



Informing Policy. Improving Health.

Health and Health Care Spending: Where Have We Been & Where are We Headed?

October 8, 2020

Kansas Economic Outlook Conference

Wichita, KS

Robert St. Peter, M.D.

Kansas Health Institute



Kansas Health Institute

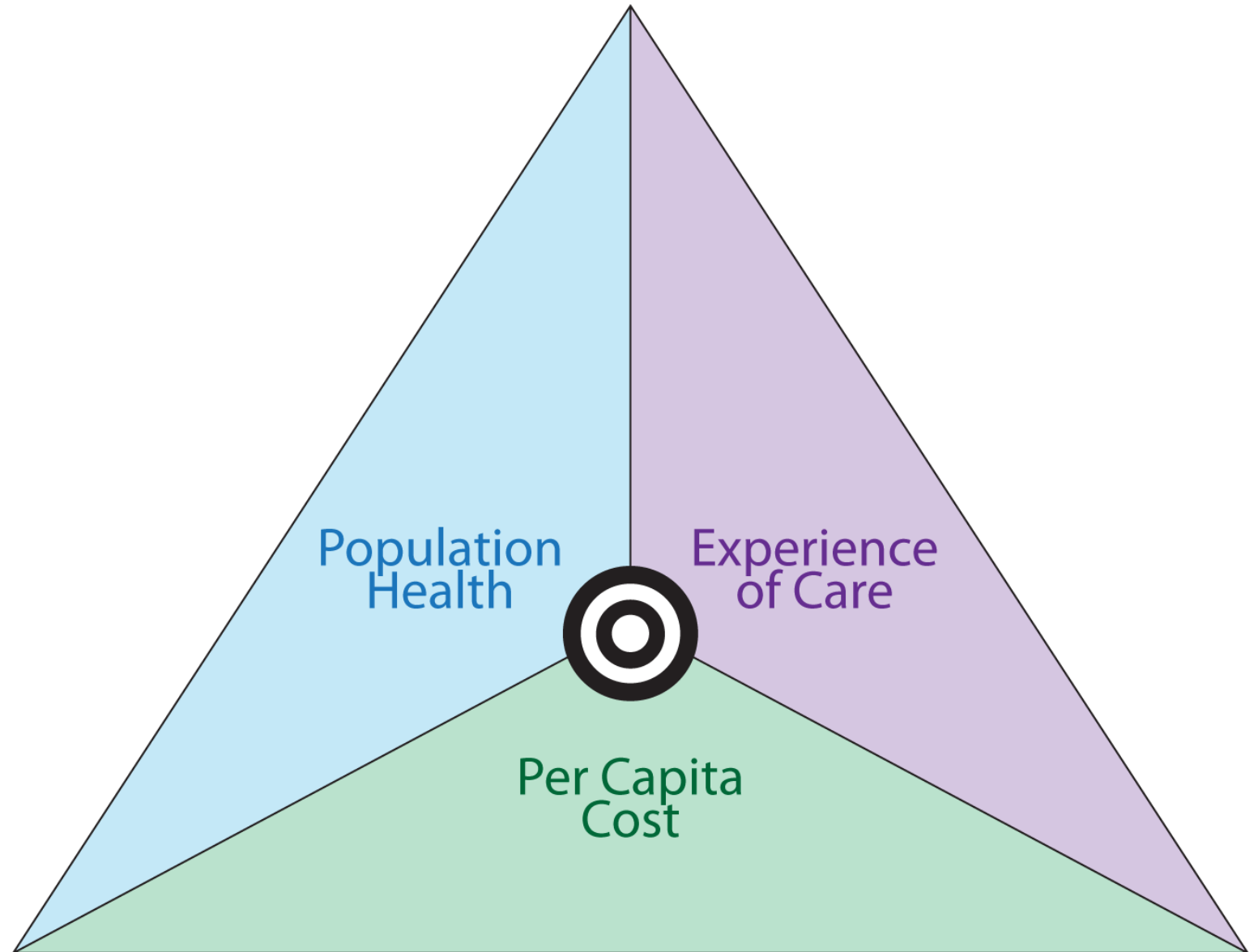
Informing Policy. Improving Health.

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OVERVIEW

- Health status
- Health care spending in U.S.
- The importance of price
- Health care spending in Kansas
- Impact of COVID-19 on spending
- Policy approaches to reduce spending

Triple Aim of Health Care Innovation







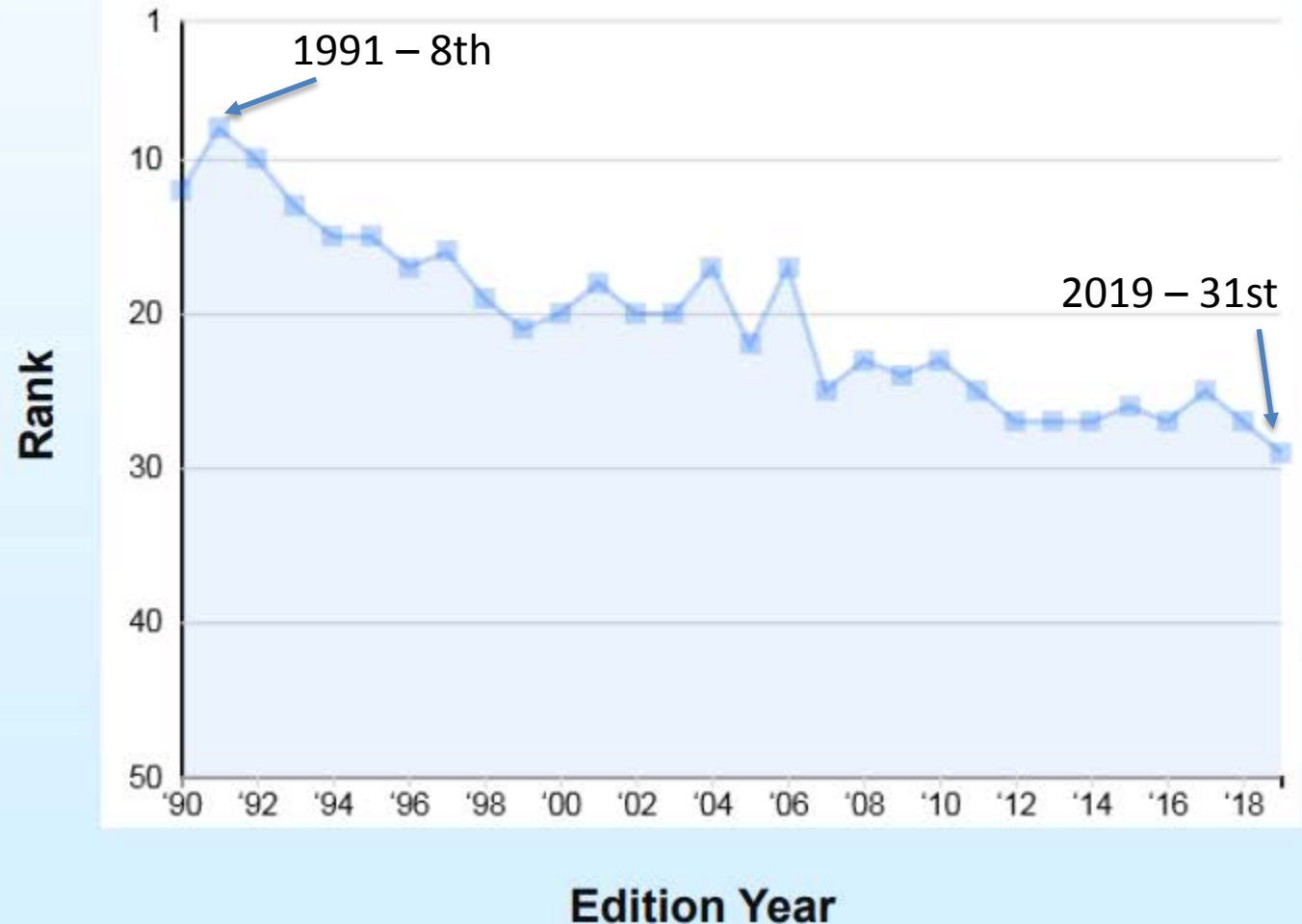
HOW HEALTHY IS KANSAS?

“

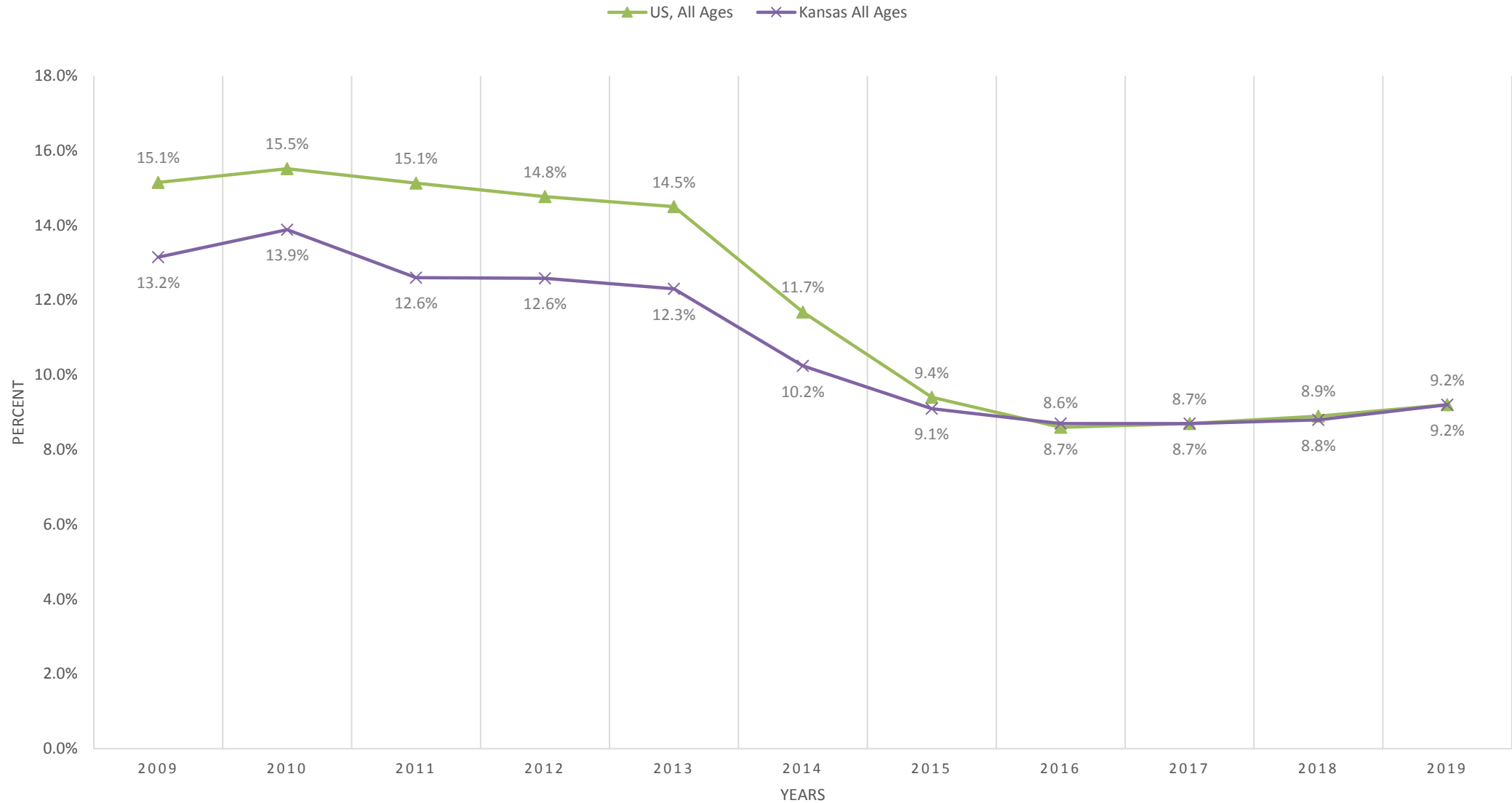
Of all the states in the US, over the past 30 years, Kansas has seen the greatest decline in its health rankings.

(America's Health Rankings, December 6, 2019)

Kansas Health Ranking 1990-2019



UNINSURED RATES FOR KANSAS AND U.S., 2009-2019

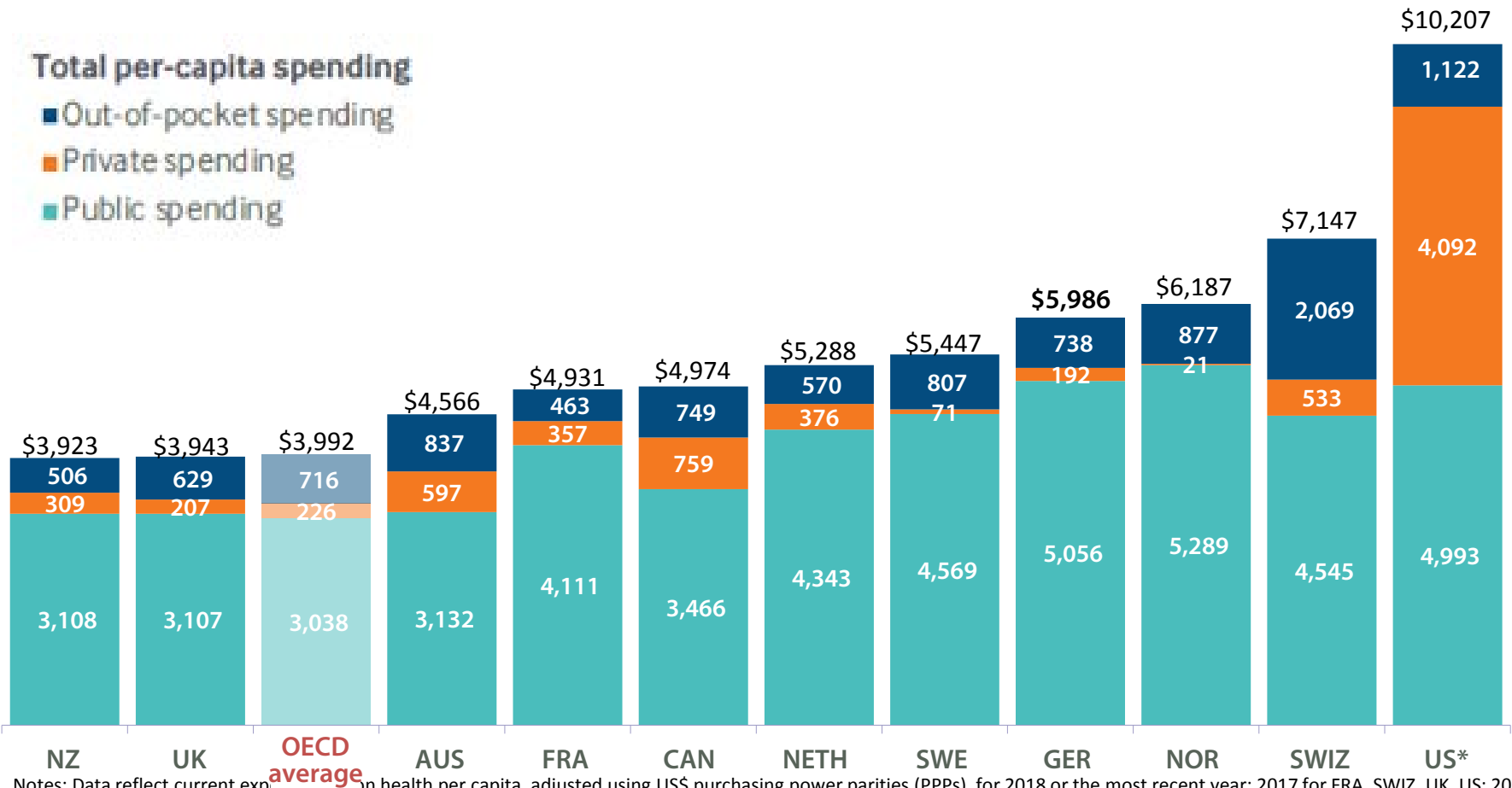




HEALTH CARE SPENDING IN U.S.

Health Care Spending per Capita by Source of Funding, 2018

Dollars (US\$), adjusted for differences in cost of living

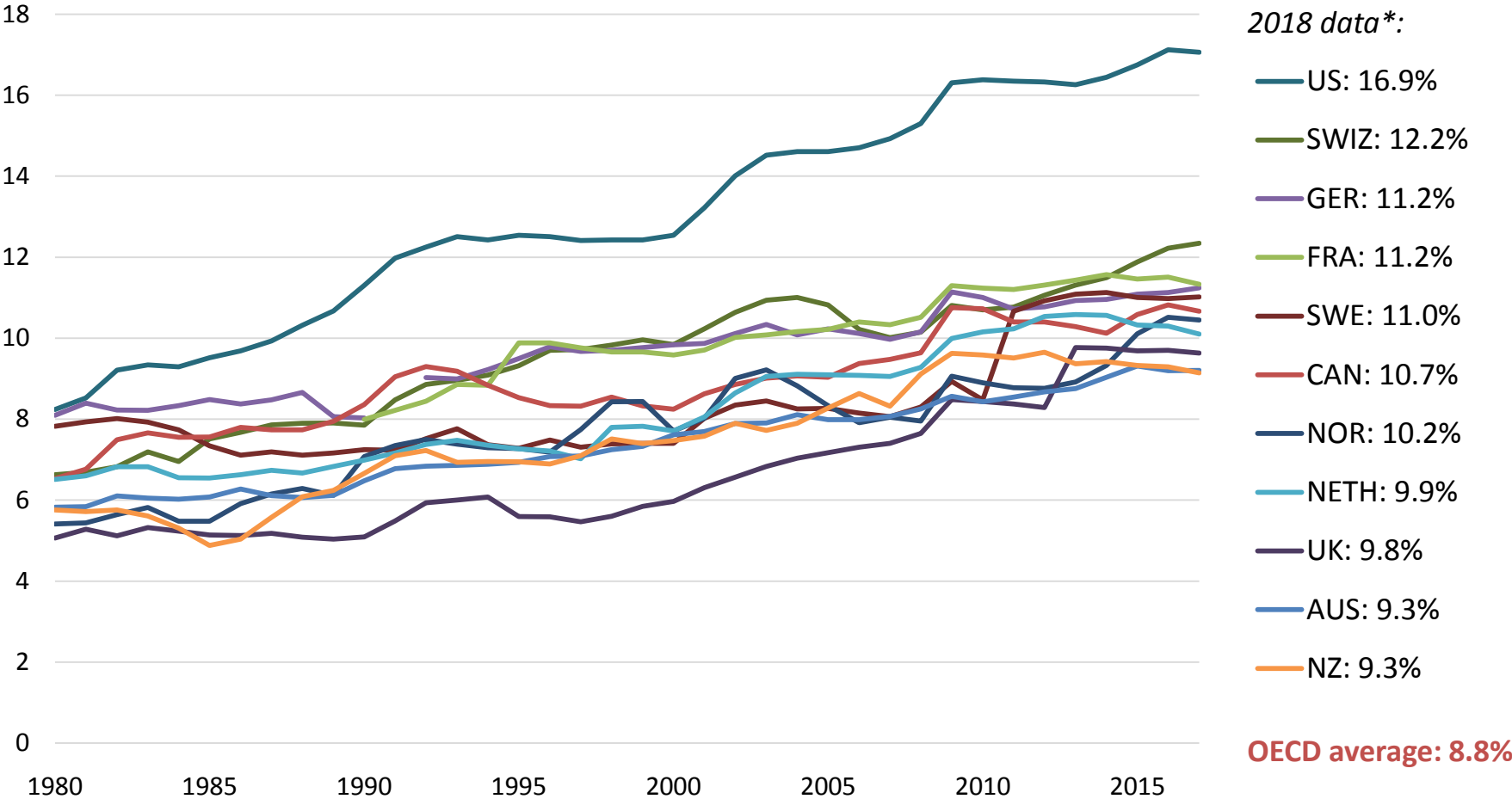


Notes: Data reflect current expenditures on health per capita, adjusted using US\$ purchasing power parities (PPPs), for 2018 or the most recent year: 2017 for FRA, SWIZ, UK, US; 2016 for AUS. Data for 2018 reflect estimated or provisional values. Numbers may not sum to total health care spending per capita because of excluding capital formation of health care providers, and some uncategorized health care spending. * For US, spending in the “Compulsory private insurance schemes” (HF122) category has been reclassified into the “Voluntary health insurance schemes” (HF21) category, given that the individual mandate to have health insurance ended in January 2019. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

Health Care Spending as a Percent of GDP, 1980–2018

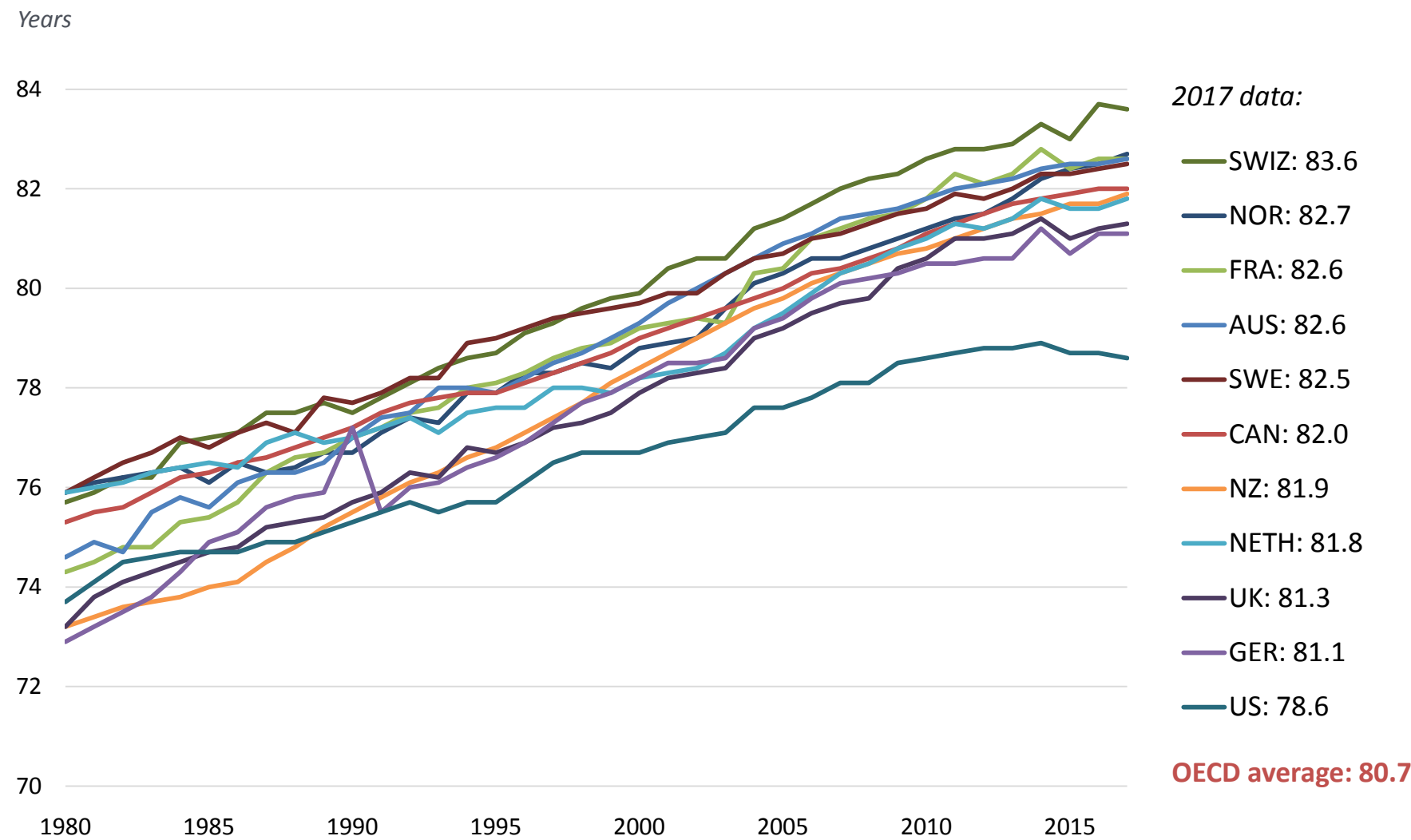
Percent (%) of GDP, adjusted for differences in cost of living



Notes: Current expenditures on health. Based on System of Health Accounts methodology, with some differences between country methodologies. GDP = gross domestic product. OECD average reflects the average of 36 OECD member countries, including ones not shown here. * 2018 data are provisional or estimated.

Data: OECD Health Statistics 2019.

Life Expectancy at Birth, 1980–2017

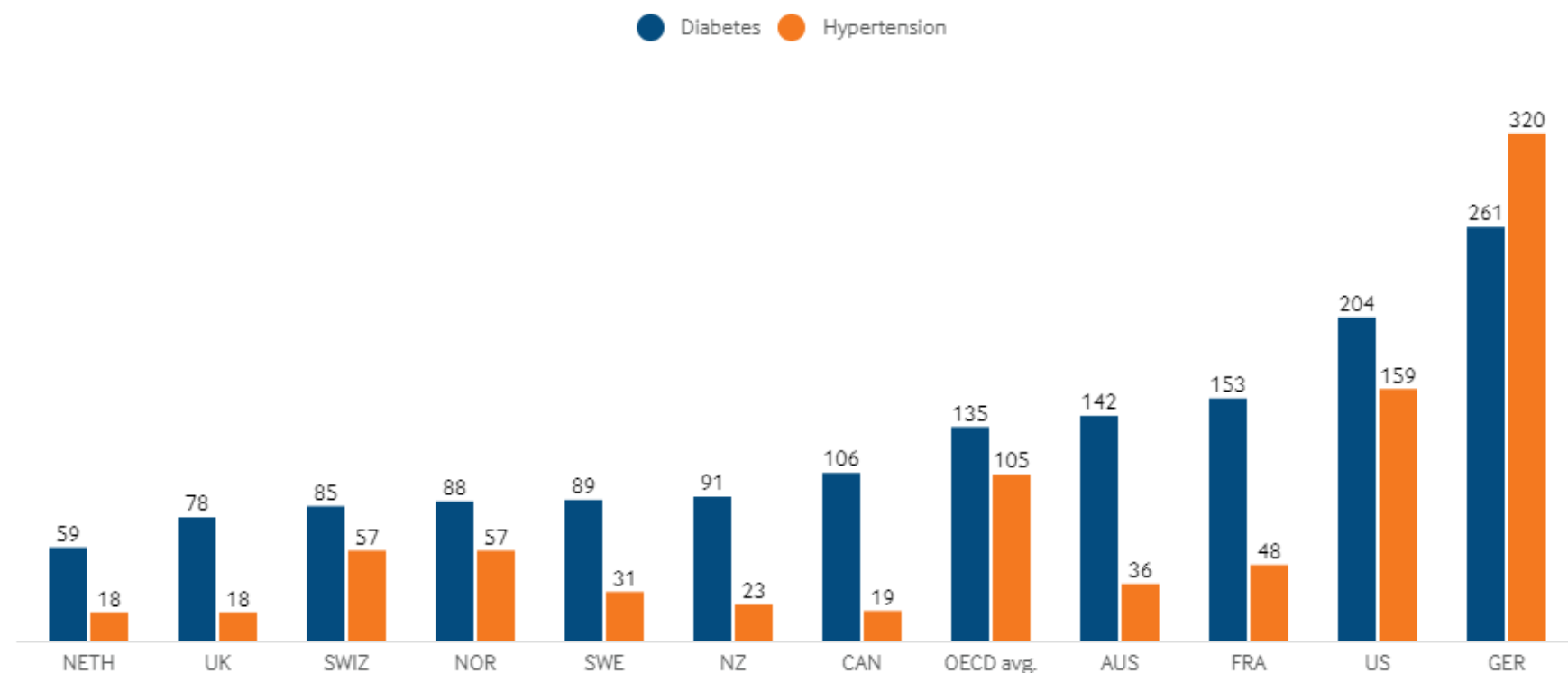


Note: OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

The U.S. Has Among the Highest Rates of Hospitalizations from Preventable Causes Like Diabetes and Hypertension

Discharges per 100,000 population



 Download data

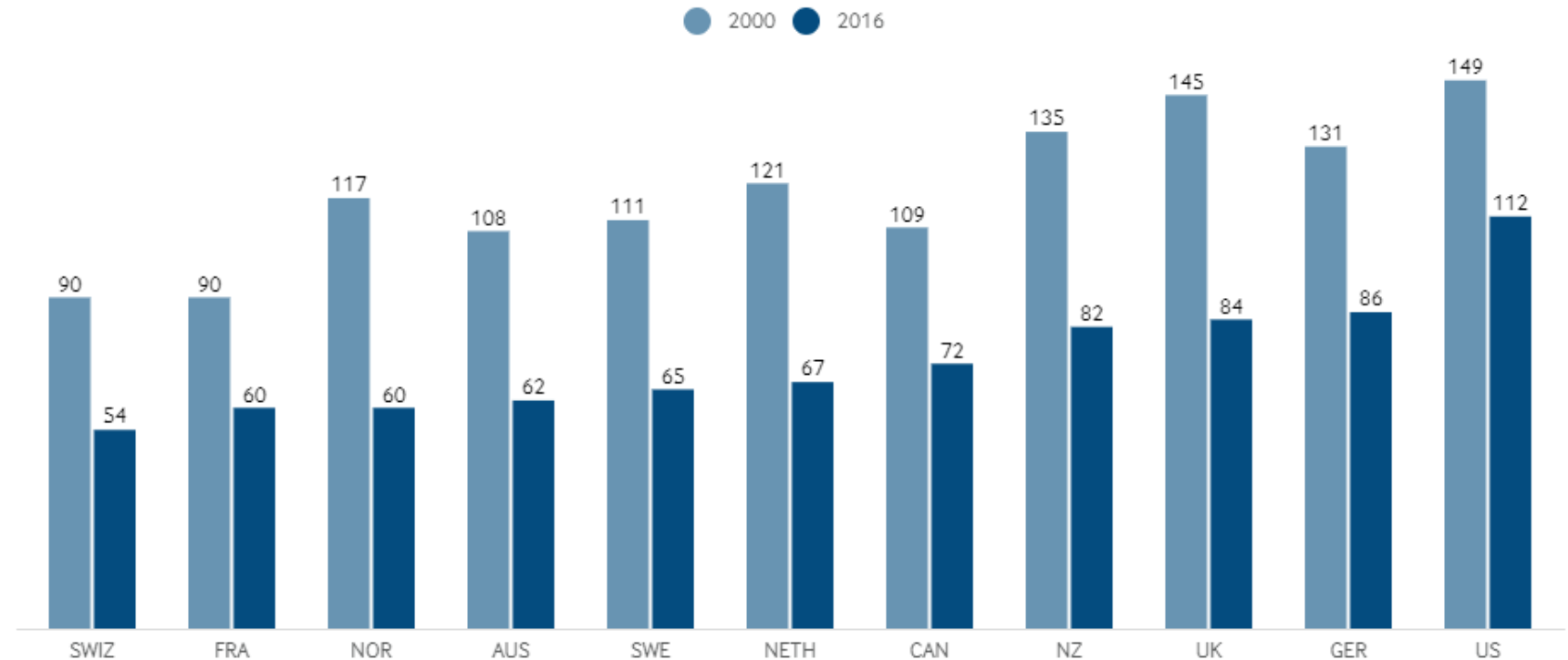
Notes: Data reflect 2017 or nearest year: 2016 for AUS, NZ; 2010 for US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

Data: OECD Health Statistics 2019.

Source: Roosa Tikkanen and Melinda K. Abrams, *U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes?* (Commonwealth Fund, Jan. 2020).
<https://doi.org/10.26099/7avy-fc29>

The U.S. Has the Highest Rate of Avoidable Deaths

Deaths per 100,000 population



 Download data

Notes: Data for 2000 (except UK, 2001) and latest available (2016 for NETH, NOR, SWE, US; 2015 for AUS, CAN, FRA, GER, SWIZ, UK; 2014 for NZ). Mortality data from World Health Organization (WHO) detailed mortality files (released Dec. 2018). Population data from WHO detailed mortality files, except CAN (UN population database) and US (Human Mortality Database). Amenable causes as per list by Nolte and McKee (2004). Calculations by the European Observatory on Health Systems and Policies (2019). Age-specific rates standardized to European Standard Population, 2013.

Data: Marina Karanikolos, European Observatory on Health Systems and Policies, 2019.

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

<https://doi.org/10.26099/7avy-fc29>

What if the price of food increased like the price of health care?



\$57



\$65

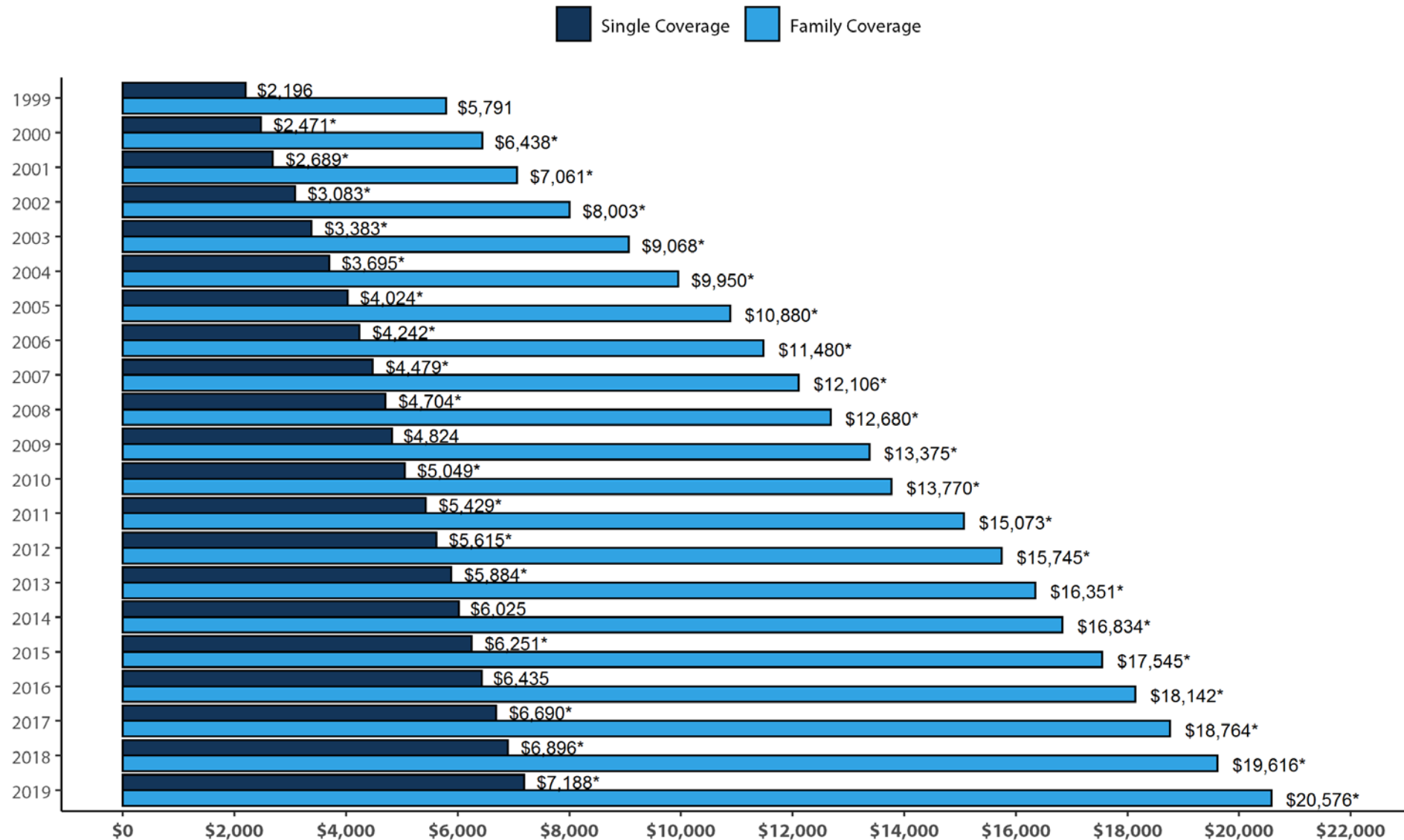


\$160

Source: Institute of Medicine, Best Care at Lower Cost: The Path to Continuously Learning Health Care in America (2013) and updated to 2019 dollars with the Federal Reserve Bank Consumer Price Index Inflation Calculator.

Figure 16

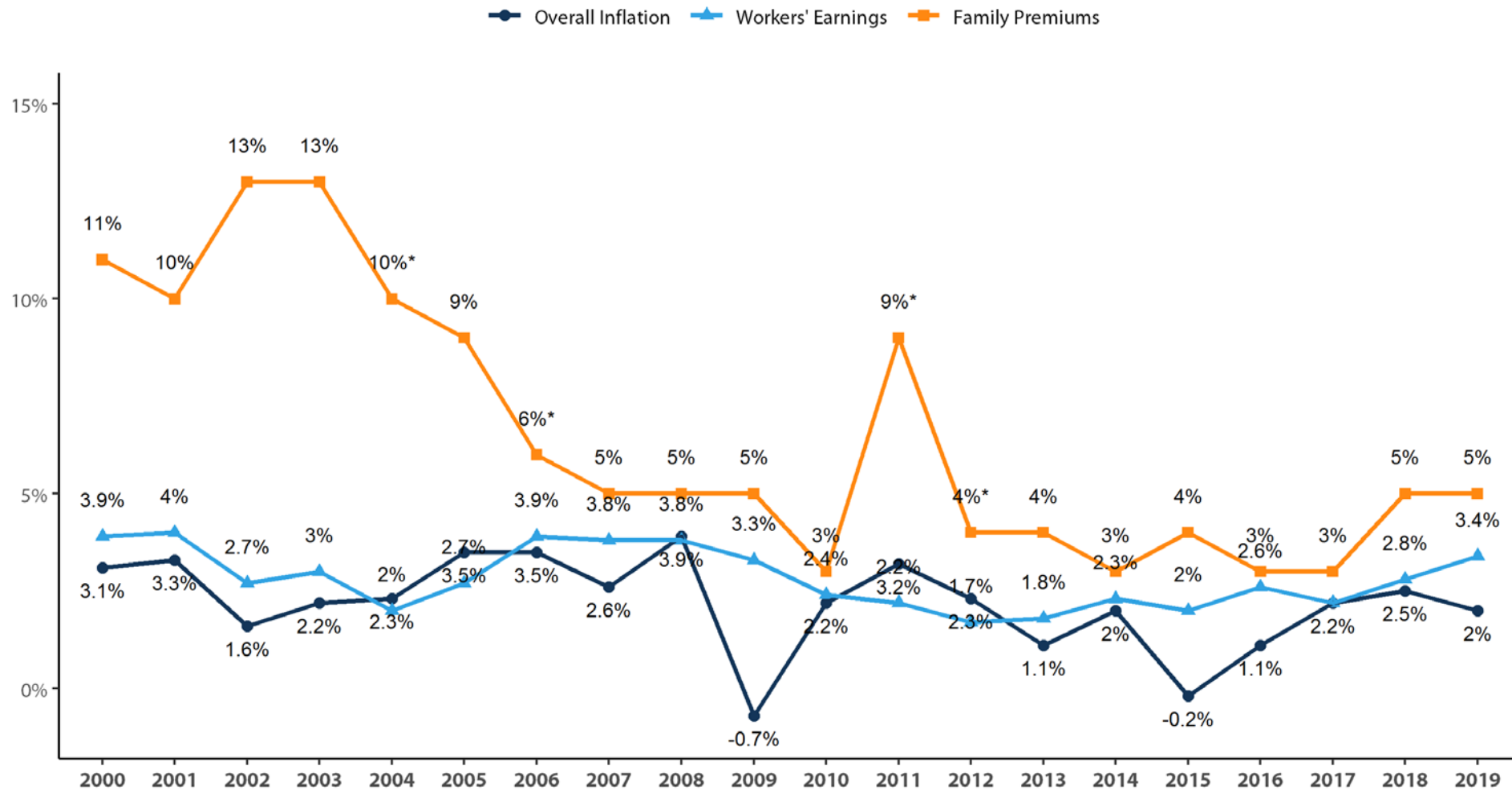
Average Annual Premiums for Single and Family Coverage, 1999-2019



* Estimate is statistically different from estimate for the previous year shown ($p < .05$).

SOURCE: KFF Employer Health Benefits Survey, 2018-2019; Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2017

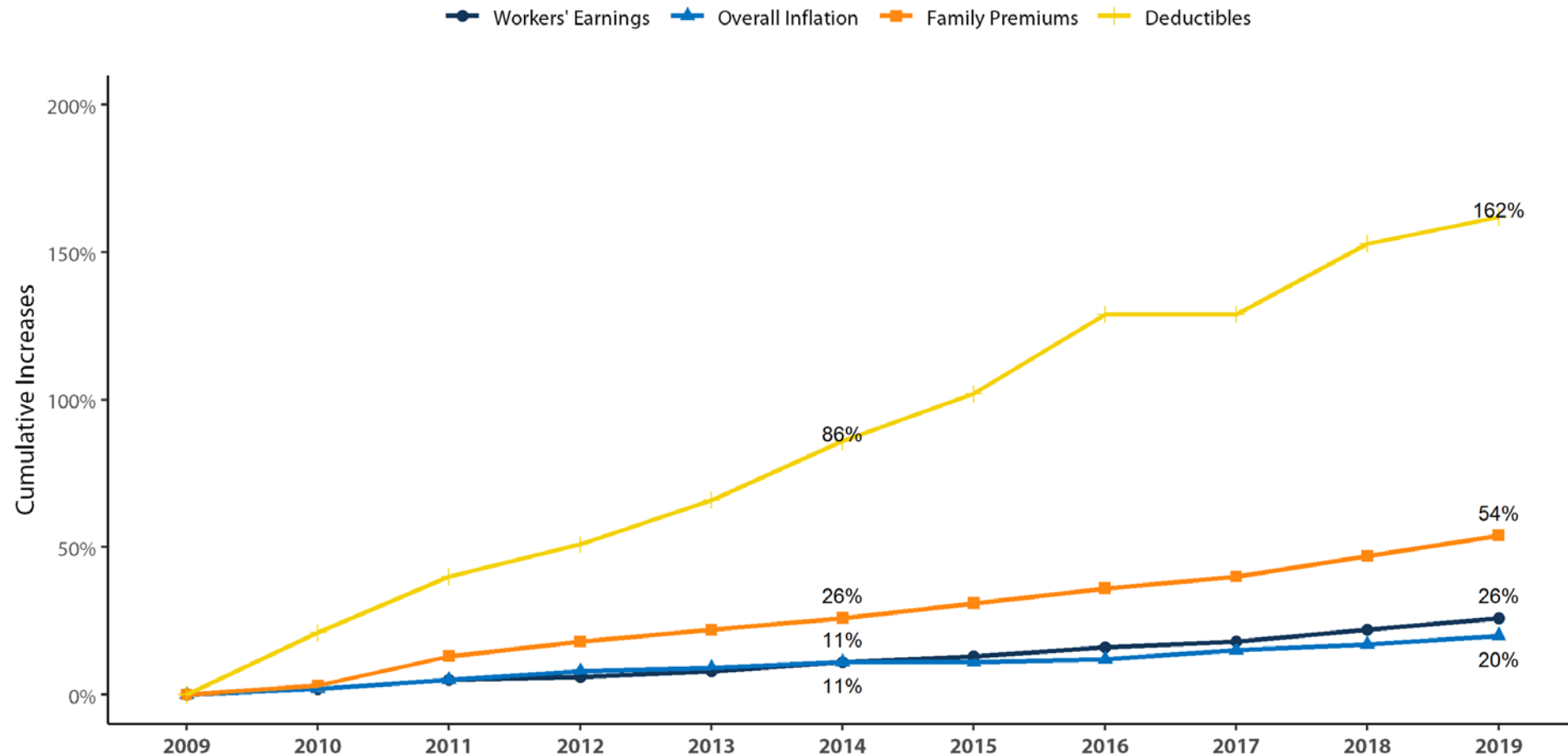
Cost of Health Care Rising Faster Than Workers' Wages and Inflation



* Estimate is statistically different from estimate for the previous year shown ($p < .05$).

SOURCE: KFF Employer Health Benefits Survey, 2018-2019; Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2017. Bureau of Labor Statistics, Consumer Price Index, U.S. City Average of Annual Inflation (April to April), 1999-2019; Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey, 1999-2019 (April to April).

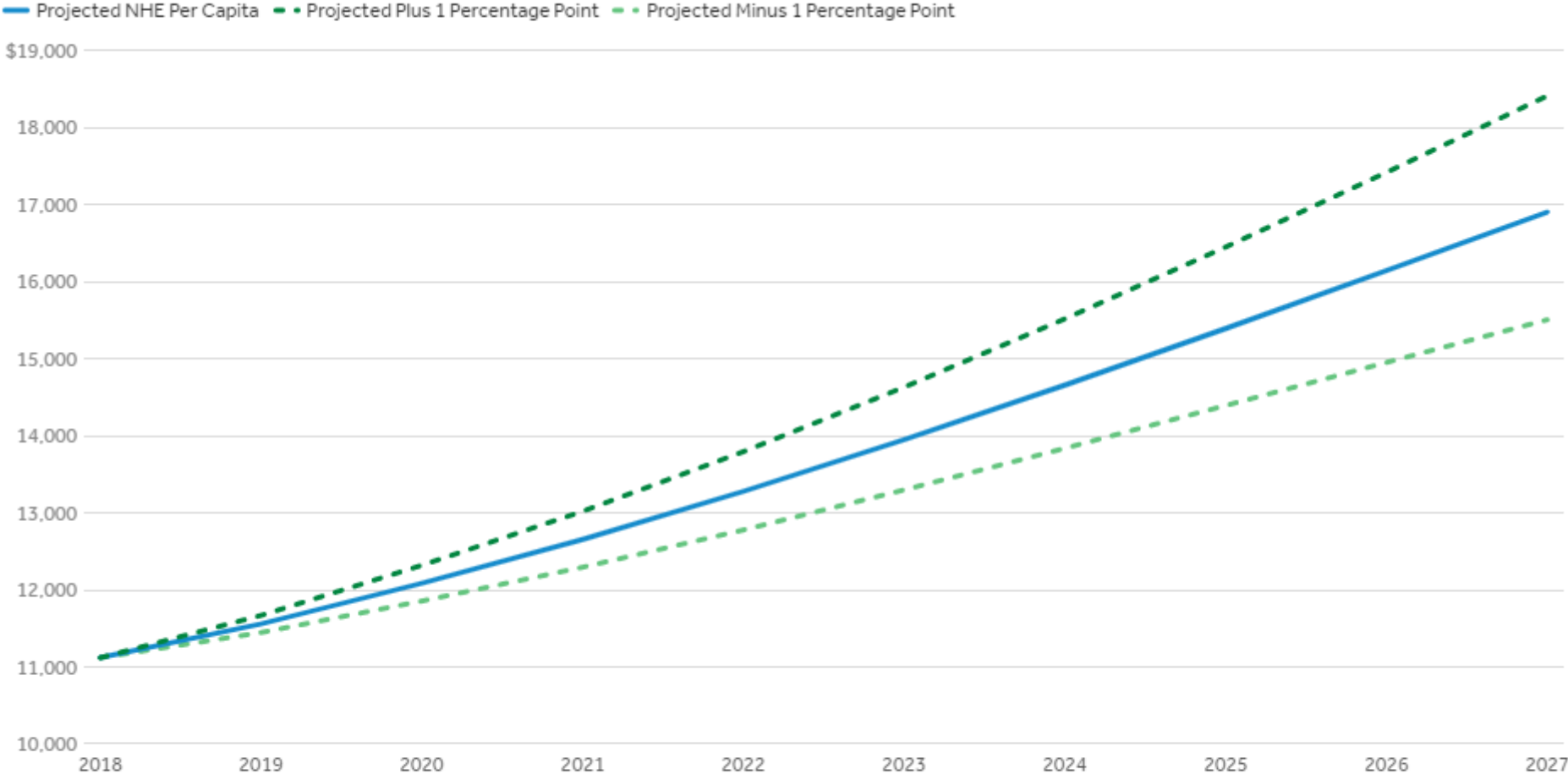
Cost of Health Care Rising Faster Than Workers' Wages and Inflation



NOTE: Average general annual deductibles are for single coverage and are among all covered workers. Workers in plans without a general annual deductible for in-network services are assigned a value of zero.

SOURCE: KFF Employer Health Benefits Survey, 2018-2019; Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2009-2017. Bureau of Labor Statistics, Consumer Price Index, U.S. City Average of Annual Inflation (April to April), 2009-2019; Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey, 2009-2019 (April to April).

Projected annual change in U.S. per capita health spending and alternative scenarios, 2018- 2027





Note: NHE is national health expenditures. Projected NHE for 2018 varies from actual 2018 expenditures.

Source: [KFF analysis of National Health Expenditure Accounts \(NHEA\)](#) • [Get the data](#) • [PNG](#)

HEALTH CARE SPENDING 101

$$\text{Total Spending} = \text{Number of people} \times \text{Volume of services per person} \times \text{Price per service}$$

HEALTH CARE SPENDING 101

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Drivers of US Health Care Spending

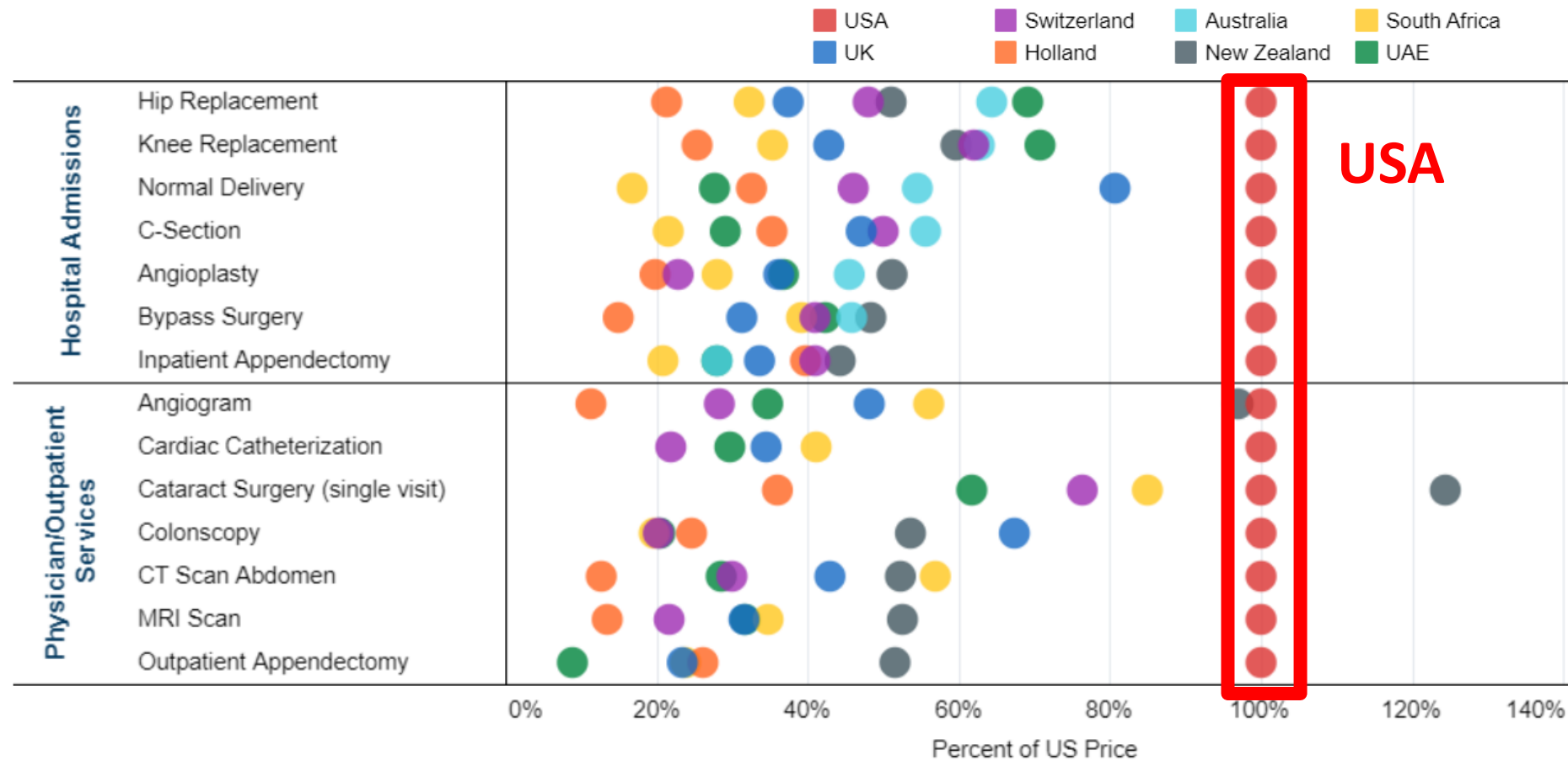
POPULATION-BASED FACTORS

- Aging Population
- Chronic Disease
- Obesity
- Mental Illness/Substance Abuse

SYSTEM-BASED FACTORS

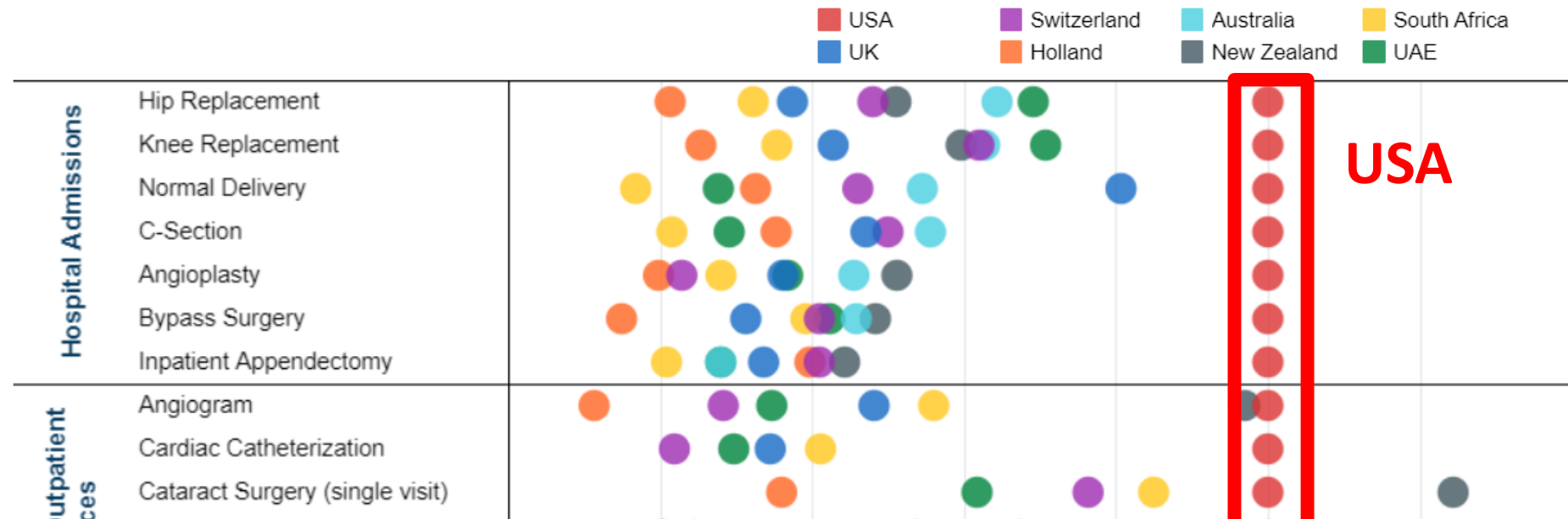
- Overutilization
- High Prices
- Industry Consolidation
- High administrative costs

Figure 1: Medical Prices in 2017 as a Percent of US Prices



Source: John Hargraves and Aaron Bloschichak, International comparisons of health care prices from the 2017 iFHP survey, Health Care Cost Institute's #HealthyBytes Blog (Dec. 17, 2019), <https://healthcostinstitute.org/blog/entry/international-comparisons-of-health-care-prices-2017-ifhp-survey>

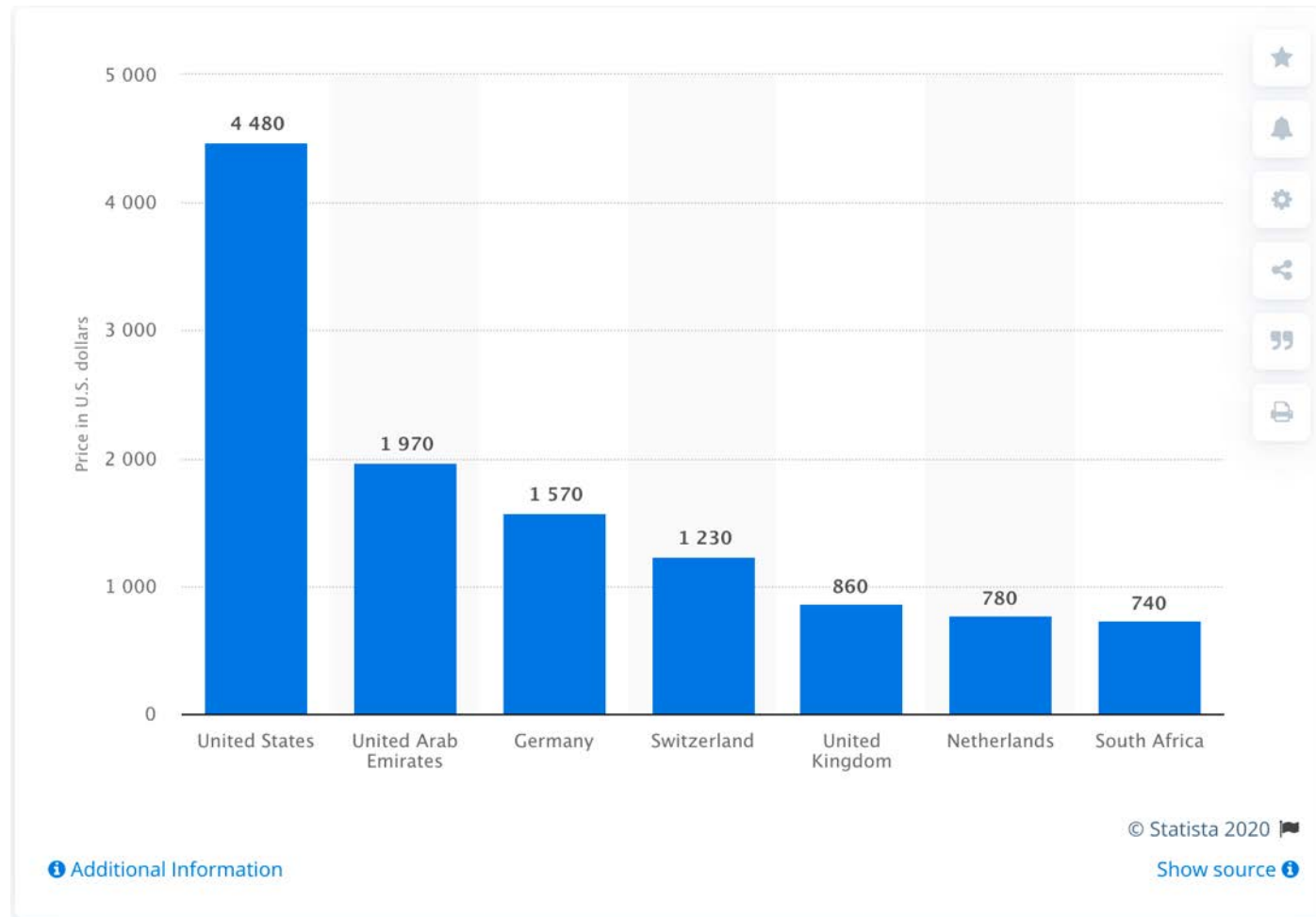
Figure 1: Medical Prices in 2017 as a Percent of US Prices



“Prices are the primary reason why US spends more on health care than any other country”

- Gerard F. Anderson, Peter Hussey, and Varduhi Petrosyan, *It's Still The Prices, Stupid: Why The US Spends So Much On Health Care, And A Tribute To Uwe Reinhardt*, Health Affairs 38:1 (2019)

Source: John Hargraves and Aaron Bloschichak, International comparisons of health care prices from the 2017 iFHP survey, Health Care Cost Institute's #HealthyBytes Blog (Dec. 17, 2019), <https://healthcostinstitute.org/blog/entry/international-comparisons-of-health-care-prices-2017-ifhp-survey>



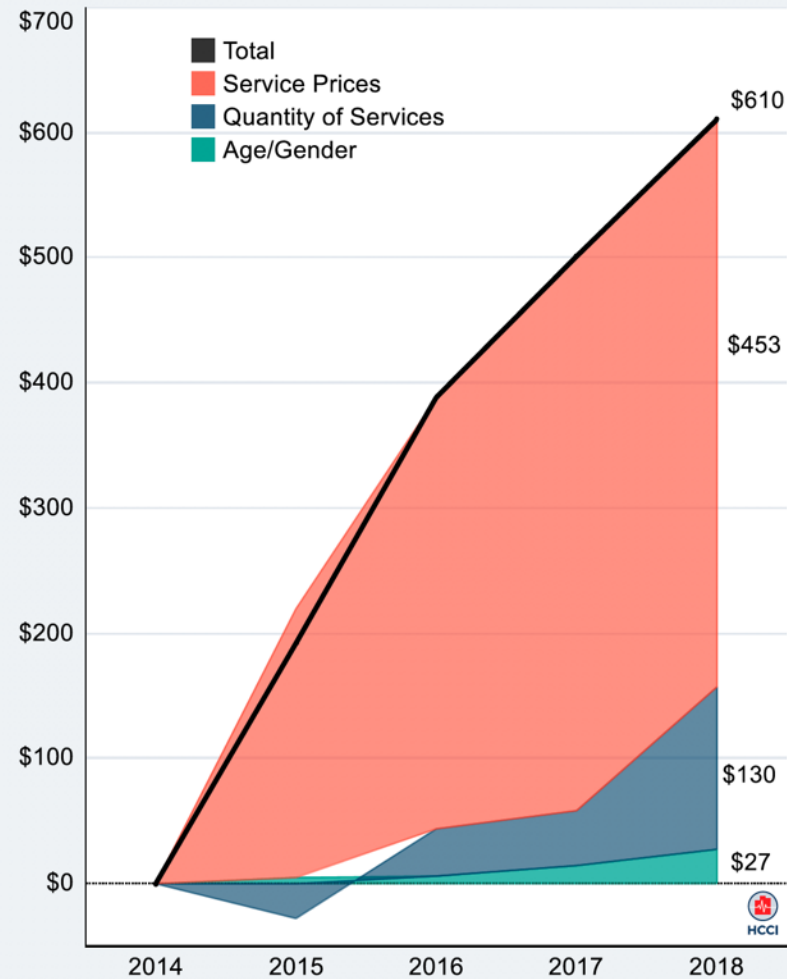
Price for Humira Pen, 2 kit, 40 mg in 2017 USD

<https://www.statista.com/statistics/312014/average-price-of-humira-by-country/>

Pharmaceutical Prices

Breakdown of Growth in Spending per Person

(2018 dollars)



Service Prices.

Higher prices accounted for **74%** of total spending increases above inflation over the 5-year period - an average of **\$453** per person.

Quantity of Services.

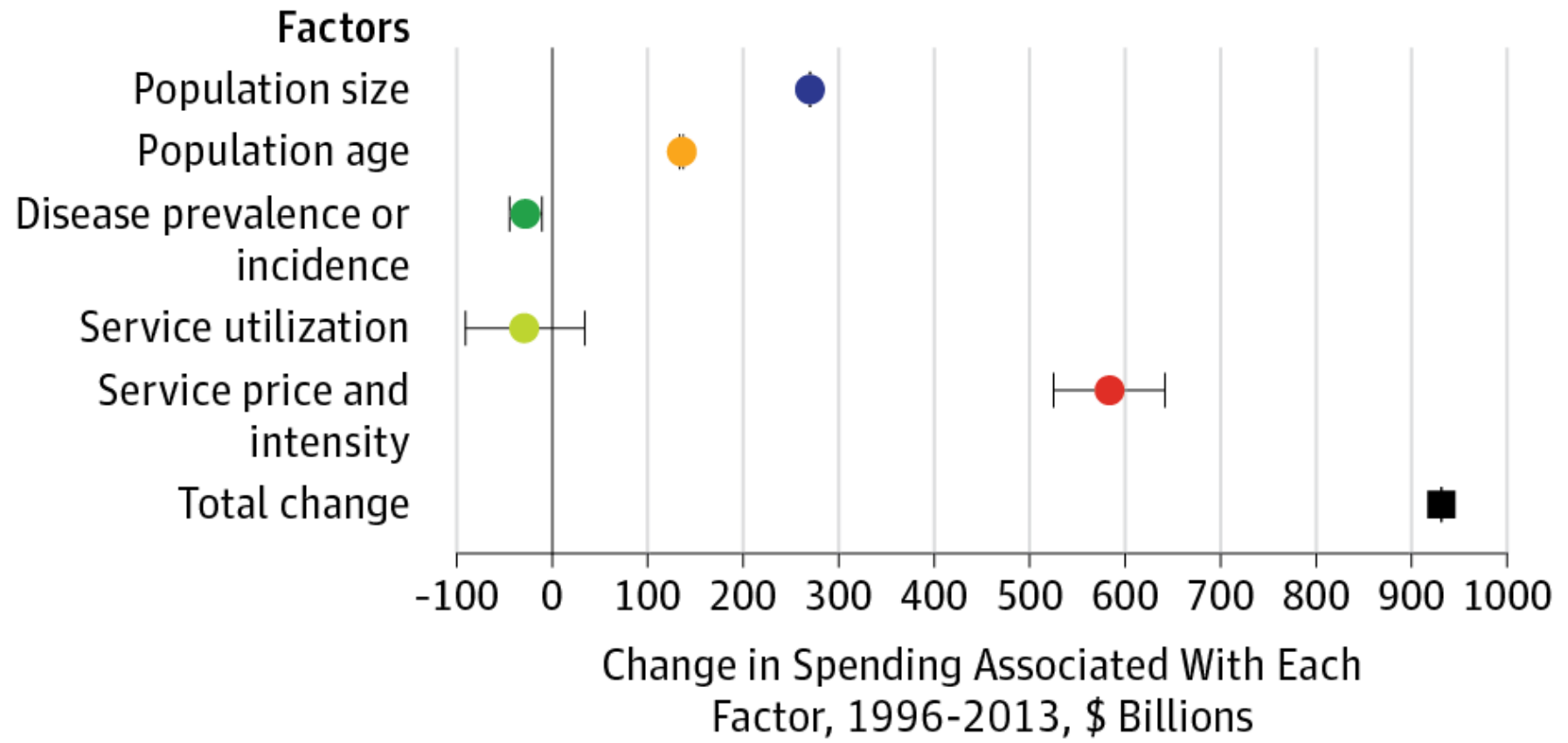
Increased utilization of medical services, which was concentrated in 2018, accounted for **21%** of spending growth after inflation - an average of **\$130** per person.

Age/Gender.

Demographic shifts in the employer-insured population accounted for **4%** of post-inflation spending growth over the 5-year period - an average of **\$27** per person.

Source: HCCI, 2018 Health Care Cost and Utilization Report

WHAT DRIVES INCREASES IN HEALTH CARE SPENDING?



Dieleman, JL et. Al, *JAMA*. 2017;318(17):1668-1678. doi:10.1001/jama.2017.15927

U.S. Health Care Prices Are the Elephant in the Room

BY UWE E. REINHARDT MARCH 29, 2013 6:00 AM 156

HEALTH AFFAIRS > VOL. 22, NO. 3

It's The Prices, Stupid: Why The United States Is So Different From Other Countries

Gerard F. Anderson, Uwe E. Reinhardt, ... [See all authors](#) ▾

BRIEF

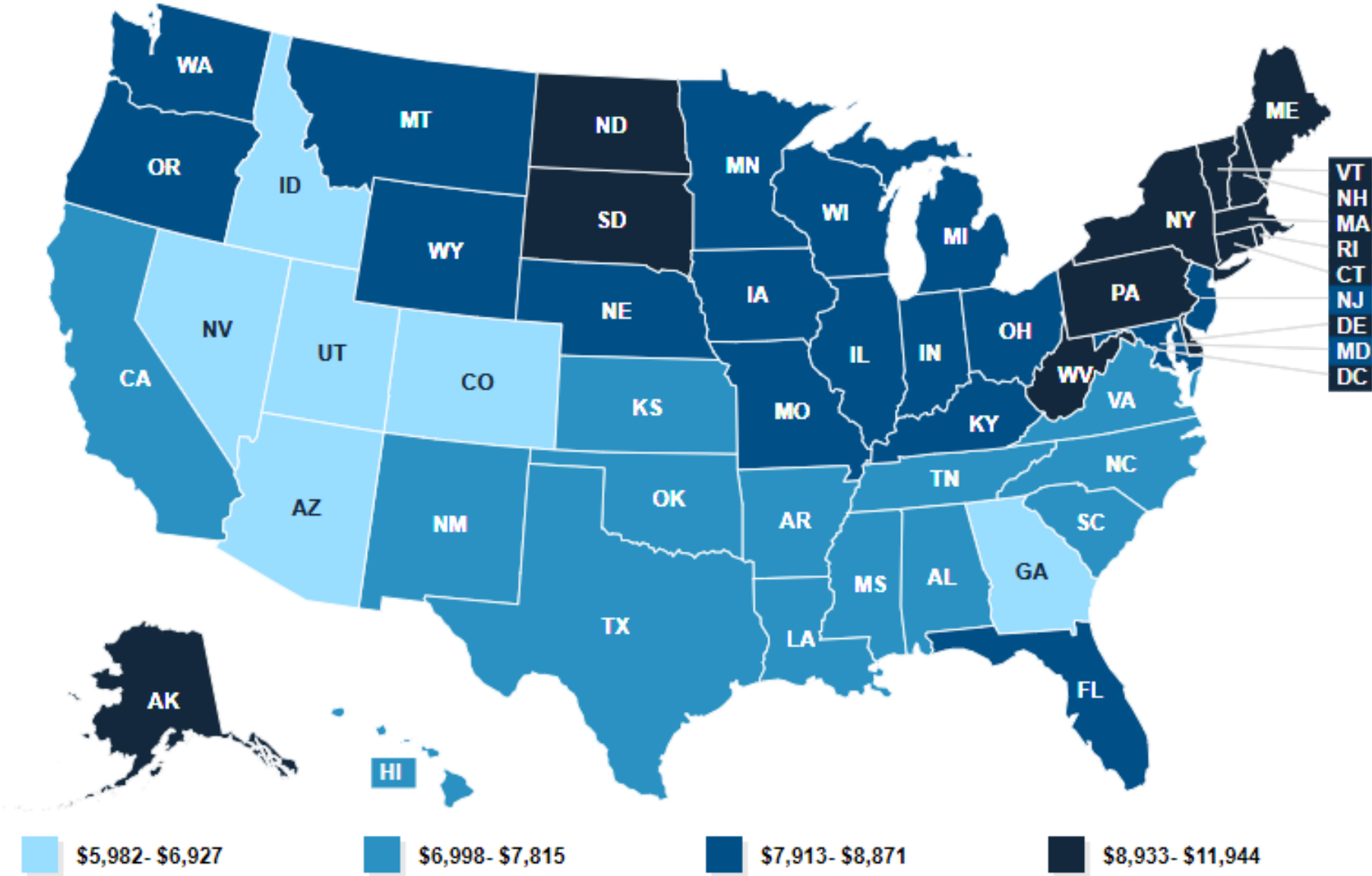
**Prices — not use — drive higher
healthcare costs, HCCI says**



HEALTH CARE SPENDING IN KANSAS

Health Care Expenditures per Capita, by State (2014)

US: \$8,045
KS: \$7,651
Rank: 32nd



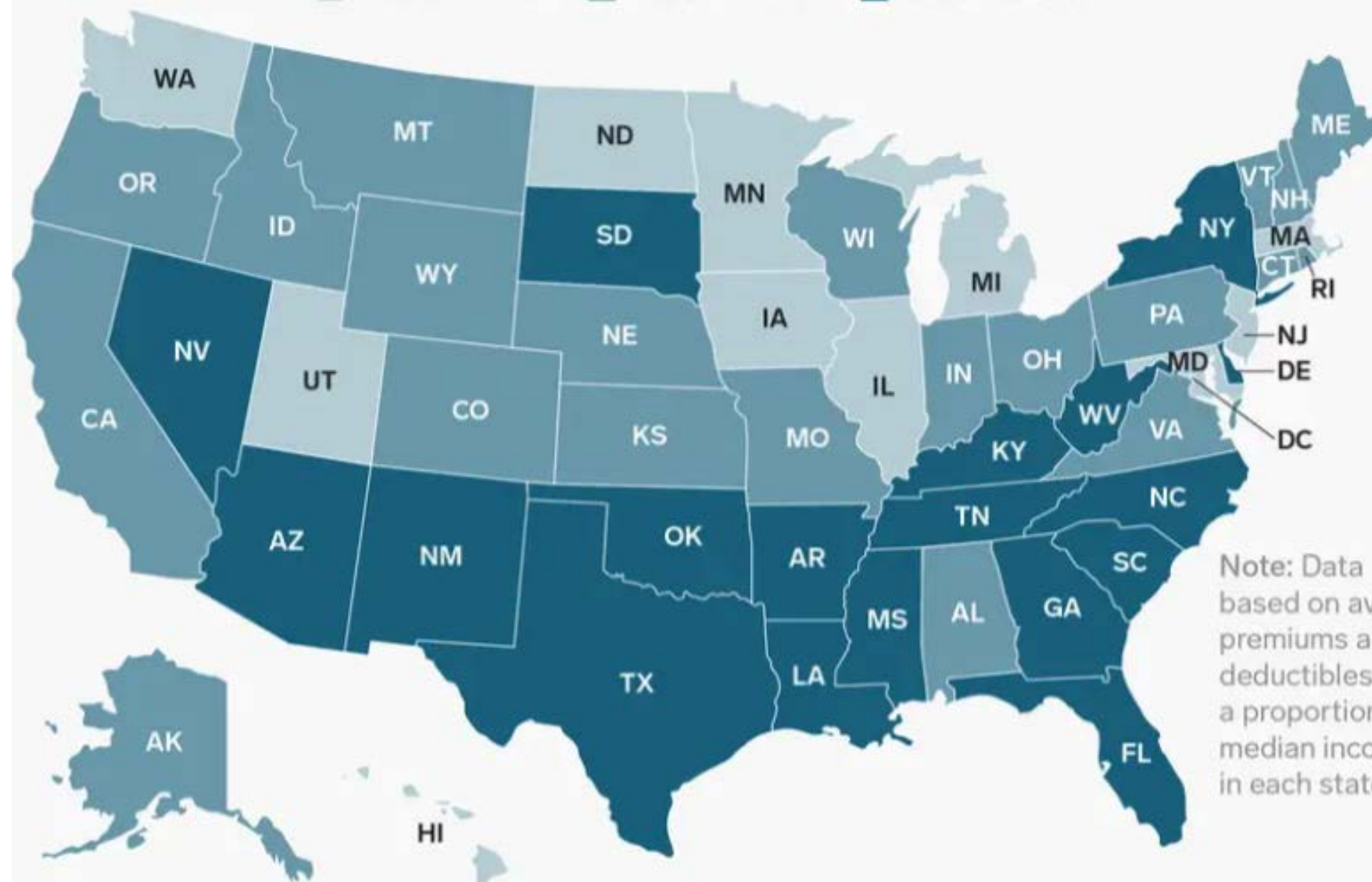
Your healthcare burden in every state, 2017

Percent of income devoted to healthcare

7.8%–9.9%

10%–11.9%

12%–15.5%



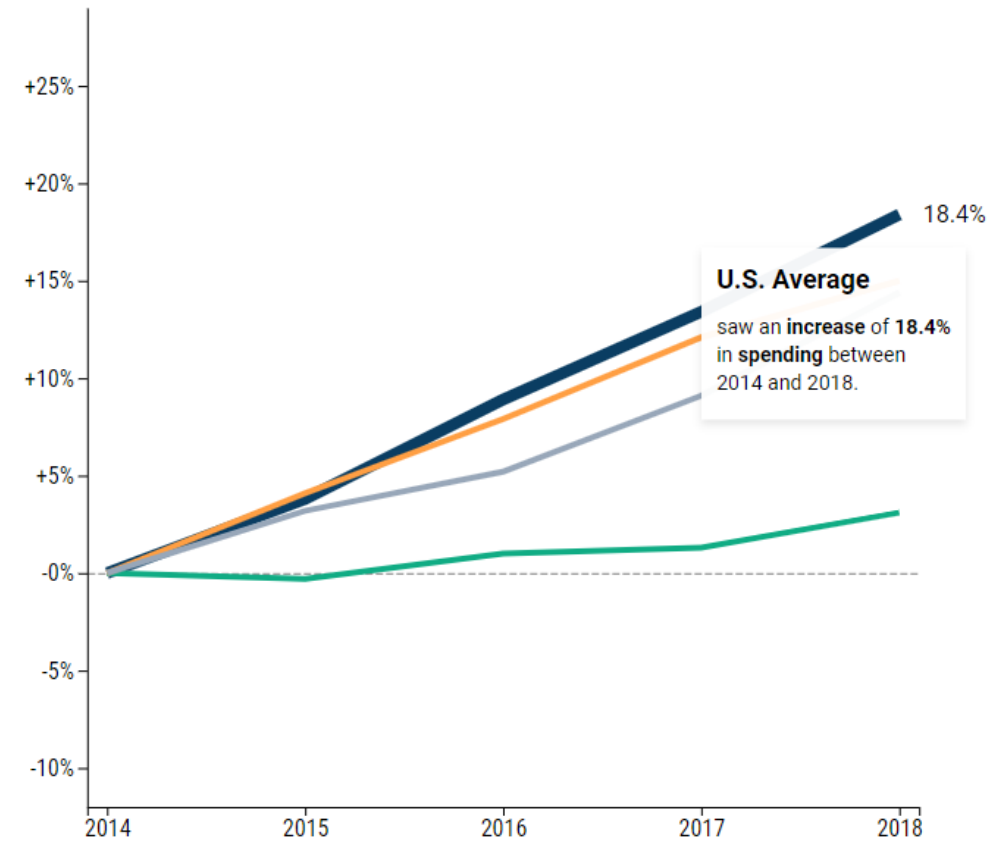
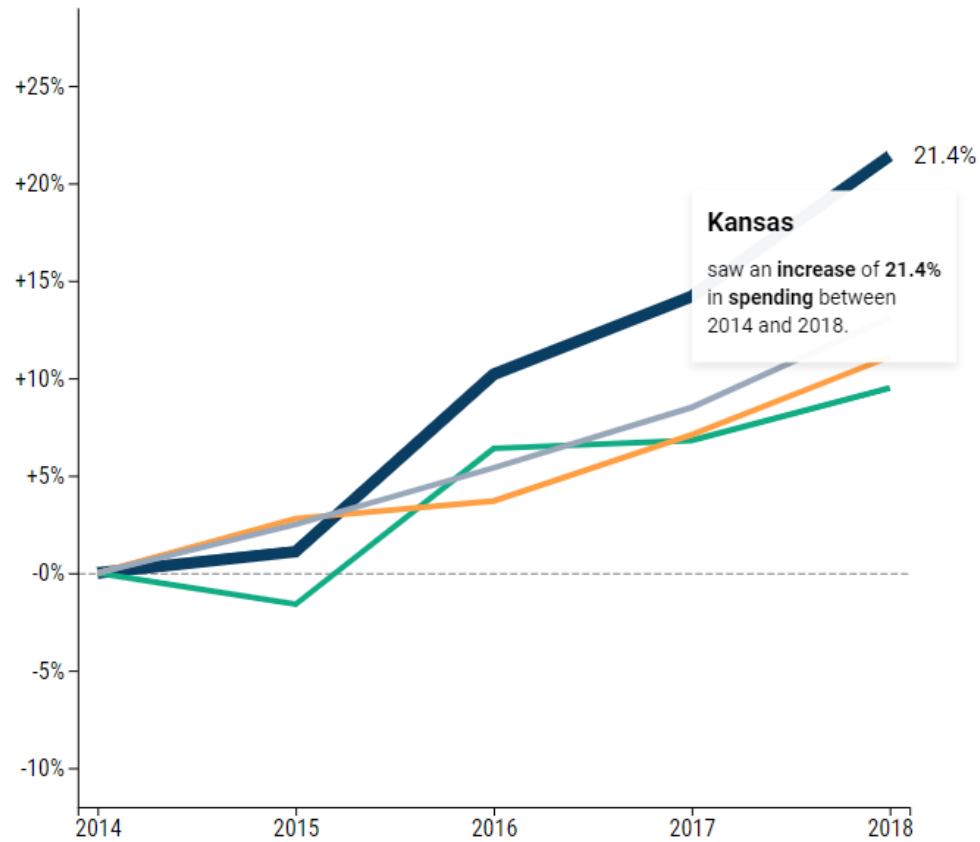
Note: Data based on avg. premiums and deductibles as a proportion of median income in each state.

US: \$7,240
(11.7%)
KS: \$7,001 (10.5%)
Rank: 34th

Cumulative Growth in Spending per Person by State since 2014

CHOOSE A STATE: 

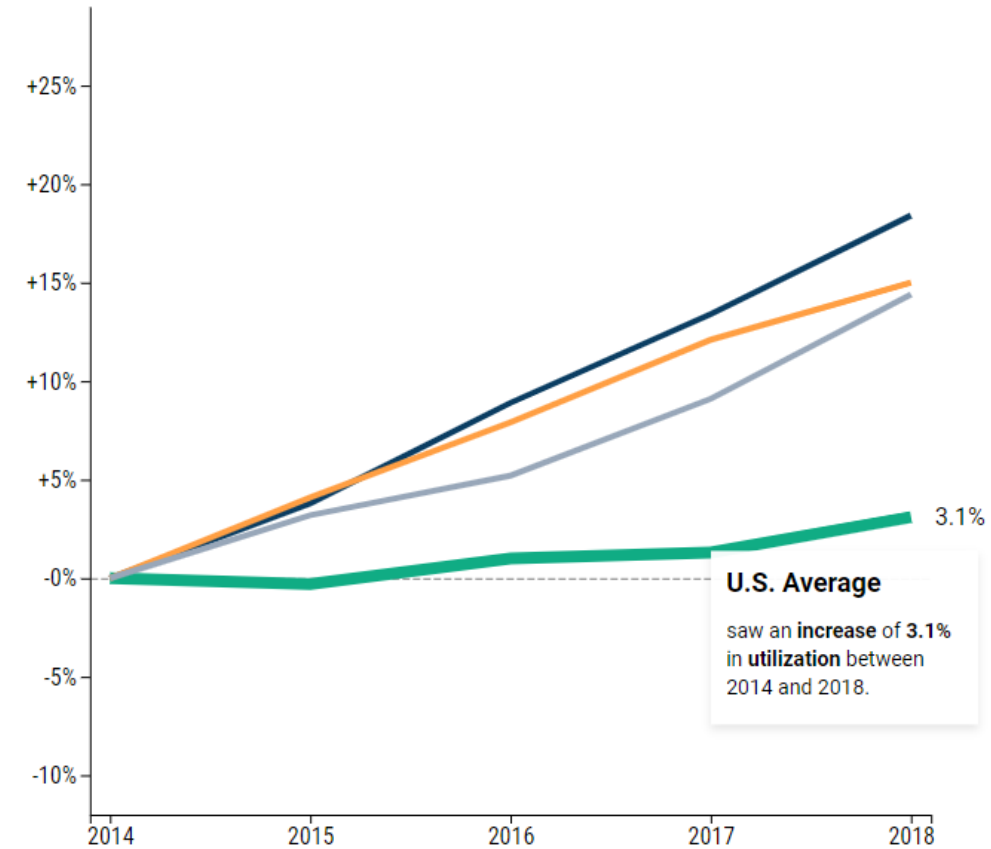
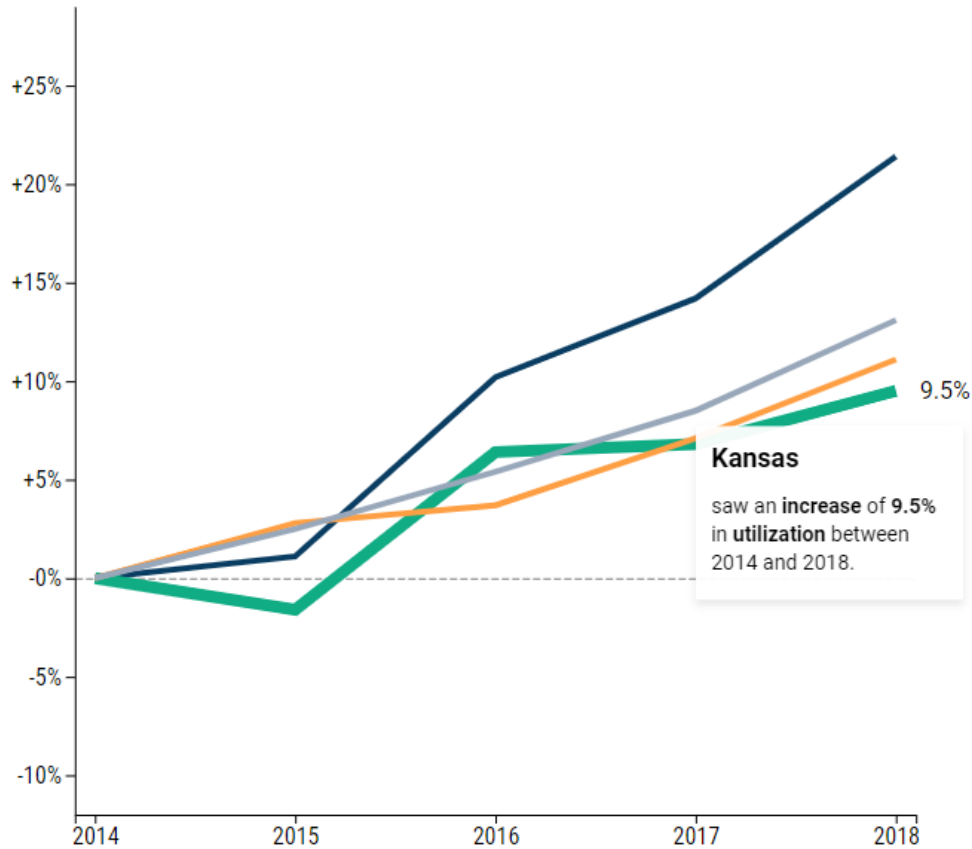
☒ Spending ☐ Utilization ☐ Price ☐ GDP Per Capita 



Cumulative Growth in Spending per Person by State since 2014

CHOOSE A STATE: 

☒ Spending ☐ Utilization ☐ Price ☐ GDP Per Capita 

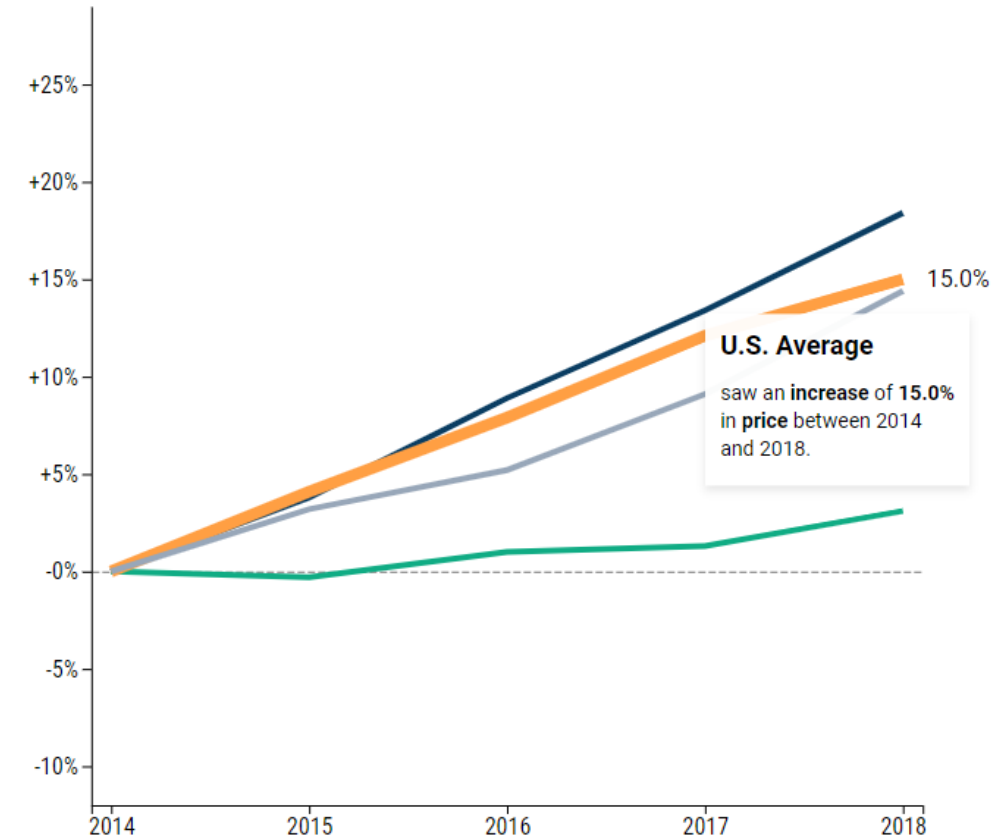
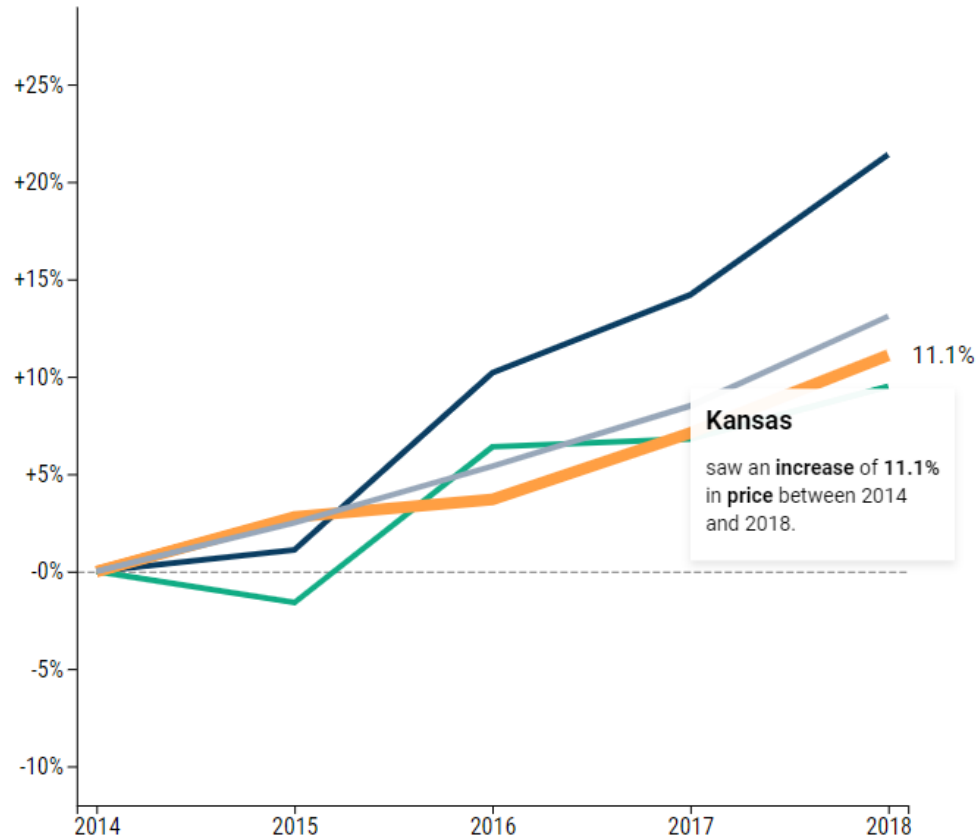


HCCI, 2018 Health Care Cost and Utilization Report

Cumulative Growth in Spending per Person by State since 2014

CHOOSE A STATE: 

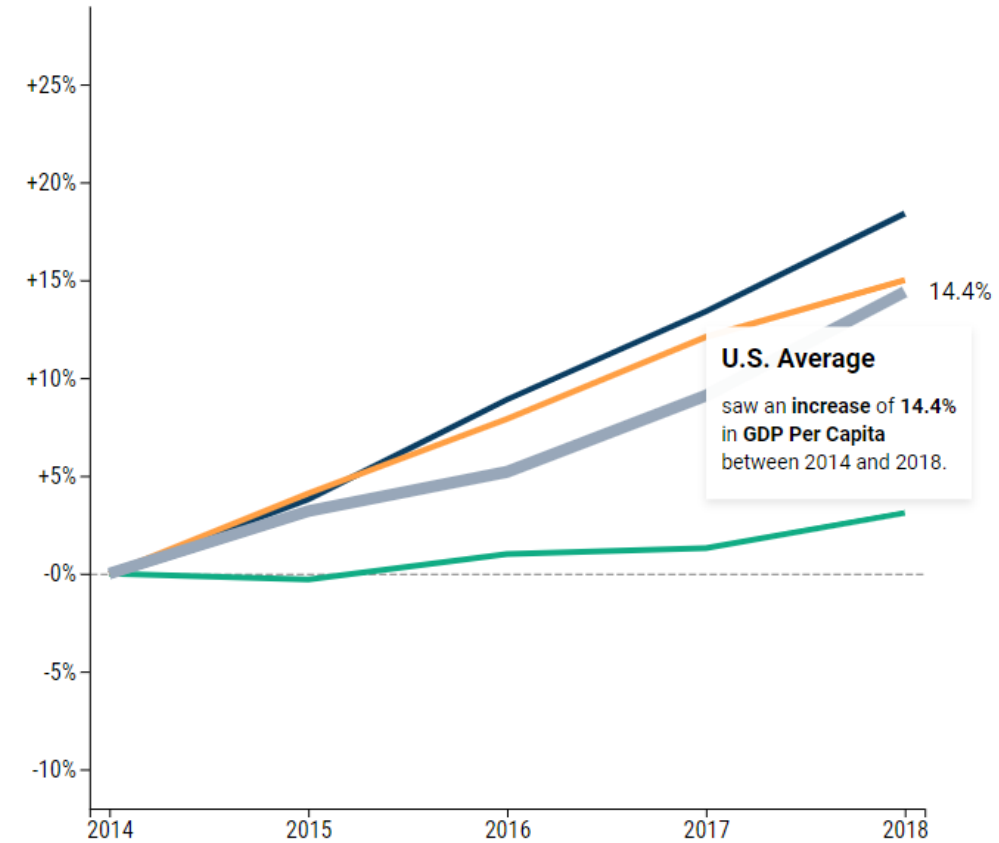
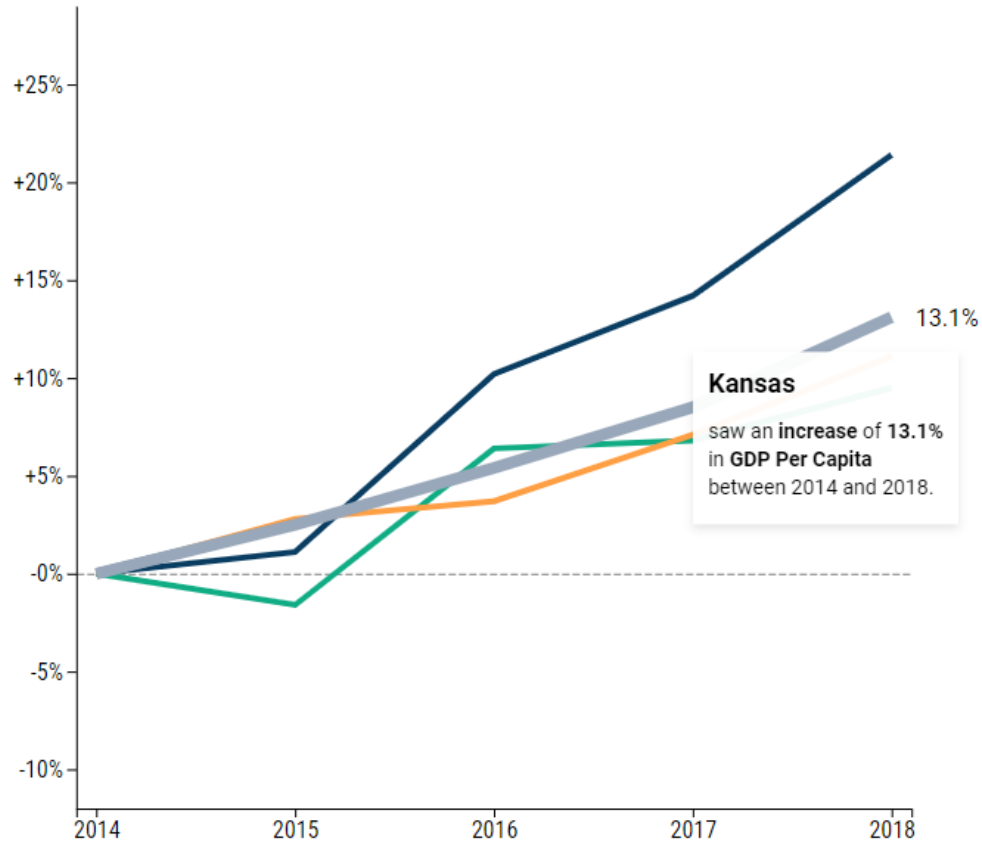
☒ Spending ☐ Utilization ☐ Price ☐ GDP Per Capita 



Cumulative Growth in Spending per Person by State since 2014

CHOOSE A STATE: 

☒ Spending ☐ Utilization ☐ Price ☐ GDP Per Capita 





IMPACT OF COVID-19

Year over year percent change in personal consumption expenditures on health care services, January 1960 - June 2020

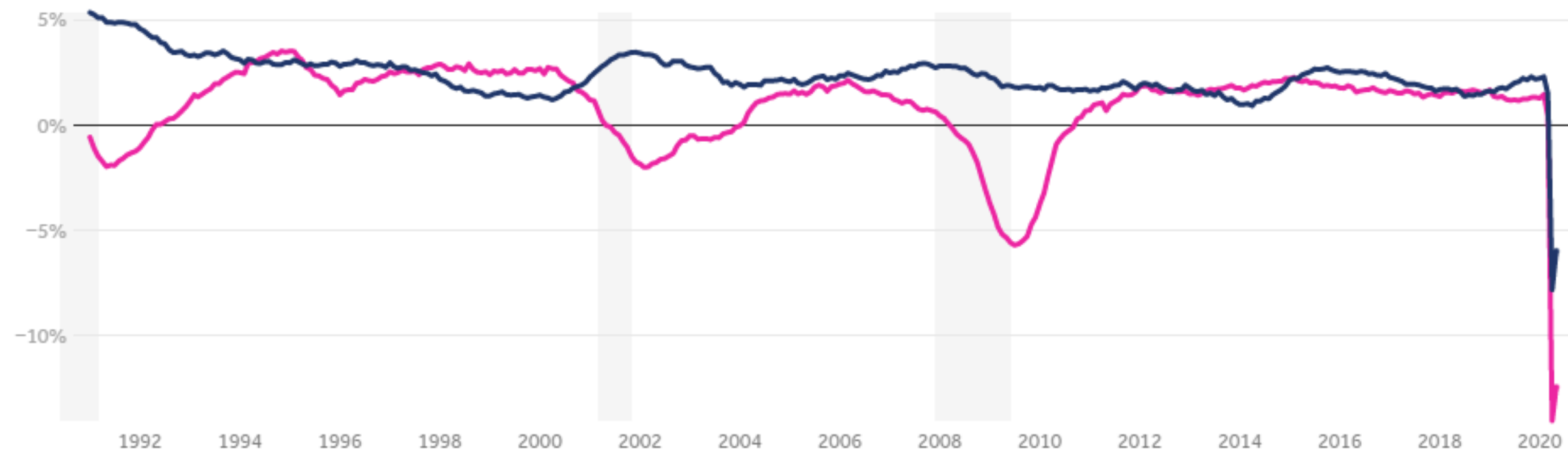


Note: Monthly spending data are annualized

Source: [KFF analysis of BEA Data](#) • [Get the data](#) • [PNG](#)

Year-over-year change in healthcare and non-healthcare employment, January 1991 through May 2020

Healthcare employment All other employment

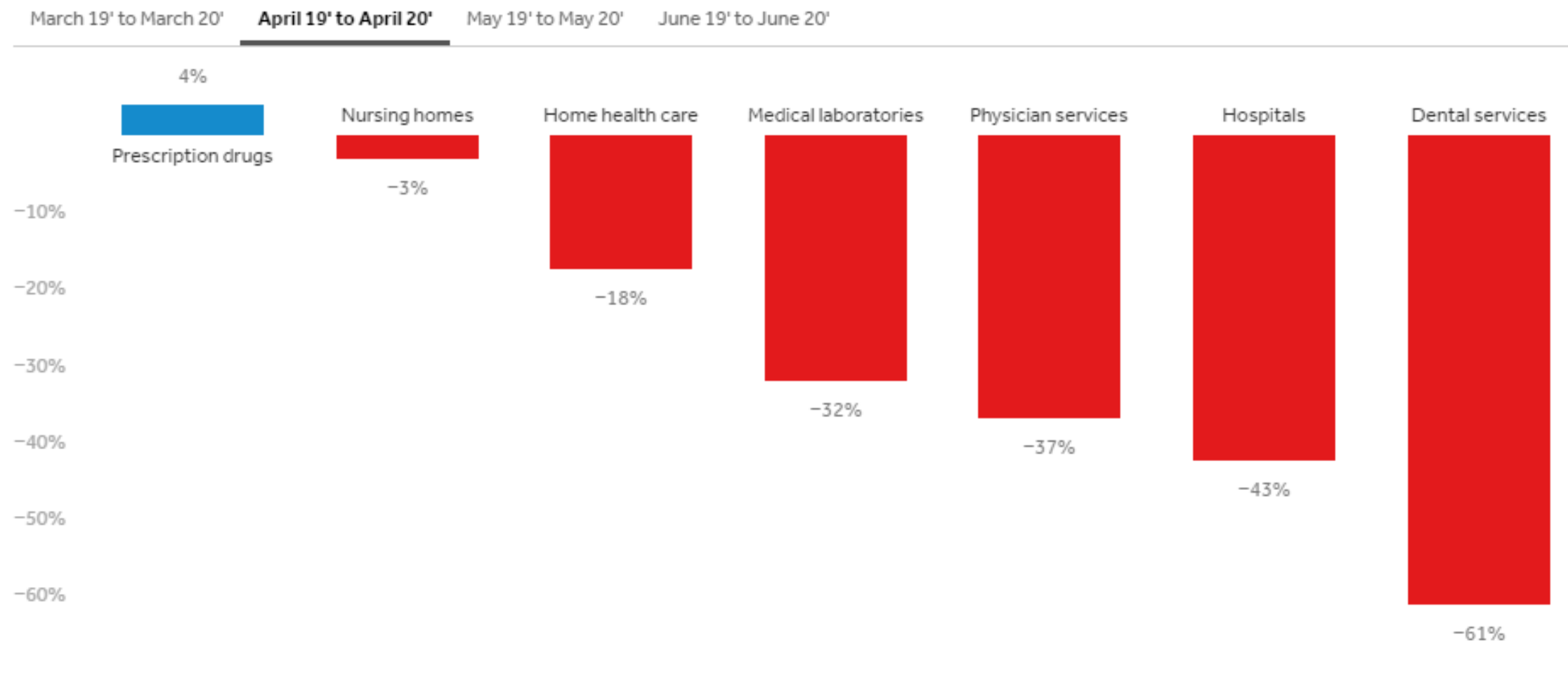


Grey regions represent periods of economic recession.

Source: Bureau of Labor Statistics • [Get the data](#) • [PNG](#)

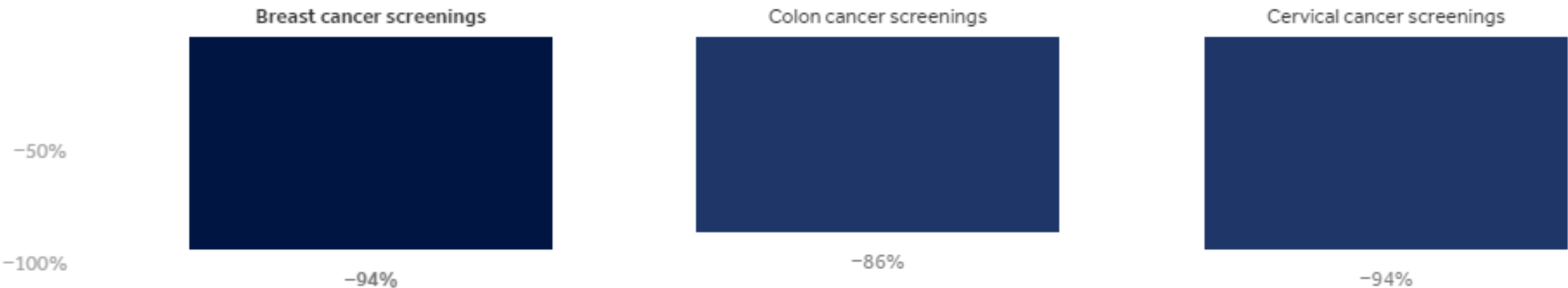
Spending dropped sharply for dental offices, physician services, and hospitals

Percent change in personal consumption expenditures, by product type



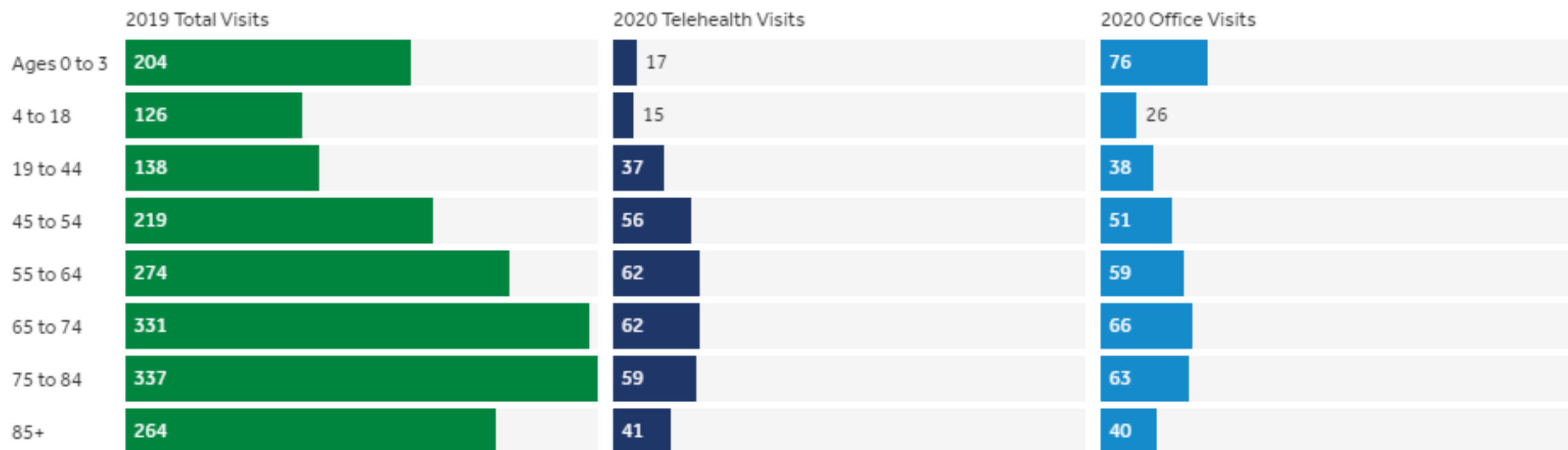
Source: KFF analysis of BEA data • [Get the data](#) • [PNG](#)

Change in average weekly cancer screening volume, Jan 1, 2017-Jan 19, 2020 vs Jan 20-Apr 21, 2020, by type of screening



Source: [Epic Health Research Network, "Preventive Cancer Screenings during COVID-19 Pandemic"](#) • [Get the data](#) • [PNG](#)

Visits per 1,000 patients from March 15 to April 14 in 2019 vs 2020, by patient age and type of visit



Source: [Epic Health Research Network, "Expansion of Telehealth during COVID-19 Pandemic"](#) • [Get the data](#) • [PNG](#)

Preserving and Promoting Competition in the Post-Coronavirus Disease 2019 Healthcare Delivery System

[Vinay K. Rathi, MD, MBA¹](#); [J. Michael McWilliams, MD, PhD^{2,3,4}](#); [Dhruv Khullar, MD, MPP^{5,6}](#)

[Author Affiliations | Article Information](#)

JAMA Health Forum, accessed Oct. 6, 2020

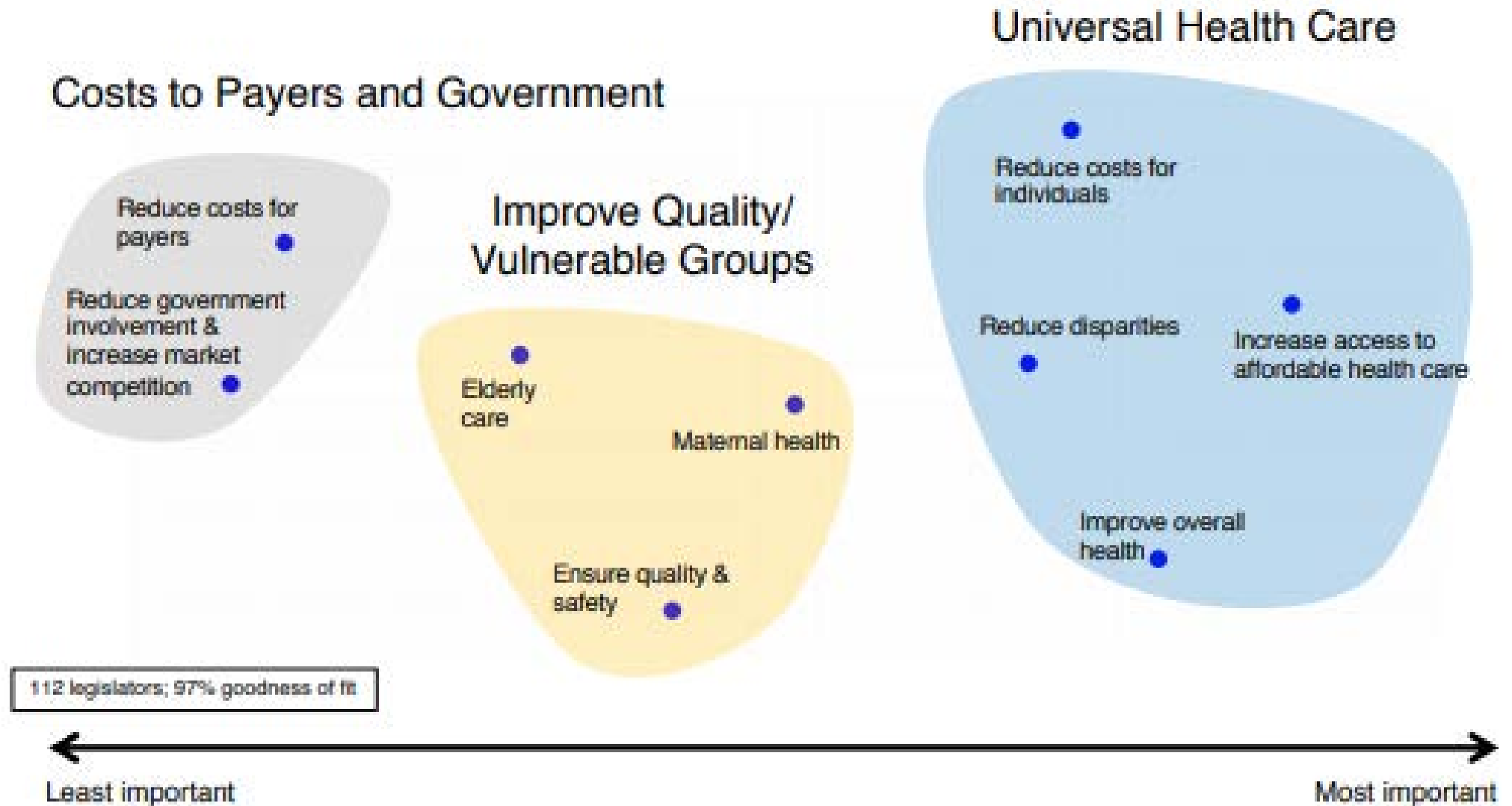
Importance of monitoring potential impact of COVID-19 on:

- Competition/consolidation
- Price
- Access
- Health



IS THERE A PATH FORWARD?

Figure 1. Overall Health Policy Importance Map for Mostly Democratic Group of Legislators (80% Democratic, 20% Republican)



**Figure 2. Overall Health Policy Importance Map for Mostly Republican Group of Legislators
(20% Democratic, 80% Republican)**

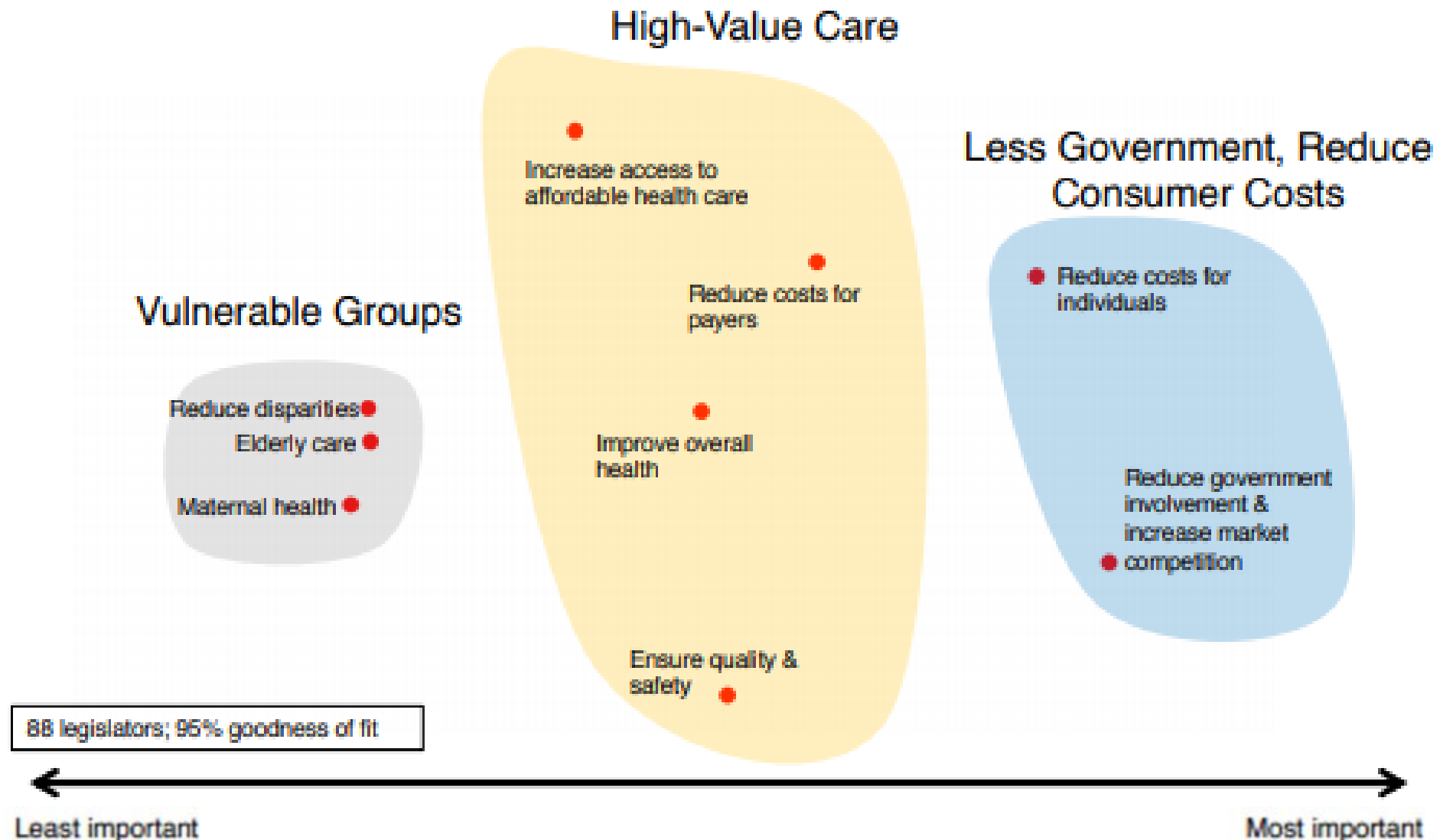
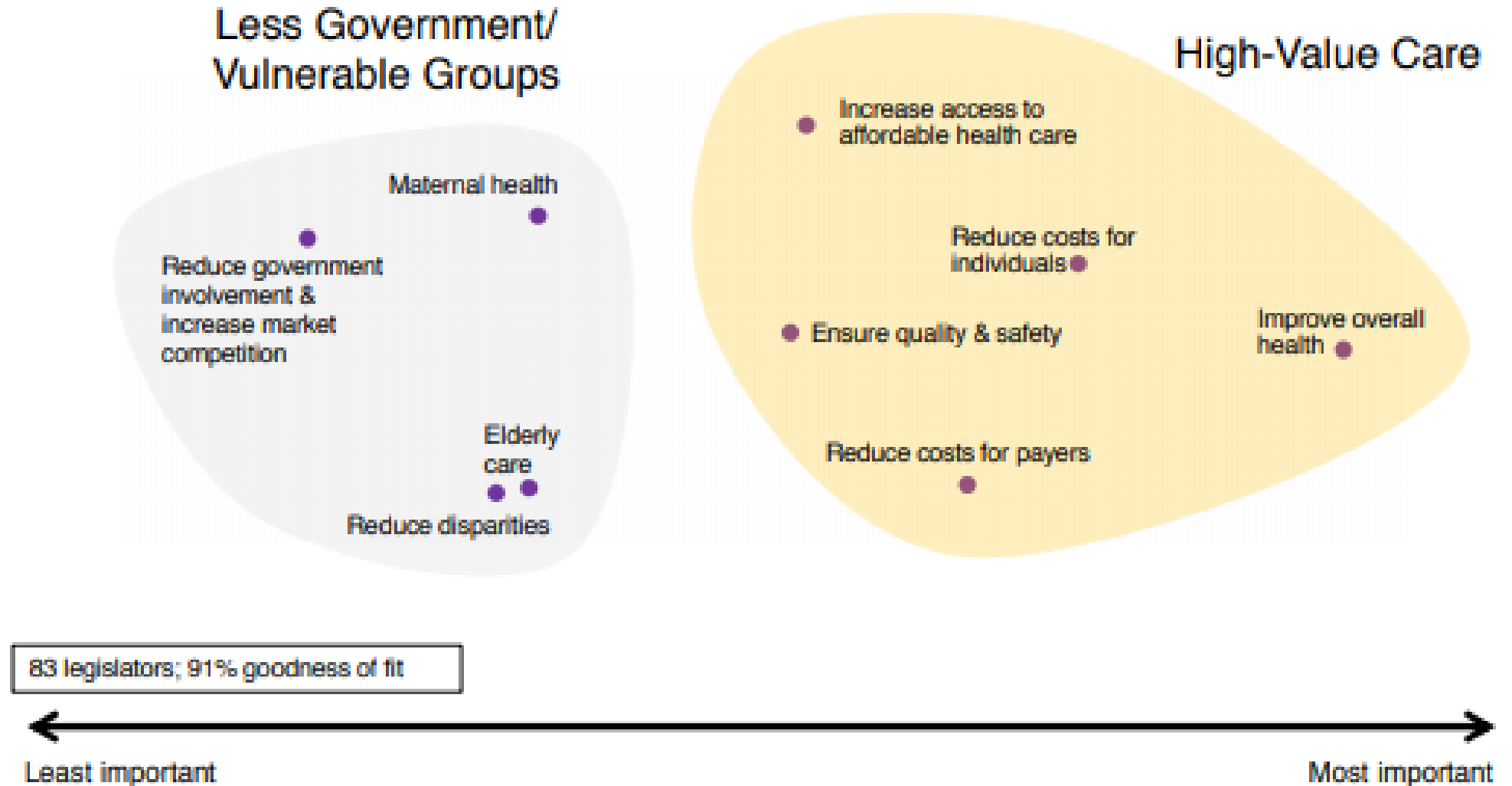


Figure 3. Overall Health Policy Importance Map for Moderate Group of Legislators (50% Democratic, 50% Republican)



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U.S. Health Care System Performance Rankings

	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
OVERALL RANKING	2	9	10	8	3	4	4	6	6	1	11
Care Process	2	6	9	8	4	3	10	11	7	1	5
Access	4	10	9	2	1	7	5	6	8	3	11
Administrative Efficiency	1	6	11	6	9	2	4	5	8	3	10
Equity	7	9	10	6	2	8	5	3	4	1	11
Health Care Outcomes	1	9	5	8	6	7	3	2	4	10	11

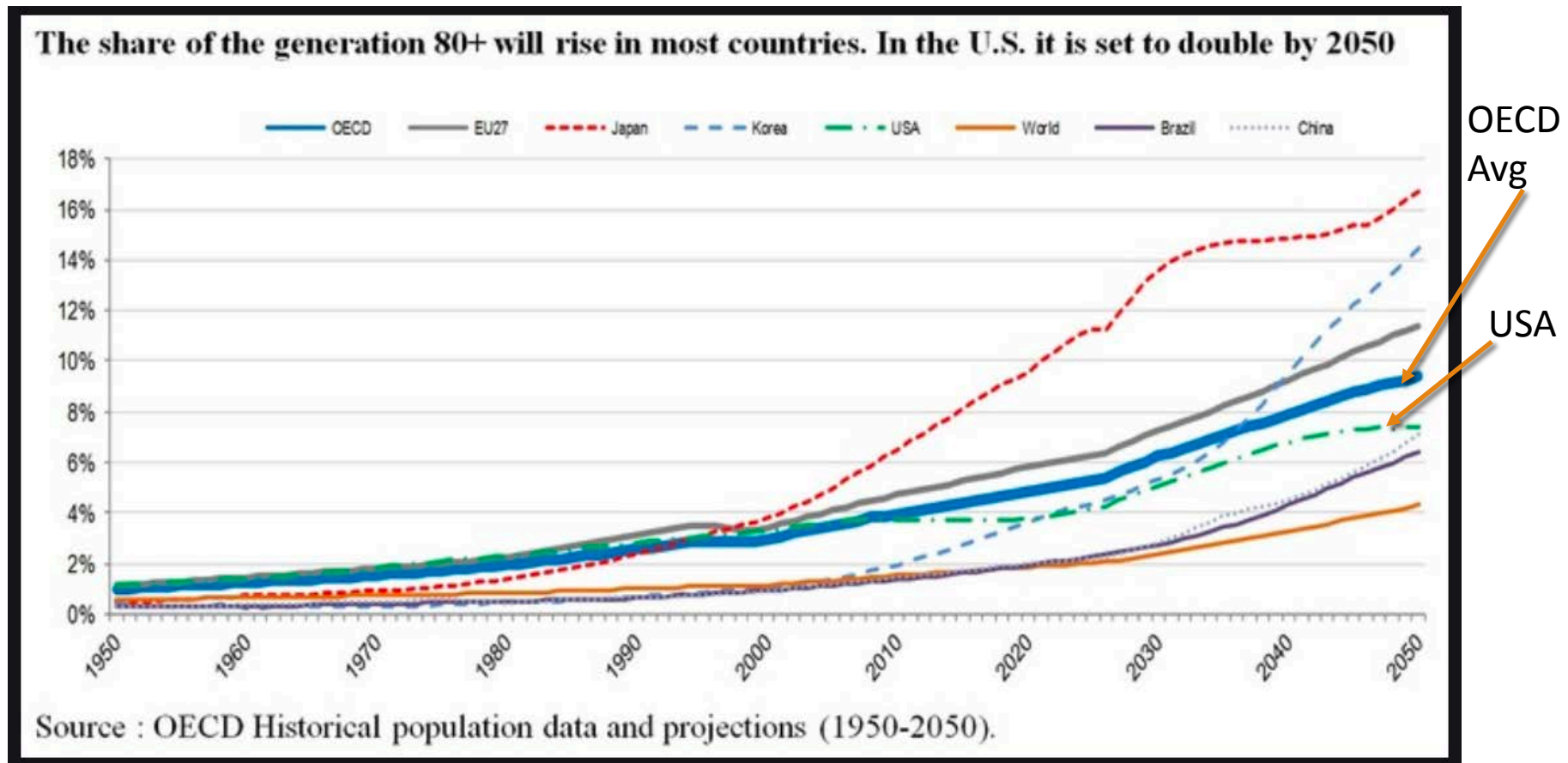
Source: Commonwealth Fund analysis.



Kansas Health System Performance

Ranking Highlights^a

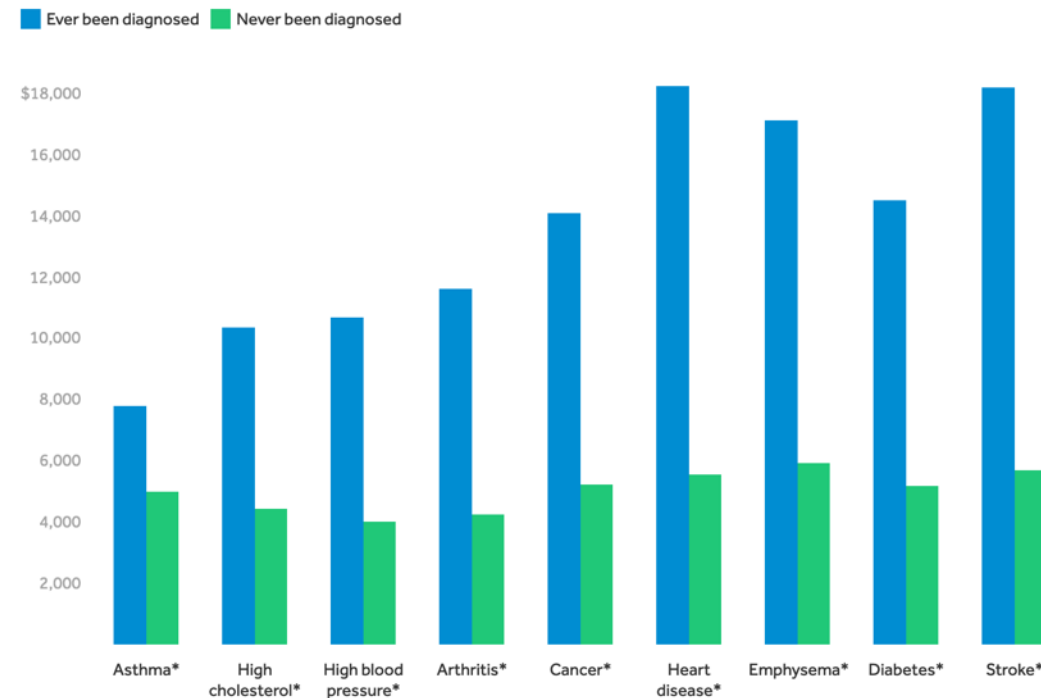
	National Rank		Rank Among Plains States	
	2020	Change from baseline	2020	Change from baseline
Overall	34 of 51	-4	6 of 7	0
Access & Affordability	22	+2	3	+2
Prevention & Treatment	27	-5	6	-1
Avoidable Use & Cost	29	+3	6	0
Healthy Lives	34	-7	6	-1
Income Disparity	34	+1	6	0



Comparison of Aging Populations

Chronic Disease

Per capita health spending based on diagnosis status, in U.S. Dollars, 2017



Note: *Estimate is significantly different from estimate for all other groups ($p < .05$). For all diagnoses shown, with the exception of asthma, diagnosis status was asked only of respondents age 18 or older. All respondents were asked about their asthma diagnosis status.

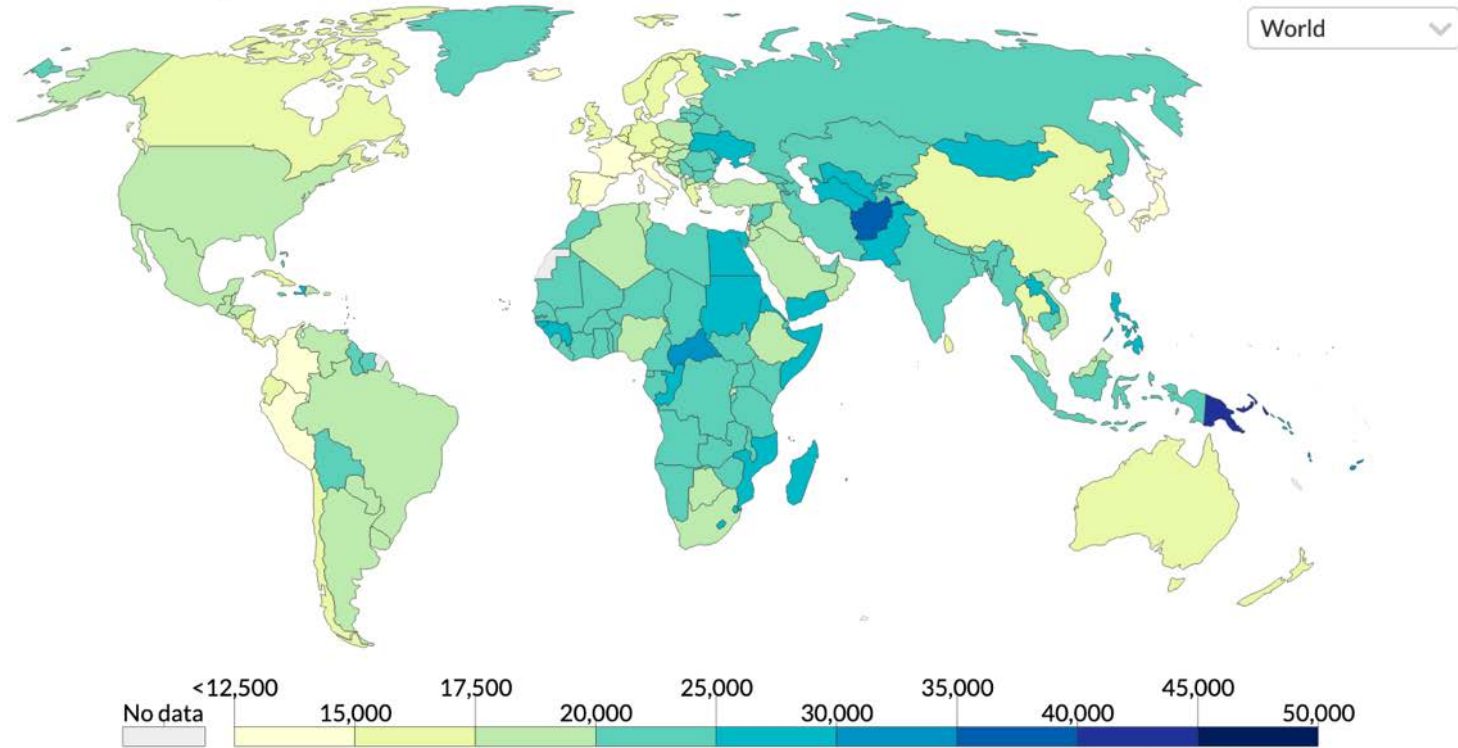
Source: KFF analysis of Medical Expenditure Panel Survey • [Get the data](#) • PNG

Peterson-KFF
Health System Tracker

DALY rates from non-communicable diseases (NCDs), 2017

Our World
in Data

Age-standardized DALY (Disability-Adjusted Life Year) rates per 100,000 individuals from non-communicable diseases (NCDs). DALYs are used to measure total burden of disease - both from years of life lost and years lived with a disability. One DALY equals one lost year of healthy life.



Source: IHME, Global Burden of Disease

CC BY

1990

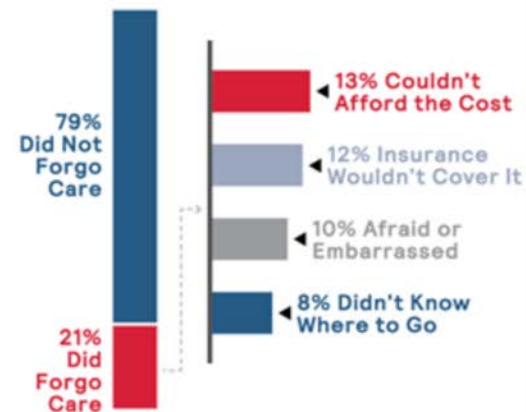
2017

Mental Health and Substance Use Disorders Were the Leading Cause of Disease Burden in the US in 2015

Disability adjusted life years (DALYs) rate per 100,000 population



1 in 5 Reported That They or a Family Member Had to Forgo Needed Mental Health Services in 2016



Mental Illness Treatment Accounted for \$89 Billion (5%) of Total Medical Services Spending in the US in 2013

■ \$10 Billion in Spending



Authors: Rabah Kamal; Cynthia Cox, MPH; and David Rousseau, MPH; for the Kaiser Family Foundation.

Source: Kaiser Family Foundation analysis. Original data and detailed source information are available at kff.org/JAMA_8-01-2017.

Please cite as: JAMA. 2017;318(5):415. 10.1001/jama.2017.8558



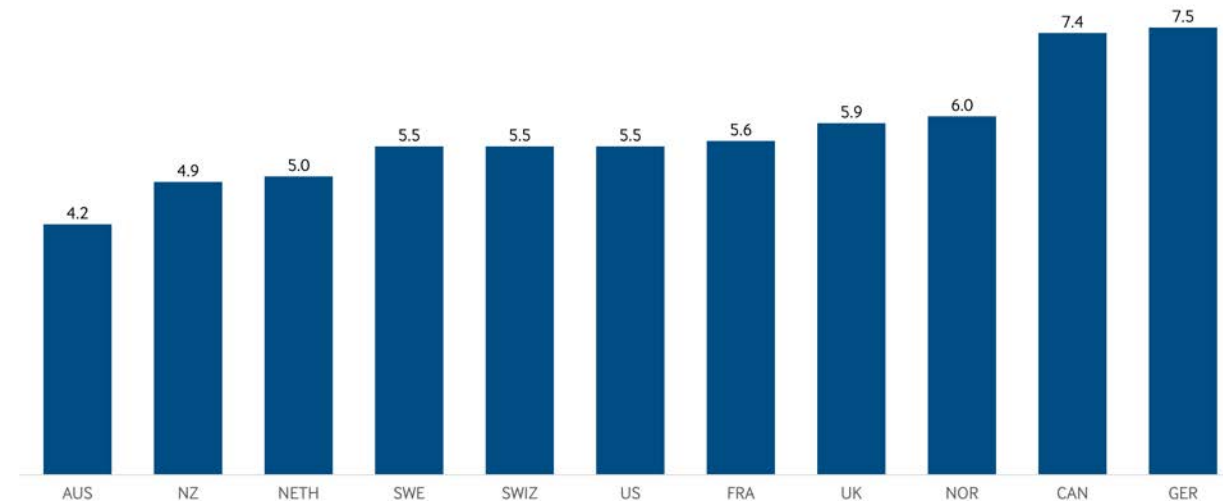
The JAMA Network

Mental Illness/Substance Abuse

Utilization: Hospital Stays

Average length of stay for acute care (days)

OECD average: 6.4



 Download data

Notes: Data reflect average length of stay for curative (acute) care for physical and mental/psychiatric illnesses, or treatment of injury; diagnostic, therapeutic, and surgical procedures; and obstetric services. Excludes rehabilitative care, long-term care, and palliative care. Data for 2017 or nearest year: 2016 for AUS, FRA, NZ, US. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

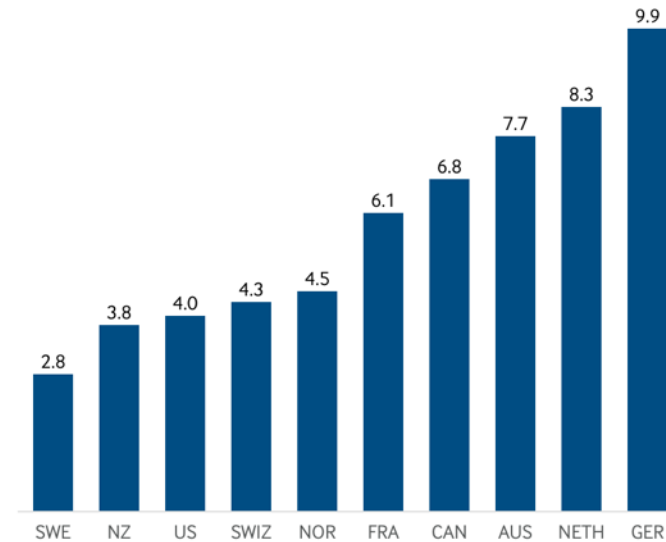
Data: OECD Health Statistics 2019.

Source: Roosa Tikkanen and Melinda K. Abrams, *U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes?* (Commonwealth Fund, Jan. 2020).
<https://doi.org/10.26099/7avy-fc29>

Utilization – Physician Visits

Average physician visits per capita, 2017

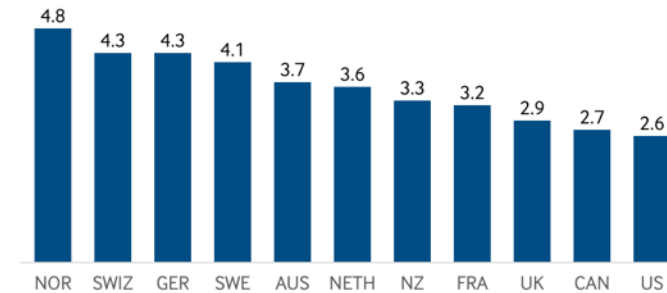
OECD average: 6.8



 Download data

Practicing physicians per 1,000 population, 2018

OECD average: 3.5



 Download data

Notes: Physician visit data reflect 2017 or nearest year: 2016 for FRA, 2011 for US. No recent data for UK (since 2009). Physician supply data for 2018 or nearest year: 2017 for AUS, GER, NETH, SWIZ, US; 2016 for SWE. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

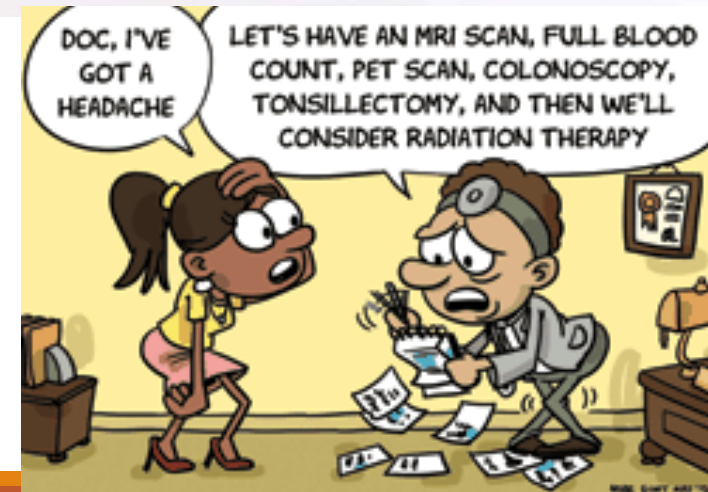
Data: OECD Health Statistics 2019.

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<https://doi.org/10.26099/7avv-fc29>

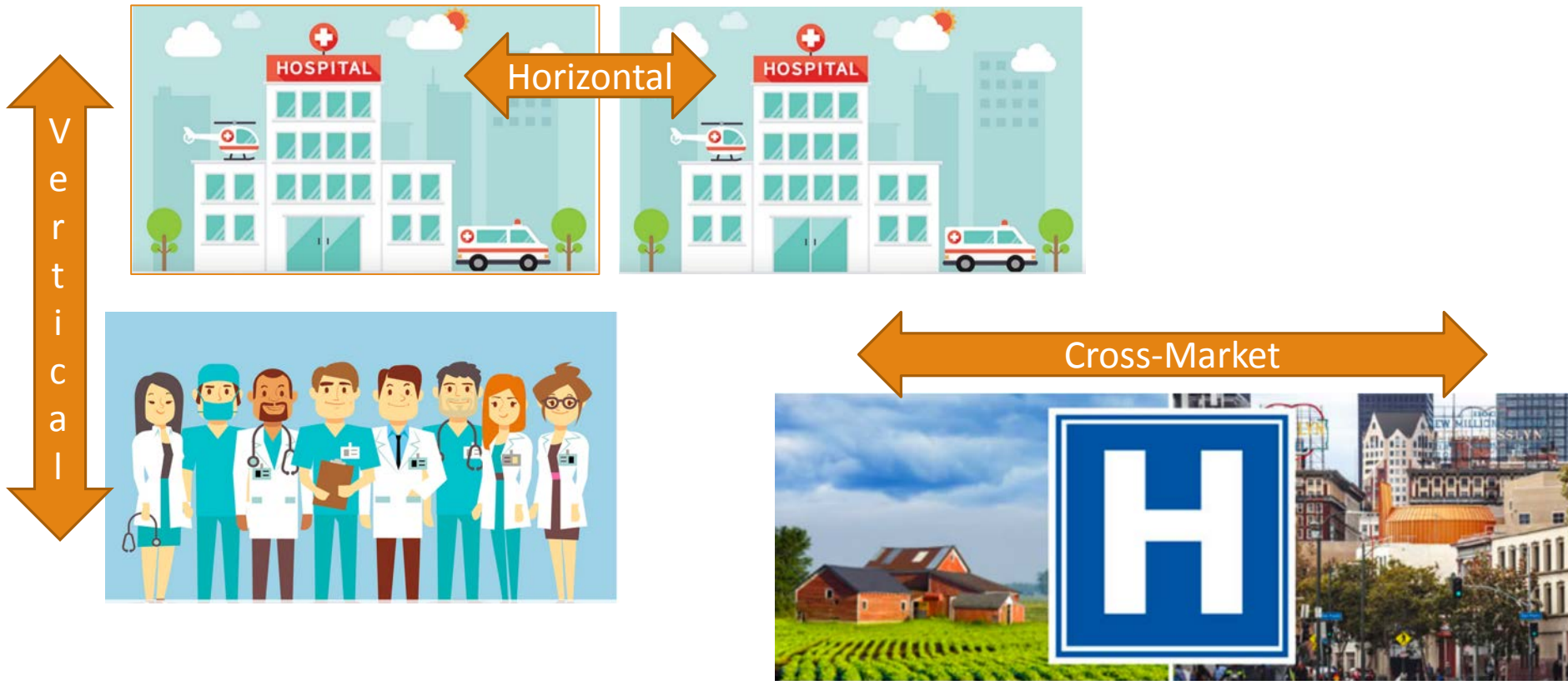
“Defensive Medicine”

Real, but Low Impact on Healthcare Spending:

- Less than 2 percent of total health care spending (Congressional Budget Office in 2004)
- 2.4 percent of total national health care spending in 2008. (Mello et. al.)
- Only 2.9% of costs were completely defensive in one MA hospital system (Rothberg et. al.)

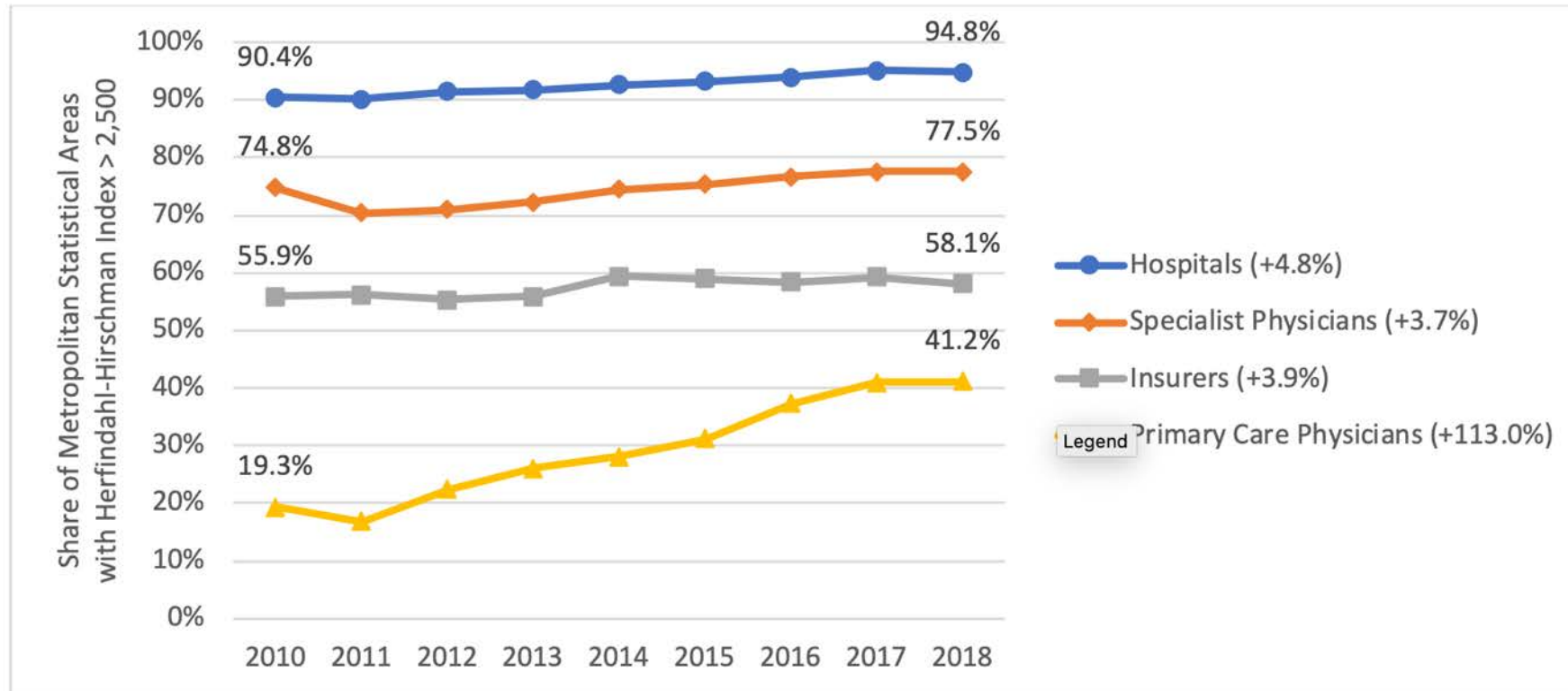


Healthcare Merger Mania



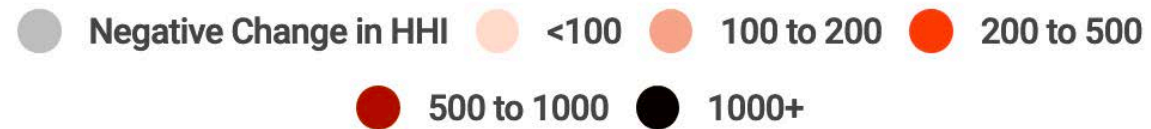
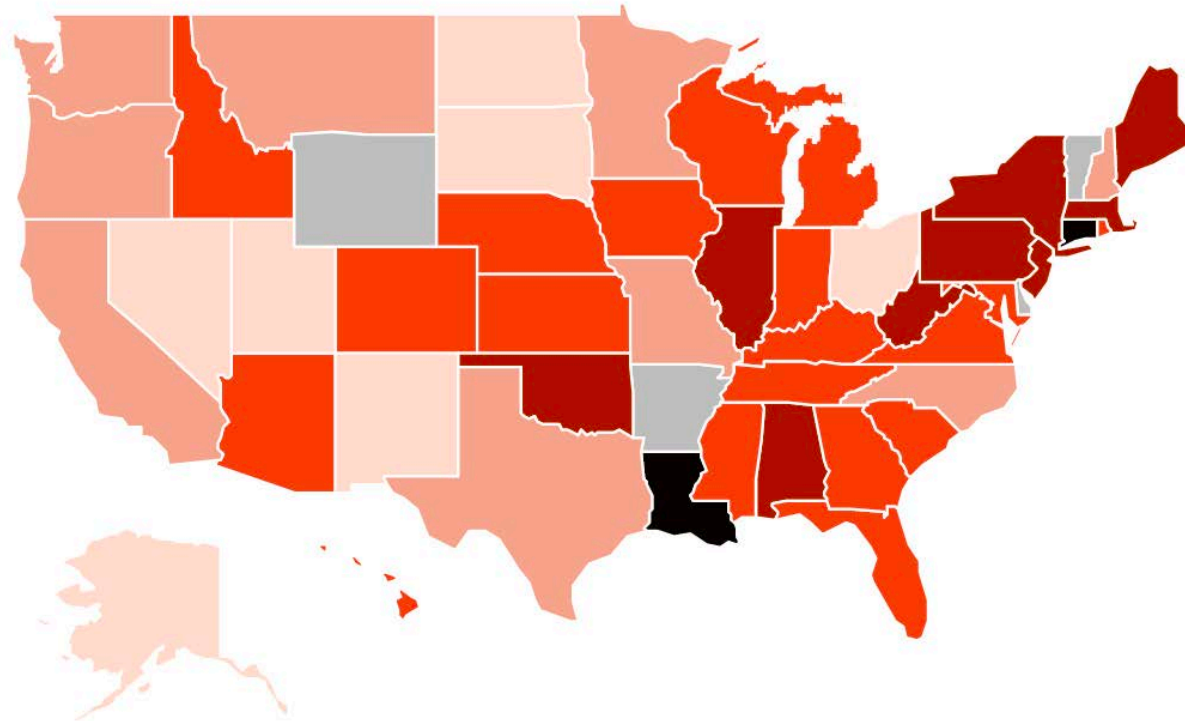
Health Care Consolidation

Figure 1: Healthcare Market Concentration Levels 2010-2018



Source: Nicholas C. Petris Center on Health Care Markets and Consumer Welfare (petris.org), University of California, Berkeley, analysis of data from the American Hospital Association Annual Survey, SK&A Office Based Physicians Database from IQVIA, and Managed Market Surveyor File from [HealthLeaders InterStudy](#) (Decision Resources Group).

Change in HHI from 2010 to 2018



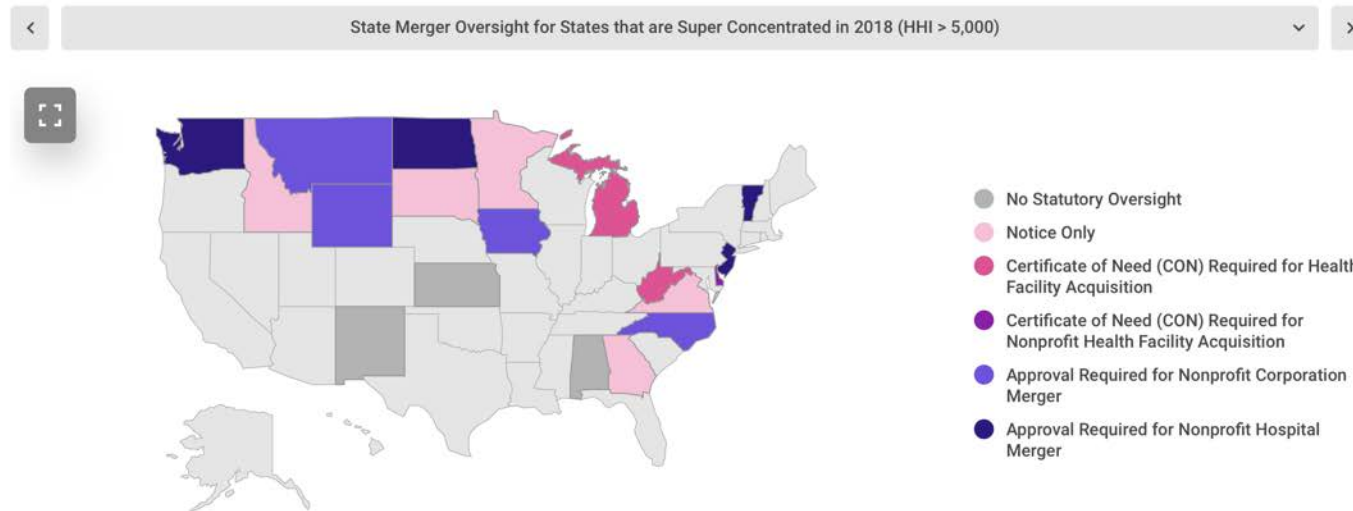
Source: The Source on Healthcare Price and Competition

Merger Oversight in Super Concentrated States

State Merger Oversight and Market Concentration from 2010-2018



These overlay maps combine and show the intersection of statutory merger oversight authority and market concentration levels of hospitals of all 50 states from 2010-2018. An upcoming report will analyze the impact of state merger review authority on market concentration.



Download data

Data from 2010-2018

Source: The Source on Healthcare Price & Competition and the Petris Center

WHAT STATES HAVE DONE TO CONTROL HEALTH CARE COSTS AND IMPROVE QUALITY

- Establish cost growth goal
- Public health and cost outcomes scorecard
- Adopt payment and delivery system reform goals
- Implement bundled payments for all payers
- Institute global budgets for hospitals
- Launch All Payer Claims Databases (APCD)

Emanuel, E., et. al., Health Affairs Blog, April 28, 2016

WHAT STATES HAVE DONE TO CONTROL HEALTH CARE COSTS AND IMPROVE QUALITY (CONT.)

- Expand evidence-based home visiting services
- Improve price transparency
- Integrate behavioral health and primary care
- Combat addiction to prescription drugs and heroin (and methamphetamine)
- Improve the delivery of long-term care
- Align scope of practice with community needs

Emanuel, E., et. al., Health Affairs Blog, April 28, 2016

WHAT STATES HAVE DONE TO CONTROL HEALTH CARE COSTS AND IMPROVE QUALITY (CONT.)

- Institute reference pricing in the State Employee Health Plan
- Expand the use of telehealth
- Decrease unnecessary emergency room use

AEI/BROOKINGS

RECOMMENDATIONS

- Improve incentives for cost-effective private insurance
 - Limit the tax exclusion of employer-sponsored insurance
 - Ensure effective anti-trust enforcement
 - Create pathway to the development of APCDs

A response to Chairman Alexander and the Senate HELP Committee, March 2, 2019

AEI/BROOKINGS

RECOMMENDATIONS (CONT.)

- Remove state regulatory barriers to provider market competition
 - Repeal any willing provider laws
 - Certificate of need reform
 - Surprise billing reform
- Improve choice environment for (buying insurance)
 - Comprehensive plan-finder tools that give consumers better information on the likely cost of enrollment options

OTHERS?

- Right to Shop
- Direct patient care models
- Reinsurance programs/high risk pools
- Association Health Plans/Short Term Limited Duration Insurance