



HEALTH CARE
COST INSTITUTE

Its Still The Prices Stupid: Observations on Health Care Spending in the US

Niall Brennan
CEO, HCCI
@N_Brennan
March, 2020



HCCI's Mission

HCCI's mission is to *get to the heart* of the key issues impacting the U.S. health care system — by using the best data to get the best answers.

Our values are simple:

- Health care claims data should be accessible to all those who have important questions to ask of it.
- Health care information should be transparent and easy to understand.
- All stakeholders in the health care system can drive improvements in quality and value with robust analytics.

HCCI reports cost trends and facilitates informed debate about the less-understood commercially-insured population



HCCI 1.0 Data Holdings

aetna®

UnitedHealthcare®

KAISER
PERMANENTE®

Humana.

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Commercial Claims

- Years: 2008-2017
- All 50 states and D.C.
- Updated annually
- De-identified, HIPAA and anti-trust compliant

Medicare Fee-For-Service Claims

- National Qualified Entity (QE)
- Years: 2012-2017
- 100% Parts A & B & D

ESI
42M



FFS Medicare
40M





HCCI 2.0 Data Holdings



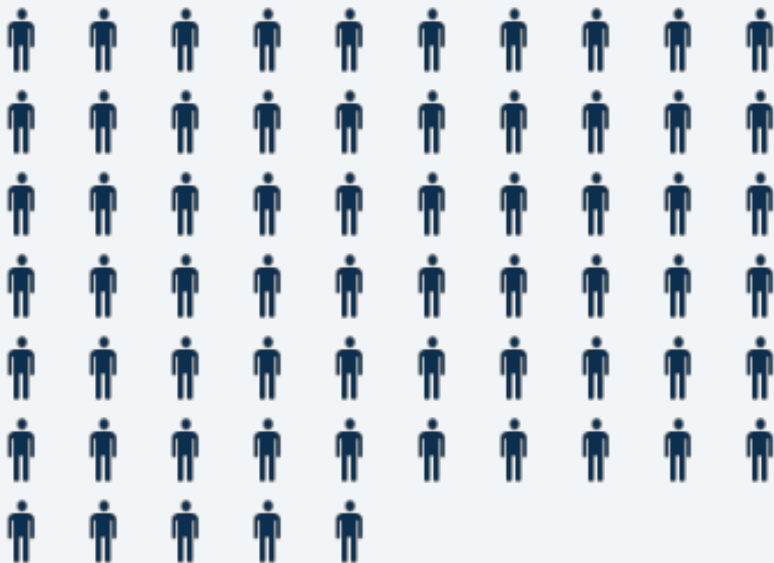
Commercial Claims

- Years: 2012-2018
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Medicare Fee-For-Service Claims

- National Qualified Entity (QE)
- Years: 2012-2018
- 100% Parts A & B & D

ESI
65M



FFS Medicare
40M





HCCI Governance

Independent Board

- ***Bob Town, UT-Austin, Chair***
- Mike Chernew, Harvard
- Leemore Dafny, Harvard
- Roy Goldman, President, Society of Actuaries
- Aneesh Chopra, Entrepreneur, former White House CTO
- Chuck Phelps, University of Rochester (retired)
- Almeta Cooper, Morehouse University (retired)
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- Stephanie Carlton, McKinsey
- Amy Finkelstein, MIT
- Marshall Votta, Nautic Partners



Enabling World Class Research

HCCI's current research partners include:

Dartmouth

THE UNIVERSITY OF TEXAS
MD Anderson
Cancer Center



MEDPAC Medicare
Payment Advisory
Commission



Weill Cornell
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UNIVERSITY OF MINNESOTA
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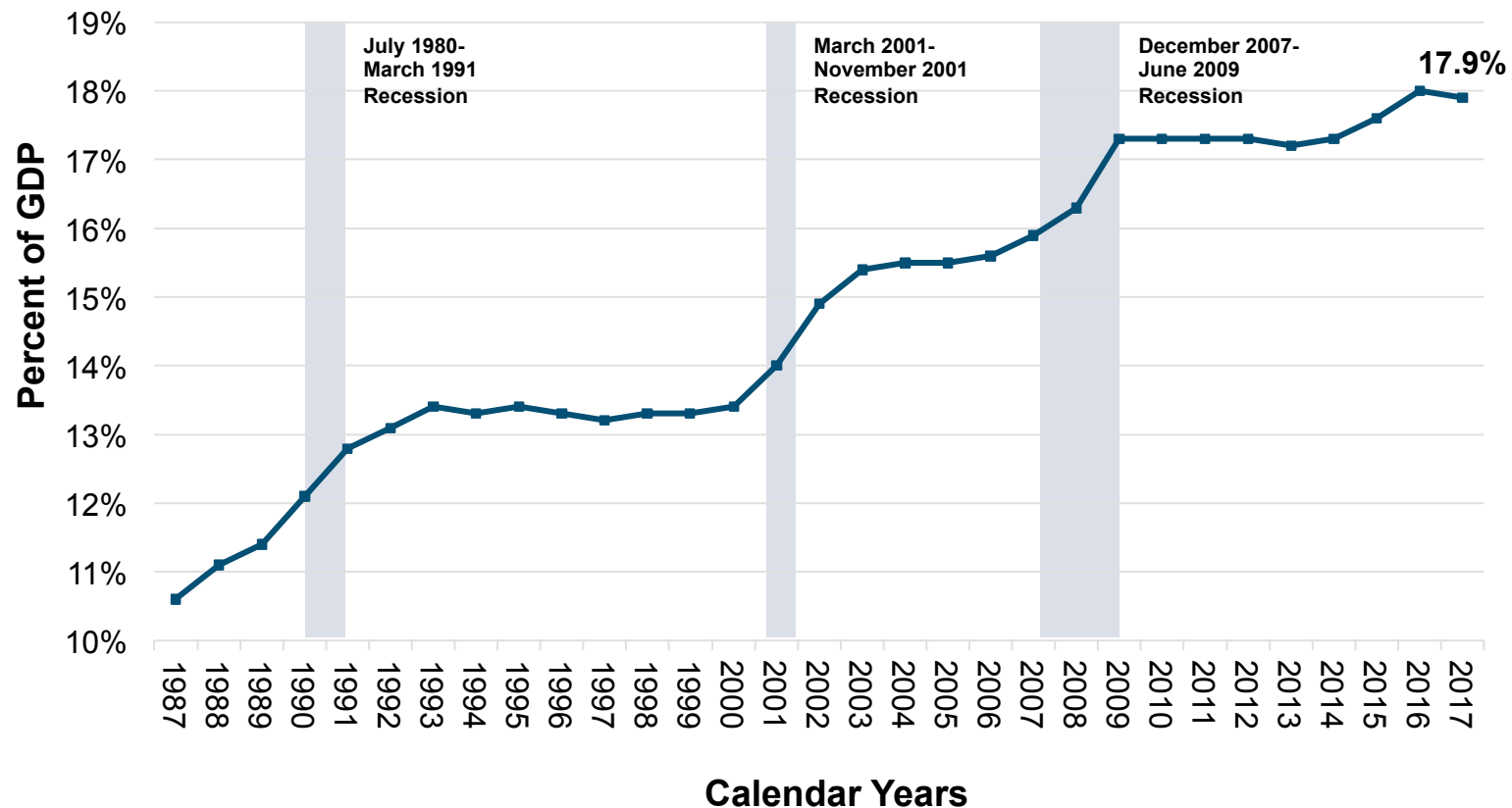
HCCI also facilitates data access and research through foundation partnerships:





Share of GDP Spent on Health Care

National Health Expenditure as a Share of Gross Domestic Product, 1960-2017

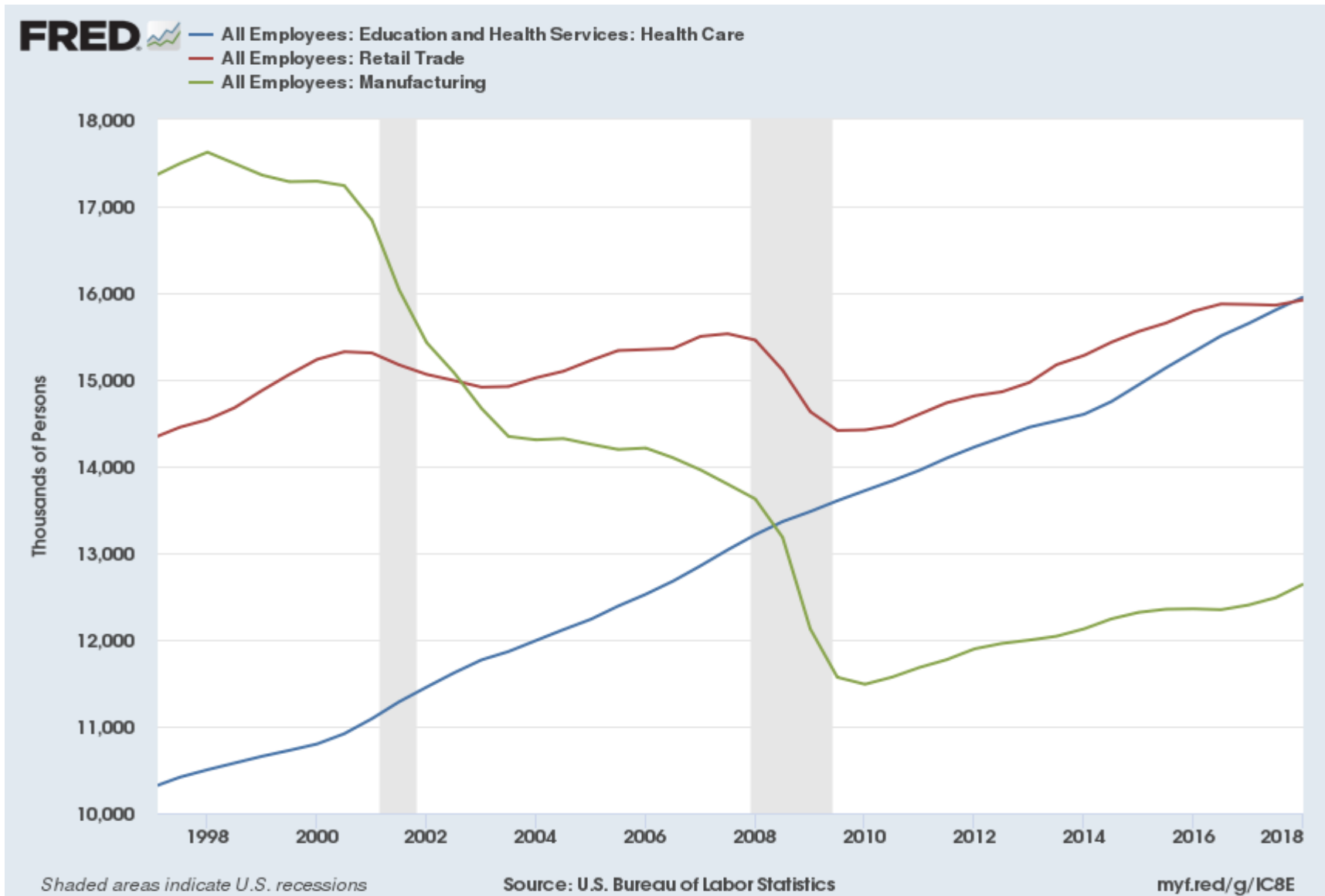


SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group





US Health Care Employment 1998-2018





Health Care Reform Efforts in the US





Some Observations on the Status Quo

- Americans are indefatigable when it comes to optimism and new ideas about controlling health care costs
- BUT
 - NOTHINGS WORKING
 - And that optimism means everyone thinks reform can be achieved without hurting them / hurting anyone
- Quality!
- Patient Responsibility!
- Value-based Care!
- Transparency!
- Disruption!
- Innovation!



Its (still) the prices stupid!

HEALTH SPENDING

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

Higher health spending but lower use of health services adds up to much higher prices in the United States than in any other OECD country.

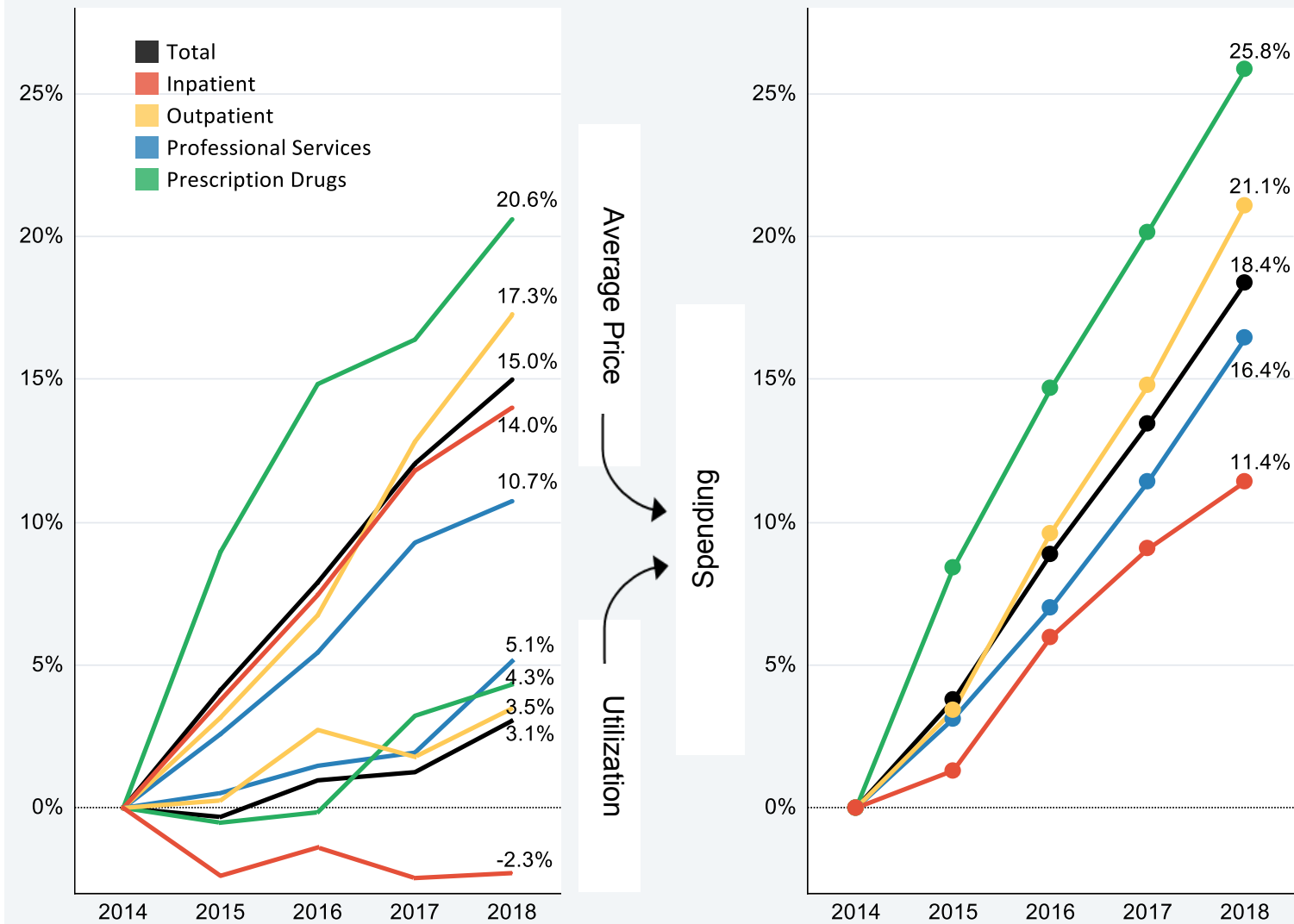
by Gerard F. Anderson, Uwe E. Reinhardt, Peter S. Hussey, and Varduhi Petrosyan





ESI Spending Trends 2014 - 2018

Figure 4: Cumulative Change in Spending per Person, Utilization, and Average Price by Service Category



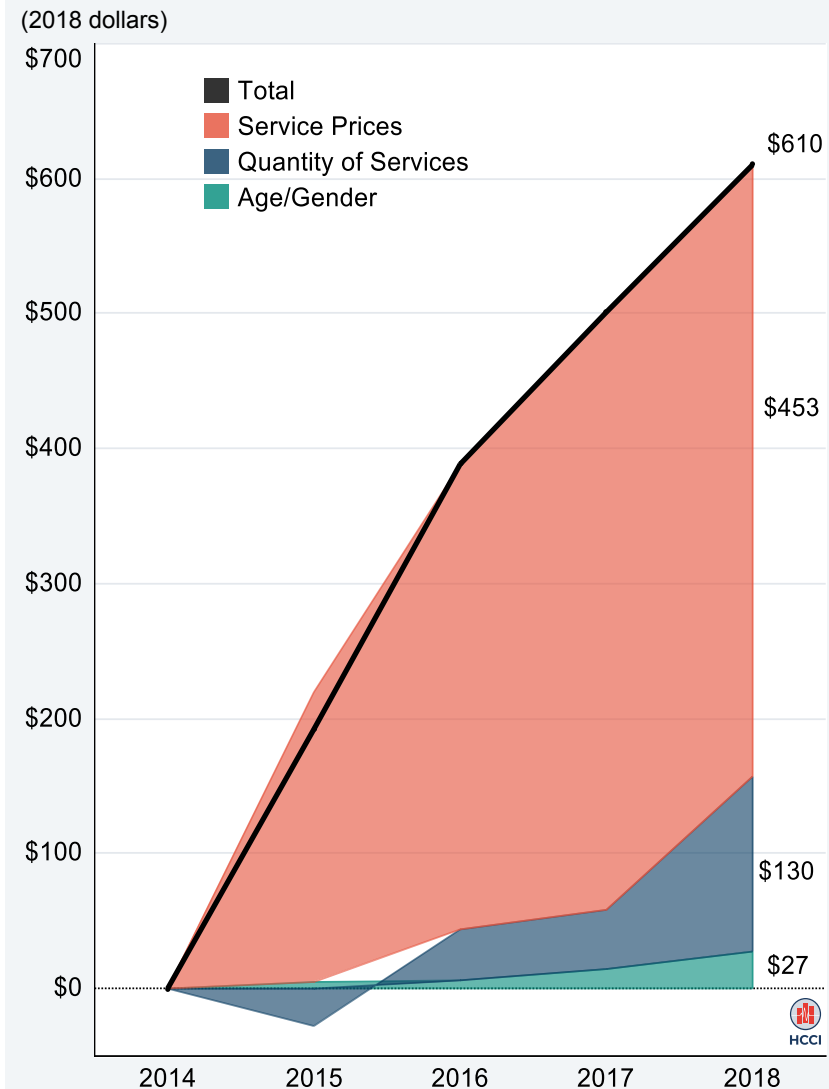
Note: Utilization and average prices account for changes in the type or intensity of services used, with the exception of prescription drugs. Prescription drug spending is the amount paid on the pharmacy claim, which reflects discounts from the wholesale price, but not manufacturer rebates.



What Factors Drove Health Care Spending Increases?

- After accounting for inflation, health care spending increased \$610 over the five-year period.
- Price growth accounted for just about three-quarters (\$453) of the cumulative increase above inflation over the five-year period.
- Increases in the quantity of services used accounted for 21% (\$130) of the cumulative increase beyond inflation, with much of that contribution coming in the last year of the period.
- The population with employer-sponsored insurance got slightly older and slightly more female on average between 2014 and 2018, which accounted for just over 4% (\$27) of the growth above inflation in spending per person.

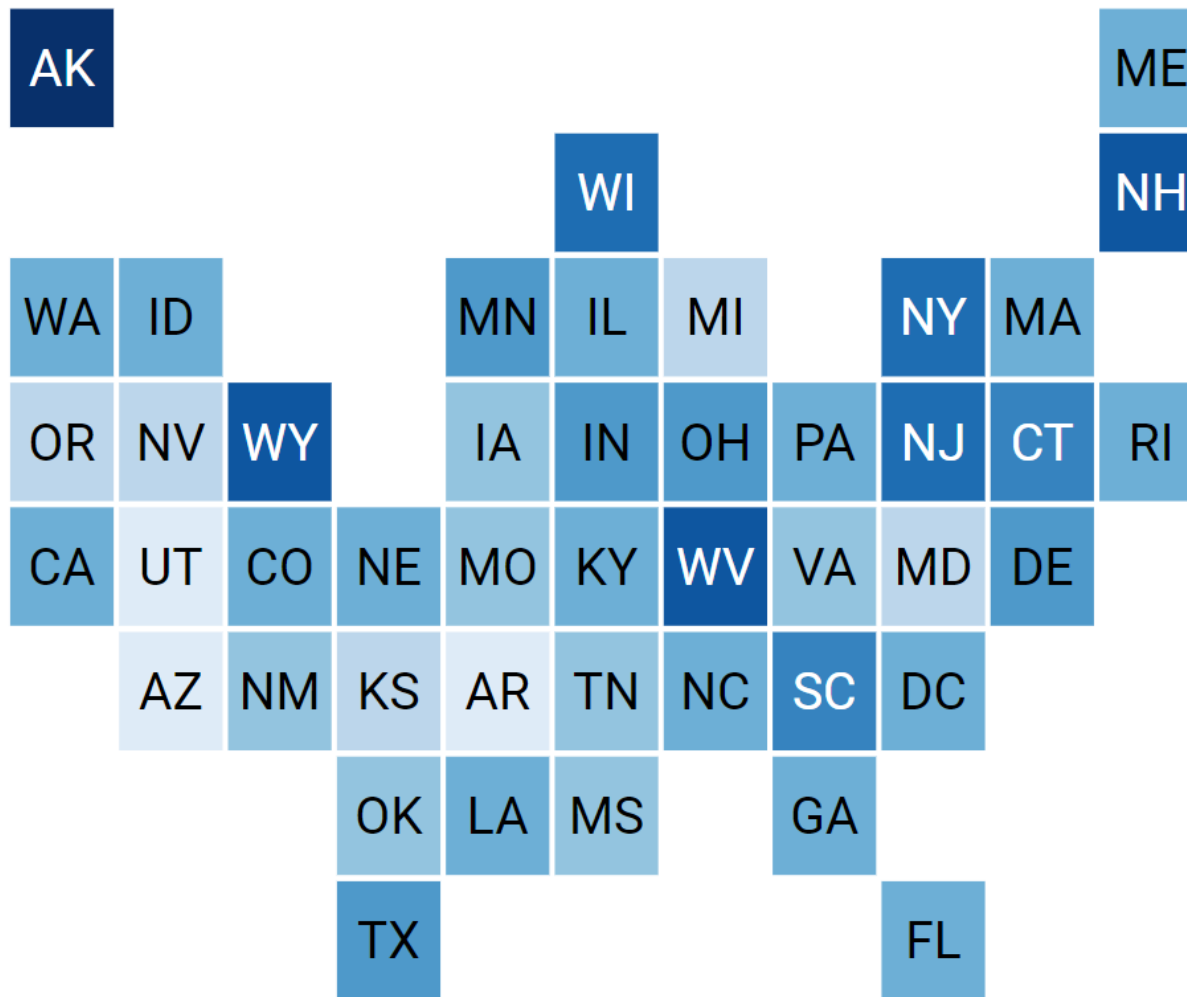
Figure 2: Factors Contributing to Growth in Spending per Person





LA Ranked 29th Highest State, Spending \$5,718 per Person in 2018

SPENDING PER PERSON IN 2018
\$4,700 \$8,000



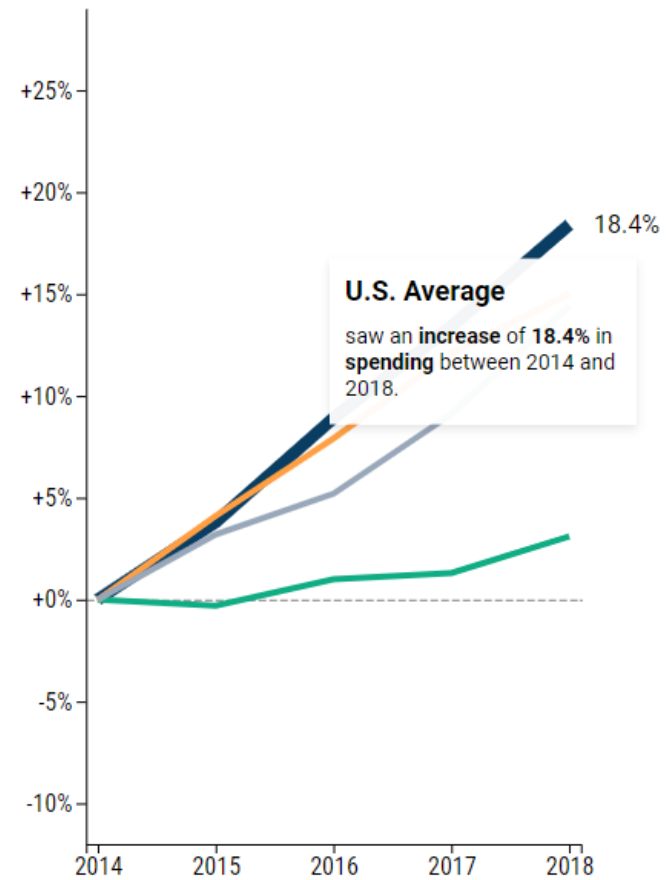
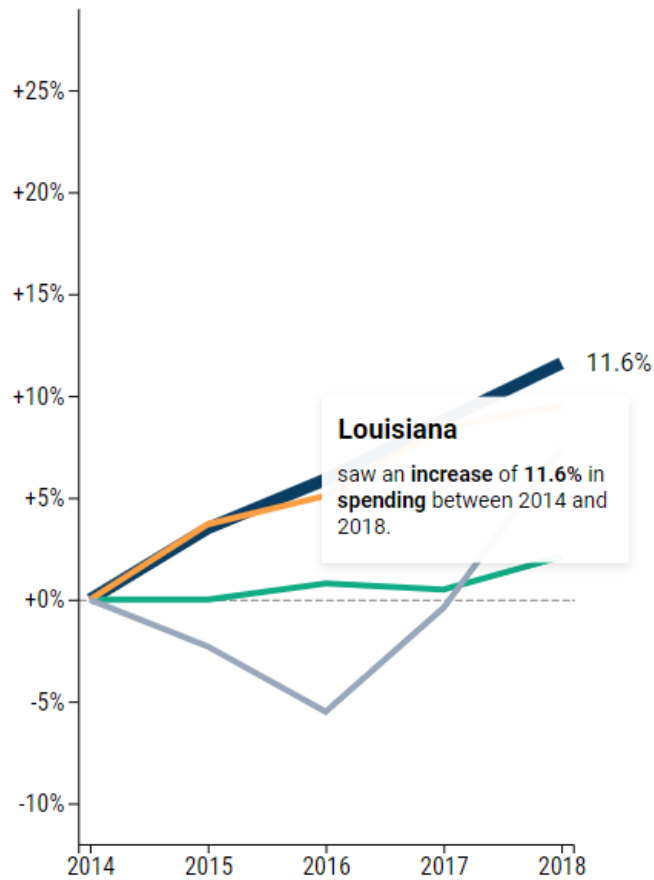


Spending Growth in LA was lower than the National Average from 2014 to 2018

Cumulative Growth in Spending per Person by State since 2014

CHOOSE A STATE: ●

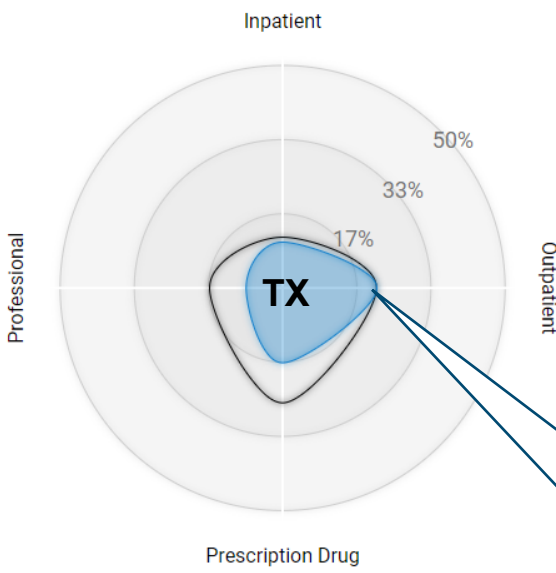
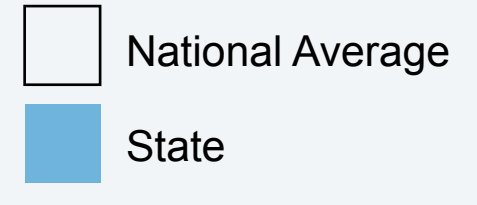
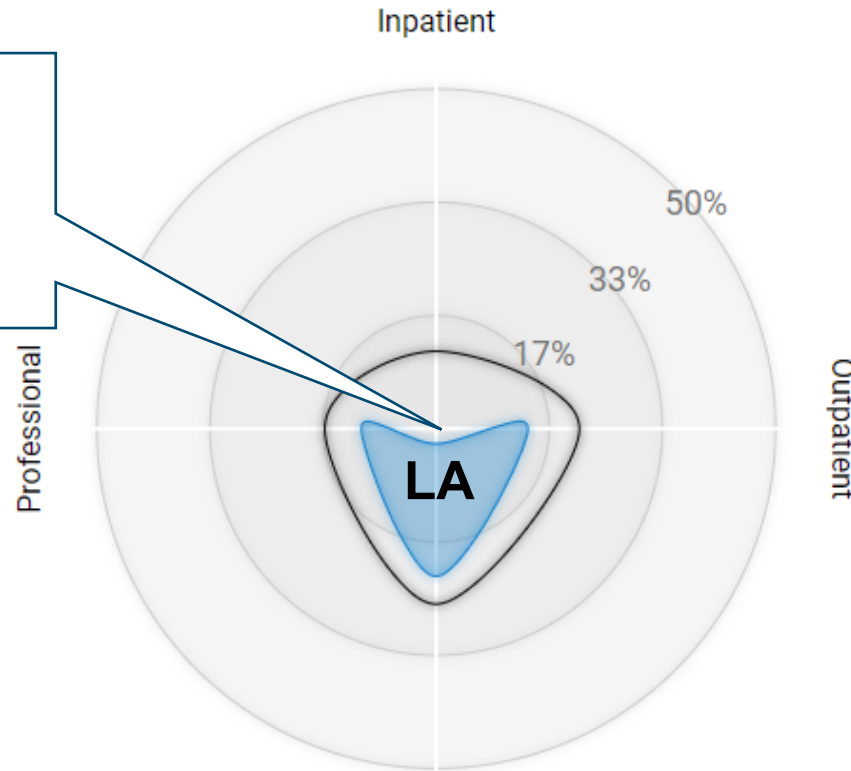
Spending Utilization Price GDP Per Capita i





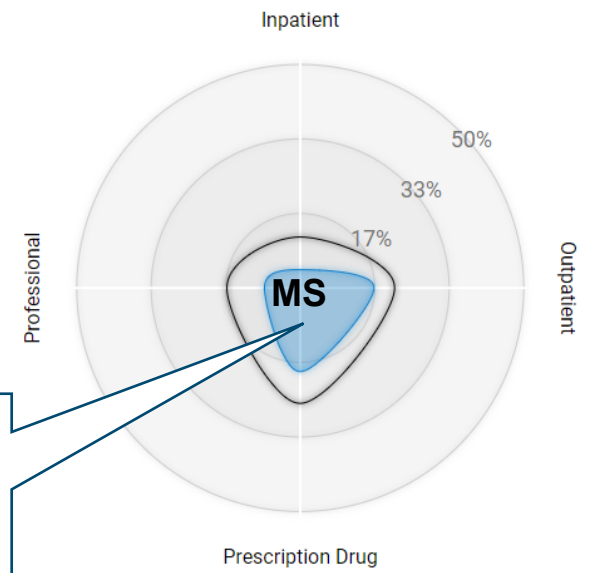
Louisiana had lower spending growth than neighboring states

LA had lower spending growth than the national average for all service categories. Inpatient spending decreased.



Outpatient spending increased faster in TX

Prescription Drug



MS also had spending growth below the national average



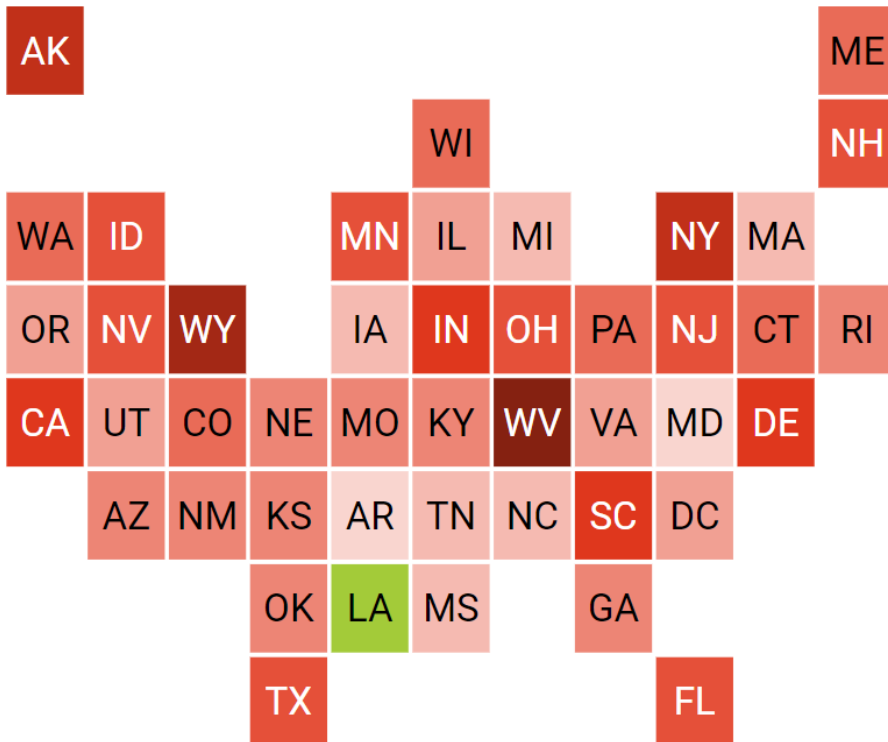
LA 2018 Inpatient Spending \$899 per person, 3rd lowest state

2018 Spending per Person by Service Category

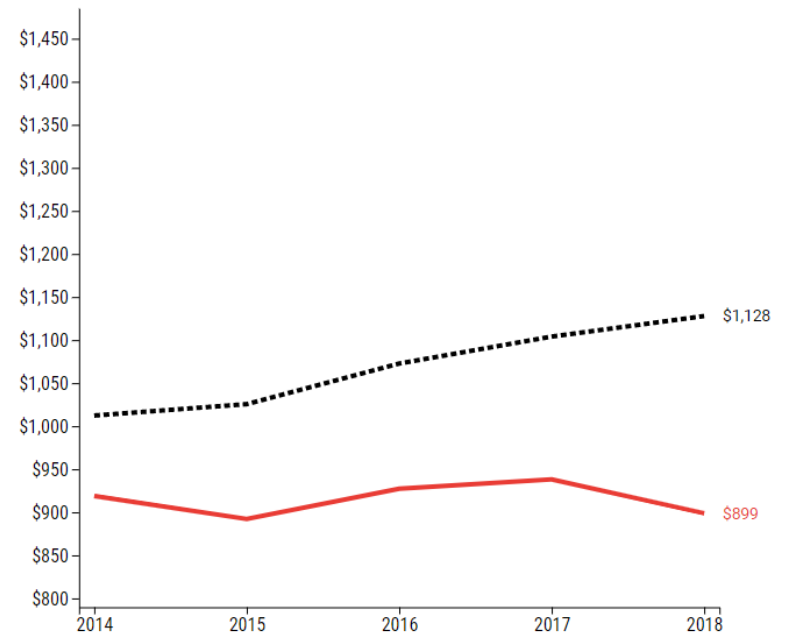
CHOOSE A STATE:

Inpatient Outpatient Prescription Drug Professional Selected State U.S. Average

COST PER PERSON 2018
\$842 \$1,485



Average Annual Spending per Person on Inpatient Services in Louisiana





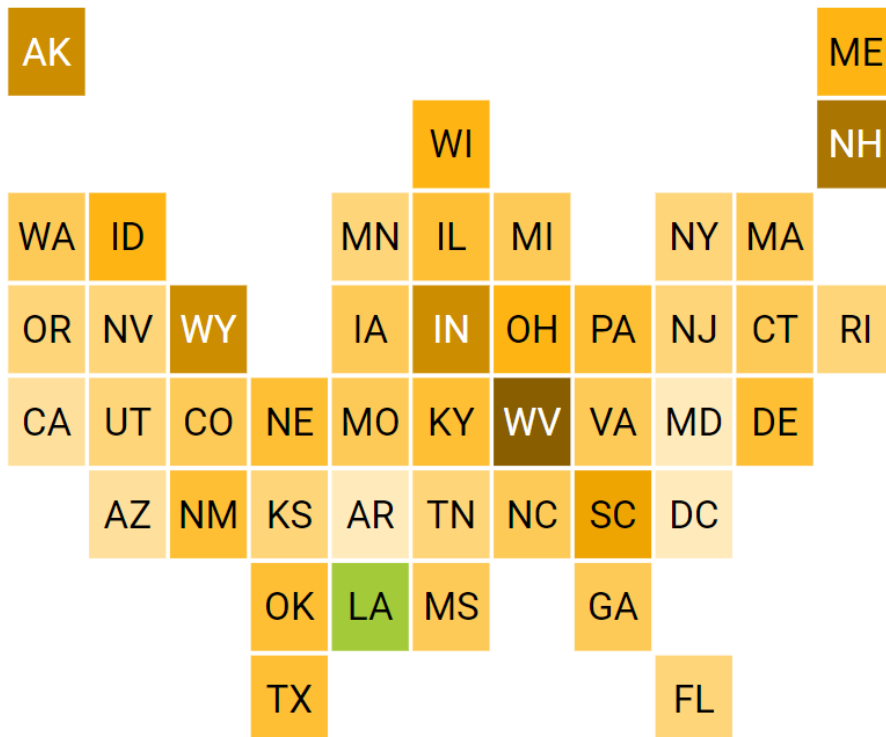
LA 2018 Outpatient Spending \$1,671 per person, 25th highest state

2018 Spending per Person by Service Category

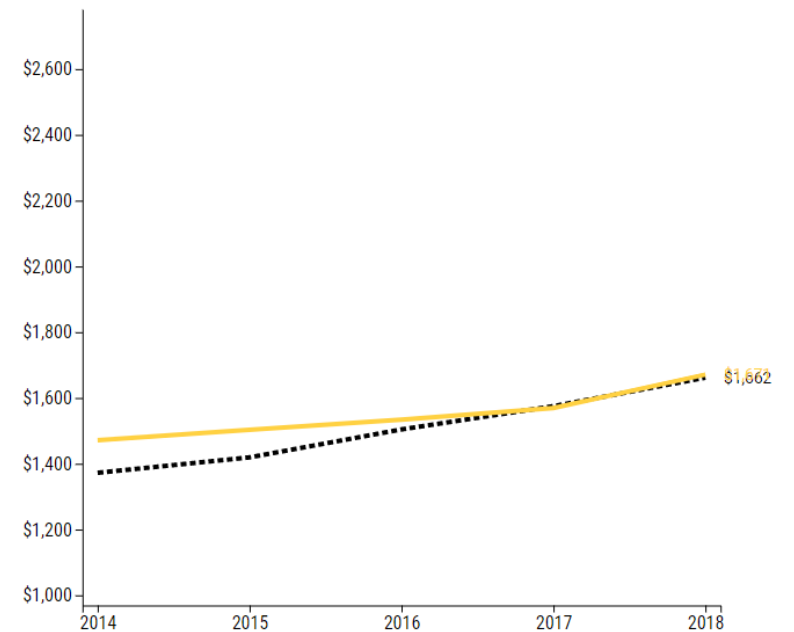
CHOOSE A STATE:

Inpatient Outpatient Prescription Drug Professional Selected State U.S. Average

COST PER PERSON 2018
\$1,055 \$2,782



Average Annual Spending per Person on Outpatient Services in Louisiana



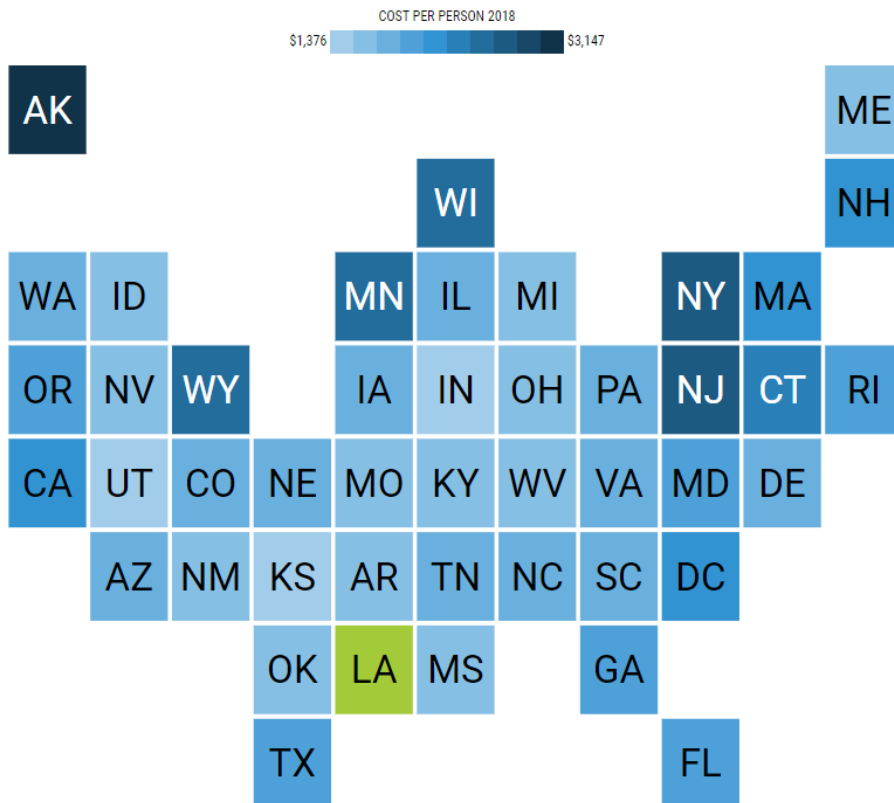


LA 2018 Professional Spending \$1,830 per person, 24th highest state

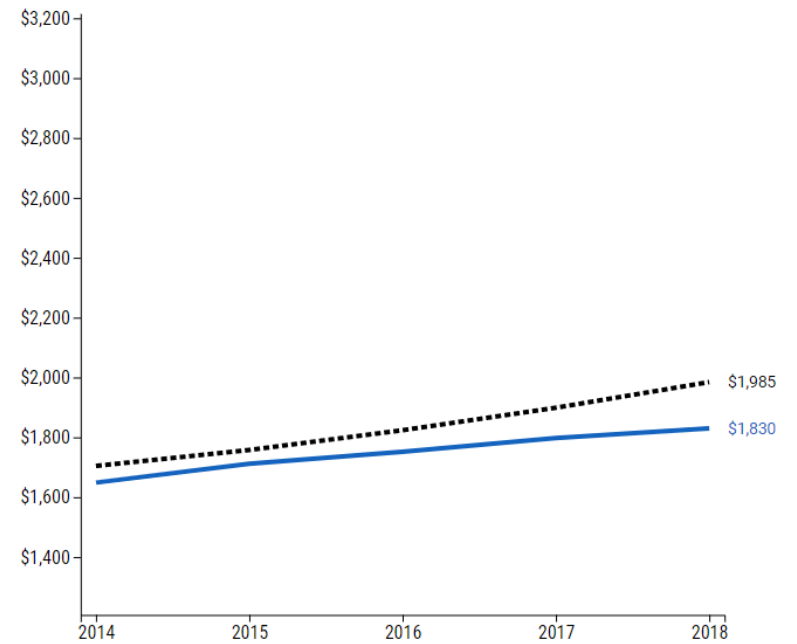
2018 Spending per Person by Service Category

CHOOSE A STATE: ●

● Inpatient ● Outpatient ● Prescription Drug ● Professional Selected State U.S. Average



Average Annual Spending per Person on Professional Services in Louisiana





HCCI: Healthy Marketplace Index

Project Overview:

- Compare how local health care markets function throughout the country
 - Analyzed over 1.8 billion commercial claims from 2012-2016
- Develop, publicly report a standard set of replicable measures:
 - Service Price, Service Use, Hospital Market Competition
- For each measure: interactive web articles, dashboards, public use files
 - Explore trends across 112 metro areas in 43 States
 - Including 4 metros within the state of Louisiana

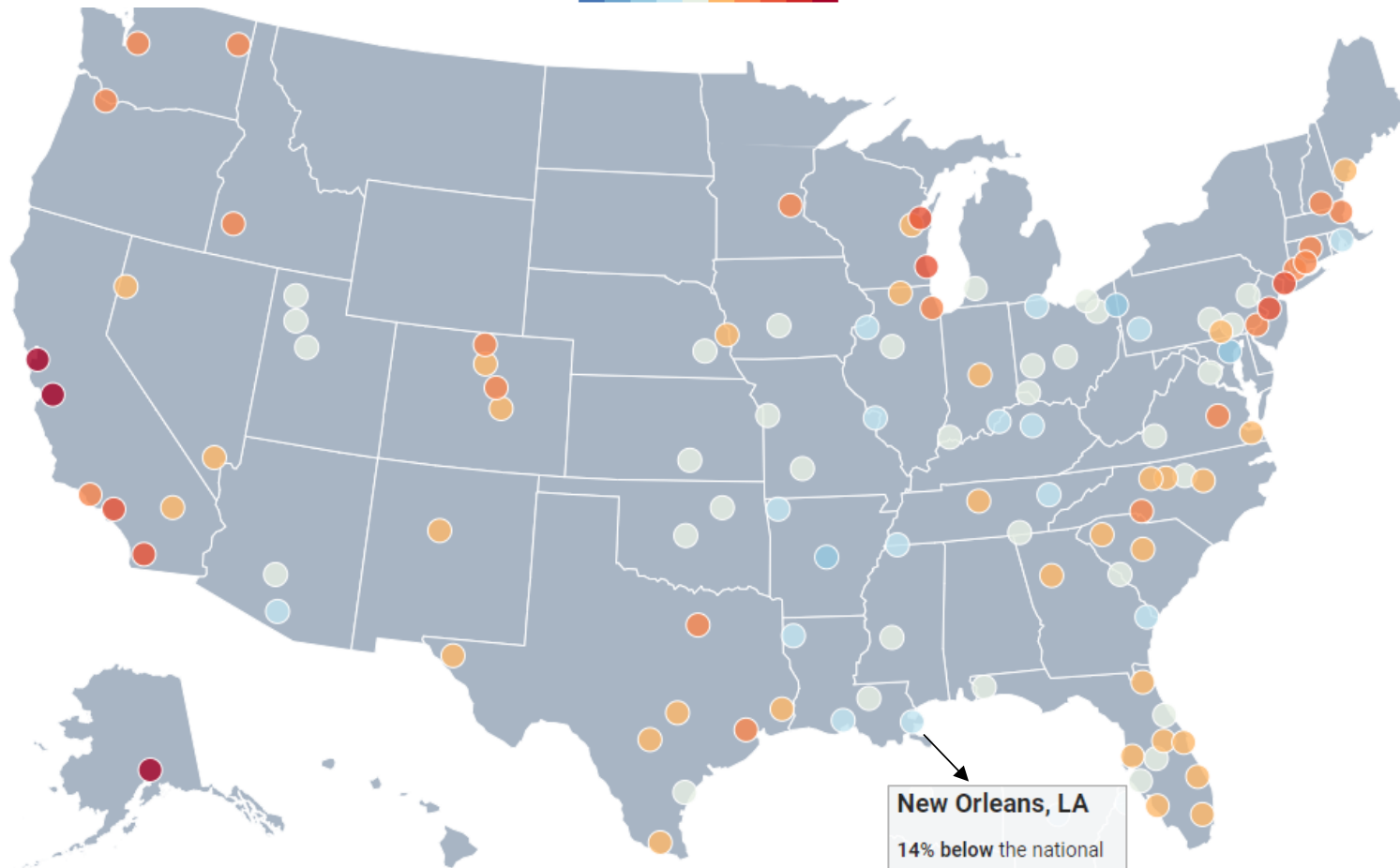


Wide Variation in Prices Across U.S.

Overall Health Care Prices in U.S. Metros Relative to National Median, 2016

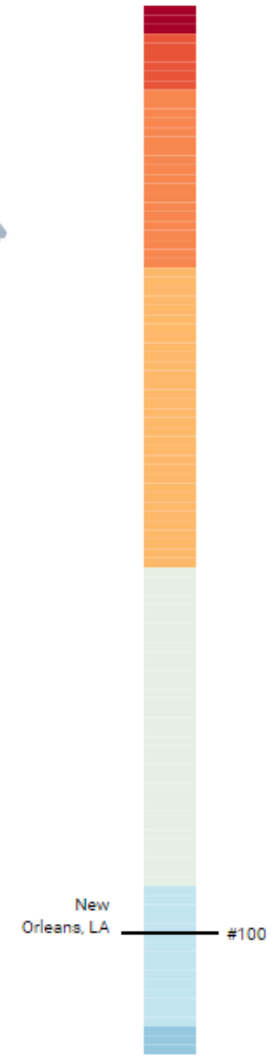
FIND A METRO: ▾

PERCENT DIFFERENCE FROM NATIONAL MEDIAN
-50% 50%



New Orleans, LA
14% below the national median in 2016
Similar prices to Toledo, OH and Fayetteville, AR

Metros Ranked by Price





Prices Growing Almost Everywhere

Comparing Overall Price and Use Changes, 2012 - 2016

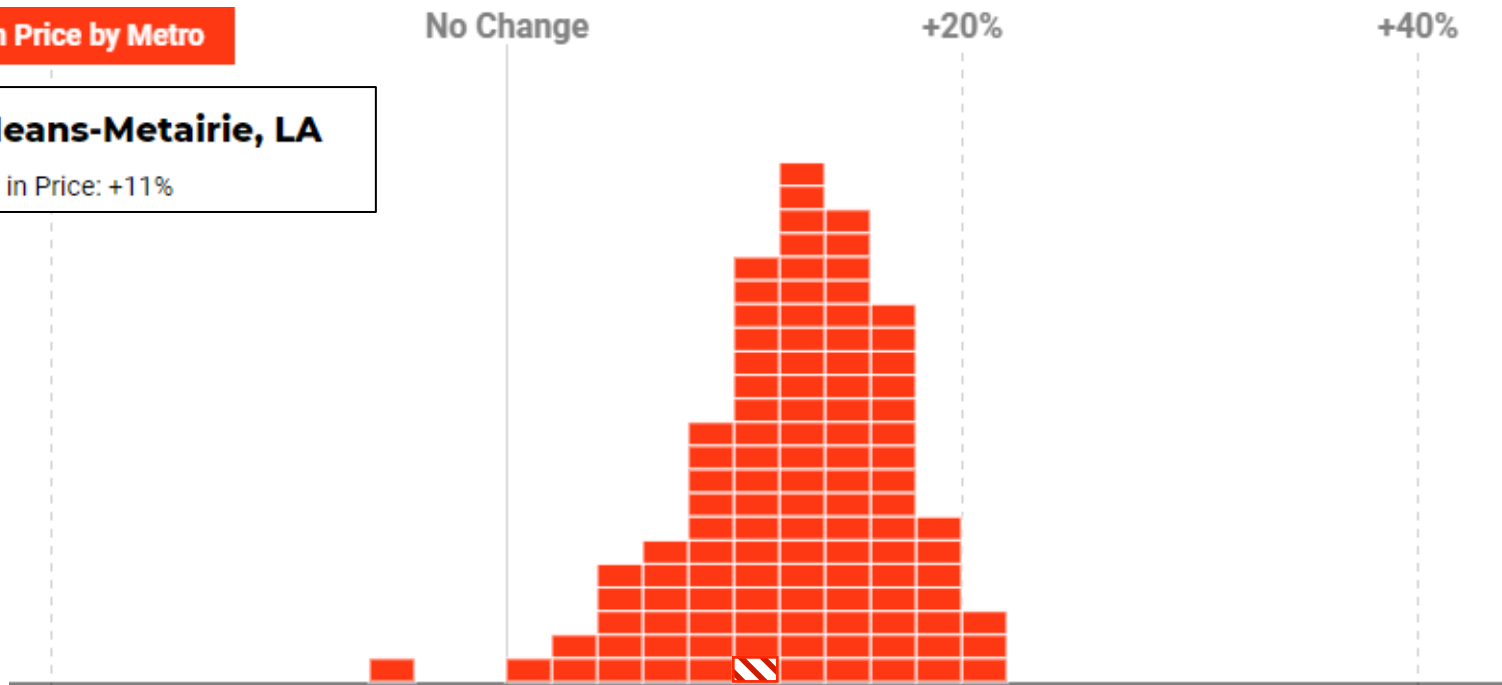
FIND A METRO: New Orleans-Metairie, LA ▾

HIGHLIGHT A SERVICE TYPE: Overall Inpatient Outpatient Professional ⓘ

Change in Price by Metro

New Orleans-Metairie, LA

Change in Price: +11%





However, Use Declining Largely Everywhere

Comparing Overall Price and Use Changes, 2012 - 2016

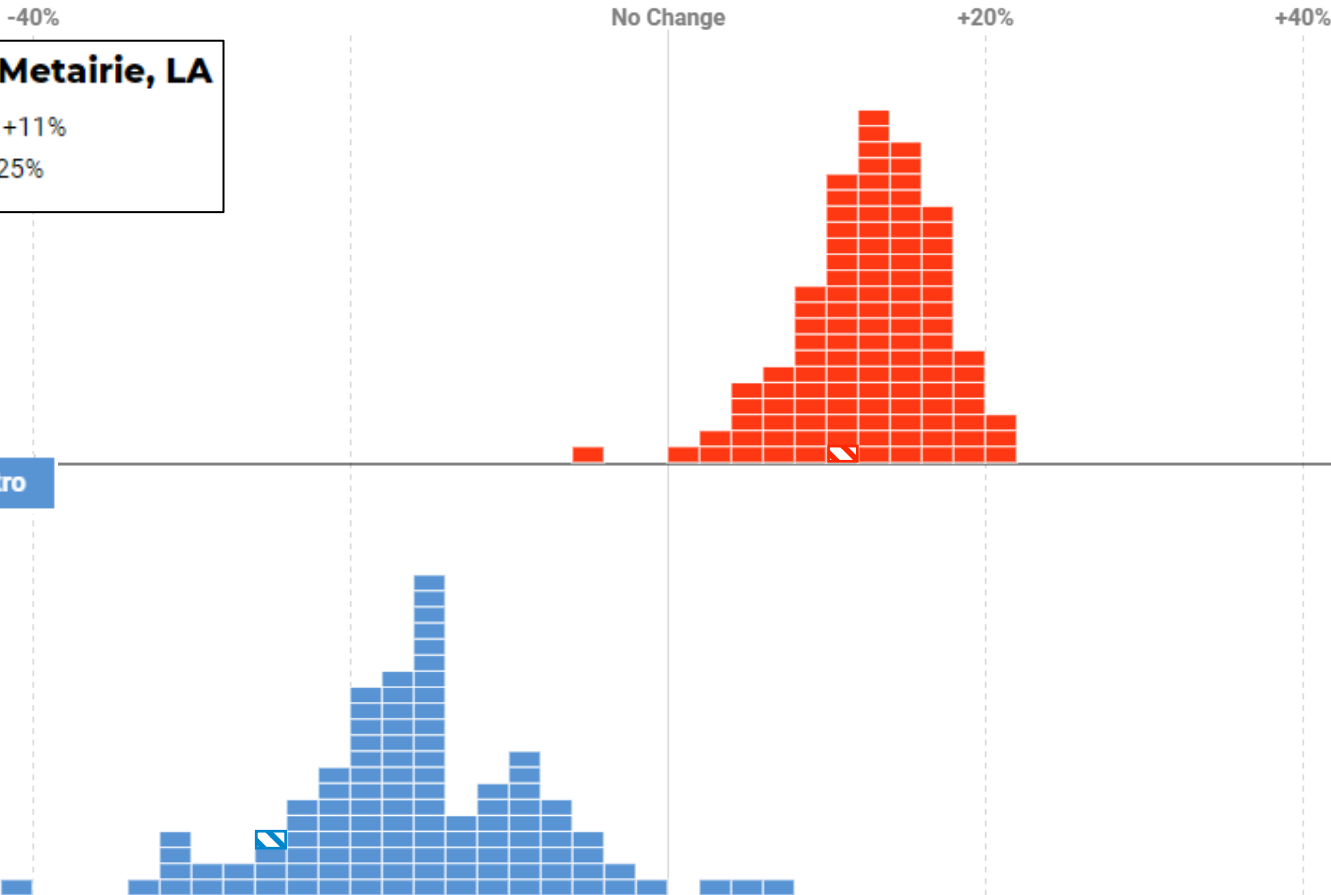
FIND A METRO: New Orleans-Metairie, LA ▾

HIGHLIGHT A SERVICE TYPE: Overall Inpatient Outpatient Professional ⓘ

Change in Price by Metro

New Orleans-Metairie, LA

- Change in Price: +11%
- Change in Use: -25%





Held True throughout Louisiana

All 4 metro areas in Louisiana experienced a growth in prices & decline in use

- Prices
 - Lafayette (+5%) lowest growth rate, New Orleans & Shreveport (+11%) both had highest
- Use
 - Shreveport (-8%) smallest decline, New Orleans (-25%) largest

Metro Area	% Change in Price	% Change in Use
Baton Rouge	+9%	-16%
Lafayette	+5%	-23%
New Orleans-Metairie	+11%	-25%
Shreveport-Bossier City	+11%	-8%



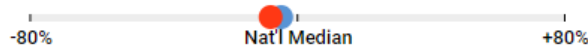
Compare Price & Use by Metro and Over Time

Compare Health Care Prices, Use Levels and Growth in Select Metros

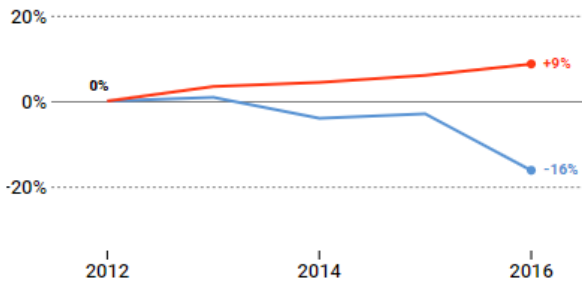
● Overall ● Inpatient ● Outpatient ● Professional ⓘ ⬇

Baton Rouge, LA

2016 Overall Levels:
Price: **-8% below** median
Use: **-5% below** median

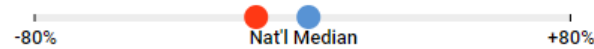


Overall growth since 2012:
Price: **+9%**, Use: **-16%**

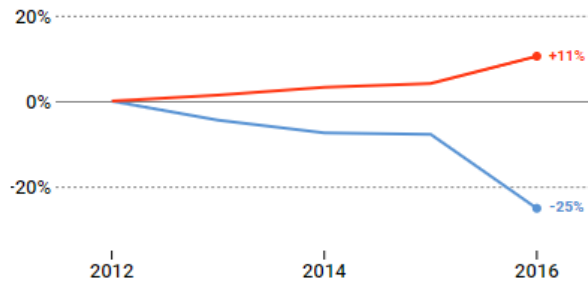


New Orleans-Metairie, LA

2016 Overall Levels:
Price: **-14% below** median
Use: **2% above** median

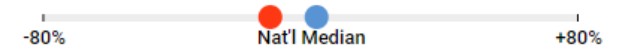


Overall growth since 2012:
Price: **+11%**, Use: **-25%**

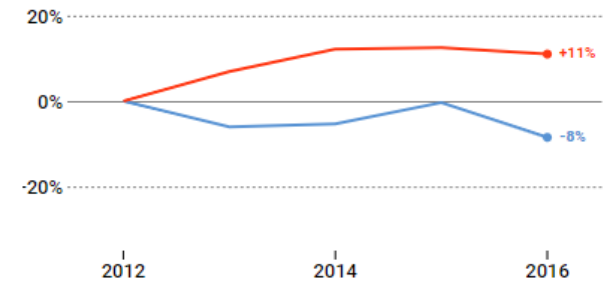


Shreveport-Bossier City, LA

2016 Overall Levels:
Price: **-12% below** median
Use: **2% above** median



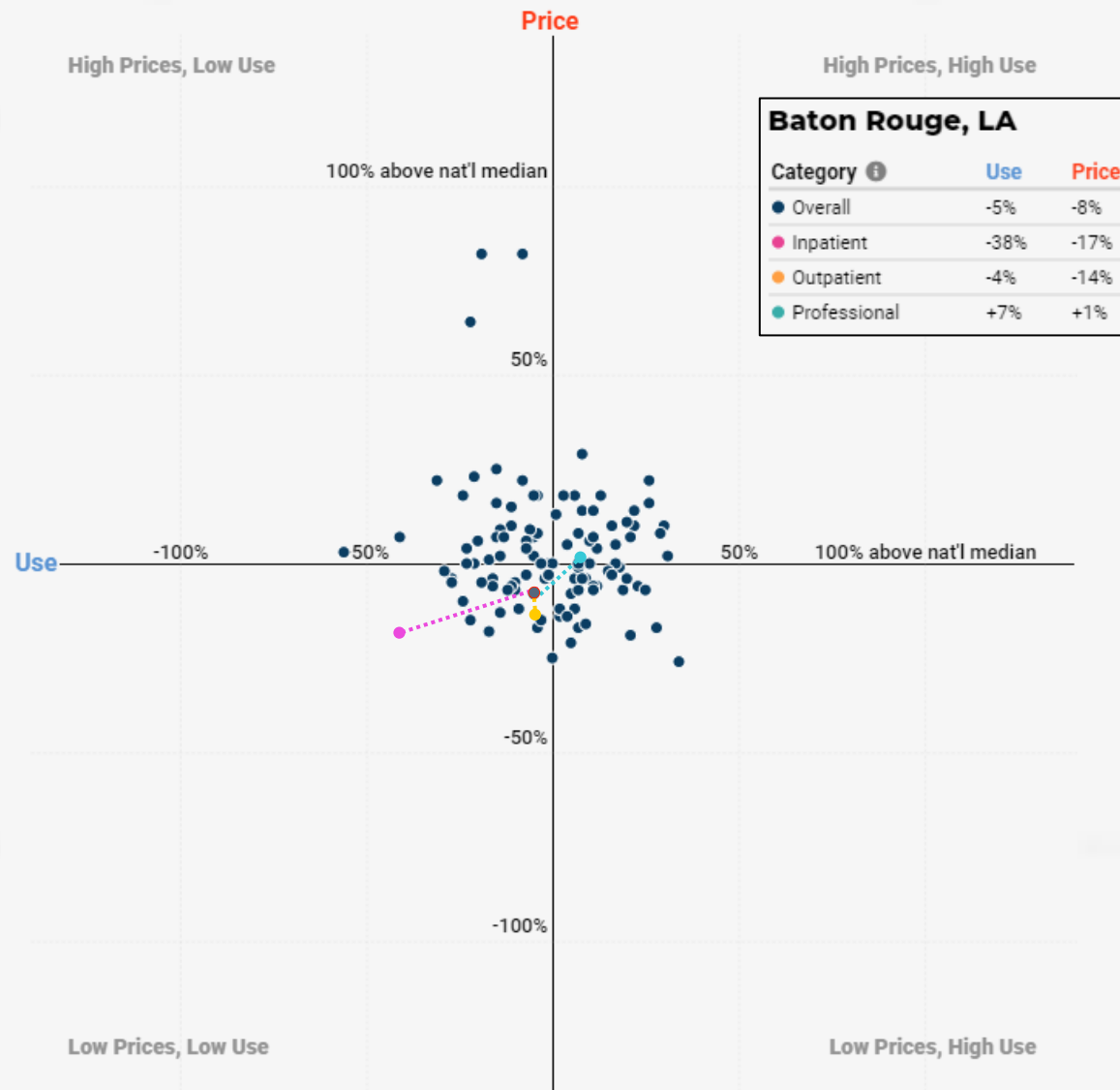
Overall growth since 2012:
Price: **+11%**, Use: **-8%**





Prices and Use Varied by Service Category Within Metros

Price and Use Levels *Within* Metro Areas by Service Categories, 2016





Majority of Inpatient Hospital Markets were Highly Concentrated

Inpatient Hospital Market Concentration in U.S. Metros, 2016

UNCONCENTRATED

MODERATELY CONCENTRATED

HIGHLY CONCENTRATED

VERY HIGHLY CONCENTRATED



Metros Ranked by Concentration

🔍 New Orleans-Metairie, ... ✕

👉 Click or mouseover a group above to highlight on the map.
Hover over a city below to see more.

Where else did patients get care?

PERCENT OF ADMISSIONS

0-10% 10-20% 20%+

New Orleans, LA #71

New Orleans, LA

RANK 2016 HHI

71 **0.2794**

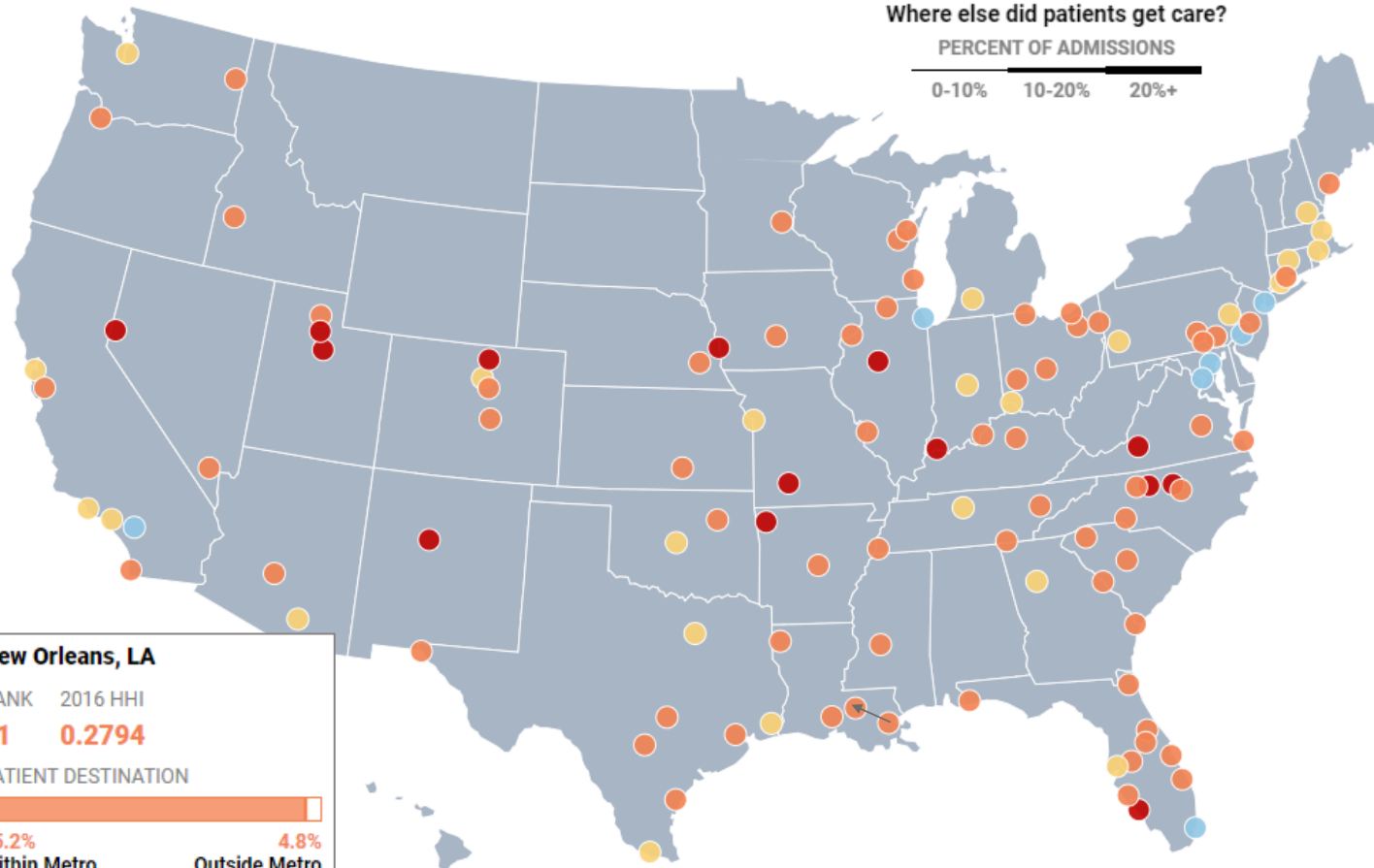
PATIENT DESTINATION



95.2% **Within Metro** 4.8% **Outside Metro**

MAJOR DESTINATIONS

Baton Rouge, LA





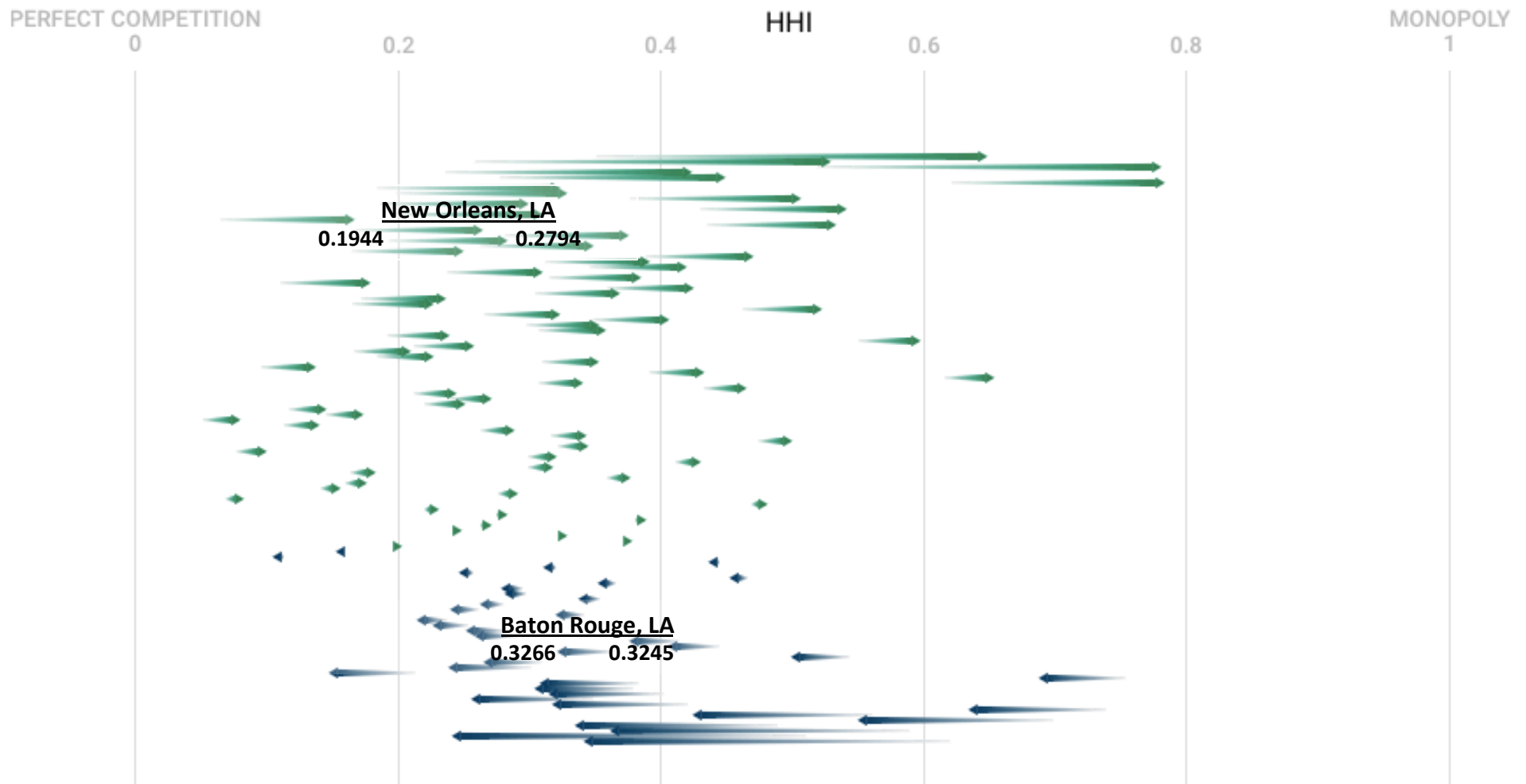
Most Hospital Markets Became More Concentrated Over Time

Change in Hospital Market Concentration

Change in HHI from 2012–2016 by U.S. Metro

HHI INCREASED

HHI DECREASED





Compare Market Concentration Level by Metro and Over Time

Inpatient Hospital Concentration in U.S. Metros, 2016

UNCONCENTRATED

MODERATELY CONCENTRATED

HIGHLY CONCENTRATED

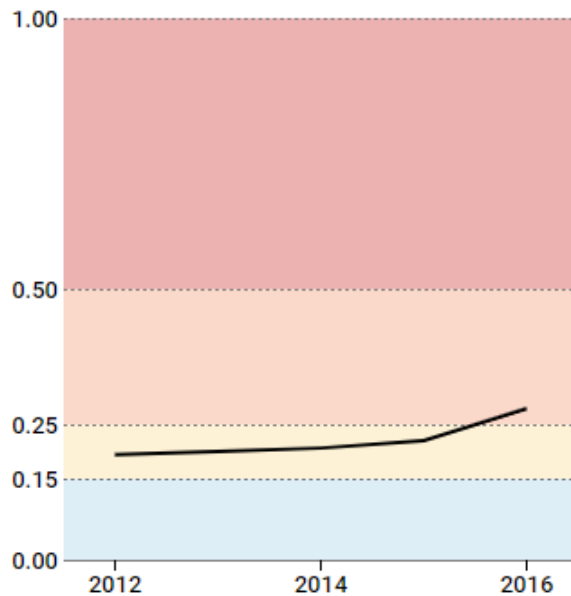
VERY HIGHLY CONCENTRATED



New Orleans-Metairie, LA

2016 HHI: 0.2794

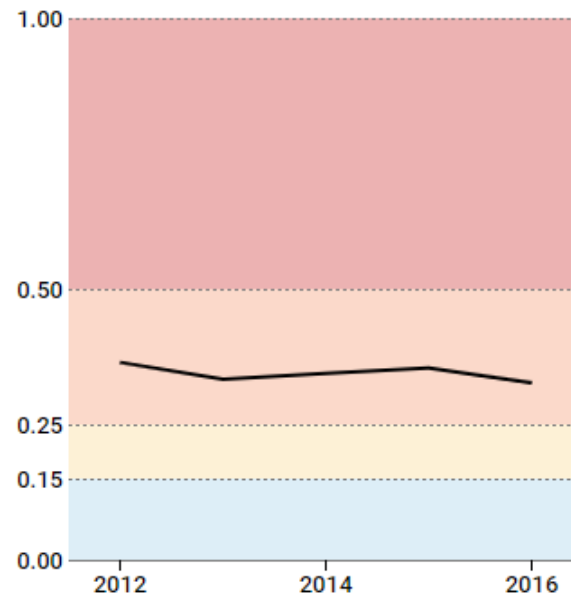
Change in HHI since 2012: **+0.0849**



Baton Rouge, LA

2016 HHI: 0.3266

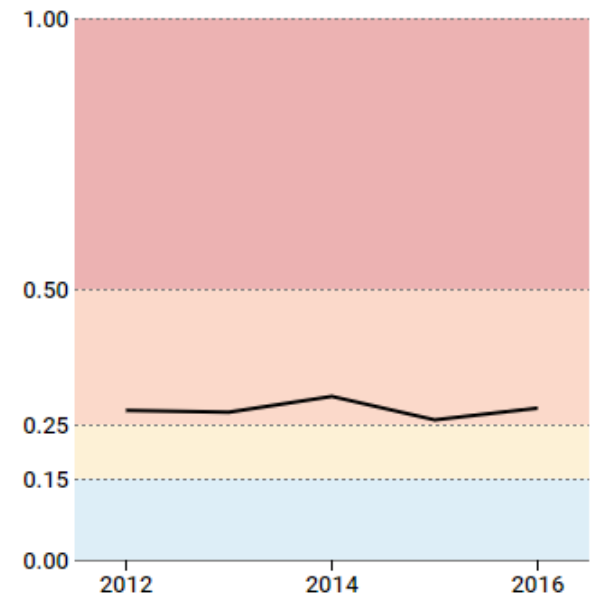
Change in HHI since 2012: **-0.0379**



Shreveport-Bossier City, LA

2016 HHI: 0.2797

Change in HHI since 2012: **+0.0041**

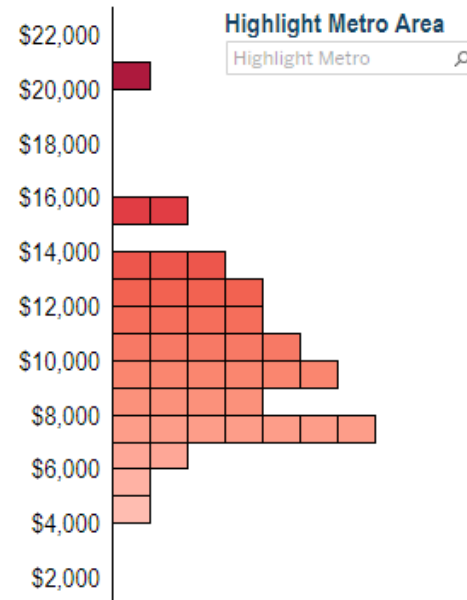
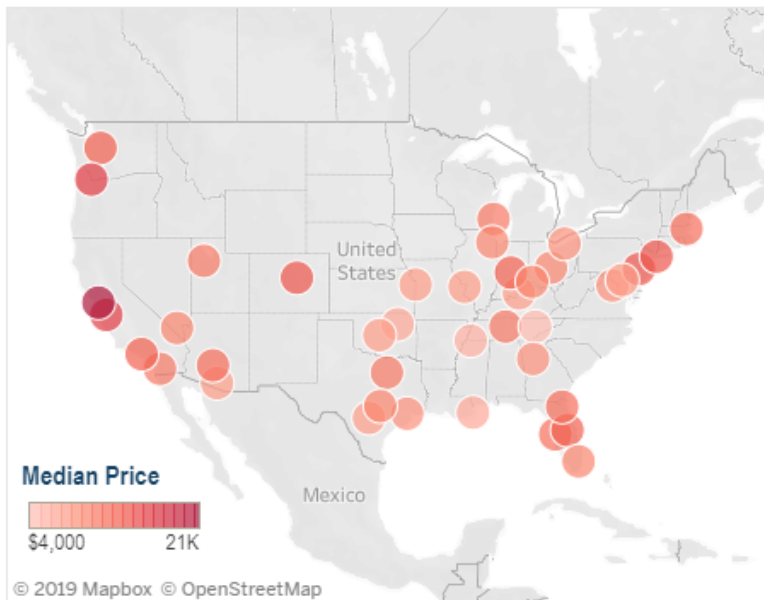




Price Levels Don't Necessarily Capture Variation in Prices of Different Services Within Areas

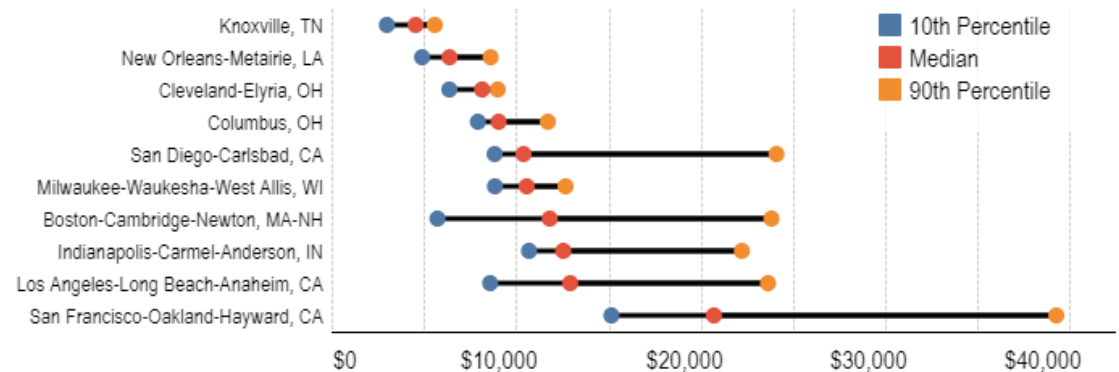
C-Section Delivery

Distribution of Metro Area Median Service Prices, 2016



C-Section Delivery

Range of Service Prices for Select Metro Areas, 2016

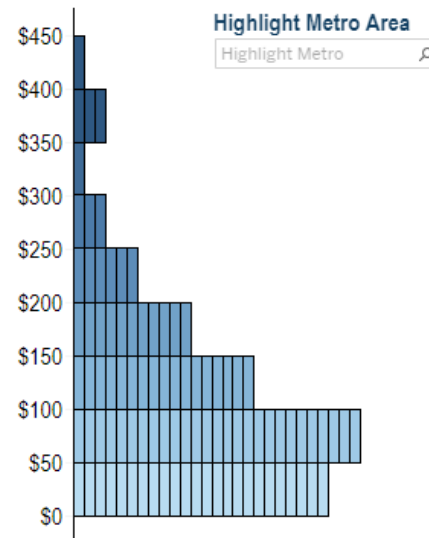
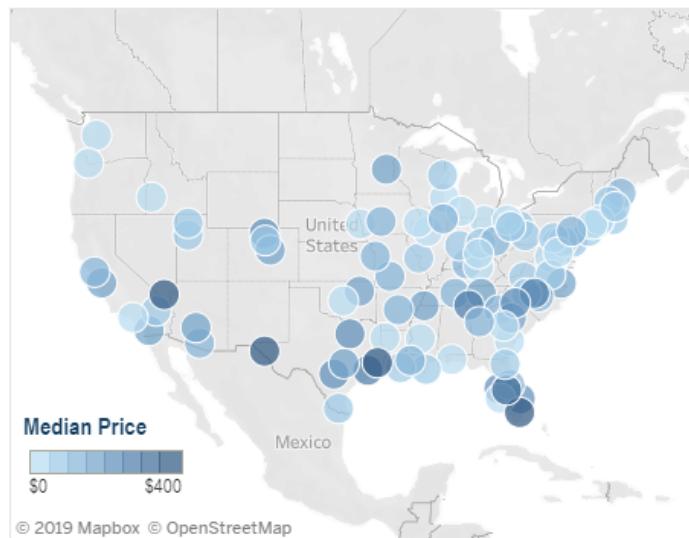




Price Levels Don't Necessarily Capture Variation in Prices of Different Services Within Areas

Blood Test

Distribution of Metro Area Median Service Prices, 2016



The New York Times

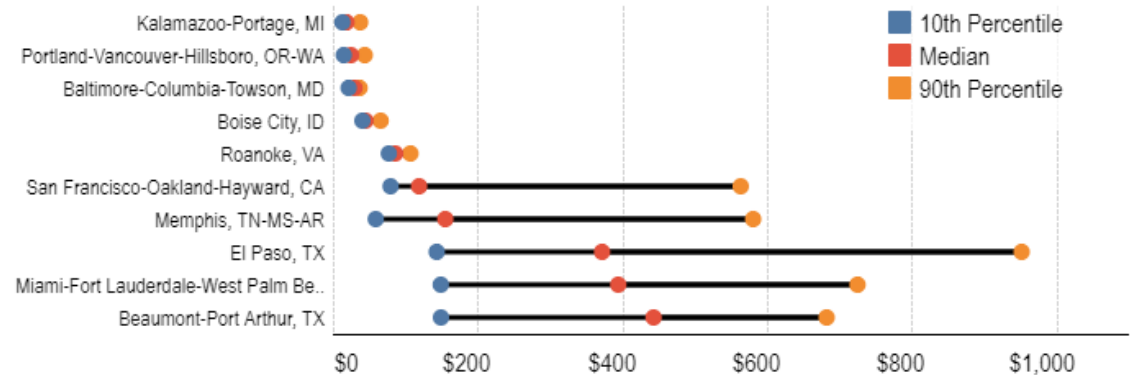
TheUpshot

By Margot Sanger-Katz

They Want It to Be Secret: How a Common Blood Test Can Cost \$11 or Almost \$1,000

Blood Test

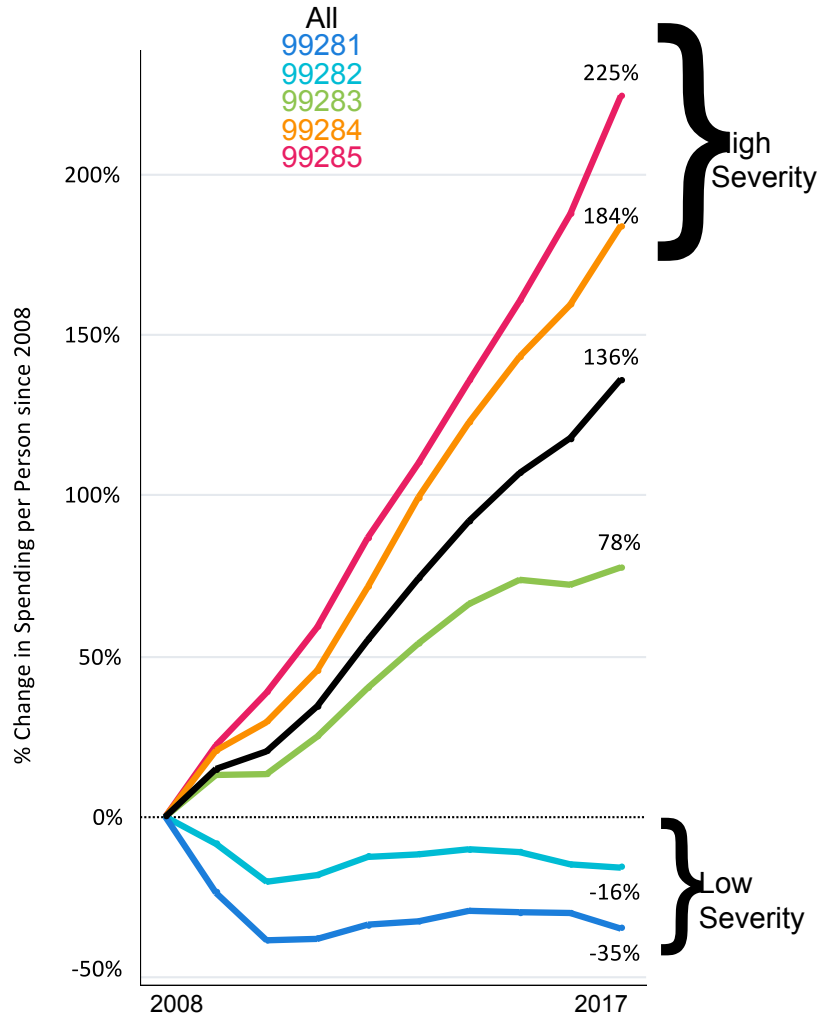
Range of Service Prices for Select Metro Areas, 2016



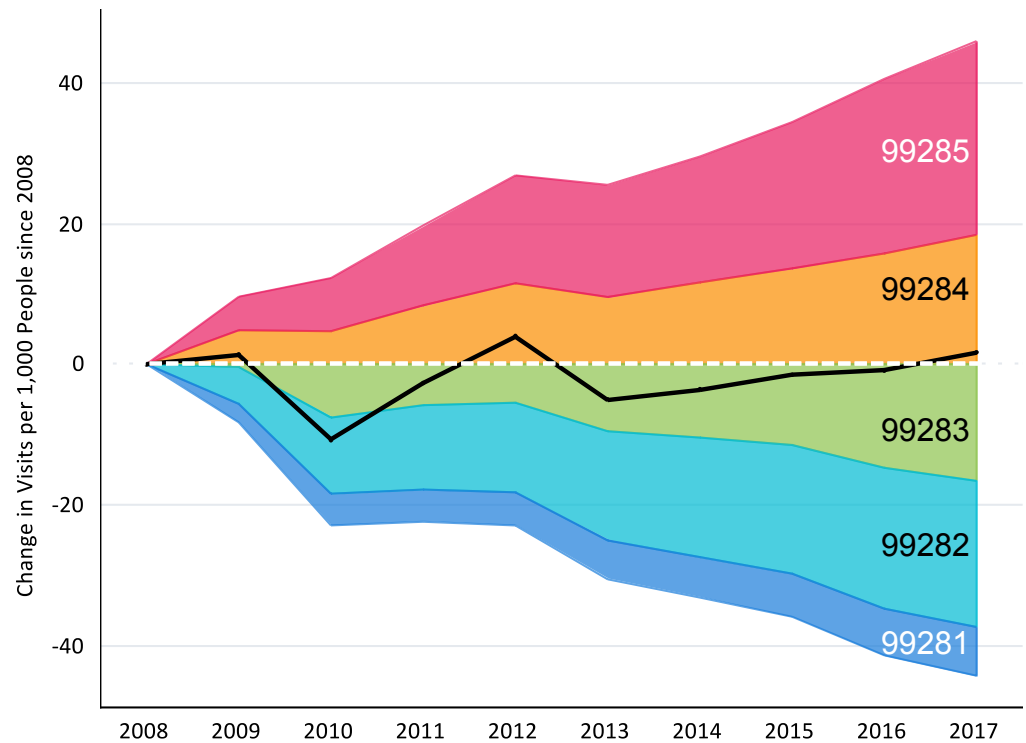


10 Years of ER Spending – prices and coding

Spending per Person more than doubled in 10 years



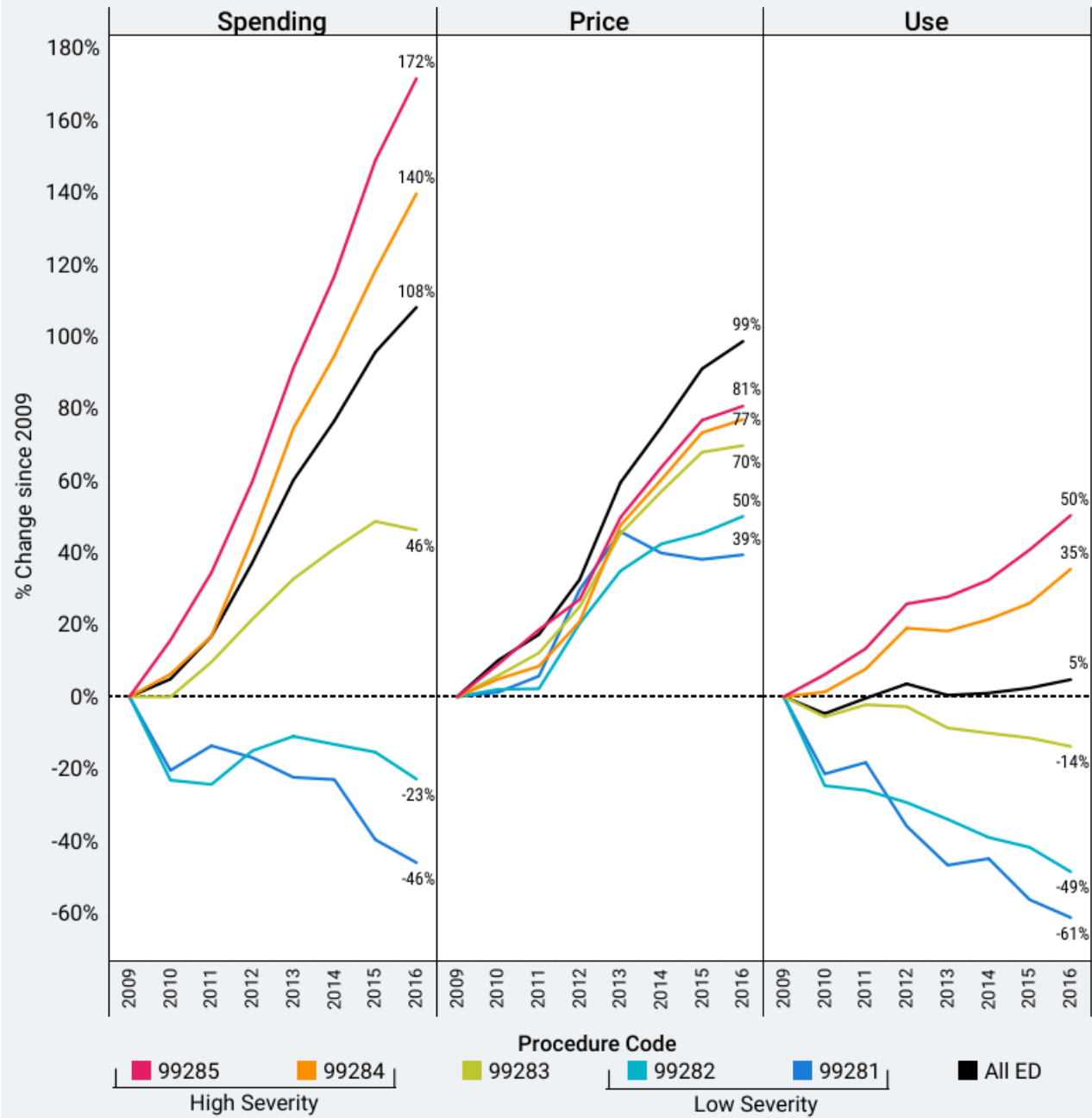
Overall ER Use did not change over the 10 years, but the mix of CPT codes billed did



Cumulative Change in Emergency Room Spending, Prices, and Utilization from 2009 to 2016



State: LA





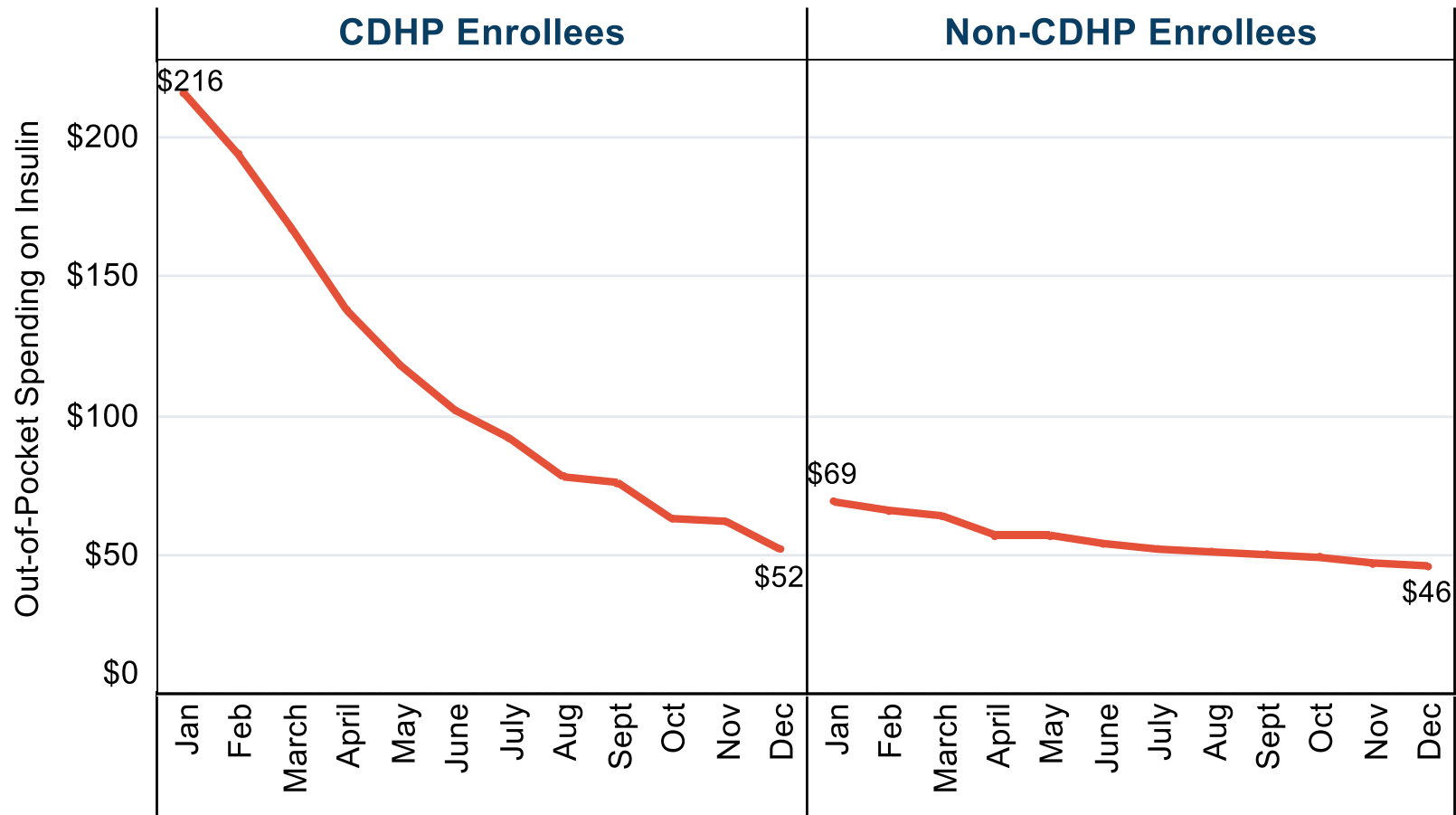
Median increase in point-of-sales prices for common insulin products between 2012 and 2016 was 92%

	Product	Delivery	Description	Average Price per Product (\$)					5-yr Chg. (%)
				2012	2013	2014	2015	2016	
Basal	Humulin N	Vial	10mL, 100 units/mL	68	79	95	116	131	93%
		Pen	5 pens, 3mL each, 100 units/mL	219	257	290			
		KwikPen	5 pens, 3mL each, 100 units/mL			314	370	415	
	Novolin N	Vial	10mL, 100 units/mL	67	75	89	108		
	Lantus	Vial	10mL, 100 units/mL	123	152	211	244	243	98%
		SoloStar Pen	5 pens, 3mL each, 100 units/mL	217	258	325	368	367	69%
	Levemir	Vial	10mL, 100 units/mL	124	152	216	252	264	113%
		FlexPen	5 pens, 3mL each, 100 units/mL	217	253	315			
		FlexTouch	5 pens, 3mL each, 100 units/mL			353	380	398	
		Toujeo	SoloStar Pen	3 pens, 1.5mL each, 300 units/mL				333	328
	Tresiba	U-100 Pen	5 pens, 3mL each, 100 units/mL					440	
		U-200 Pen	3 pens, 3mL each, 200 units/mL					524	
Mealtime	Humulin R	Vial	10mL, 100 units/mL	68	80	96	116	132	94%
		U-500 Vial	20mL, 500 units/mL	563	804	961	1152	1319	134%
		U-500 KwikPen	2 pens, 3mL each, 500 units/mL					513	
	Novolin R	Vial	10mL, 100 units/mL	68	79	93			
	Apidra	Vial	10mL, 100 units/mL	97	124	169	209	240	147%
		SoloStar Pen	5 pens, 3mL each, 100 units/mL	196	244	332	408	466	138%
	Humalog	Vial	10mL, 100 units/mL	127	147	178	213	241	90%
		Cartridge	5 cart., 3mL each, 100 units/mL	235	271	334	398	449	91%
		Pen	5 pens, 3mL each, 100 units/mL	247	285	346	415	469	90%
		KwikPen	2 pens, 3mL each, 200 units/mL					381	
	Novolog	Vial	10mL, 100 units/mL	127	146	176	209	237	87%
		Cartridge	5 cart., 3mL each, 100 units/mL	242	275	333	397	443	83%
		FlexPen	5 pens, 3mL each, 100 units/mL	247	286	344	409	461	87%



Individuals enrolled in CDHPs have more dramatic month-to-month fluctuations in OOP spending on insulin

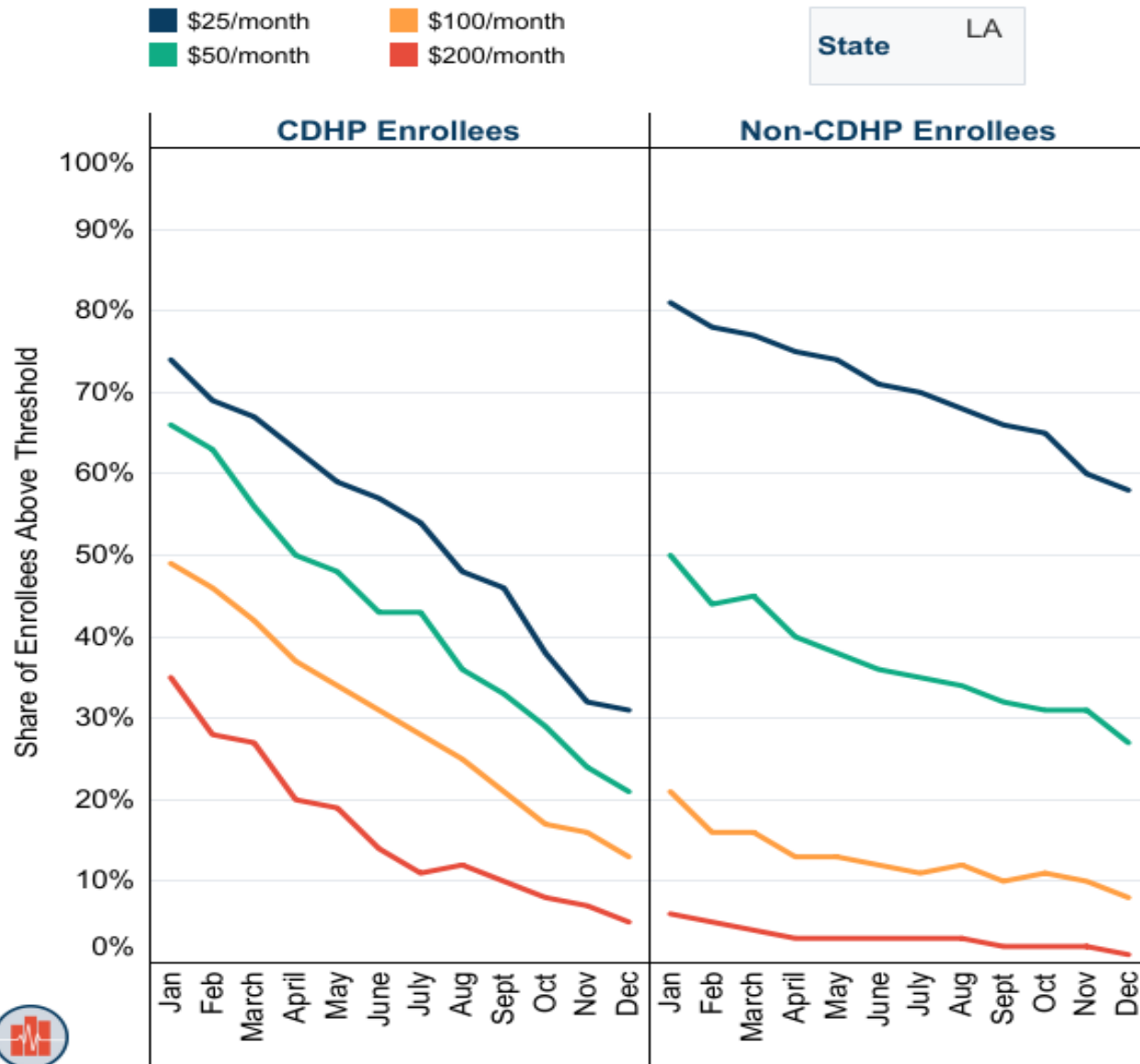
Average Monthly Out-of-Pocket Spending on Insulin in TX





Monthly cap on OOP spending on insulin would vary by health plan type and month

Share of Enrollees with Monthly Out-of-Pocket Spending on Insulin Above Dollar Thresholds in LA 2017





Medicare v Commercial Rates for Selected Services

Figure 1: Variation Across States and Metro Areas in 2017

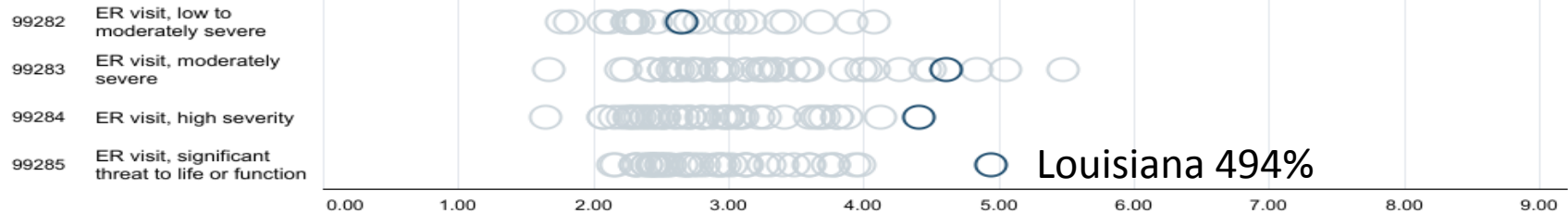
Emergency Room Commercial:Medicare Allowed Amount Ratio	Emergency Room Median Commercial Allowed Amounts	Radiology Commercial:Medicare Allowed Amount Ratio	Radiology Median Commercial Allowed Amounts	Anesthesia Commercial:Medicare Allowed Amount Ratio	Anesthesia Median Commercial Allowed Amounts
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Commercial ESI to Medicare Ratios - ER

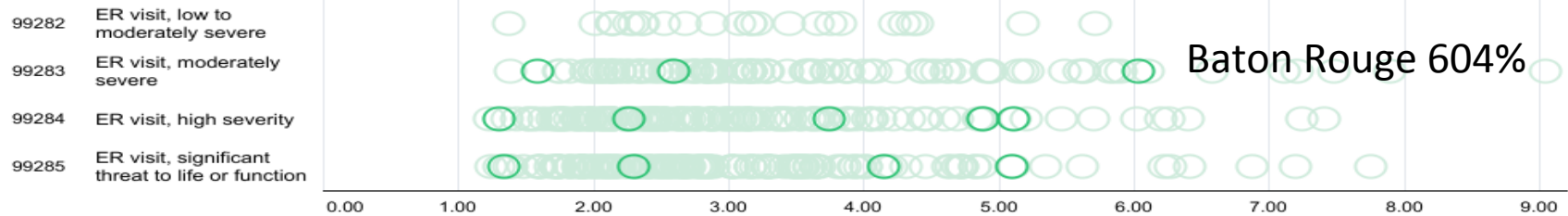


State Commercial to Medicare Ratio of Average Allowed Amounts - Emergency Room

State: Highlighting "LA"



CBSA Commercial to Medicare Ratio of Average Allowed Amounts - Emergency Room



Ratios presented here show the mean in-network allowed amount (amount paid by insurer plus out-of-pocket payments from patients) paid by commercial employer sponsored insurance (ESI) divided by the mean allowed amount paid by Medicare fee-for-service in 2017. Allowed amounts used in this analysis do not include facility fees.

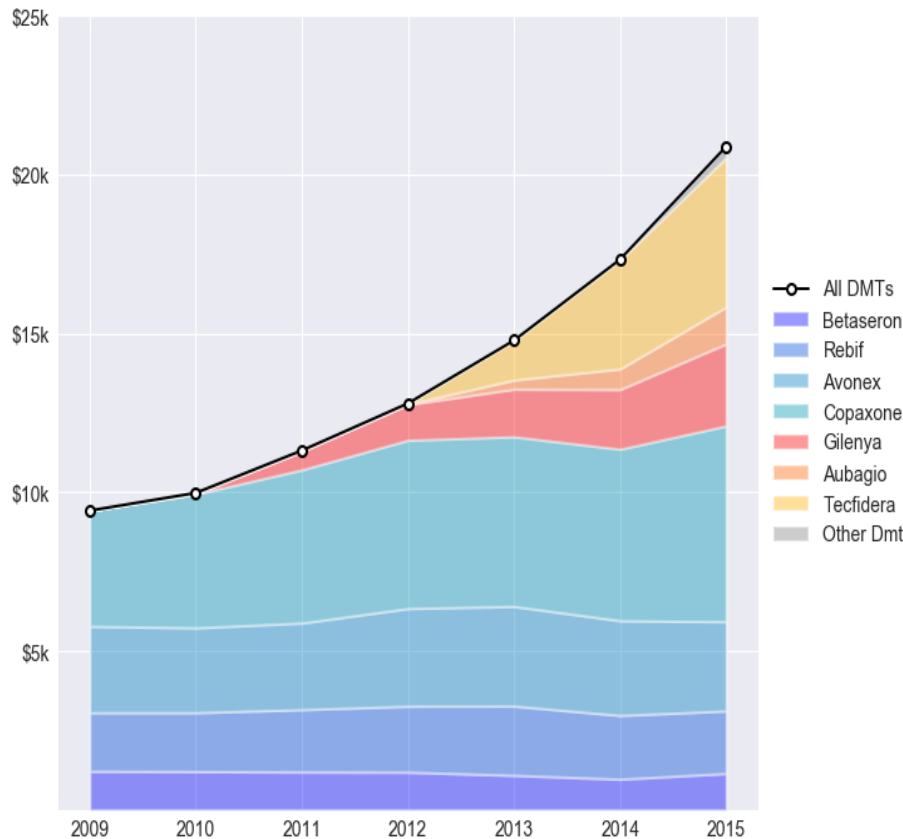
Commercial estimates are for specific emergency room (ER) procedures billed by emergency medicine specialists, anesthesia procedures billed by anesthesiologists, and radiology procedures billed by radiologists..



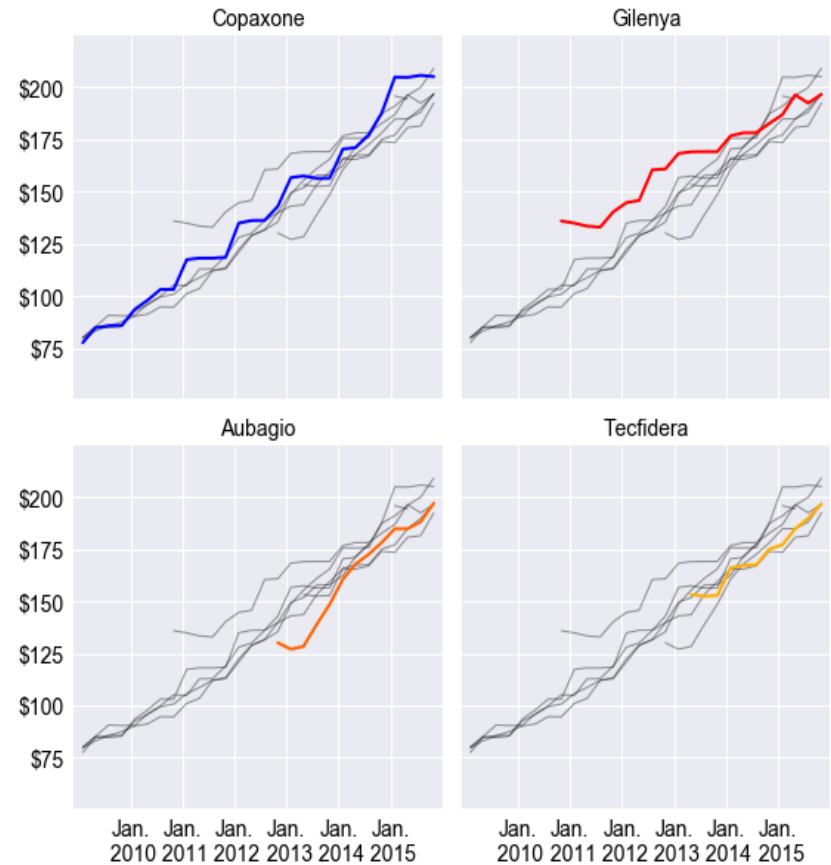
How do rising drug prices affect cost of care for people with MS?

Studying the implications of price changes of the most common drugs taken by people with MS

Total Spending Per Capita by People w/ MS on Disease Modifying Therapies, 2009-2015



Average Price per Filled Day for Most Common NDC Code for Each DMT, 2009-2015



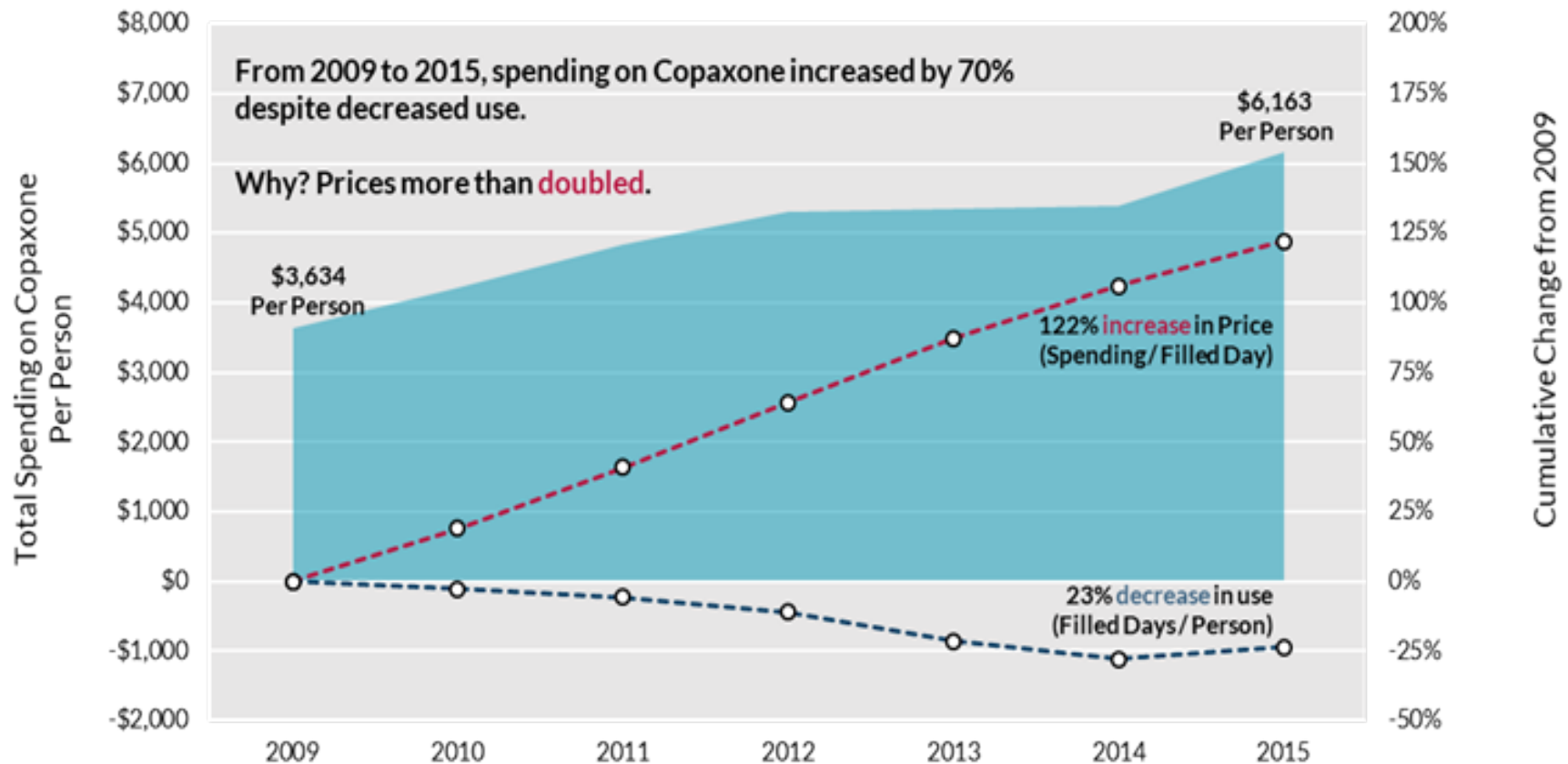


Health care is the only sector of the American economy where you can lose market share and gain revenue



HCCI

Copaxone:
Spending **More**, Using **Less**



Source: HCCI, 2018