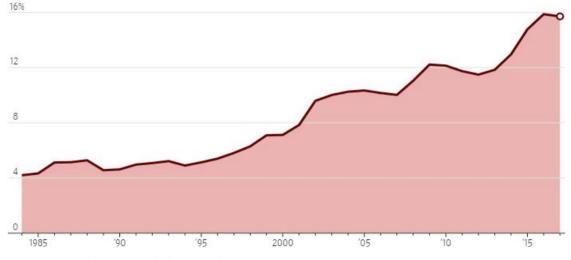


Industry growth

As percent of S&P 500, healthcare has grown substantially

- 17% of GDP
- Hospitals alone are 6% of GDP

Cooper, Yale, 2015



Source: WSJ analysis of S&P Global Market Intelligence data



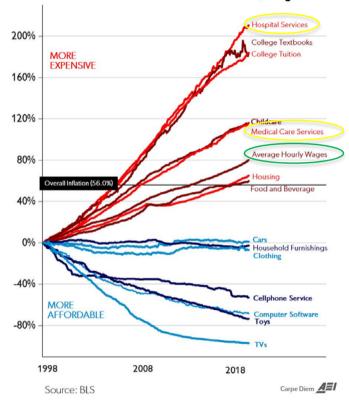
Consumer pricing

- Over 20 years, wages increased 80% while hospital spend increased 212%
- Dominant hospitals charge 15% more than those with at least 3 competitors
- Mergers among local competitors within 5 miles increased prices by 6%, with no effect on those 250 miles apart

Cooper, Craig, Gaynor, Van Reneen Yale 2015

Price Changes (January 1998 to December 2018)

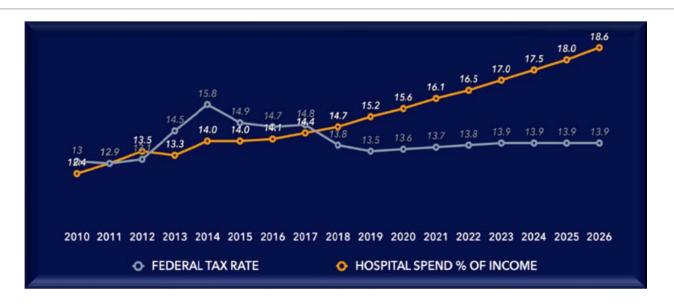
Selected US Consumer Goods and Services, Wages





Burden on middle America

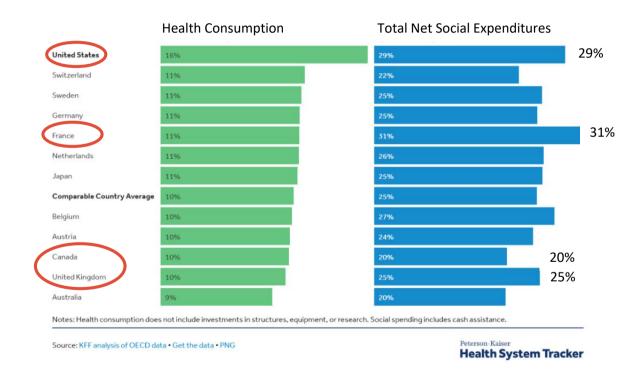
Share of hospital spend exceeds tax rate





Total spending: health care and social services

On the basis of total spend, US on par with peers





Answers and options

System-based

- Accelerate shift from FFS to Value
- Re-emphasize primary care
- Standardize and focus care with data
- Increase usable transparency at the doctor and condition level
- Leverage technology for CX and care coordination
- De-institutionalize care

Policy

- Invest in social determinants
- Establish broad re-insurance pools
- Enforce anti-trust laws
- Reform malpractice laws to limit defensive medicine
- Expand Medicare eligibility
- Medicare for All

Healthcare is the top political issue and voters feel the system is broken yet they resist change to their personal system of care

