2021

Trends Shaping the Post-Pandemic Health Economy



Data Stories as a Guide to the Post-Pandemic Health Economy

Healthcare plays a massive societal role. It is complex and represents a growing economy. Defining trends of the last decade – from consumer expectations for Amazon-like services to "non-traditional" provider entrants – will continue to accelerate in the years ahead. Improving the speed and quality of decision making among every healthcare stakeholder has never been more critical. But in an economy defined by constant change, the challenges of effective decision making placed on healthcare executives, from hospital operators to the policymakers, are even more acute. In my experience working with senior executives and board members of the nation's largest health systems, health services and supplier organizations, and Fortune 500 healthcare companies, I have seen organizations lack the appropriate information needed to make effective decisions.

The health economy creates more data than any other part of the economy, but healthcare has historically been challenged to gather, distill and analyze the data in a way that allows healthcare executives to operationalize it as meaningful information. As an industry:

- We are prone to gather and analyze data in silos – EMRs vs ERPs, trends in Medicare vs trends in digital health, etc.
- We are satisfied with data that is
 "directionally correct" instead of
 demanding data that is "statistically
 valid" leading us to make go-forward
 decisions rooted in historical trends that
 assume status guo.
- We extrapolate a discrete data point, something that is true of 5% or 10% of the population, to 100% of the population.

Executive teams don't have the luxury of time to collect, filter, synthesize and interpret the wealth of critical insights needed to inform their strategies. With this inaugural data trends report, I intend to offer all of us in the industry a foundational framework.

Data tells a story, sometimes good and sometimes bad. There are an endless number of stories I could have shared, but this year we start with 120+ all grounded in facts about the past and sophisticated machine learning models about the future, with minimal reliance on survey data. Armed with these trends that integrate data stories across the health economy, I hope this report will cause you to reflect on the future of the U.S. health economy, and the role your organization is best suited to play. I hope that you will use this report as a compass in developing and implementing the strategic solutions the U.S. healthcare system so desperately needs. I encourage you to read this report in order. Each story stands on its own, but additional context comes from the connectivity between these stories. Each story will resonate differently based on your respective vantage point, but there is something in here for everyone that touches the nearly \$4T health economy.

-Sanjula Sanjula Jain, Ph.D. SVP, Market Strategy & Chief Research Officer, Trilliant Health

Table of Contents



Introduction 4							
I.	Executive Summary: Key Insights	6					
Demand							
I.	Consumer Loyalty 8						
II.	Psychographics 17						
III.	Volume						
IV.	Telehealth						
V.	Urgent Care44						
VI.	Forecast Overview						
	i. Digestive	71					
	ii. Heart/Vascular	76					
	iii. Neuro/Spine	81					
	iv. OB/GYN	86					
	v. Orthopedic	91					
VII.	Consumer Preferences	96					
VIII	Key Insights	101					

Supply	•••••			
	l.	Physicians		
	II.	Provider Loyalty 110		
	III.	Hospitals and Health Systems 113		
	IV.	ASCs 118		
	٧.	Retail		
	VI.	New Entrants		
	VII.	Key Insights		
Yield	•••••			
	l.	Cost		
	II.	Price		
	III.	Key Insights		
Conclu	sion .			
Method	dolog	y 158		
Acknowledgements 159				
Disclai	mer	160		

INTRODUCTION

The Health Economy





The U.S. health economy is the largest sector of the largest global economy. Hospitals constitute the largest segment of the U.S. health economy, serving both as the provider of last resort and a vital part of the local economy in every community, as the COVID-19 pandemic painfully reminded us.

For decades, the U.S. health economy has operated as if the fundamental rules of economics – **demand, supply, and yield** – do not apply. Our thesis is that this is not sustainable, particularly for hospitals and health systems that operate in what game theorists call a "negative-sum game" which has several immutable economic rules.

In this inaugural report, we hope to persuade players in the health economy to re-examine their longstanding assumptions about the basic economics of their business. Of note, is Peter Drucker's observation that the hospital is "altogether the most complex human organization ever devised." Simply said, delivering healthcare efficiently is more challenging for a hospital than any other provider, and there are more providers competing for the consumer's loyalty than anyone realizes in today's health economy.

INTRODUCTION CONTINUED...

If hospitals are required to play by different rules than the competition, then it is critical that they play by the one rule that applies to all market participants: the **basic rules of economics**. Doing so requires an accurate and continuous understanding of consumer **demand and supply** for healthcare services, which **ultimately determines yield**.

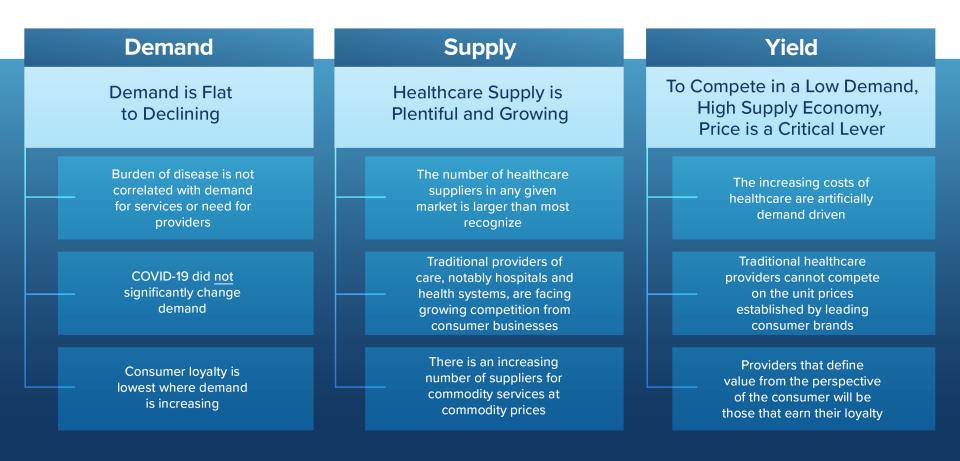
As healthcare executives begin developing strategies to guide their organizations in a health economy recovering from the global **COVID-19 pandemic**, insight into the demand, supply and yield equation will help us distinguish between commonly held anecdotes and the data-informed truths. **For example:**

The Anecdote	The Fact
Patients are loyal	Patients are consumers, and consumers are not loyal
Everyone loves telehealth	Less than 15% of the U.S. population used telehealth in 2020
Surgeons are splitters	PCPs are splitters
If we win the heart of Mom, we win the family	Women are less loyal to a system than men
If you build it, they will come	Consumer preference is based on psychology , not "location, location"
Demand is derivative of burden of disease	Demand is flat to declining despite increasing burden of disease
Not much changes in healthcare	Everything changes

What follows is a fact-based, data-driven analysis of the trends that will define the landscape, and subsequent challenges, for all players in the post-pandemic health economy.

EXECUTIVE SUMMARY: KEY INSIGHTS

Winning Strategies in the Health Economy Require Data-Driven Insight into Demand, Supply and Yield





DEMAND

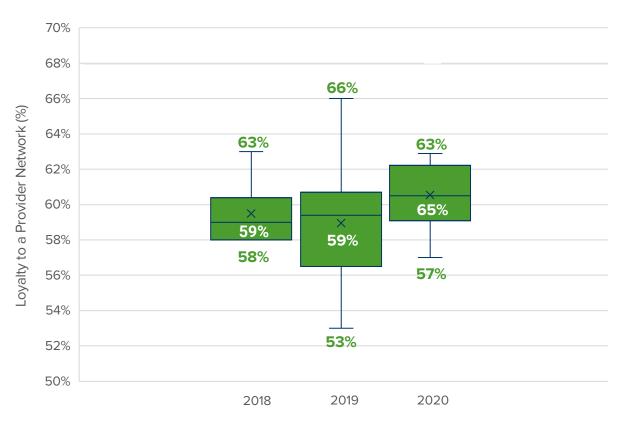
Demand refers to both the exogenous and endogenous factors that influence consumer preferences (e.g., location, price) and need for services (e.g., genetic predisposition).



Healthcare Consumers are Not Loyal

On average, consumers in the top ten CBSAs are 61% loyal to a provider network.

DISTRIBUTION OF CONSUMER LOYALTY, 2018-2020



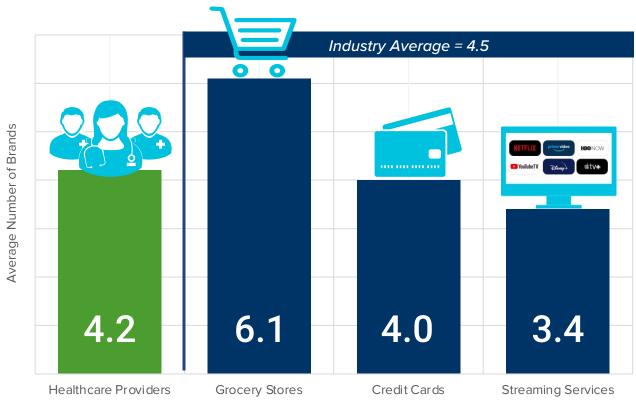
Note: Consumer loyalty is a measure that reflects the percent of a patient's total care that was received in a single provider network (or brand). Loyalty was calculated using claims for all patients with at least five healthcare provider visits in a year.

Source: Trilliant Health national all-payer claims database.

Loyalty in Healthcare is Comparable to Other Industries

Consumers split their healthcare spending across an average of 4.2 provider brands, similar to consumer behavior in other industries with abundant choice.

NUMBER OF BRANDS AFFILIATED WITH CONSUMERS BY INDUSTRY



Comparable Industries

Note: Consumer loyalty to healthcare providers is a measure that reflects the percent of a patient's total care that was received in a single provider network (or brand). Loyalty was calculated using claims for all patients with at least five healthcare provider visits in a year.

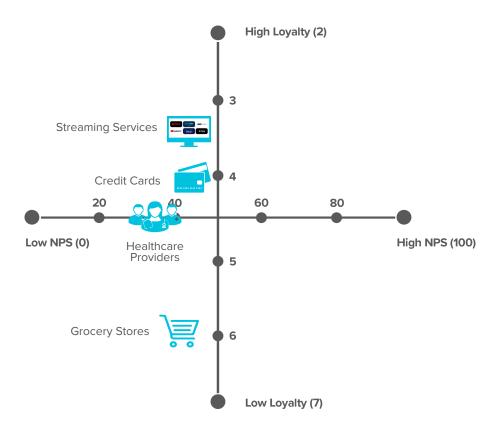
Source: Analysis of publicly available consumer purchase trend datasets; 2018-2020 and Trilliant Health national all-payer claims database, 2020.

 $_{\odot}$ 2021 TRILLIANT HEALTH 10

Consumer "Satisfaction" is Not Correlated with Loyalty

Where consumers spend their dollars is a more precise measure of loyalty than self-reported satisfaction (i.e., NPS).

LOYALTY TO BRANDS VS. NET PROMOTER SCORES (NPS)
IN SELECT INDUSTRIES, 2018-2020

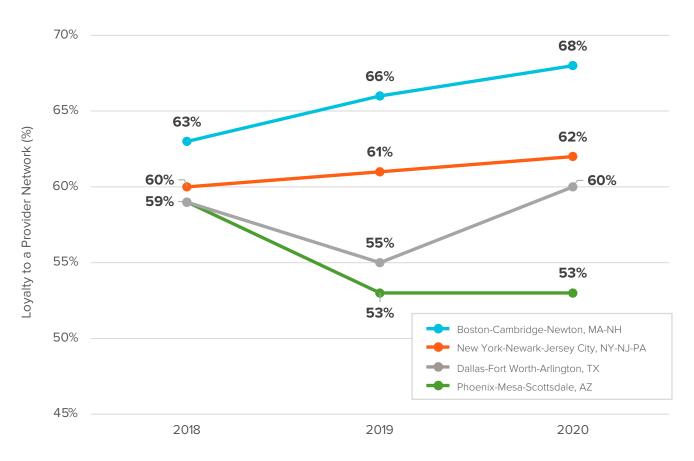


Note: Loyalty is a measure of the number of brands where consumers "split" or spend their dollars. Splitting across fewer brands denotes higher loyalty. Source: Analysis of publicly available Net Promoter Score (NPS) data; 2018-2020.

Loyalty to Provider Networks Varies by CBSA

Consumer loyalty is affected by numerous factors and can vary over time.

CONSUMER LOYALTY BY CBSA, 2018-2020

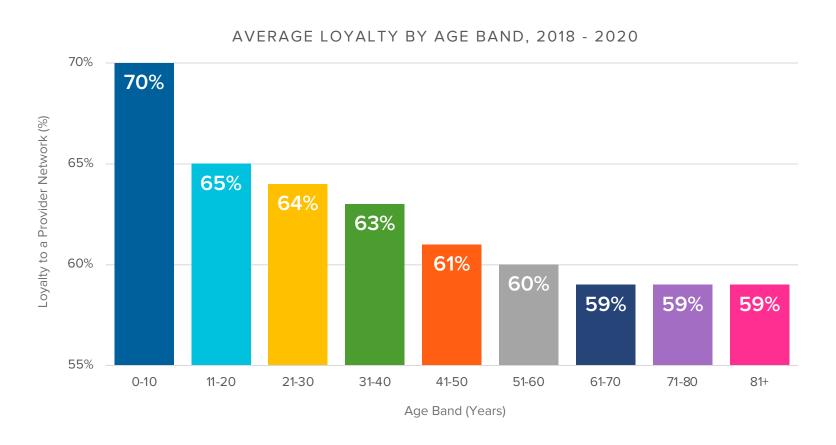


Note: Consumer loyalty is a measure that reflects the percent of a patient's total care that was received in a single provider network (or brand). Loyalty was calculated using claims for all patients with at least five healthcare provider visits in a year.

Source: Trilliant Health national all-payer claims database.

Loyalty to Provider Networks Declines With Age

Growth in demand for healthcare services is greater in the Medicare population, which is less loyal than any other age cohort.



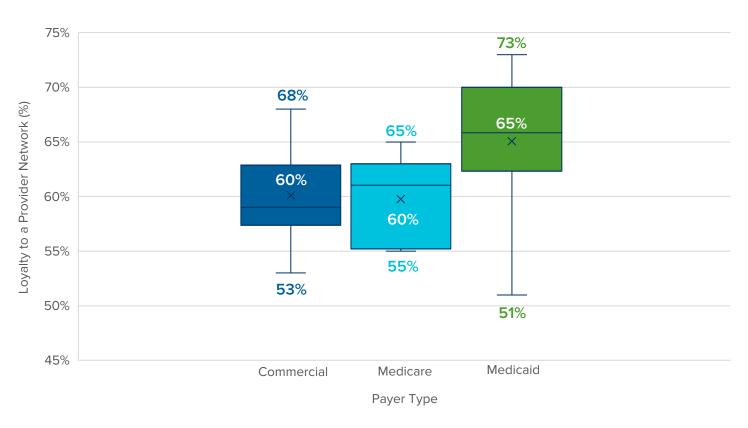
Note: Consumer loyalty is a measure that reflects the percent of a patient's total care that was received in a single provider network (or brand). Loyalty was calculated using claims for all patients with at least five healthcare provider visits in a year.

Source: Trilliant Health national all-payer claims database.

Medicaid Patients are the Most Loyal to Provider Networks

On average, commercially insured and Medicare populations are notably less loyal to provider networks.

AVERAGE LOYALTY TO PROVIDER NETWORKS BY PAYER TYPE, 2018 - 2020



Note: Consumer loyalty is a measure that reflects the percent of a patient's total care that was received in a single provider network (or brand). Loyalty was calculated using claims for all patients with at least five healthcare provider visits in a year.

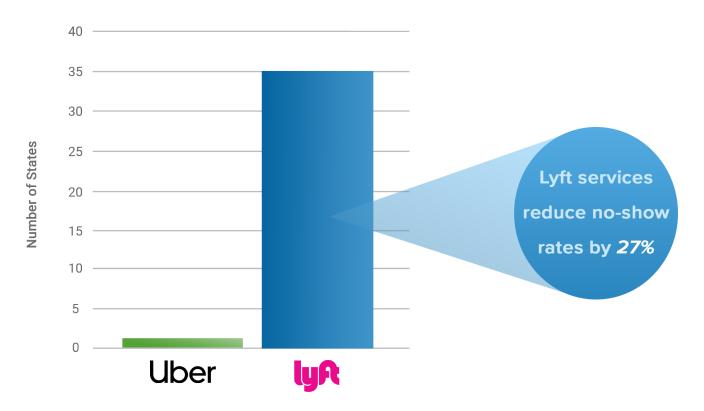
Source: Trilliant Health national all-payer claims database.

 $_{\odot}$ 2021 TRILLIANT HEALTH 14

Ride-Sharing Services Expand Access to Care Providers

Lyft's transportation services supports 22M Americans, primarily Medicaid patients, in traveling to and from appointments and broadening access to care services.

NUMBER OF STATE MEDICAID PARTNERSHIPS WITH RIDE-SHARING COMPANIES, 2020



Source: Analysis of publicly reported data on Lyft website (April 2020) and Uber press releases.

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Women are Less Loyal to Provider Networks than Men

Women seek out a broader number of providers for their healthcare services than men. This is consistent across markets and over time.

VARIATION IN CONSUMER LOYALTY BY GENDER IN SELECT MARKETS COMPARED TO NATIONAL AVERAGE, 2018-2020



Note: Consumer loyalty is a measure that reflects the percent of a patient's total care that was received in a single provider network (or brand). Loyalty was calculated using claims for all patients with at least five healthcare provider visits in a year.

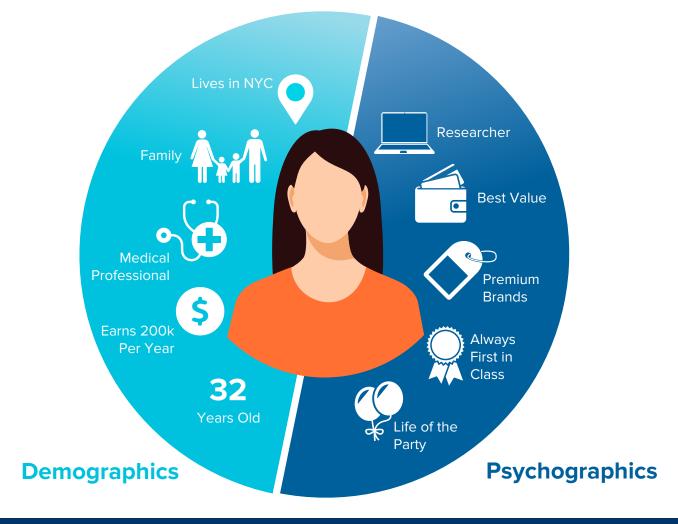
Source: Trilliant Health national all-payer claims database.

DEMAND

Psychographics

Demographics and Psychographics are Distinctly Different

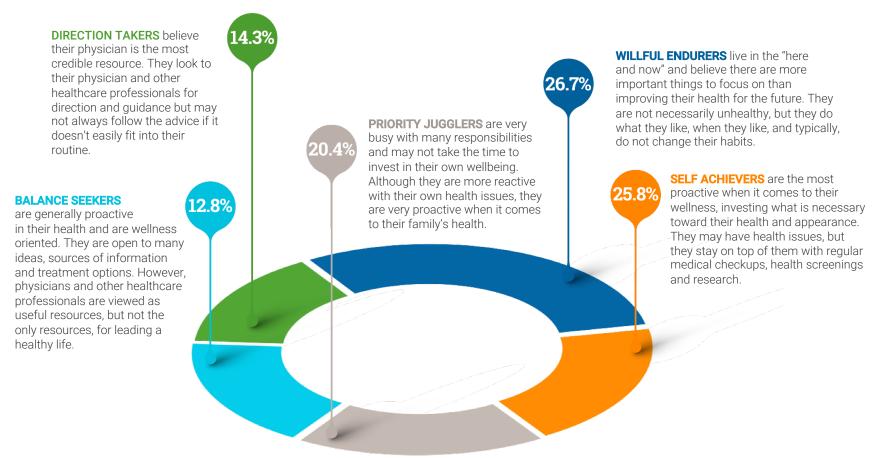
Demographics describe facts about a person in this moment and vary over time. Psychographics describe why a person makes the decisions they do and persist over time.



Consumers are Classified into 1 of 5 Psychographic Profiles

Psychographics provide insight into the "why" behind consumer choices.

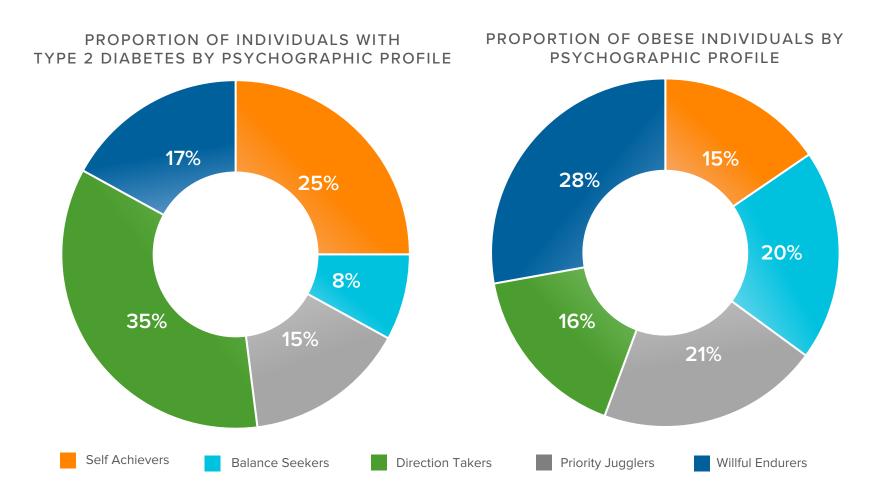
DISTRIBUTION OF HEALTHCARE CONSUMERS BY PSYCHOGRAPHIC PROFILE



Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

Psychographic Profile Distributions Vary by Disease Type

A consumer's psychographic profile influences compliance with care pathways. For example, diet improvement strategies that include content from branded experts will be most effective for Direction Takers.



Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

Alabama and New Jersey are Outliers for Self Achievers

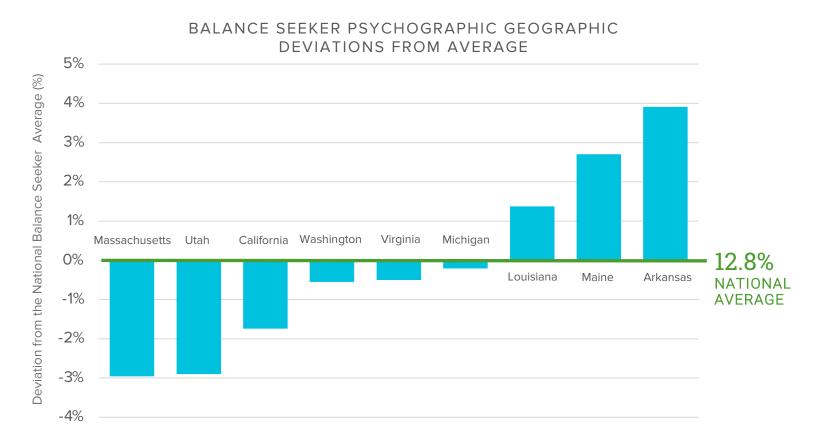
Self Achievers are the most proactive when it comes to their wellness, investing what is necessary toward their health and appearance. They may have health issues, but they stay on top of them with regular medical checkups, research, etc.



Note: Variation calculated as the percentage point difference between the proportion of Self Achiever consumers (by state) and the national average (for all states, equal to 25.8%). Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

Massachusetts and Arkansas are Outliers for Balance Seekers

Balance Seekers are generally proactive in their health and are wellness oriented. They are open to many ideas, sources of information and treatment options. Physicians and other healthcare professionals are viewed as useful resources, but not the only resources, for leading a healthy life.



Note: Variation calculated as the percentage point difference between the proportion of Balance Seeker consumers (by state) and the national average (for all states, equal to 12.8%) Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020..

Wyoming and Mississippi are Outliers for Direction Takers

Direction Takers believe their physician is the most credible resource. They look to their physician and other healthcare professionals for direction and guidance but may not always follow the advice if it doesn't easily fit into their routine.

DIRECTION TAKER PSYCHOGRAPHIC GEOGRAPHIC DEVIATIONS FROM AVERAGE



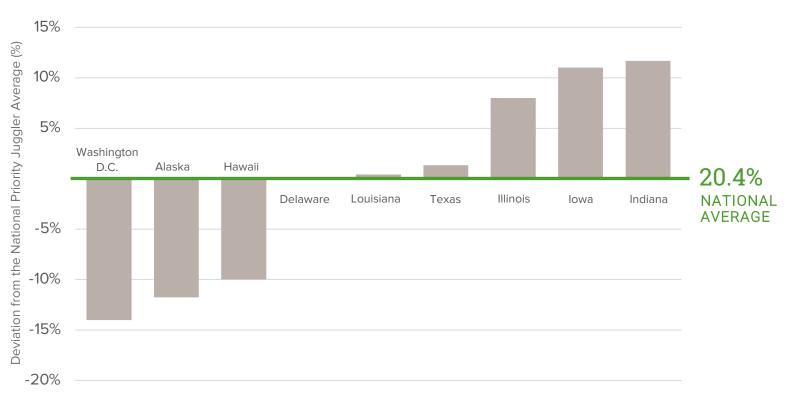
Note: Variation calculated as the percentage point difference between the proportion of Direction Taker consumers (by state) and the national average (for all states, equal to 14.3%). Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

Washington D.C. and Indiana are Outliers for Priority Jugglers

Priority Jugglers are very busy with many responsibilities and may not take the time to invest in their own wellbeing.

Although they are more reactive with their own health issues, they are very proactive when it comes to their family's health.



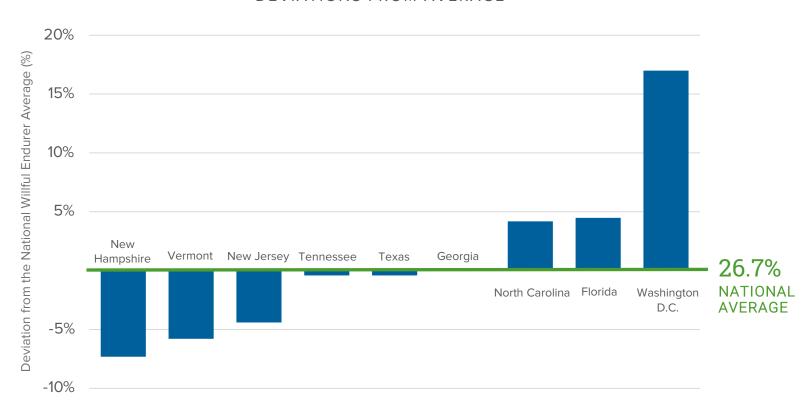


Note: Variation calculated as the percentage point differential between the proportion of Priority Juggler consumers (by state) and the national average (for all states, equal to 20.4%). Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

New Hampshire and Washington D.C. are Outliers for Willful Endurers

Willful Endurers live in the "here and now" and believe there are more important things to focus on than improving their health. They are not necessarily unhealthy, but they do what they like, when they like, and typically, don't change habits.

WILLFUL ENDURER PSYCHOGRAPHIC GEOGRAPHIC DEVIATIONS FROM AVERAGE

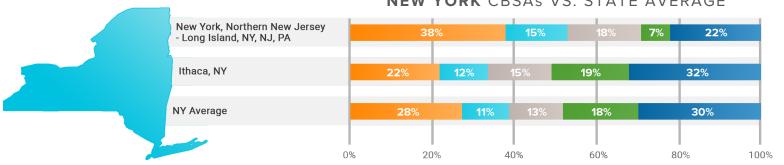


Note: Variation calculated as the percentage point differential between the proportion of Willful Endurer consumers (by state) and the national average (for all states, equal to 26.7%). Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

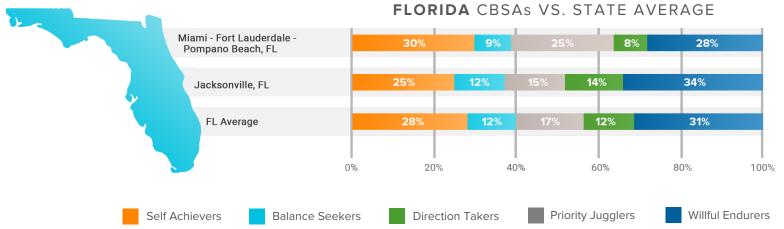
Psychographics Vary Not Only by State but by CBSA

Psychographics are why the adage "healthcare is local" is true.





DISTRIBUTION OF PSYCHOGRAPHIC PROFILES OF SELECT FLORIDA CBSAs VS. STATE AVERAGE

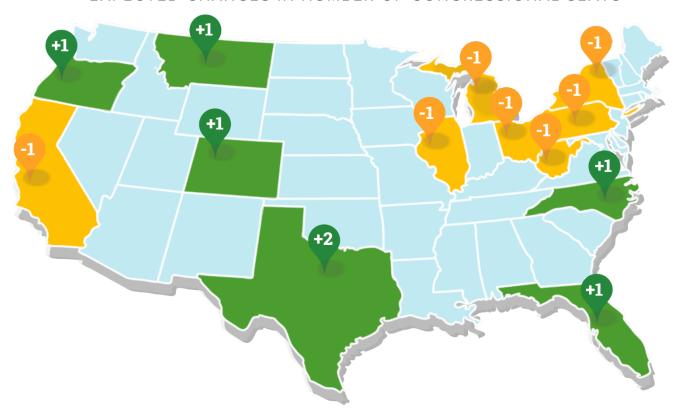


Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

2020 Census Reveals Notable Migration Trends

States that are expected to either gain or lose a Congressional seat will see significant changes in the profile and preferences of its constituents, subsequently influencing healthcare demand.

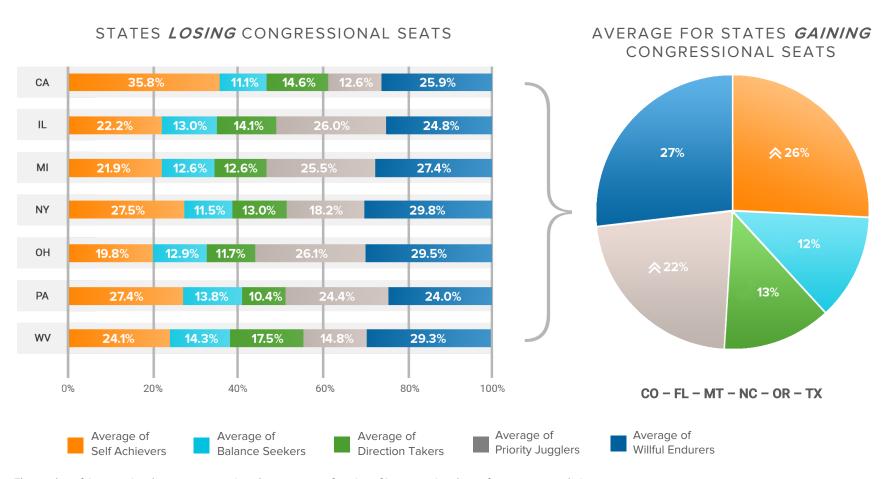
EXPECTED CHANGES IN NUMBER OF CONGRESSIONAL SEATS



Note: The number of Congressional seats are apportioned to states as a function of its respective share of aggregate population. Source: 2020 U.S. Census Bureau; Which States Will Gain or Lose Seats in the Next Congress - The New York Times (nytimes.com).

Population Migration Will Impact Consumer Preferences

States that are expected to gain Congressional seats are likely to see a greater influx of Self Achievers and Priority Jugglers, which will inevitably impact consumer preferences for healthcare in those regions.



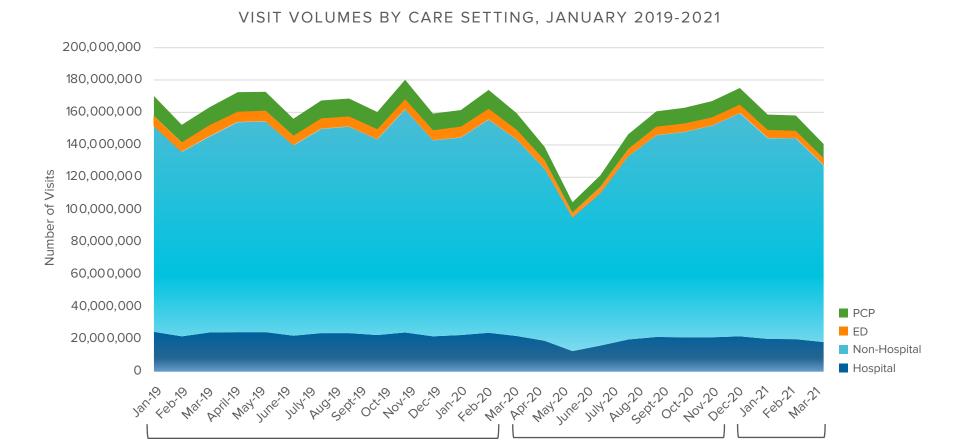
Note: The number of Congressional seats are apportioned to states as a function of its respective share of aggregate population. Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.



DEMAND: VOLUME

Volume Declines Attributed to Pandemic are Lost, Not Delayed

Emergency department visits, a key source of inpatient admissions, are 33% lower in January 2021 from January 2020.



Source: Trilliant Health national all-payer claims database.

Pre-Pandemic

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Month and Year

Peak Pandemic

Post-Peak

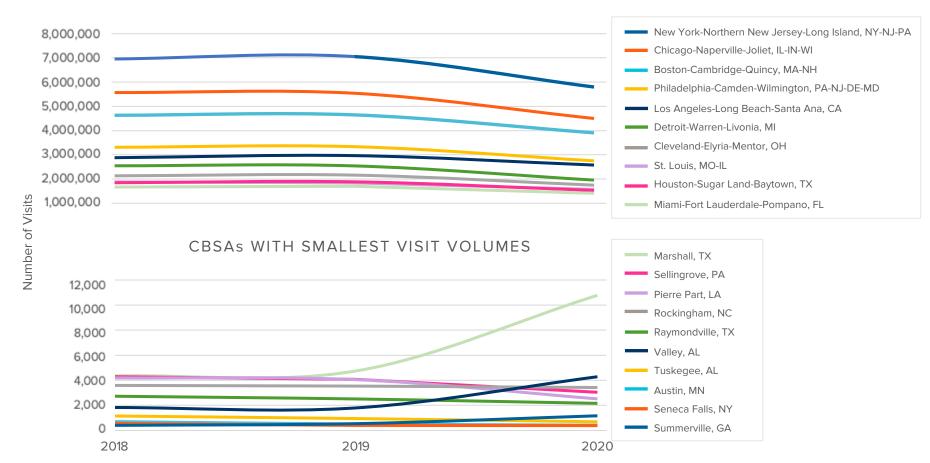
Pandemic

DEMAND: VOLUME

Trends in Medicare Utilization Vary by CBSA

Major metropolitan CBSAs experienced a much larger decline in hospital visits by traditional Medicare beneficiaries than rural CBSAs.





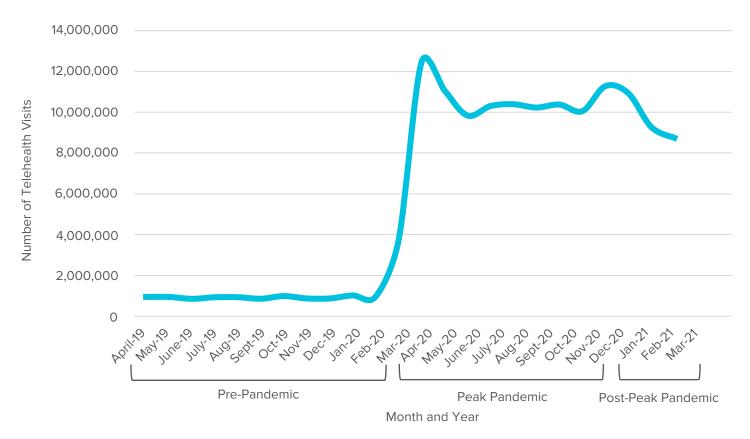
Source: Centers for Medicare and Medicaid Services (CMS) IPPS and OPPS data.



Telehealth Use Beginning to Taper Post-Pandemic

Approximately 38M Americans (excluding traditional Medicare) generated approximately 96M telehealth visits during COVID-19.

TELEHEALTH UTILIZATION BY PANDEMIC STAGE, APRIL 2019-MARCH 2021



Note: Telehealth visit volumes reflect video-only encounters for all payers excluding traditional Medicare. Survey data released from The Kaiser Family Foundation (May 2021) suggests that approximately 6.6M Medicare beneficiaries utilized a video telehealth visit. The chart above includes utilization by 3.8M Medicare Advantage enrollees. Our estimates do not account for any self-pay telehealth visits.

Source: Trilliant Health national all-payer claims database.

Teladoc Projects 2021 Visit Volume to be Less than 4% of U.S. Population

Telehealth services are increasingly being commoditized as a "membership" good that will be adopted by a small segment of Americans.

Exhibit 99.1

Teladoc.

Teladoc Health Reports Fourth-Quarter and Full-Year 2020 Results

Q4 revenue grows 145% year-over-year to \$383.3 million and total visits increase 139% to 3.0 million

Full year revenue grows 98% year-over-year to \$1,094.0 million and total visits increase 156% to 10.6 million

Issues 2021 first-quarter and full-year guidance

PURCHASE, NY, February 24, 2021— Teladoc Health, Inc. (NYSE: TDOC), the global leader in whole-person virtual care, today reported strong financial results for the fourth quarter and full year ended December 31, 2020.

"As virtual care shifted to become a consumer expectation in 2020, Teladoc Health not only met the rapidly growing demand, but we transformed our company to define a new category of whole-person virtual care," said Jason Gorevic, chief executive officer of Teladoc Health. "By accelerating our mission to transform the health care experience, we exceeded our fourth-quarter and full-year 2020 expectations and see strong momentum across our global business in 2021 as the market embraces the breadth and depth of our unique capabilities."

Revenue

Source: Tela

(\$ thousands, unaudited)						
		Quarter Ended December 31,			Year Ended December 31,	
	2020	2019		2020	2019	
Access Fees Revenue						
U.S.	\$ 282,826	\$ 98,052	188 %	\$ 737,408	\$ 356,656	107 %
International	33,131	28,924	15 %	124,392	106,640	17 %
Total	315,957	126,976	149 %	861,800	463,296	86 %
Visit Fee Revenue						
U.S.	53,149	29,222	82 %	206,093	88,669	132 %
docomiceds release, F	ebruary 12:02	21. 291	(61)%	818	1,342	(39)%
Total	53 262	29 513	80 %	206 911	90.011	130 %

TELADOC'S REPORTED EXPECTATIONS FOR FY 2021

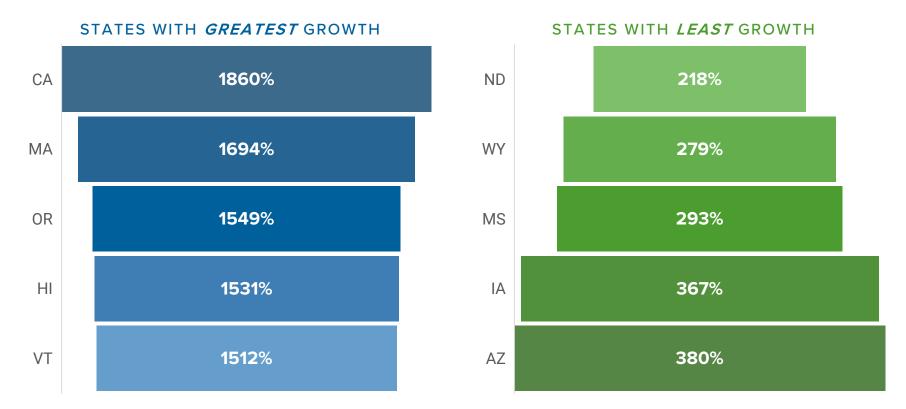
- Total U.S. paid membership to be in the range of 52 to 54 million members and visit fee only access to be available to 22 to 23 million individuals, including 2 to 3 million individuals on a temporary basis.
- Total telehealth visits to be between 12 and 13 million.

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Growth in Telehealth at Pandemic Peak Varied Regionally

California experienced the greatest percentage growth (1860%) in telehealth utilization at the peak of the pandemic, while North Dakota experienced the smallest percentage growth (218%).

PERCENT CHANGE IN TELEHEALTH UTILIZATION FROM PRE-PANDEMIC TO PEAK PANDEMIC

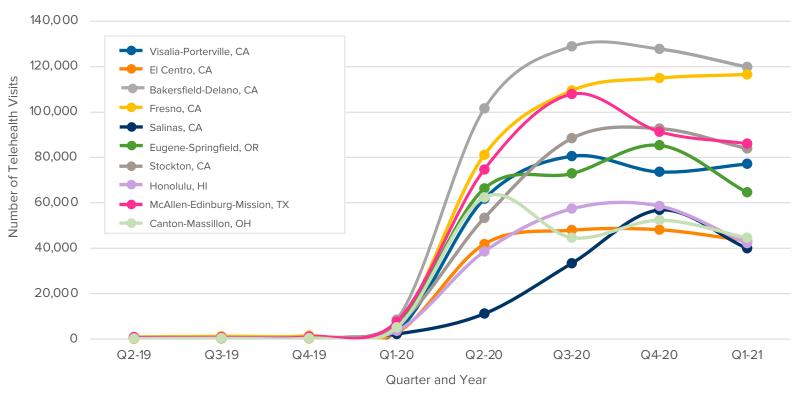


Note: Pre-Pandemic and Peak Pandemic date ranges are 2019-2020 Q1 and 2020 Q2-2020 Q4, respectively. Source: Trilliant Health national all-payer claims database.

Six Markets with Highest Percentage Growth in Telehealth Utilization During Pandemic Were in California

Telehealth utilization has remained near peak pandemic volumes for markets with highest percentage growth in telehealth utilization during the pandemic.

TELEHEALTH UTILIZATION AMONG CBSAs WITH <u>GREATEST</u> PERCENTAGE VOLUME GROWTH DURING THE PANDEMIC

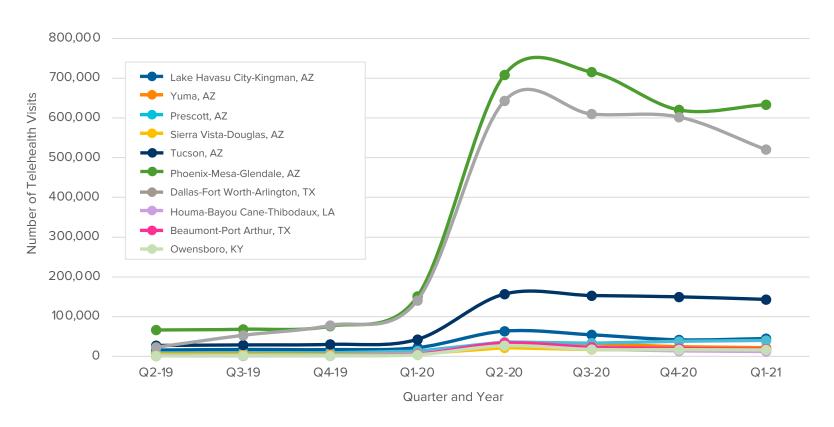


Source: Trilliant Health national all-payer claims database.

Six of Top 10 Markets with Lowest Percentage Growth in Telehealth Utilization During Pandemic Were in Arizona

The Phoenix and Dallas CBSAs had higher telehealth utilization pre-pandemic than the other top 10 CBSAs.

TELEHEALTH UTILIZATION AMONG CBSAs WITH <u>LOWEST</u> PERCENTAGE VOLUME GROWTH DURING THE PANDEMIC

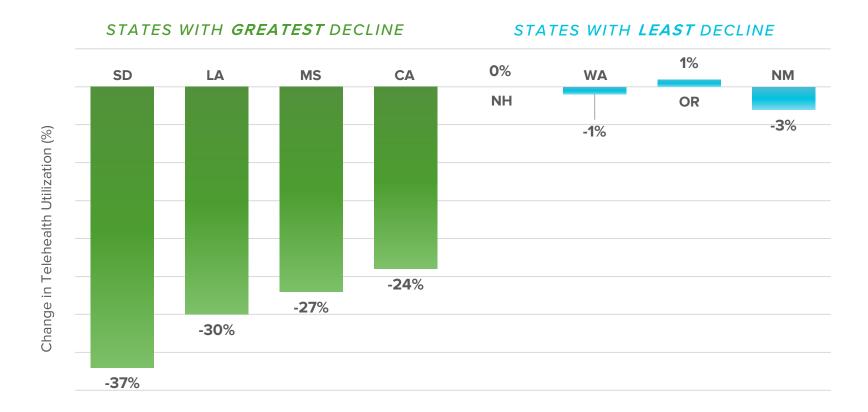


Source: Trilliant Health national all-payer claims database.

Telehealth Utilization is Declining in Most States Post-Pandemic

California experienced both the highest absolute and percentage increase in telehealth utilization during the peak pandemic period.

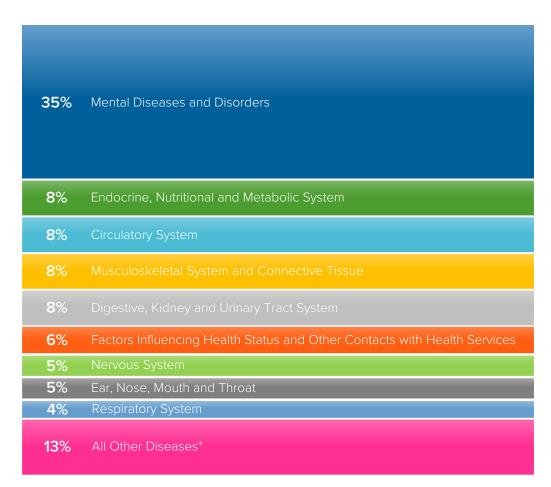
PERCENT CHANGE IN TELEHEALTH UTILIZATION FROM PEAK PANDEMIC TO POST-PEAK



Note: Peak Pandemic, and Post-Peak Pandemic date ranges are 2020 Q2-2020 Q4, and 2021 Q1, respectively. Source: Trilliant Health national all-payer claims database.

Behavioral Health was a Key Driver of Telehealth Demand During the Peak of the Pandemic

PROPORTION OF TELEHEALTH VISITS BY MAJOR DIAGNOSTIC CATEGORY

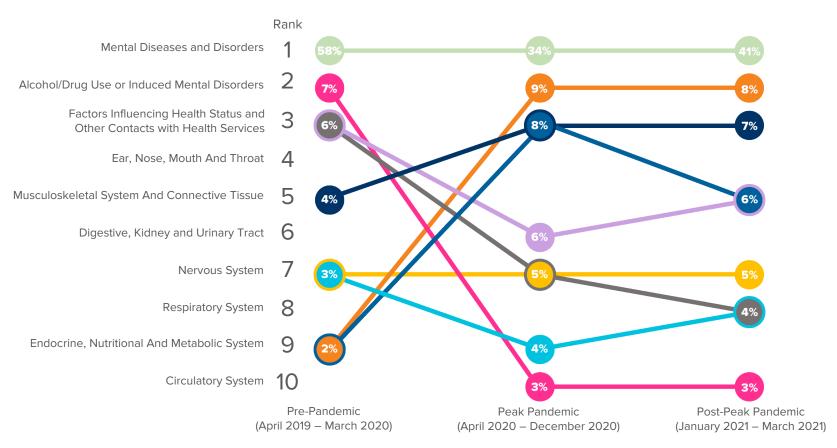


Note: *"Other Diseases" refers to all other Major Diagnostic Categories (MDCs) with proportion of telehealth visits for any given MDC <3%. Peak pandemic defined as April to December 2020. Source: Trilliant Health national all-payer claims database.

Behavioral Health is Consistently the Key Driver of Telehealth Utilization

Even prior to COVID-19, telehealth was utilized primarily for treating behavioral health.

PROPORTION OF TELEHEALTH VISITS RANKED BY MAJOR DISEASE CLASSIFICATION

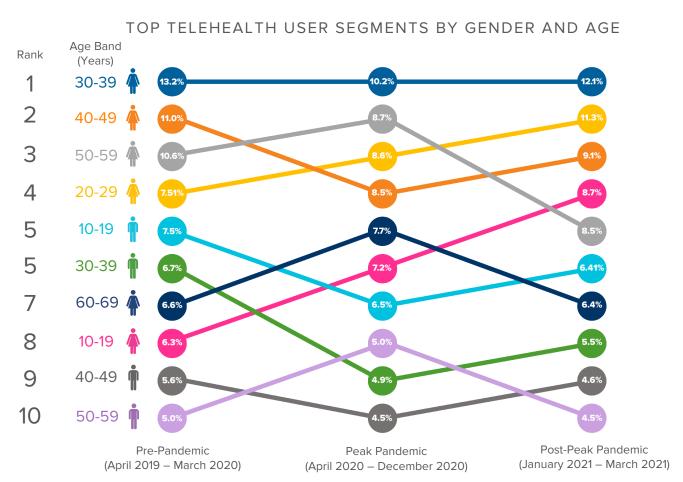


Note: Total percentages by column do not sum to 100% since the ranks shown were capped at the top ten use cases. Source: Trilliant Health national consumer and all-payer claims database.

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Women Ages 30-39 are the Most Consistent Users of Telehealth Before, During and After the Pandemic

The fastest growing utilizers of telehealth are women ages 20-29.

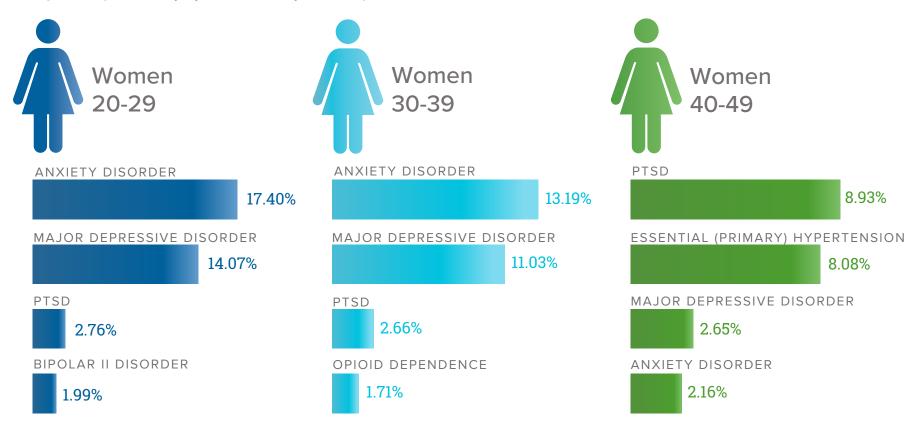


Note: Total percentages by column do not sum to 100% since the ranks shown were capped at the top ten use cases. Source: Trilliant Health national consumer and all-payer claims database.

 $_{\odot}$ 2021 TRILLIANT HEALTH 41

Anxiety and Depression are the Most Frequent Diagnoses Among the Highest Users of Telehealth

Over the past 24 months, telehealth has consistently been utilized for behavioral health diagnoses more than medical diagnoses, particularly by commercially insured patients.

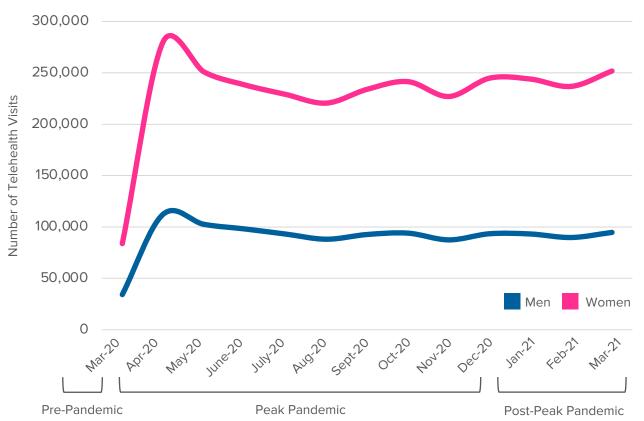


Note: Percentages reflect utilization trends during peak and post-peak pandemic (April 2019-March 2021). Source: Trilliant Health national all-payer claims database.

The Vast Majority of Telehealth Patients Citing Anxiety Were Commercially Insured Women

Women used telehealth for anxiety more than men during the pandemic.





Among Individuals Who Had a Telehealth Visit for Anxiety:

- 71.2% Women
- 83.3% Commercially Insured
- 44% Between Ages 20-39

Source: Trilliant Health national all-payer claims database.

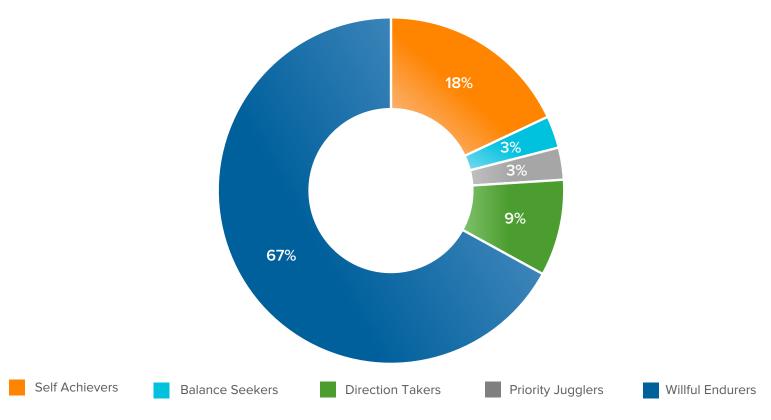


 $_{\odot}$ 2021 TRILLIANT HEALTH 44

Willful Endurers are Twice as Likely to Utilize Urgent Care Than All Other Psychographic Groups Combined

Willful Endurers comprise 67% of individuals who visit urgent care every 1-3 months.

PERCENT OF ALL PEOPLE WHO VISIT URGENT CARE EVERY 1-3 MONTHS

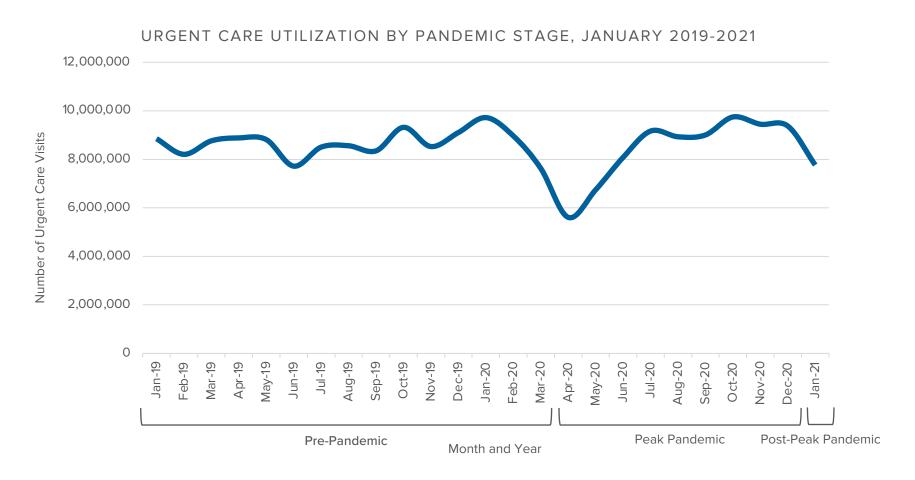


Note: Willful Endurers live in the "here and now" and believe there are more important things to focus on than improving their health for the future. They are not necessarily unhealthy, but they do what they like, when they like, and typically, do not change their habits. Distribution of psychographics remain constant over time.

Source: Trilliant Health consumer database inclusive of psychographic data for all 50 states and Washington, D.C.; 2020.

Urgent Care Volumes Have Returned to Pre-Pandemic Levels

Urgent care volumes rebounded to pre-pandemic levels by June 2020 but have not yet exceeded them.



Note: February-March 2021 was excluded due to claims limitations at the time of analysis. Source: Trilliant Health national all-payer claims database.

 $_{\odot}$ 2021 Trilliant health 46

Magnitude of Decline in Urgent Care Utilization Varied Regionally During COVID-19

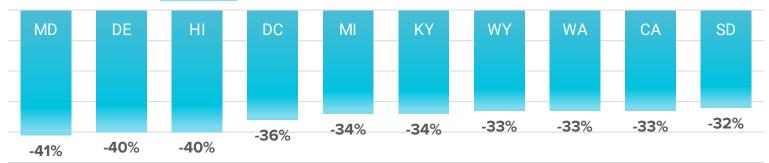
Maryland experienced the greatest decline (-41.2%) in utilization and Idaho experienced the least (-10%).

PERCENT CHANGE IN URGENT CARE UTILIZATION FROM Q1 2020 TO PEAK PANDEMIC

STATES WITH LOWEST PERCENTAGE CHANGE FROM PRE- TO PEAK PANDEMIC



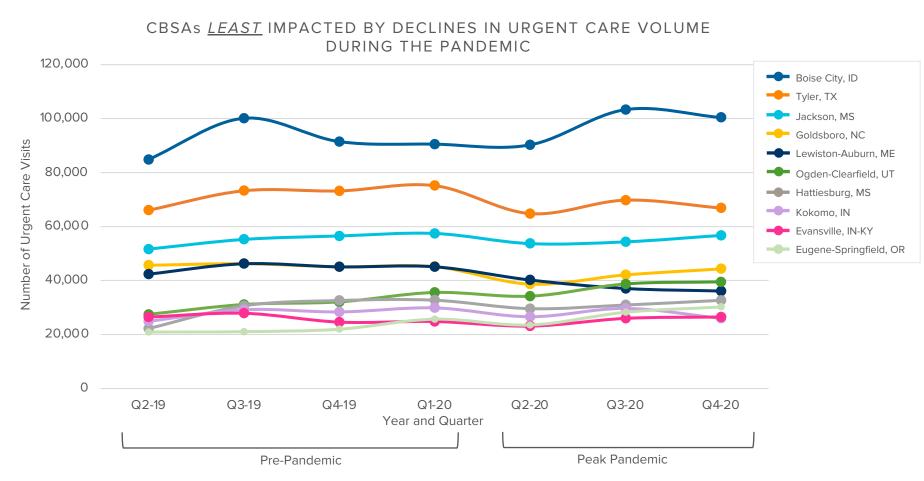




Note: Data comparison of Q1 2020 (Pre-Pandemic) to Q2 2020 (Peak Pandemic). Source: Trilliant Health national all-payer claims database.

Many Smaller CBSAs Saw Relatively Smaller Declines in Urgent Care Volume

Most urgent care centers saw a volume dip at the onset of COVID-19, and certain markets were impacted by less than 8%.

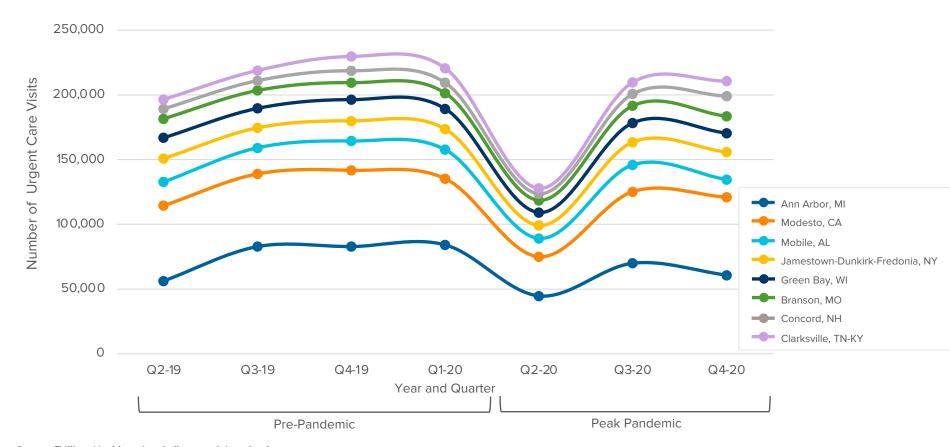


Source: Trilliant Health national all-payer claims database.

CBSAs with Varied Characteristics Experienced Nearly Identical Reductions in Urgent Care Volume

CBSAs most impacted by declines in urgent care visits during COVID-19 saw an average of 42% reduction in volumes.

CBSAs MOST IMPACTED BY DECLINES IN URGENT CARE VOLUME DURING PANDEMIC

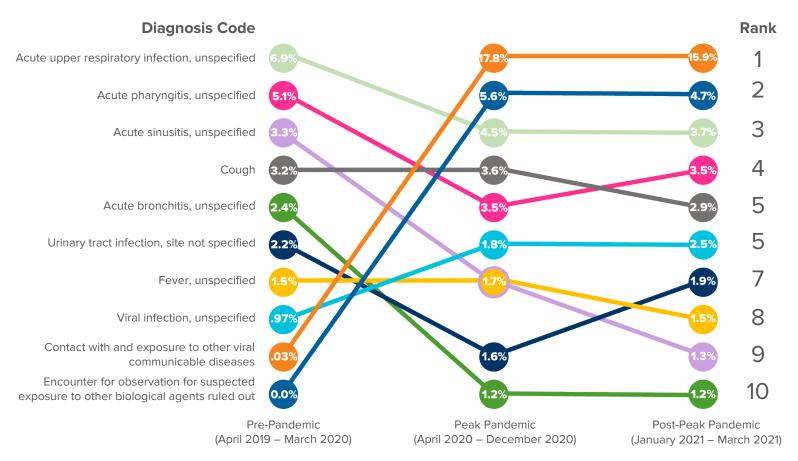


Source: Trilliant Health national all-payer claims database.

COVID-19 Testing Caused Spike in Urgent Care Volumes

Return to pre-pandemic volumes is artificially inflated by continuing COVID-19 testing.

PROPORTION OF URGENT CARE VISITS RANKED BY DIAGNOSIS



Note: Total percentages by column do not sum to 100% since the ranks shown were capped at the top ten use cases. Ranks are based on the top ten diagnoses during the post-peak pandemic (January - March 2021) time period

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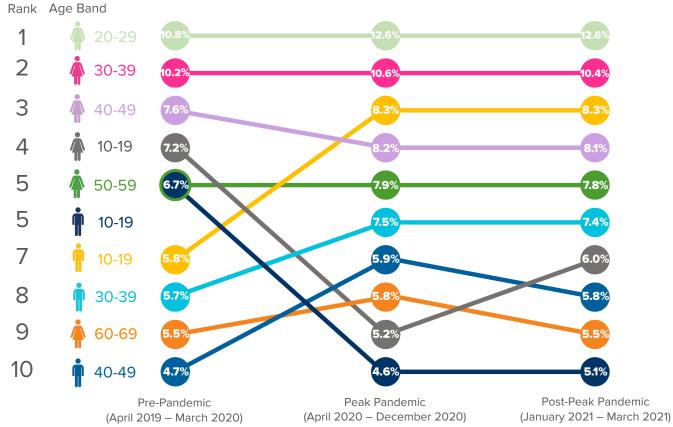
Source: Trilliant Health national all-payer claims database.

50

Most Common Users of Urgent Care are the Same as Telehealth Users

Commercially insured women ages 20-49 account for disproportionate utilization of both urgent care and telehealth.





Note: Women ages 50-59 and men ages 10-19 were tied for rank #5 pre-pandemic. Total percentages by column do not sum to 100% since the ranks shown were capped at the top ten use cases.

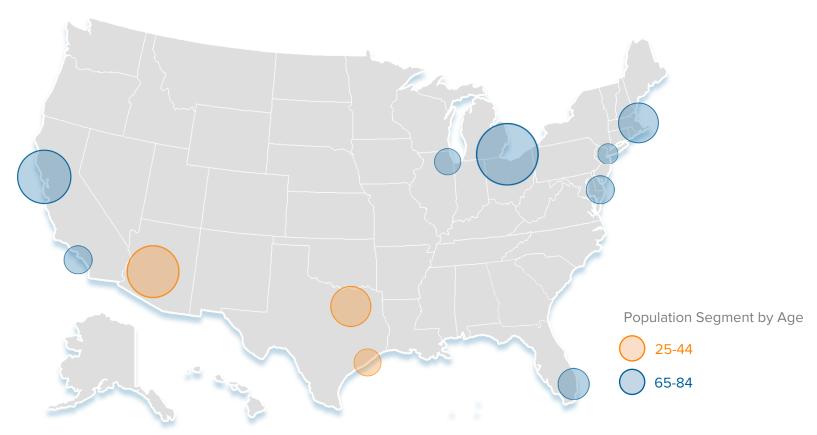
Source: Trilliant Health national all-payer claims database.



Americans are "Graying" Except in Sunbelt CBSAs

Members of the Baby Boomer generation will age into Medicare at a rate of 10,000 people per day until 2030. The 65-84 age cohort is the fastest growing demographic in most Top 10 CBSAs.

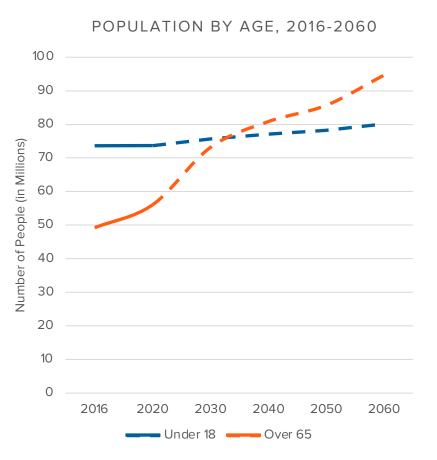
POPULATION SEGMENTS WITH THE LARGEST GROWTH BY REGION

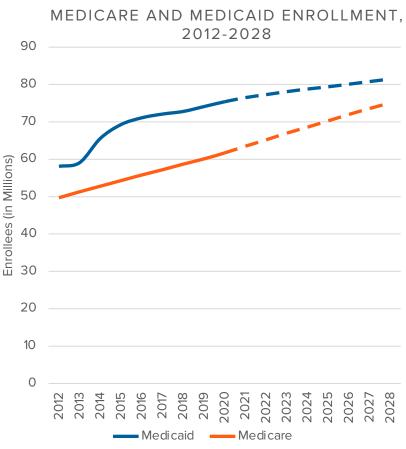


Source: Medicare Payment Advisory Commission (MedPAC) and Census Bureau.

Increasing Medicare Enrollment Continues to Reduce the Commercially Insured Population

Projected births are insufficient to offset the accelerating Medicare enrollment from the Baby Boomers, leading to inevitable decline in the commercially insured population.

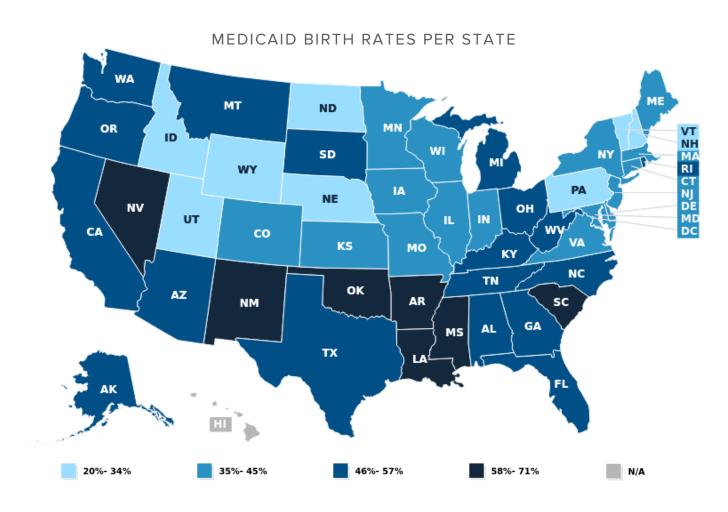




Source: Centers for Medicare and Medicaid Services (CMS) National Health Expenditures Projections, 2012-28.

Almost Half of All Births are Financed by Medicaid

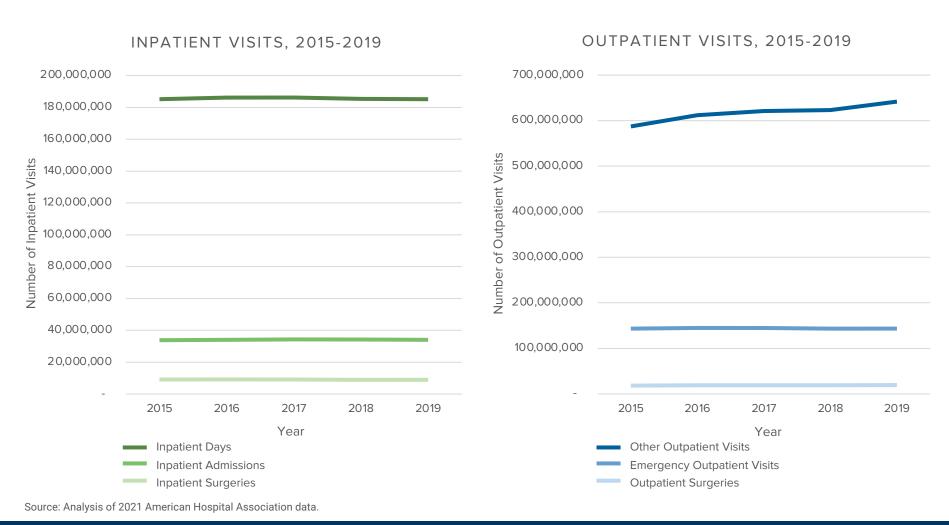
The fastest growing states (the Sunbelt) have above average Medicaid birth rates.



Sources: Kaiser Family Foundation's State Health Facts, National Center for Health Statistics.

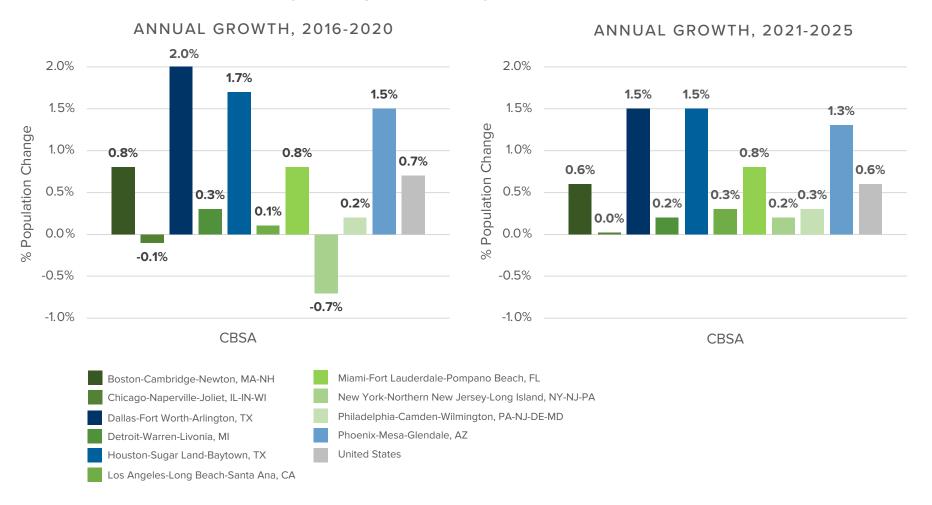
Aggregate Inpatient and Outpatient Demand Have Been Relatively Flat for Years

Inpatient hospital admissions have been flat to declining since 2008.



Population Growth in Sunbelt CBSAs Will Outpace Other CBSAs

Large Sunbelt metropolitan areas (Dallas, Houston, Phoenix) will experience largest population growth of Top 10 CBSAs. Northern and Midwest cities are expected to grow at a slower pace than the nation overall.

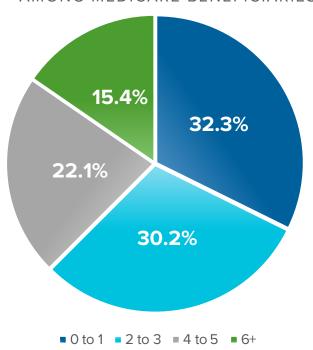


Source: Trilliant Health national all-payer claims database and proprietary demand forecast model.

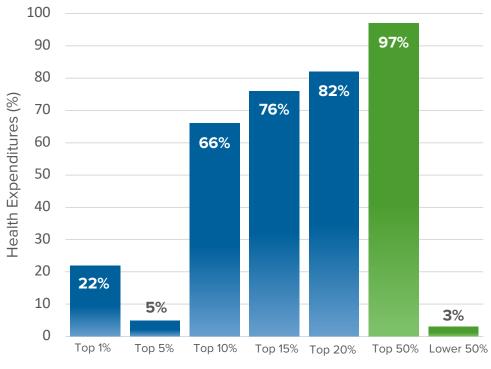
Ratio of Cost to Burden of Disease Follows the Pareto Principle

However, providers do not treat, and payers do not reimburse for all conditions equally.

NUMBER OF COMORBID CONDITIONS AMONG MEDICARE BENEFICIARIES



CONTRIBUTION TO TOTAL HEALTH EXPENDITURES BY INDIVIDUALS



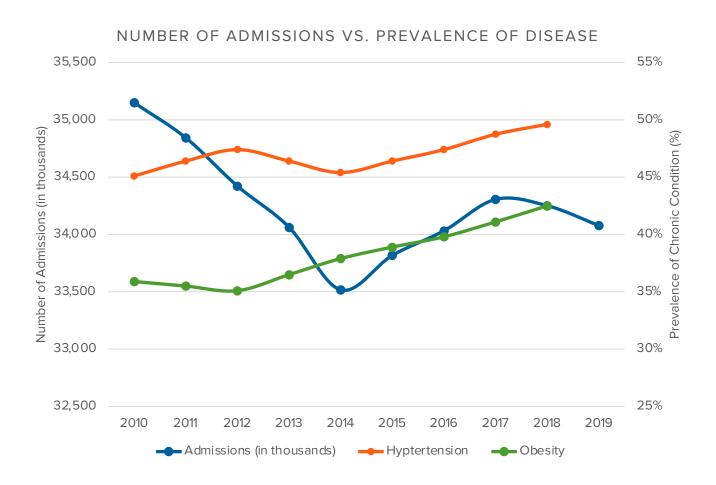
Health Spenders (by Spend Rate)

Note: The Pareto principle states that approximately 80% of the outcomes are attributed to 20% of the causes/drivers.

Source: Centers for Medicare and Medicaid Services (CMS), 2018. Kaiser Family Foundation of Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services.

Burden of Disease ≠ Demand for Service

While burden of disease has grown over the last ten years, hospital admissions peaked in 2008.

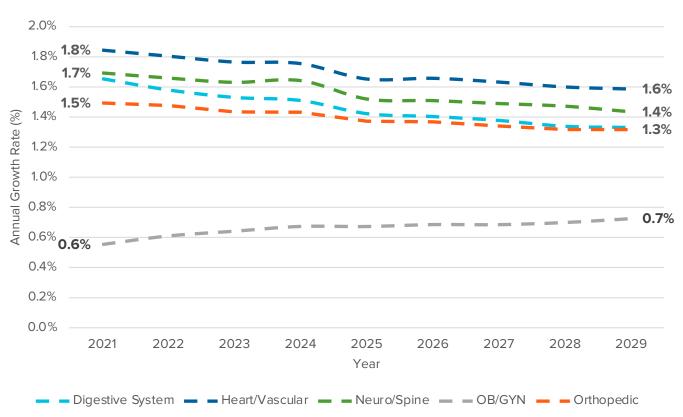


Source: American Hospital Association Statistics, 2021; Centers for Disease Control and Prevention/National Center for Health Statistics, 2019.

Growth in Surgical Demand Forecasted to Decline

Forecasted median year-over-year growth rate of major surgical service lines not expected to exceed 2%.

MAJOR SURGICAL SERVICE ANNUAL GROWTH RATE FOR THE TOP 10 CBSAs

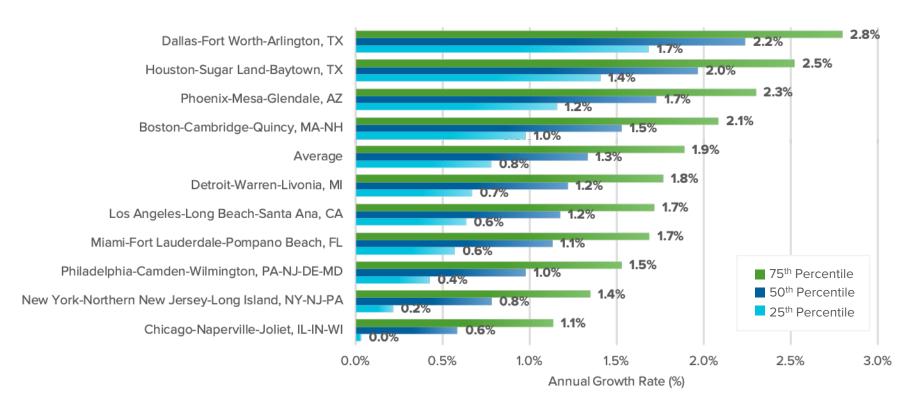


Source: Trilliant Health's proprietary demand forecast model.

Pre-COVID-19 Projections Suggest Varying Growth for Surgical Services Lines in the Largest CBSAs

Average rate of growth was forecasted between 0.8% to 1.9% year over year pre-COVID-19.

PRE-COVID-19 PROJECTIONS FOR DIGESTIVE, HEART VASCULAR, NEURO/SPINE, OB/GYN, AND ORTHOPEDICS SURGICAL GROWTH, 2021-25

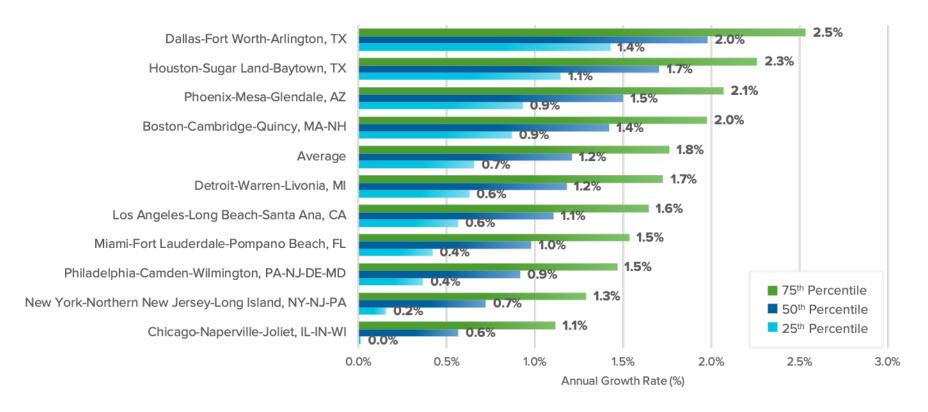


Source: Trilliant Health's proprietary demand forecast model.

...And COVID-19 Did Not Significantly Change Future Demand

Average growth is now forecasted between 0.7% to 1.9% year over year (only 0.1% decrease from pre-COVID-19 forecast projections).

POST-COVID PROJECTIONS FOR DIGESTIVE, HEART VASCULAR, NEURO/SPINE, OB/GYN, AND ORTHOPEDICS SURGICAL GROWTH 2021-25

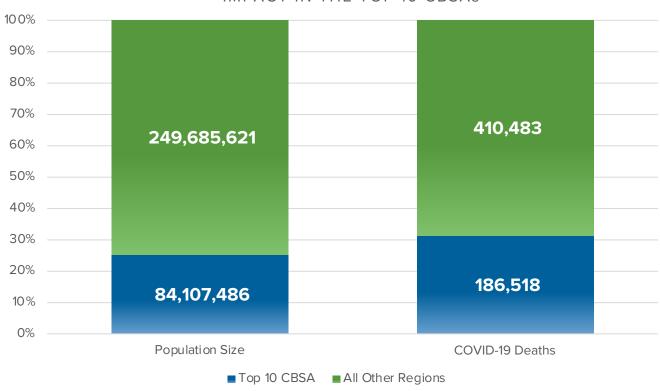


Source: Trilliant Health's proprietary demand forecast model.

31% of U.S. COVID-19 Deaths Occurred in 10 CBSAs

Impact of COVID-19 on future demand is minimal, but larger in the Top 10 CBSAs, which account for 25% of the U.S. population.

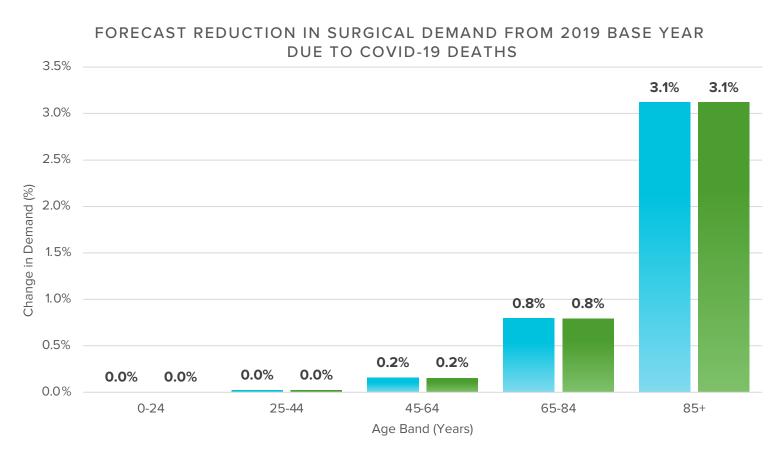




Source: Johns Hopkins University COVID-19 Tracking. Data as of May 19, 2021.

Impact of COVID-19 Mortality on Future Surgical Demand

Deaths due to COVID-19 reduced the 2021 baseline surgical demand in the 65–84 age cohort by 0.8% and 85+ age cohort by 3.1%.

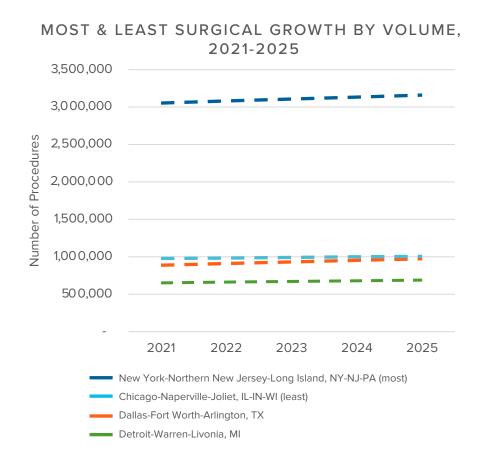


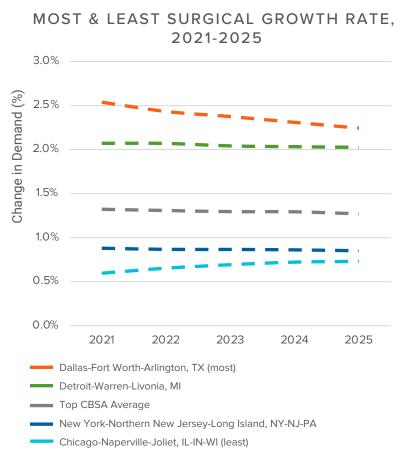
■ 25th Percentile Forecast loss of All Surgeries from 2019 Base ■ 50th Percentile Forecast loss of All Surgeries from 2019 Base

Source: Trilliant Health's proprietary demand forecast model. Johns Hopkins University COVID-19 Tracking; Centers for Disease Control and Prevention (CDC).

Projected Five-Year Surgical Demand is Slowing with Notable CBSAs Projected to Have Flat Growth

Projected growth rates are all well below the common industry assumption of approximately 3% annual growth.



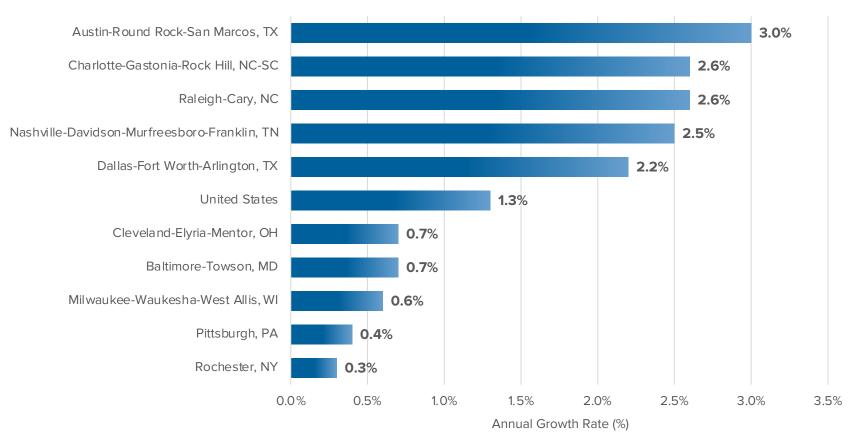


Note: Analysis includes aggregate of Digestive, Heart/Vascular Neuro/Spine, OB/GYN, and Orthopedic surgical services as a proxy for overall surgical demand. Source: Trilliant Health's proprietary demand forecast model.

National Migration Patterns Foreshadow Changes in Demand

Of CBSAs with more than one million people, the five cities with the slowest healthcare growth are in the North, while Sunbelt CBSAs encompass the top five fastest growing markets for healthcare demand.





Source: Trilliant Health's proprietary demand forecast model.

Seats of Government are Seeing Declines in Healthcare Demand

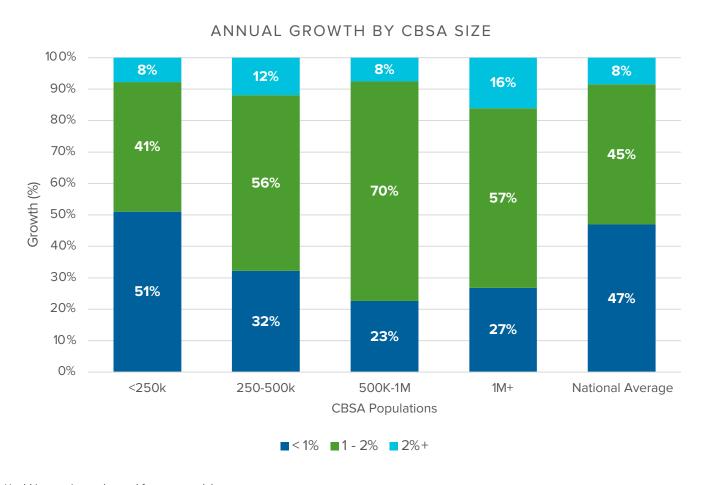
While state capitals typically have greater growth (1.5% per year) than the United States overall (1.3% per year), some are in decline.



Source: Trilliant Health's proprietary demand forecast model.

Healthcare Demand is Projected to Rise Faster in Larger CBSAs

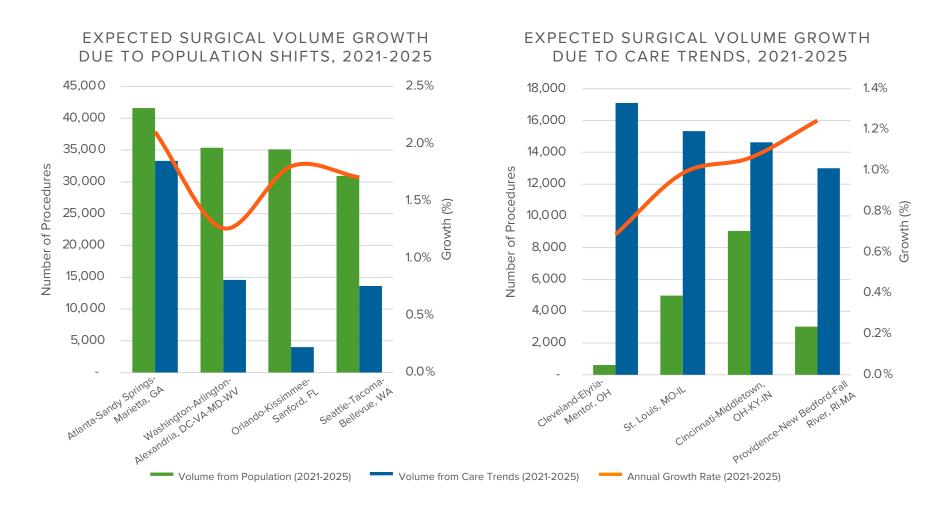
Smaller markets are growing at a lower rate than larger urban centers.



Source: Trilliant Health's proprietary demand forecast model.

The Drivers of Surgical Growth Vary by Market

Population growth and shifting demographics have a greater impact on expected health care demand than care trends in most markets.



Source: Trilliant Health's proprietary demand forecast model.

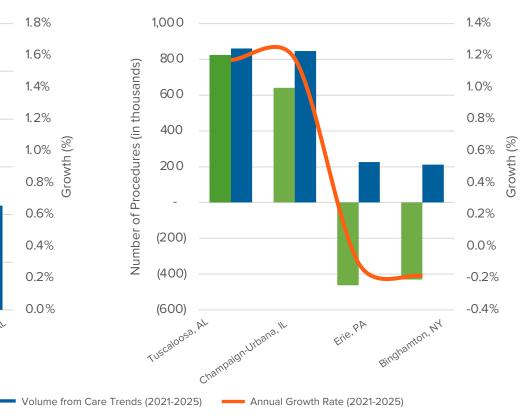
Some CBSAs Have Flat and Declining Surgical Growth Due to Population Shifts and Care Trends

Healthcare demand grows, until it doesn't. Small and mid size CBSAs have a higher propensity for flat and declining demand, creating a "negative sum game" scenario.





EXPECTED SURGICAL VOLUME GROWTH DUE TO CARE TRENDS, 2021-2025



Source: Trilliant Health's proprietary demand forecast model.

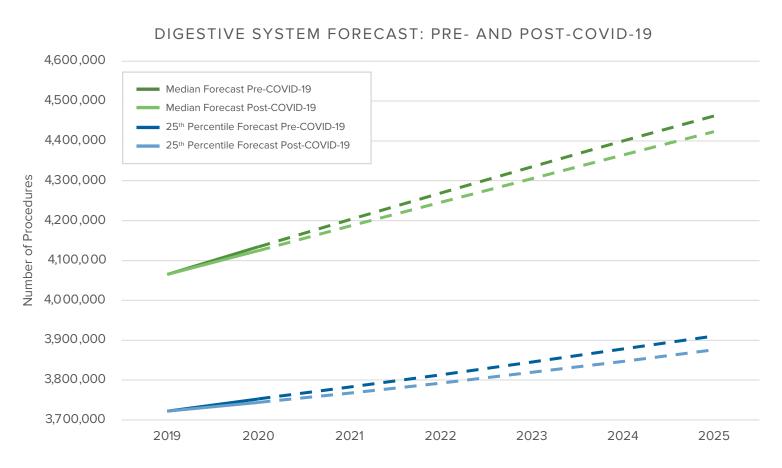


 $_{\odot}$ 2021 Trilliant health 71

DEMAND FORECAST: DIGESTIVE

Total Demand for Digestive Services Projected to Grow by 1.2% Annually

The difference in median projected digestive surgery volumes from 2019 to 2025 is 154K procedures from pre- to post-COVID-19.



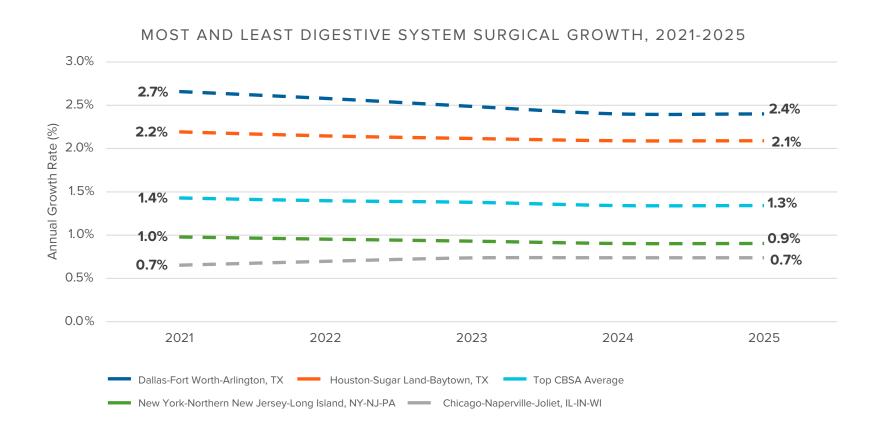
Source: Trilliant Health's proprietary demand forecast model.

 $_{\odot}$ 2021 TRILLIANT HEALTH 72

DEMAND FORECAST: DIGESTIVE

Digestive Surgery Growth from 2021-2025 Varies by CBSA

Among the largest 10 CBSAs, Dallas is expected to see the greatest growth (2.2% CAGR) in digestive system surgeries and Chicago to see the least (0.8% CAGR) compared to the average growth rate of 1.2%.

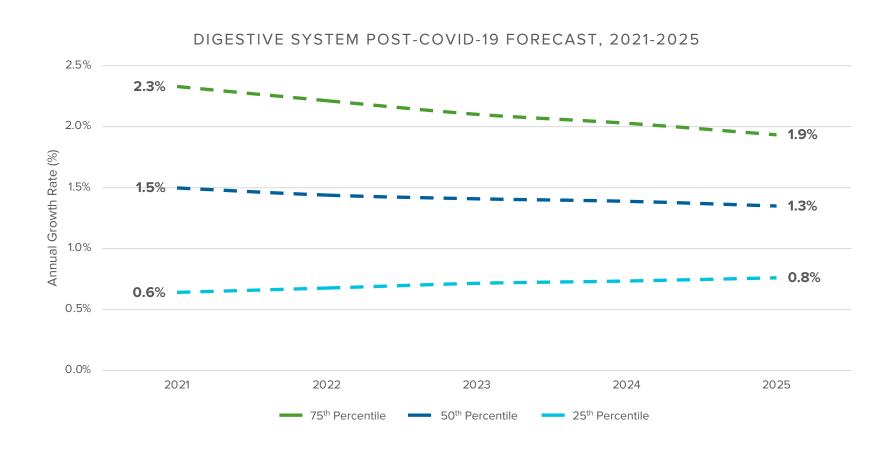


Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

DEMAND FORECAST: DIGESTIVE

Annual Digestive Surgical Volume Will Grow at 1.2% CAGR

Uncertainty around care rebounds along with changing care patterns for routine colon health causes wide variation in expected growth. Long term forecasts suggest growth to remain under 2% per year.



Source: Trilliant Health's proprietary demand forecast model.

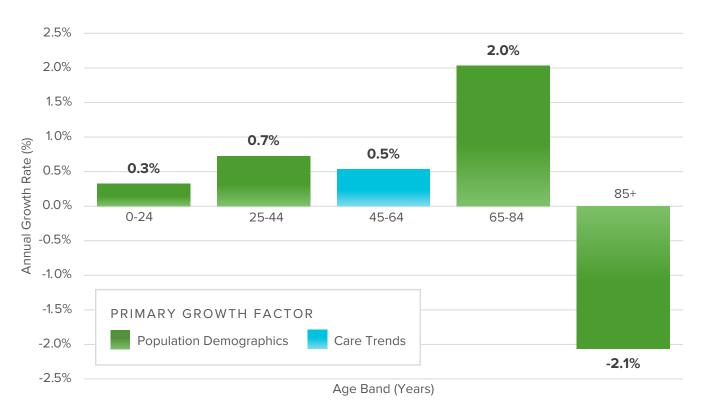
 $_{\odot}$ 2021 TRILLIANT HEALTH 74

DEMAND FORECAST: DIGESTIVE

Growth in Demand for Digestive Surgeries Will Be Driven by Individuals Ages 25-44 and 65-84

Growth in these age cohorts will be primarily attributed to shifts in population demographics.

COMPOUND ANNUAL GROWTH RATE (CAGR) FOR DIGESTIVE SURGICAL DEMAND BY AGE BAND, 2021-2025

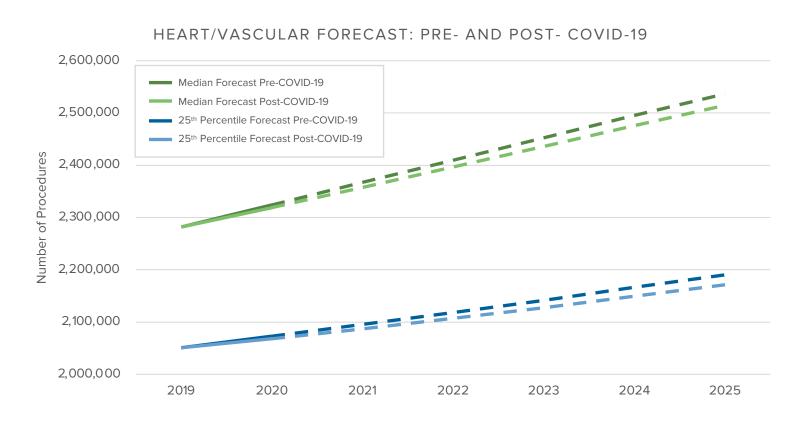


Source: Trilliant Health's proprietary demand forecast model.



Total Demand for Heart/Vascular Services Projected to Grow by 1.4% Annually

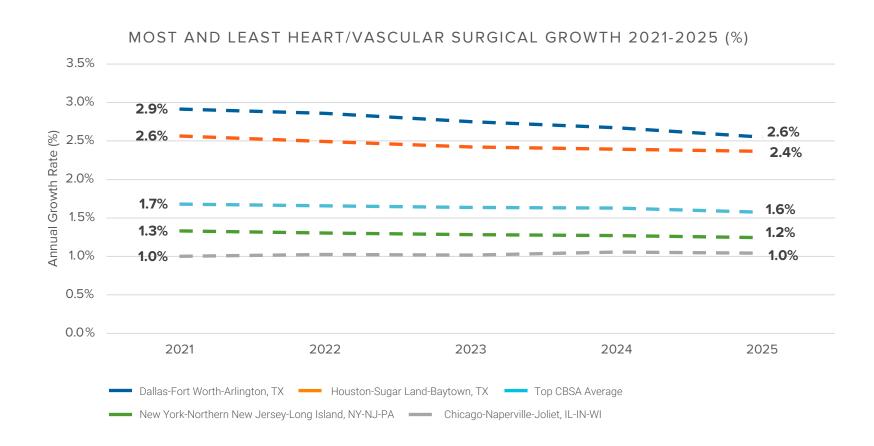
The difference in median projected heart/vascular surgical volumes from 2019 to 2025 is 86K procedures from pre- to post-COVID-19.



Source: Trilliant Health's proprietary demand forecast model.

Heart/Vascular Growth from 2021-2025 Varies by CBSA

Among the largest 10 CBSAs, Dallas is expected to see the greatest growth (2.3% CAGR) in heart/vascular surgeries and Chicago to see the least (0.9% CAGR) compared to the national average growth rate of 1.4%.

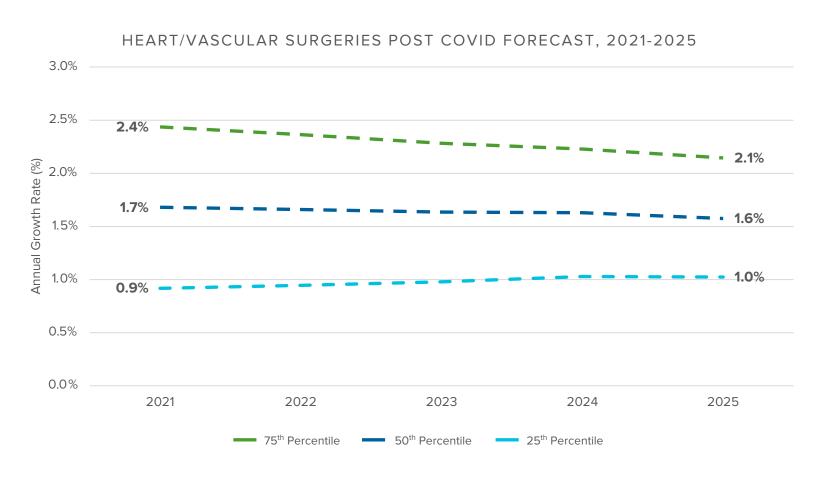


Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

 $_{\odot}$ 2021 Trilliant health 78

Annual Heart/Vascular Surgical Volume Will Grow at 1.4% CAGR

Aging demographics and delayed care create variation in expected growth in the short term. Long term forecasts suggest growth to remain between 1-2% per year.

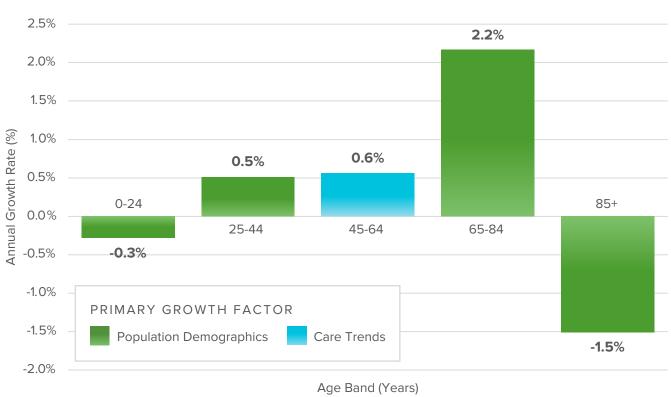


Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

Growth in Demand for Heart/Vascular Surgeries Will be Driven Primarily by Individuals Ages 65-84

Growth in this age cohort will be primarily attributed to shifts in population demographics with more Americans aging.



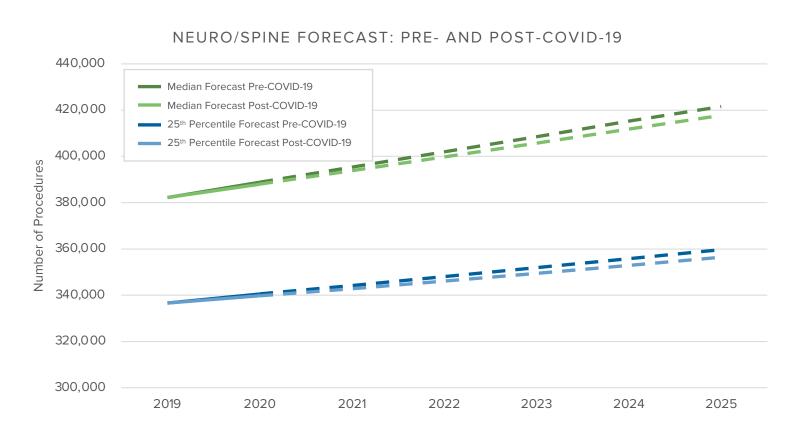


Source: Trilliant Health's proprietary demand forecast model.

DEMAND *Neuro/Spine Forecast*

Total Demand for Neuro/Spine Services Projected to Grow by 1.2% Annually

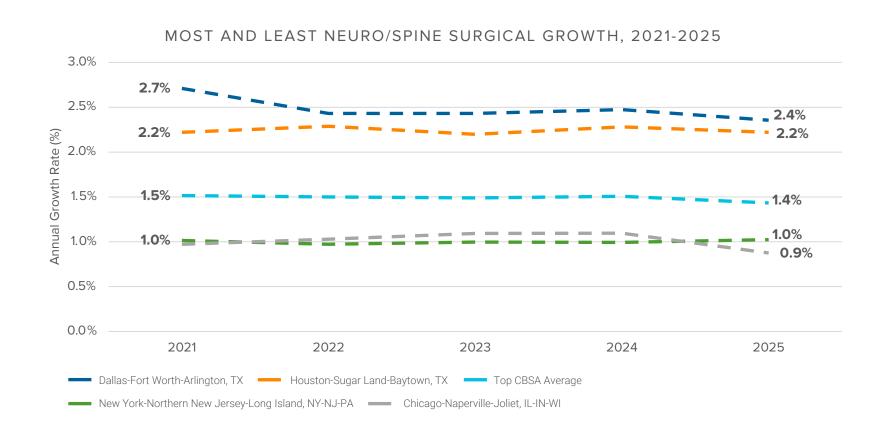
The difference in median projected Neuro/Spine surgical volumes from 2019 to 2025 is 14,000 procedures from pre- to post-COVID-19.



Source: Trilliant Health's proprietary demand forecast model.

Neuro/Spine Growth from 2021-2025 Varies by CBSA

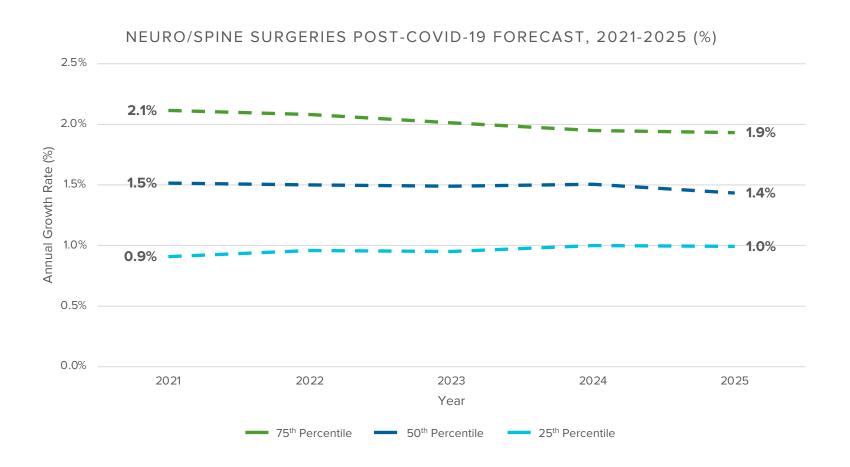
Among the largest 10 CBSAs, Dallas is expected to see the greatest growth (2.1% CAGR) in Neuro/Spine surgeries, with Chicago and New York City to see the least (0.8% CAGR), compared to the national average growth rate of 1.2%



Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

Annual Neuro/Spine Surgical Volume Will Grow at 1.2% CAGR

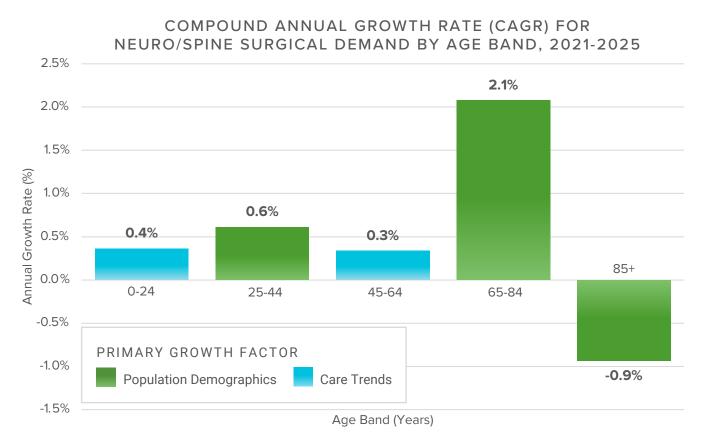
Aging demographics are expected to sustain consistent 1-2% annual growth for Neuro/Spine procedures.



Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

Growth in Demand for Neuro/Spine Surgeries Will Largely be Driven by Individuals Ages 65-84

Older Americans will continue to be the major driver in Neuro/Spine with 46% of all surgeries being performed on adults ages 65-84 in 2025.

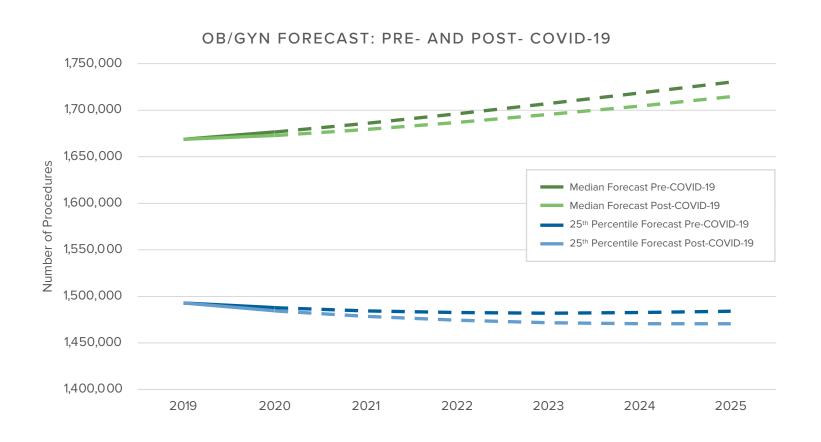


Source: Trilliant Health's proprietary demand forecast model.



Total Demand for OB/GYN Services Projected to Grow by 0.4% Annually

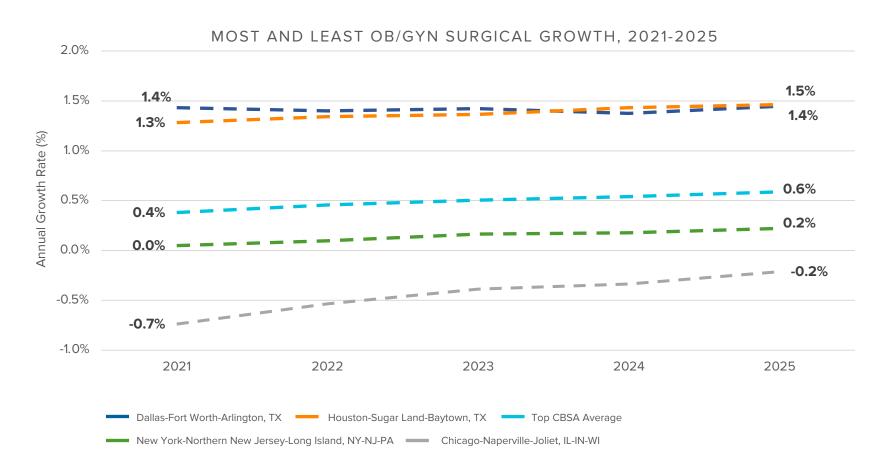
The difference in median projected OB/GYN procedural volumes from 2019 to 2025 is 62K from pre- to post-COVID-19.



Source: Trilliant Health's proprietary demand forecast model.

OB/GYN Procedure Demand from 2021-2025 Varies by CBSA

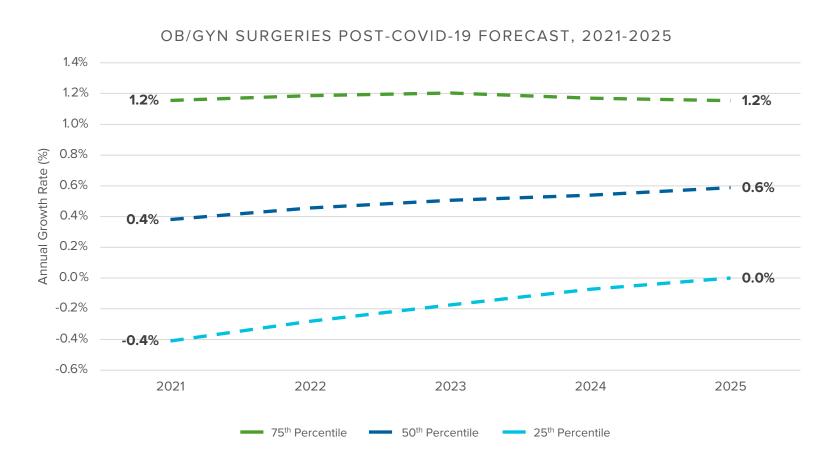
Among the largest 10 CBSAs, Dallas is expected to see the greatest growth (1.2% CAGR) in OB/GYN procedures and Chicago is expected to see the least (-0.4% CAGR), compared to the national average growth rate of 0.4%.



Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

Annual OB/GYN Surgical Volume Will Grow at 0.4% CAGR

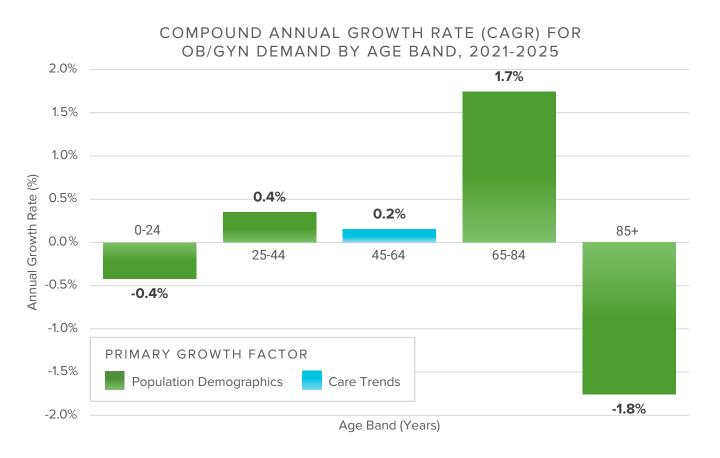
Large disparity in geographic trends creates significant variability in future OB/GYN demand. Projected growth ranges from -0.4% to 1.2% by 2025.



Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

Growth in Demand for OB/GYN Procedures Will be Primarily Driven by Younger Population in Sunbelt CBSAs

Births in women ages 25-44 are forecast to increase due to population growth in Sunbelt CBSAs. Growth in gynecological oncology procedures for women ages 65-84 is attributed to increased population demographics.

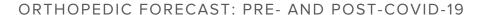


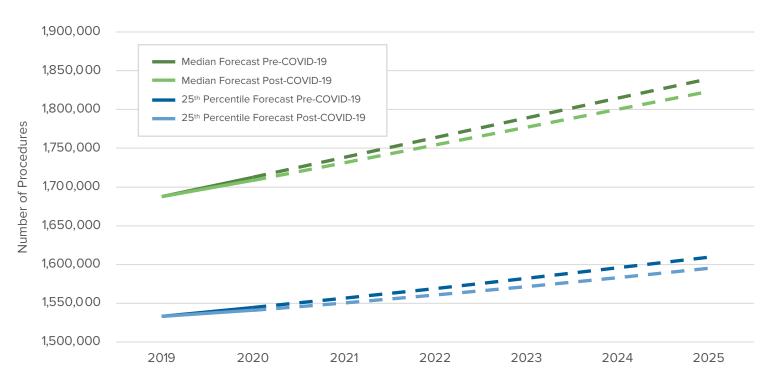
Source: Trilliant Health's proprietary demand forecast model.



Total Demand for Orthopedic Services Projected to Grow by 1.1% Annually

The difference in median projected Orthopedic surgical volumes from 2019 to 2025 is 63K from pre to post-COVID-19.

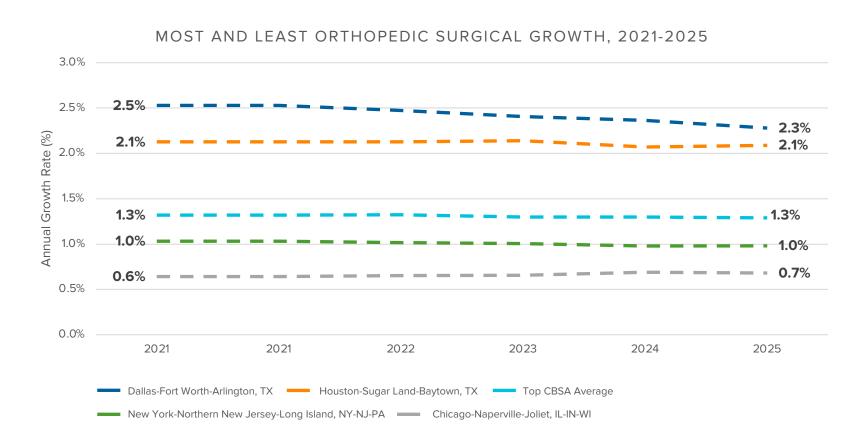




Source: Trilliant Health's proprietary demand forecast model.

Orthopedic Procedure Growth from 2021-2025 Varies by CBSA

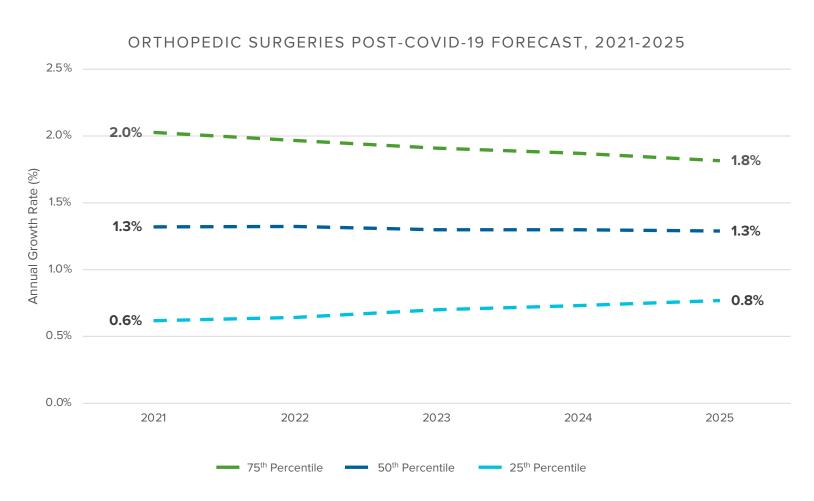
Among the largest 10 CBSAs, Dallas is expected to see the greatest annual growth (2.0% CAGR) in Orthopedic surgeries and New York City is expected to see the least (0.6% CAGR), compared to the national average growth rate of 1.1%.



Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

Annual Orthopedic Surgical Volume Will Grow at 1.1% CAGR

With a consistently aging population, growth in Orthopedic surgery is expected to be well above 1% through 2025.

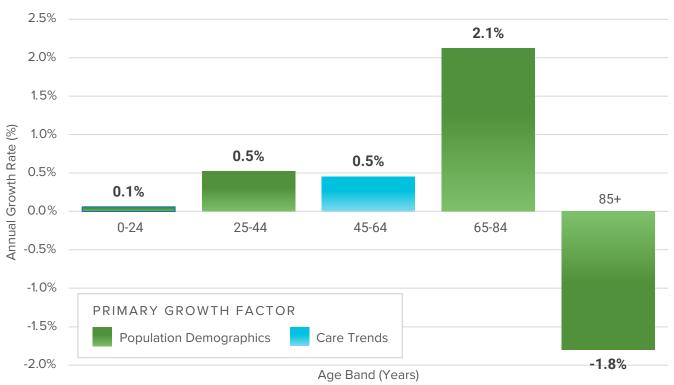


Note: CAGR denotes Compound Annual Growth Rate. Source: Trilliant Health's proprietary demand forecast model.

Growth in Demand for Orthopedic Surgeries Will Occur in All Age Cohorts Except 85+

Growth in ages 65-84 will make up 41% of all Orthopedic surgeries in 2025. Increasing care trends in surgeries for ages 45-64 are expected to result in that age cohort making up 29% of all Orthopedic surgeries by 2025.





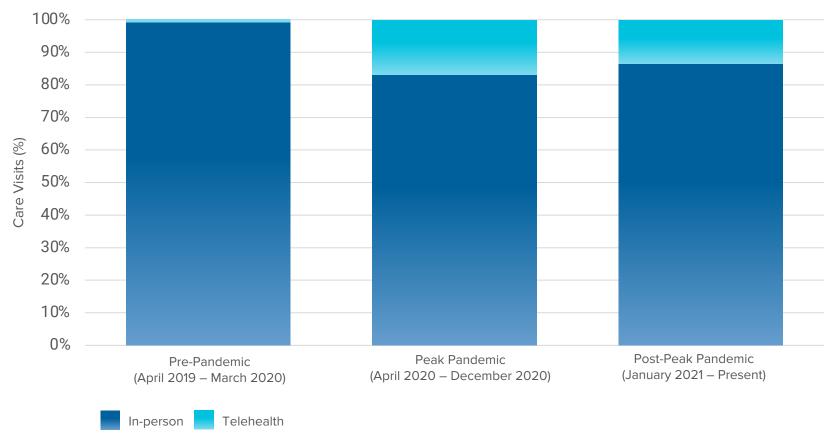
Source: Trilliant Health's proprietary demand forecast model.



Individuals Prefer Omni-Channel Care Options

83.2% of individuals that received care for a service with an equivalent virtual option during the peak of pandemic opted for an in-person visit and is similar across payer mix.

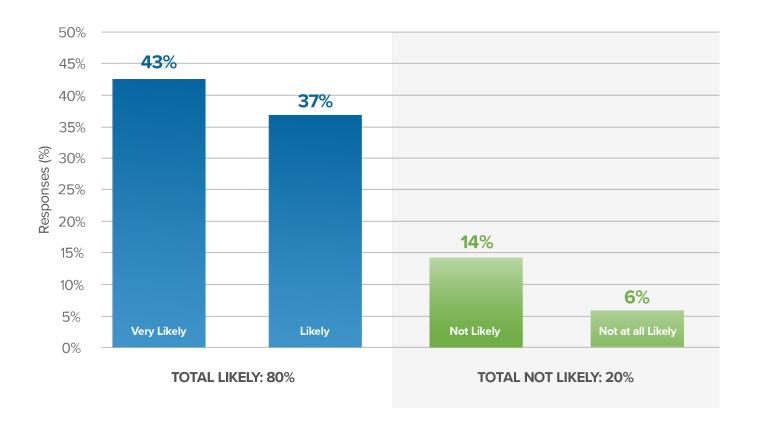




Source: Trilliant Health national all-payer claims database.

Strong Willingness to Engage in Home Care

On average, 80% of consumers report a likelihood to use home care models if covered by insurance.



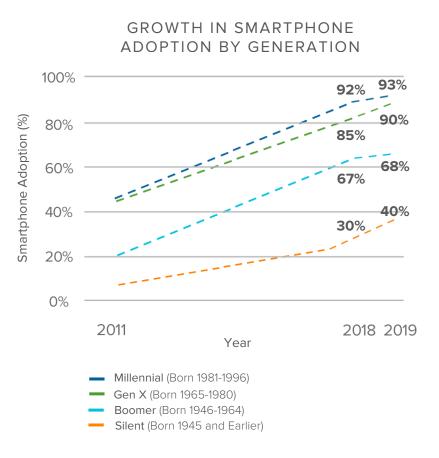
Note: The data represents survey responses to the following question: "There is a relatively new form of medical care called "home recovery care" or "hospital at home," where doctors and other medical providers provide hospital-level care in your home for a lot of medical conditions, like Congestive Heart Failure, COPD, pneumonia, and more. This means that you do not have to be admitted to the hospital to be treated for certain conditions but can recover in the comfort of home with nurses and doctors either visiting you in person or through telehealth.

Now, thinking about yourself... If this kind of care was covered by your insurance, how likely would you be to use it?

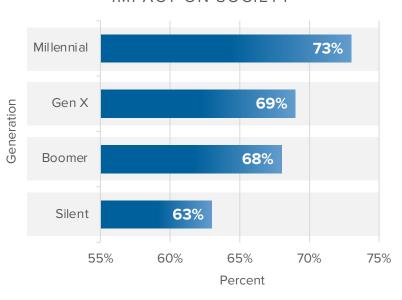
Source: Public Opinion Strategies/Jarrard Phillips Cate & Hancock National Survey of 1,000 Adults, Conducted April 16-20, 2020.

Older Americans are Less Inclined to Use Digital Modalities

Reflective of their preferences for telehealth, older adults are in the cohort of those less likely to leverage digital platforms.



PERCENT OF USERS WHO REPORT THE INTERNET HAS HAD A POSITIVE IMPACT ON SOCIETY

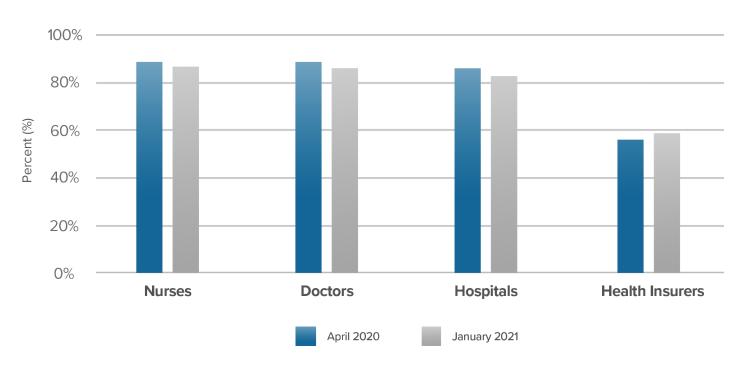


Source: Pew Research Center, 2019.

Americans View Providers as the Most Trusted Source of Health Information

Doctors, hospitals and nurses continue to be highly trusted but did see a slight dip in the wake of COVID-19.

PERCENT OF AMERICANS THAT REPORTED FAVORABLE LEVELS OF TRUST IN ENTITIES PROVIDING HEALTH INFORMATION



Note: The data represents survey responses to the following question: "When it comes to providing information about critical health issues, how much do you trust each of the following people, organizations, and companies – a great deal, a fair amount, not very much, or not at all?" The percentages reported reflect the proportion of respondents that indicated either "Trust a Great Deal" or "Trust a Fair Amount."

Source: Jarrard, Phillips, Cate & Hancock/Public Opinion Strategies National Surveys of 1,000 Adults Conducted April 16-20, 2020 and 1,002 Adults Conducted January 12-16, 2021.

DEMAND: KEY INSIGHTS

Demand is Flat to Declining

- Burden of disease is not correlated with Demand for services or need for providers
 - Disease-based demand projections incorrectly assume demand for comorbid individuals is 1:1.
 - Demand is a derivative of the Medicare age cohort and population migration.
 - Growth in inpatient and outpatient demand has been flat to declining years prior to COVID-19.
- 2 COVID-19 did not significantly change demand
 - Projected rate of demand growth varies by 0.1% between pre- and post-pandemic estimates.
 - Densely populated markets will be most adversely affected for future demand post-COVID-19.
 - COVID-19's acceleration of telehealth adoption is beginning to taper and suggests long-term use is limited to a discrete user profile.
- Consumer loyalty is lowest where demand is increasing
 - Women are more likely to split where they receive care across more providers.
 - Consumers, particularly those with more care needs, prefer more traditional models of care and are less comfortable with digital modalities.
 - Consumer decisions are driven by psychology more than neighborhood.

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SUPPLY

Supply refers to the various providers of health services ranging from hospitals and physician practices to retail pharmacies, new entrants (e.g., Walmart, Amazon), and virtual care platforms.

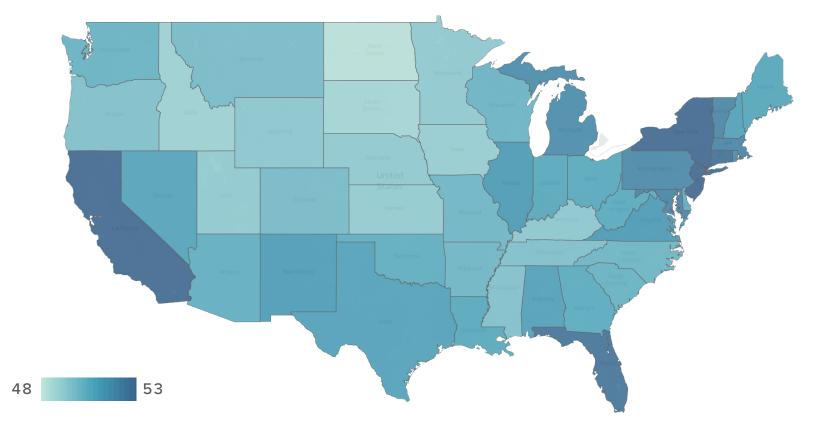
 $_{\odot}$ 2021 trilliant health $_{\odot}$

SUPPLY Physicians

Three of the Four Most Populated States Have the Highest Proportion of Older Physicians

The average age of practicing physicians is 50.8 years old.



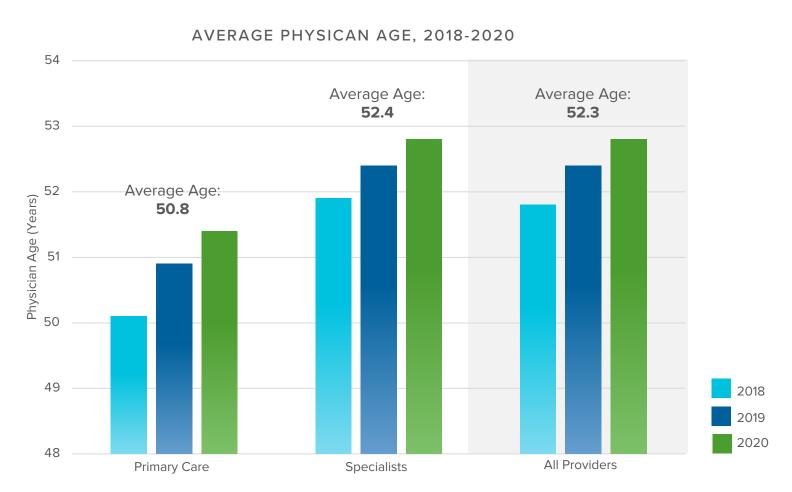


Note: Data shown for 2020. Source: Trilliant Health national all-payer claims database.

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The Average Age of Specialists and Primary Care Physicians is Increasing

The three-year average age of specialists is 52.4 years compared to 50.8 years for primary care physicians.

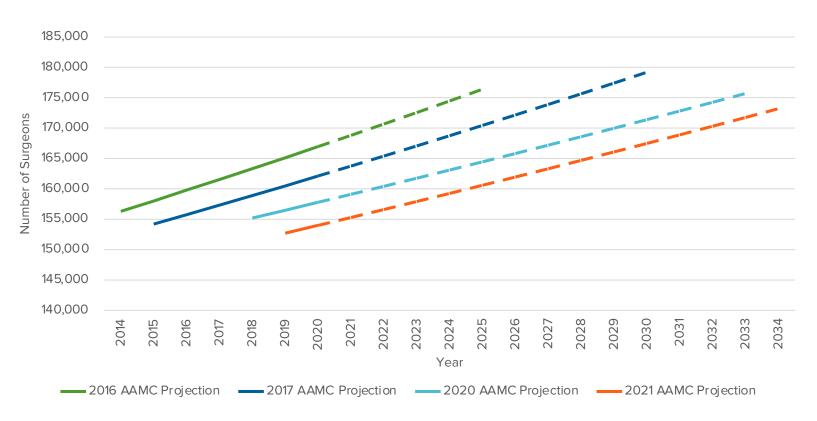


Source: Trilliant Health national all-payer claims database.

AAMC Has Consistently Projected Declining Surgeon Demand

While much has been made of increasing demand and decreasing physician supply, the AAMC has consistently revised their surgeon demand projections downward over time.

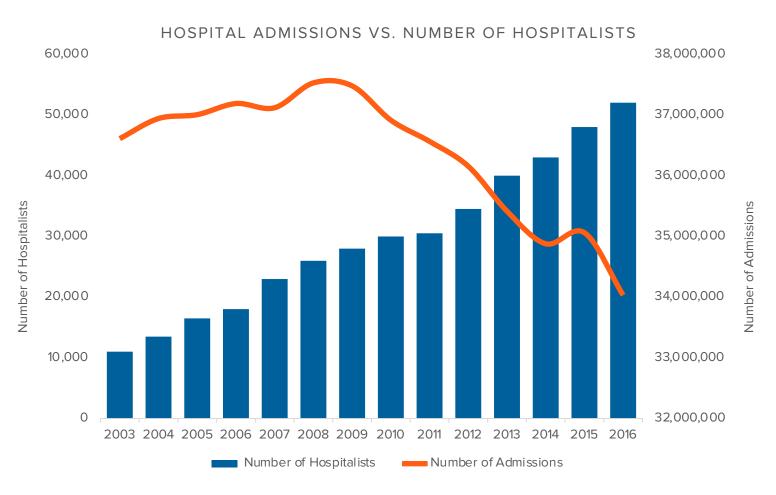
AMERICAN ASSOCIATION OF MEDICAL COLLEGES (AAMC) PROJECTIONS FOR SURGEON DEMAND OVER TIME



Note: Comparable data was unavailable for years 2018 and 2019. Source: American Association of Medical Colleges (AAMC) Physician Supply and Demand Projection Reports; 2016, 2017, 2020, 2021.

Physician Shortage or Physician Preference?

Annual inpatient admissions have declined by 3.5M from 2008-2016 while number of hospitalists have almost doubled.



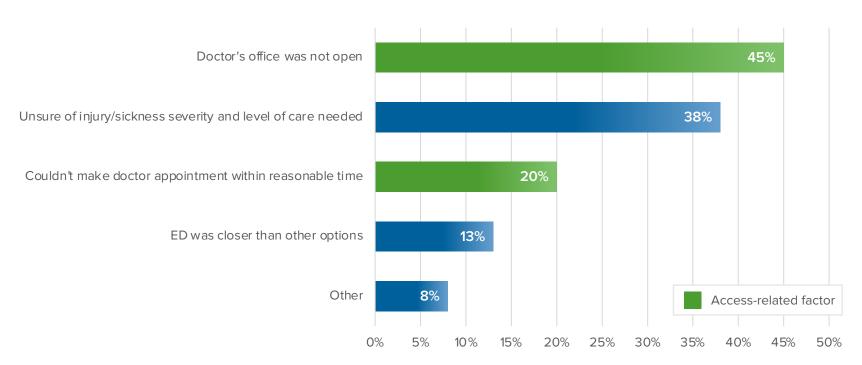
Source: Centers for Disease Control and Prevention (CDC) Health, United States – Previous Reports; The New England Journal of Medicine "Zero to 50,000 — The 20th Anniversary of the Hospitalist", 2016.

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Is Physician Supply Appropriately Matched to Patient Access Preferences?

Among the 25% of patients who reported visiting an ED in the last 12 months and believed they could have gone elsewhere, 65% cited access-related reasons for choosing the emergent setting.

REPORTED REASONS FOR VISITING THE EMERGENCY DEPARTMENT (ED) THAT COULD HAVE BEEN AVOIDED



Source: McKinsey Consumer Health Insights Survey, 2017.

SUPPLY: PHYSICIANS

The Largest Employer of Physicians is a Fortune 5 Company

Optum Health, subsidiary of the largest health insurer, employs more than 5% of all U.S. physicians and plans to employ an additional 10,000+ physicians.

UnitedHealth Group Incorporated (UNH) CEO Andrew Witty on Q1 2021 Results - Earnings Call Transcript Apr. 15, 2021 2:45 PM ET | UnitedHealth Group Incorporated (UNH) Q1: 2021-04-15 Earnings Summary Press Release 10-Q EPS of \$5.31 beats by \$0.93 | Revenue of \$70.20B (8.96% Y/Y) beats by \$1.10B

UnitedHealth Group Incorporated (NYSE:UNH) Q1 2021 Earnings

As you know, we are on track to grow by over 10,000 physicians. We are now at 56,000 doctors, both affiliated, contracted and employed and we will leverage all of those models as we go forward, and we continue to evolve and employ doctors who are really actually quite attracted to our model of value-based care. We eliminate much of the clerical burden in our physicians in advanced practitioners' practice and let them focus on the work they love. So this is really gaining traction among our physician workforce.

Note: Optum is the Health Services platform of UnitedHealth Group. Source: Seeking Alpha transcript of earnings call, 2021.

Conference Call April 15, 2021 8:45 AM ET

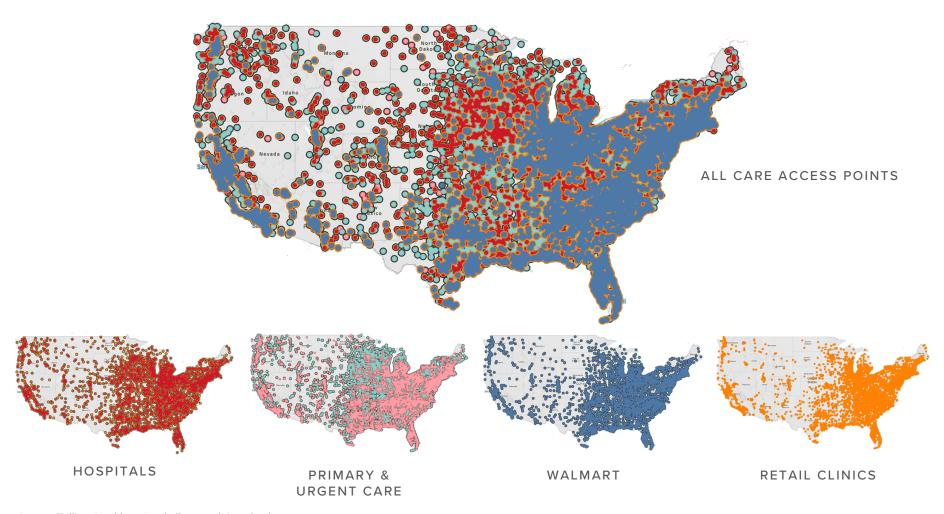
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SUPPLY: PROVIDER LOYALTY

Increased Number of Care Access Points

There are more suppliers of healthcare services today than in the past, with hospital providers in the minority.



Source: Trilliant Health national all-payer claims database.

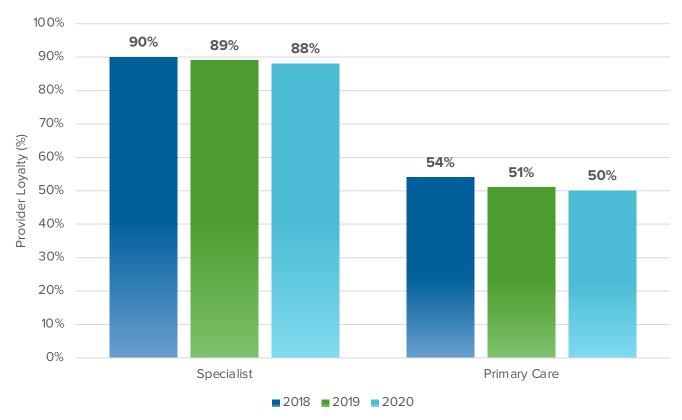
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SUPPLY: PROVIDER LOYALTY

Specialists are More Loyal than Primary Care Physicians

Specialist and primary care loyalty has declined over the last three years in tandem with the growing supply of provider networks.

PROVIDER LOYALTY ACROSS THE TOP 10 CBSAs



Note: Provider loyalty measures reflect the number of provider networks that individual physicians render care to patients across. For example, a private practice surgeon that performs 100 cases at ASC brand A and 100 cases at ASC brand B, would receive a loyalty score of 50%. Source: Trilliant Health national all-payer claims database.

 $_{\odot}$ 2021 TRILLIANT HEALTH 112

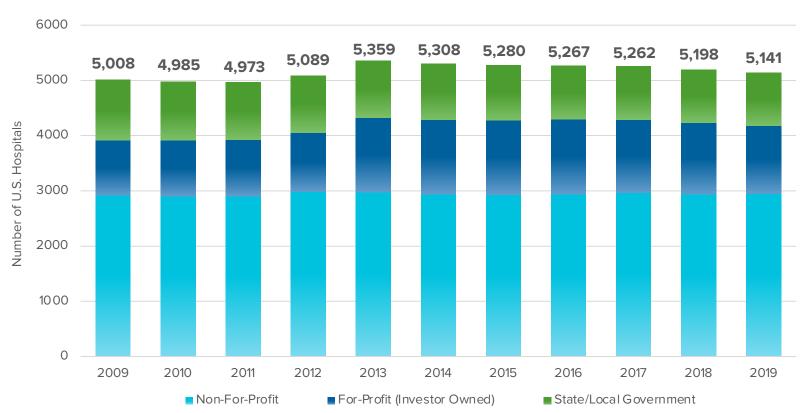
SUPPLY Hospitals and Health Systems

SUPPLY: HOSPITALS & HEALTH SYSTEMS

Total Number of U.S. Hospitals are Declining

218 hospitals have closed or been repurposed since 2013 highs, reflecting the reduction of inpatient demand.

U.S. COMMUNITY HOSPITALS, 2009-2019



Source: American Hospital Association Statistics, 2021.

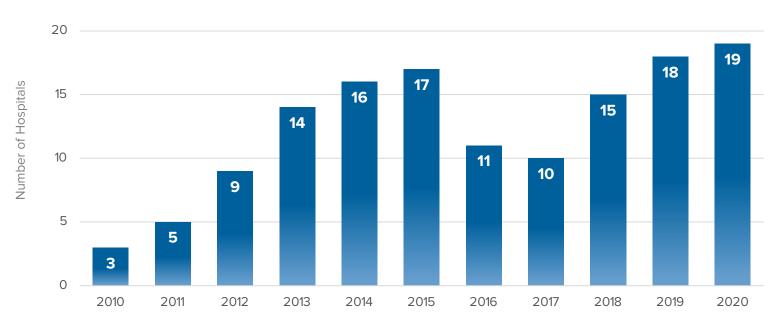
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SUPPLY: HOSPITALS & HEALTH SYSTEMS

Rural Hospital Closures Have Been on the Rise Since 2010

137 rural hospitals have closed across the U.S. since 2010 as more encountered excess inpatient capacity due to declining admissions per capita. Markets with closures are largely those in which players like Walmart will thrive.





*More than 500 hospitals (25% of all rural hospitals) were at immediate risk of closure prior to COVID-19.

Source: Cecil G. Sheps Center for Health Services Research at The University of North Carolina at Chapel Hill; Center for Healthcare Quality & Payment Reform; 2021.

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SUPPLY: HOSPITALS & HEALTH SYSTEMS

40 Not-For-Profit Health Systems Would Qualify for *Fortune 500*

As consolidation among hospitals and health systems continues, the larger networks will be those that have the resources to more effectively compete in a "negative sum game".

Health System	Fortune 500 Rank	Health System	Fortune 500 Rank
Kaiser Permanente	34	New York Health & Hospitals Corp.	355
CommonSpirit Health	102	SSM Health	386
Providence St. Joseph Health	113	Univ. of Pennsylvania Health System	399
Ascension	116	Intermountain HealthCare	405
UPMC	132	Spectrum Health	409
Trinity Health	164	HealthPartners	421
Highmark Health	172	Sentara	423
Mayo Clinic	211	Indiana Univ. Health	426
Mass General Brigham*	227	Geisinger	436
Northwell Health	238	Johns Hopkins Health System	437
Univ. of California Health System	239	Sanford Health	448
Sutter Health	240	NYU Langone Hospitals	458
Advocate Aurora Health	243	Mercy Health	470
Advent Health**	251	Henry Ford Health System	471
Bon Secours	295	Montefiore Health System	474
Atrium Health	305	Hackensack Meridian Health	478
Cleveland Clinic	307	Northwestern Medicine	481
Baylor Scott & White Health	312	Beth Israel Lahey Health System	488
Banner Health	323	Fairview Health Services	489
NewYork-Presbyterian	339	BJC Healthcare	491

Note: Cutoff to make the Fortune 500 in 2021 was \$5.37 billion in revenue; adding in non-for-profit health systems changes the cut-off to \$6.07 billion for purposes of this illustrative analysis.

Source: Revenue reported directly from health systems via Modern Healthcare and financial statements; Fortune 500 list for 2021.

 \odot 2021 TRILLIANT HEALTH 116

SUPPLY: HOSPITALS AND HEALTH SYSTEMS

Health System Consolidation Activities Have Resulted in Health Systems Comparable in Size to Leading Brands

Health systems with such scale advantages are better positioned to compete with even larger retailers (e.g., Walmart).

REVENUES OF LARGE HEALTH SYSTEMS COMPARED TO LEADING INDUSTRY BRANDS, 2020



Source: Trilliant Health analysis of publicly available and Modern Healthcare financial statements; 2020.

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SUPPLY Ambulatory Surger

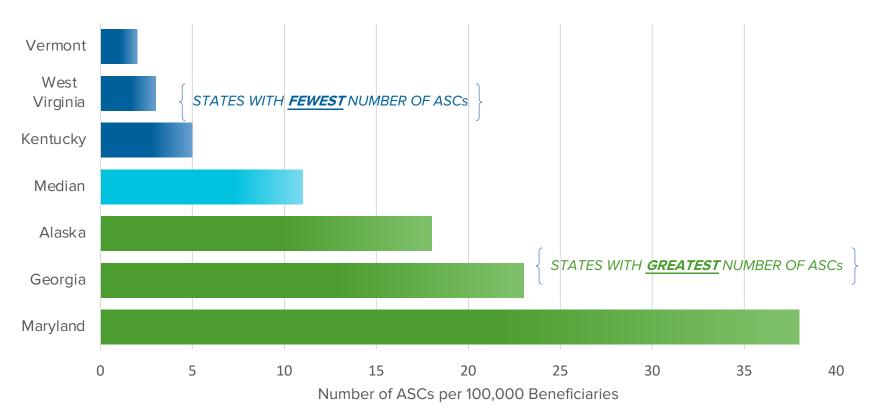
Ambulatory Surgery Centers (ASCs)

SUPPLY: ASCs

Geographic Distribution of ASCs is Uneven

The concentration of ASCs varies widely among states. Maryland had the most ASCs per Medicare beneficiary (38 ASCs per 100,000 beneficiaries) followed by Georgia (23 ASCs per 100,000 beneficiaries).





Note: Median values represent ASC counts for all 50 states and Washington, D.C. Source: Medicare Payment Advisory Commission (MedPAC) March 2021 Report to the Congress: Chapter 5.

SUPPLY: ASCs

The Growth in ASCs is in Services that are More Susceptible to Consumer Choice

The most common procedures (i.e., cataract surgeries) are "commodity-like" services for which Medicare is the price setter.

SPECIALIZATION OF ASCs BILLING MEDICARE, 2014-2019

	20	014	2019		
Type of ASC	Number of ASCs	Share of all ASCs (%)	Number of ASCs	Share of all ASCs (%)	
Single Specialty	2,978	62%	3,356	65%	
Gastroenterology	1,059	22	1,082	21	
Ophthalmology	1,049	22	1,057	21	
Pain Management	364	8	619	12	
Dermatology	201	4	209	4	
Urology	129	3	134	3	
Cardiology	12	0	88	2	
Podiatry	98	2	83	2	
Orthopedics/Musculoskeletal	30	1	32	1	
Respiratory	19	0	26	1	
OB/GYN	10	0	13	0	
Neurology	5	0	6	0	
Other	2	0	7	0	
Multispecialty	1,862	38%	1,787	35%	
More than 2 Specialties	1,460	29	1,283	25	
Pain Management and Orthopedics	163	3	195	4	
Gastroenterology and Ophthalmology	167	3	194	4	
Other with 2 Specialties	72	1	115	2	
Total	4,840	100%	5,143	100%	

Source: Medicare Payment Advisory Commission (MedPAC) March 2021 Report to the Congress: Chapter 5.

SUPPLY: ASCs

Like Other Ambulatory Providers, ASCs are Delivering Commodity Services

In time, the inpatient-only list rule will further accelerate this trend.

	2014		2019	
Surgical Service	% of Volume	Rank	% of Volume	Rank
Cataract surgery w/IOL insert, 1 stage	18.9	1	18.5	1
Upper GI endoscopy, biopsy	8.5	2	7.8	2
Colonoscopy and biopsy	6.7	3	6.8	3
Lesion removal colonoscopy (snare technique)	5.4	4	6.5	4
After cataract laser surgery	4.5	5	4.1	6
Inject foramen epidural: lumbar, sacral	4.5	6	4.6	5
Injection spine: lumbar, sacral (caudal)	3.4	7	2.5	8
Inject paravertebral: lumbar, sacral	2.8	8	3.4	7
Diagnostic colonoscopy	2.6	9	1.6	11
Colorectal screen, high-risk individual	2.1	10	2.1	9

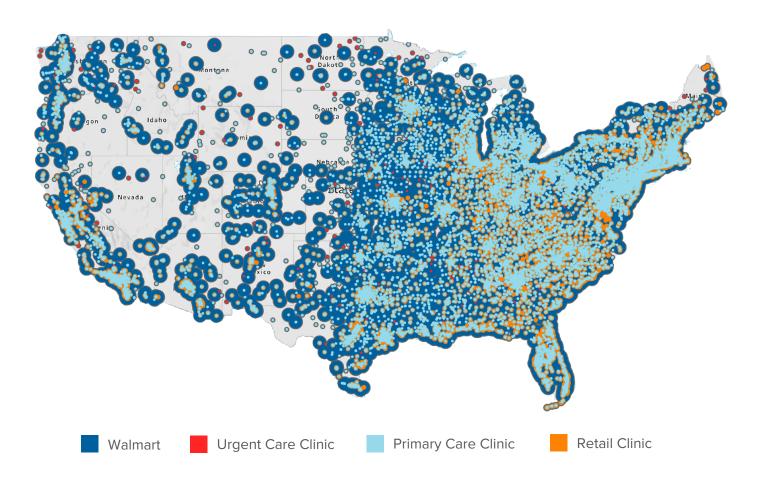
Note: Columns do not sum to 100% as list of services were capped to the top ten.
Source: Medicare Payment Advisory Commission (MedPAC) March 2021 Report to the Congress: Chapter 5; Trilliant Health all-claims database.

 $_{\odot}$ 2021 Trilliant health 121

SUPPLY Retail

87% of Walmart Retail Locations Offer Health Services

Walmart continues to expand its footprint into healthcare, increasing access to care but cutting into legacy providers' revenues.



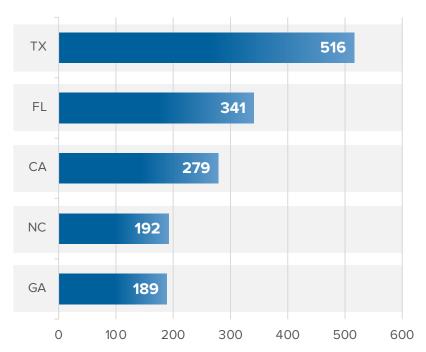
Source: Trilliant Health national all-payer database and analysis of publicly available zip code data.

Three of the Top Five States by Walmart Location Count are Gaining Congressional Seats

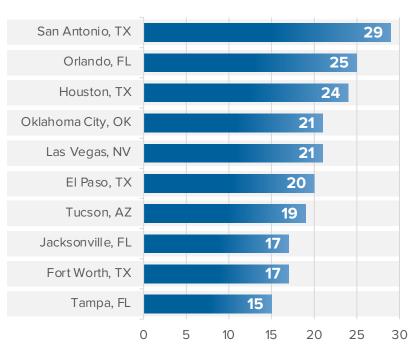
As Texas, Florida and North Carolina gain more residents in the post-pandemic economy, the competition among existing providers with Walmart for more share of care will intensify particularly for Medicaid and Medicare beneficiaries.

Top Regions of Walmart Locations

Top 5 States



Top 10 Cities

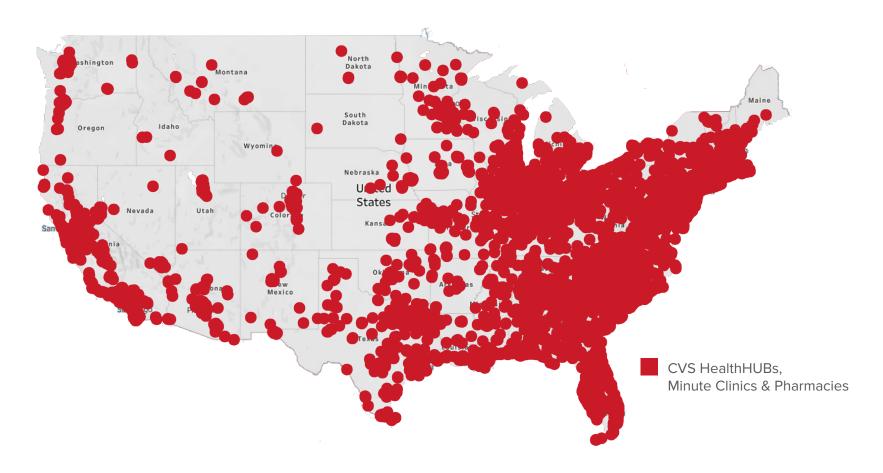


Note: Texas, Florida and North Carolina all represent states expected to gain Congressional seats due to population migration. Source: Trilliant Health national all-payer database and analysis of publicly available zip code data.

 $_{\odot}$ 2021 TRILLIANT HEALTH 124

11.1% of **♥ CVS**Heαlth. Locations Offer Minute Clinics

CVS has opened 136 HealthHUBs and has announced plans to open 1,500+.



Note: Minute Clinics, which are focused on low acuity services (e.g., colds, immunizations). Health HUBs are focus on more complex care services, notably those focused on chronic disease management.

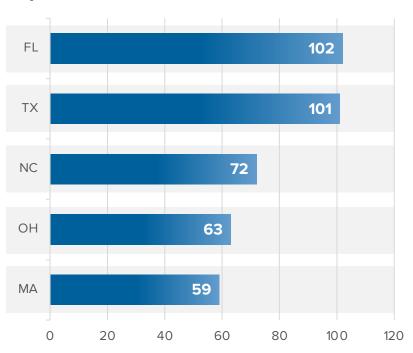
Source: Trilliant Health national all-payer database and analysis of publicly available zip code data.

CVS Minute Clinics Increasing in Sunbelt States

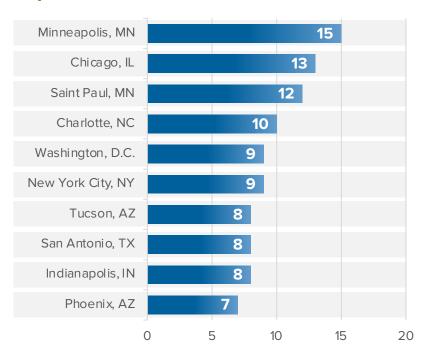
CVS' historic footprint is primarily in denser markets with greater than average proportions of commercially insured individuals, but new growth appears more focused on high-growth markets.

Top Regions of **♥CVS** minute clinic Locations

Top 5 States



Top 10 Cities



Note: Minute Clinics, which are focused on low acuity services (e.g., colds, immunizations). Texas, Florida and North Carolina all represent states expected to gain Congressional seats due to population migration.

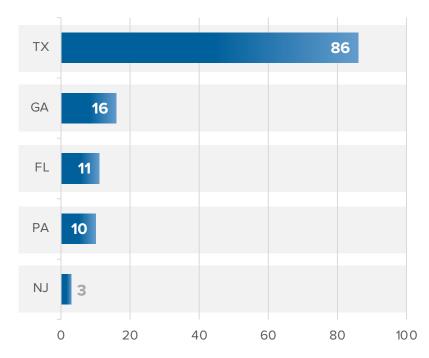
Source: Trilliant Health national all-payer database and analysis of publicly available zip code data.

CVS HealthHUBs Will Be Competing Directly with Walmart to Earn Consumer Loyalty Especially in Texas, Georgia and Florida

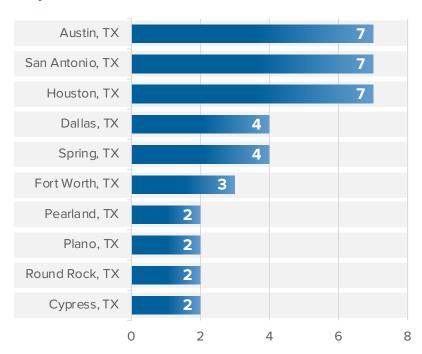
CVS HealthHUBs are planned for rapidly growing markets.



Top 5 States



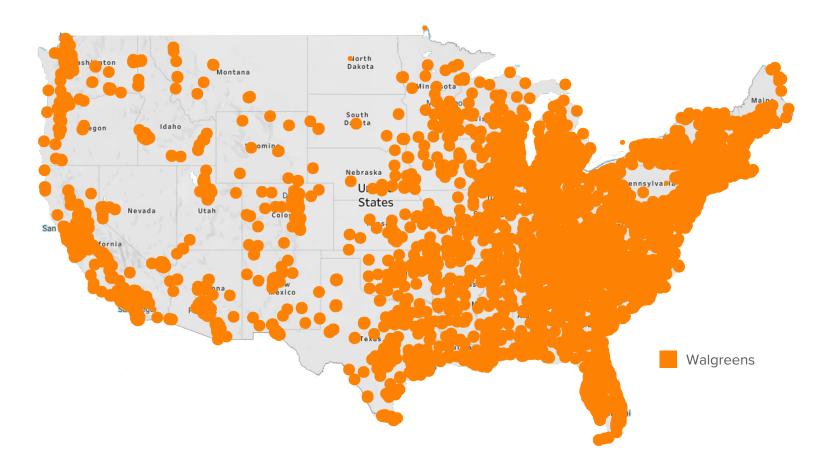
Top 10 Cities



Note: Texas and Florida represent states expected to gain Congressional seats due to population migration. Source: Trilliant Health national all-payer database and analysis of publicly available zip code data.

Walgreens Physical Footprint Does Not Yet Equate to its Scale Potential in Retail Health

Walgreens currently operates 8,986 locations across the country.



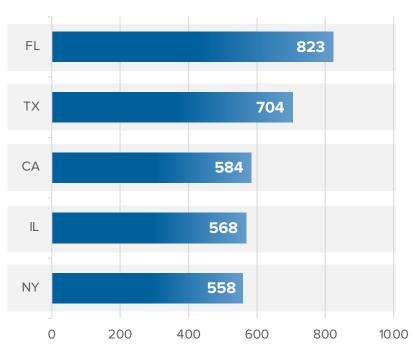
Source: Trilliant Health national all-payer database and analysis of publicly available zip code data.

Five of Walgreens' Largest Markets are Not Growth Markets

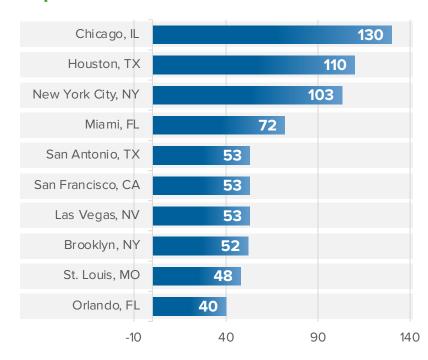
However, Walgreens' status as the largest health and wellbeing-centered customer loyalty program positions it well to compete for a growing share of consumer loyalty.

Top Regions of Walgreens Locations





Top 10 Cities



Note: Texas and Florida represent states expected to gain Congressional seats due to population migration. Source: Trilliant Health national all-payer database and analysis of publicly available zip code data.

The Largest Retail Providers Have Established Loyalty with Healthcare Consumers

Walmart's plans to launch a membership will enhance its ability to compete directly with Amazon.

Loyalty Programs

(NUMBER OF MEMBERS)



74 million Americans



100 million Americans

Membership Programs

(ANNUAL FEES)





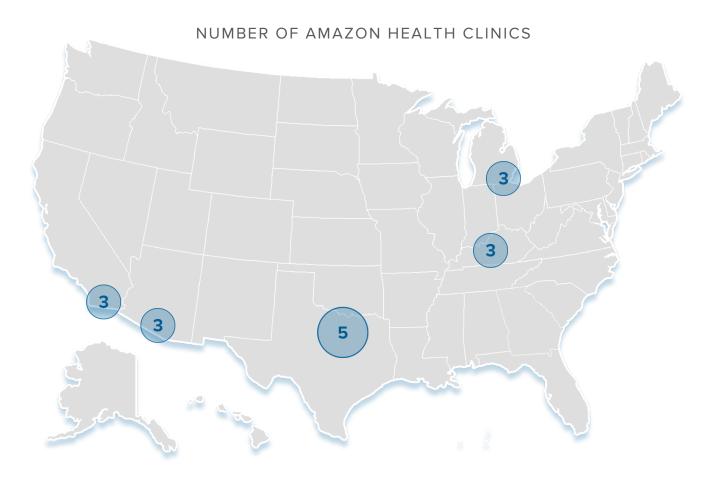
Source: CVS, Walgreens, Amazon and Walmart websites.

 $_{\odot}$ 2021 trilliant health 130



Amazon's Healthcare Footprint Continues to Expand

Amazon has launched 17 health centers with services including full-spectrum acute, chronic, and preventive primary care, same-day pediatrics, prescriptions, vaccinations, behavioral health services, physical therapy, health coaching, and care navigation for specialty referrals and diagnostic services.

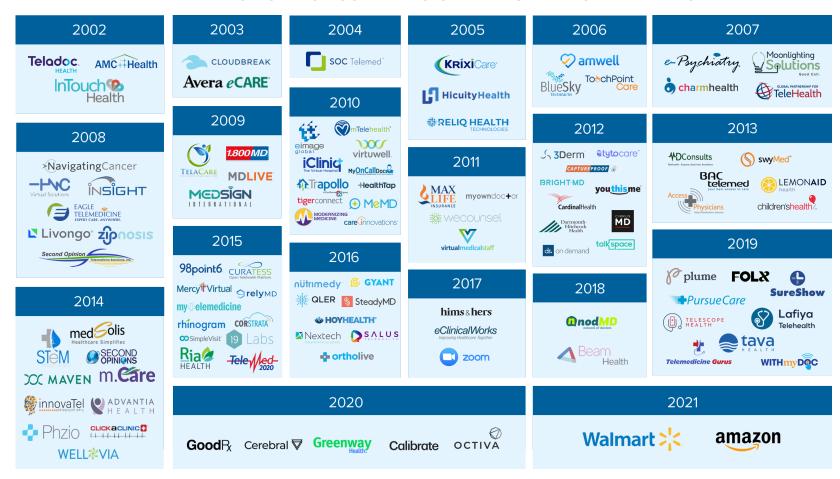


Source: Amazon website.

The Number of Tech-Enabled Care Providers has Grown

Where telehealth volumes spiked in 2021, many operators have been in the ecosystem for years; more are projected to come.

TIMELINE OF SELECT SUPPLIERS OFFERING TELE-CAPABILITIES



Note: Dates notate when company began offering telehealth services. Source: Publicly available company information.

The Number of Retail-Based Care Providers has Grown

Retail clinic operators have steadily increased to capitalize on the transition to outpatient demand.

TIMELINE OF SELECT SUPPLIERS OFFERING RETAIL-BASED CARE

1981	1982	1987	1989	1991	1993	1996
Patient First	URGENT CARE omerican family care Intermountain Healthcare	physicians Immediate care	Righttime MEDICAL CARE	Advent Health Centra Care	Next Care URGENT CARE Core Now. Urgent Care	Sutter Health PREVEA
1997	1999	2000	2001	2003	2004	2005
ProHEALTH URGENT CARE	PremierHealth UNCONT CONT CONTINUOUS SANCAUGHS CONTINUOUS Banner Urgent Care	♥CVS minute clinic	FASTMED URGENT CARE Care Spot	The Little Clinic Convenent Heptomood Middal Cue	AppleCare URGENT CARE	Redictinic Pediatrics
2006	2007	2008	2009	2010	2011	2012
ZOOM ⊕ care ⊕ healthcare clinic **The state of the sta	<pre>+ one medical Concentra</pre>	TOTAL ACCESS URGENT CARE PHYSICIANOME URGENT CARE	COMPLETE URGENT CARE FAST PAGE HEALTH URGENT CARE	URGENT CARE	urgent teams IMBURITE PARTIES CARE WELLIAMS URGENT CARE	OPTUM Care CRH (HEALTHCARE CREWELL
2013	2014	2016	2018		2019	
OCEAN STATE HEALTHCARE	MedPost BURGENT CARE GOHealth URGENT CARE	FORWARD indigo URGENT	TOWER HEALTH Advancing Health. Transforming Lives.		Walmart Care Clinic Caulity health care at an everyday tow pice	

Source: Publicly available company information.

The Number of Home-Based Care Providers has Grown

Healthcare provided in the home began over a century ago out of necessity. Consumer survey data indicates that it is preferable to in-office care due to convenience and cost.

TIMELINE OF SELECT SUPPLIERS OFFERING HOME-BASED CARE

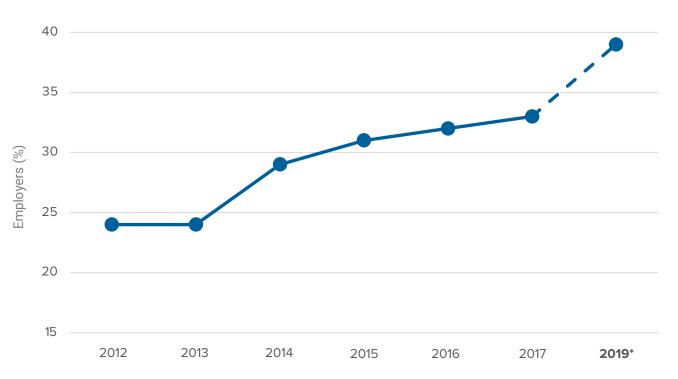


Source: Publicly available company information.

Large Employers are Expanding Medical Service Offerings

Self-insured employers are reacting to incessant premium increases. An additional 6% of large employers reported considering medical offerings by 2019.



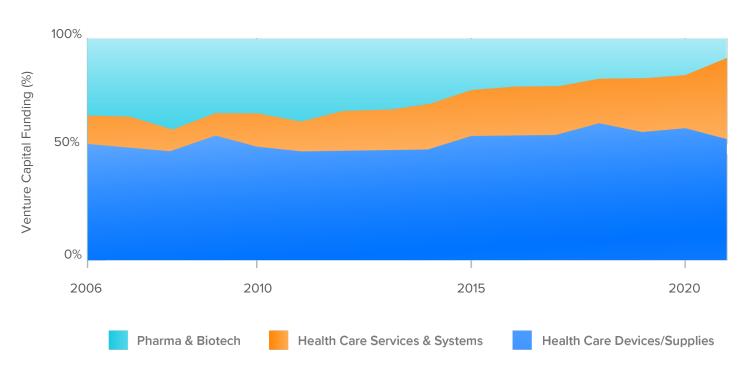


Note: *Survey responses projecting out year values were only provided for the year 2019. Data reflects survey responses among employers with 5000 or more employees. Primary care service offering criteria EXCLUDES occupational healthcare services. For comparative purposes, 38% of large employers offered clinics for occupational health services in 2017. Source: National Survey of Employer-Sponsored Health Plans, Worksite Medical Clinics: Mercer Survey Report: 2018.

Venture Capital Funding for Health Care Services has Outpaced Investments in Medical Devices and Biotech

Over the past ten years, healthcare services are drawing an increasing percentage of total venture capital investment.

VENTURE CAPITAL DOLLAR FLOW TO HEALTH CARE SERVICES

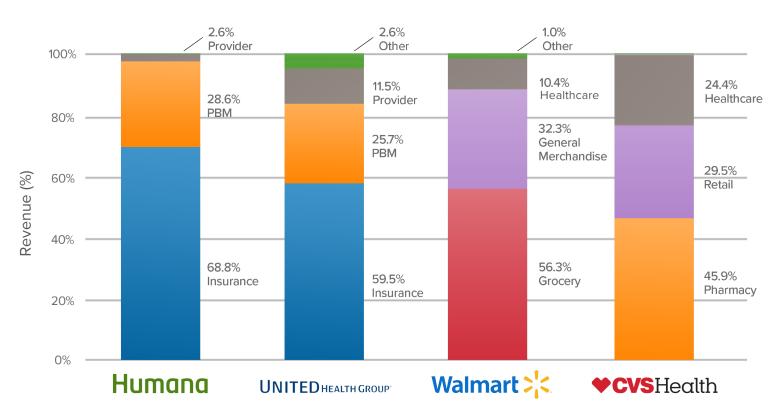


Source: Bloomberg analysis of data from PitchBook-NVCA Venture Monitor, 2021 data through Q1. Original article: Investors Bet Billions That Health Care's Long Overdue Digital Shift Is Finally Here – Bloomberg.

Payers are Becoming Providers...and so are Retailers

New market entrants have extensive experience in consumer marketing and engagement, whether Medicare Advantage or retail.

PERCENT OF REVENUE DEDICATED TO HEALTHCARE SERVICES FOR NON-TRADITIONAL PROVIDER ENTITIES



Source: Analysis of publicly available financial statements, 2020.

Existing Relationships with Consumers Creates Greater Competitive Pressures on Traditional Health System Providers

Where consolidation in health systems is growing, there is still limited penetration among a single, national provider. Businesses like Amazon that already have penetration across the country have a unique opportunity to monetize their existing customer base.



(Largest U.S. Health System)

1%

of Americans



Active Memberships

44%

of Americans

Note: HCA's equivalent admissions were reflected as a percentage of the U.S. population. Source: Consumer Intelligence Research Partners, HCA Form 10-K for year ended December 31, 2020.

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SUPPLY: KEY INSIGHTS

Healthcare Supply is Plentiful and Growing

- The number of healthcare suppliers in any given market is larger than most recognize.
 - Every provider that underestimates supply, by definition, overstates their market share.
 - Projected need for physicians is not the same as the anticipated shortage of physicians, and projections for physician demand have been declining for years.
 - Underestimating supply limits our understanding of true consumer demand.
- Traditional care providers, notably hospitals and health systems, are facing growing competition from consumer businesses.
 - New entrants have pre-existing sticky relationships with consumers.
 - There are numerous niche players focused on numerous niche markets.
 - Scale and price advantage of new entrants and retail players increases the stakes of the existing "negative sum game".
- There is an increasing number of suppliers for commodity services at commodity prices.
 - COVID-19 catalyzed the expansion of more telehealth providers.
 - The increase in capital investments in retail and tele-based companies is catering to very small consumer segments of corresponding demand.
 - Traditional healthcare providers are late market entrants.

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YIELD

Yield refers to the intersection of demand and supply, which is also influenced by market factors such as policy regulations and reimbursement incentives.

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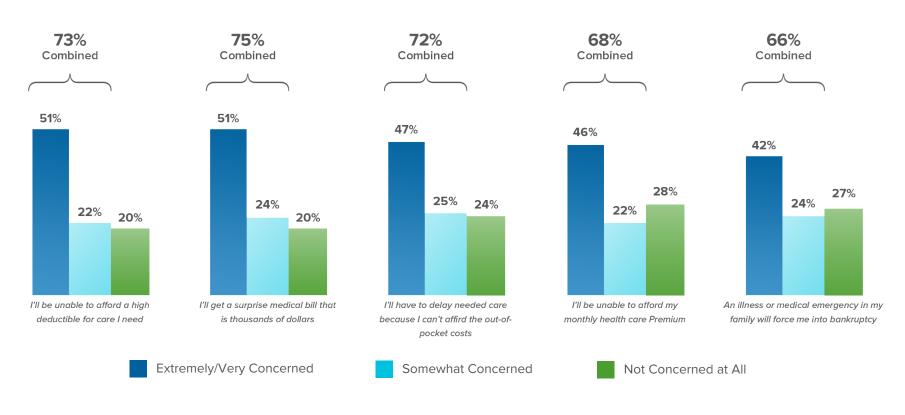


YIELD: COST

71% Americans Report Concerns Around Costs of Care

High-deductible plans and surprise medical bills remain top concerns for U.S. consumers.

HOW CONCERNED ARE YOU ABOUT THE FOLLOWING HAPPENING TO YOU IN THE NEXT FIVE YEARS?

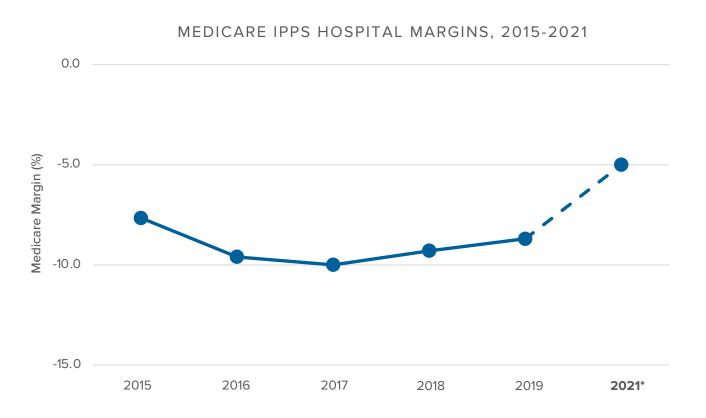


Source: Public Opinion Strategies/ALG Research National Survey of N=1,201 Registered Voters, Conducted January 22-28, 2021.

YIELD: COST

Hospital Medicare Margins Will Remain Negative

Despite negative margins, the increase in margins from 2018 to 2019 is in part attributed to a faster growth in <u>payment</u> per inpatient stay relative to <u>cost</u> per stay, reflecting high price inflation.



^{*}Projected improvement in margin assumes higher payment rate increase, primarily in response to COVID-19, but does not reflect changes to cost relative to price inflation.

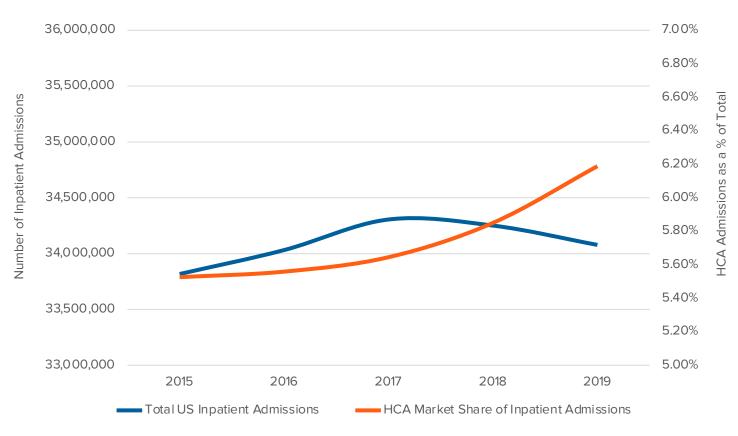
Note: Analysis includes inpatient prospective payment system (IPPS) hospitals in the U.S. with complete and nonoutlier cost report data. Source: Medicare Payment Advisory Commission (MedPAC) March 2021 Report to the Congress: Chapter 3.

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One Health System that is Winning a Losing Game...

HCA is increasing market share of inpatient admissions in almost all their key markets.



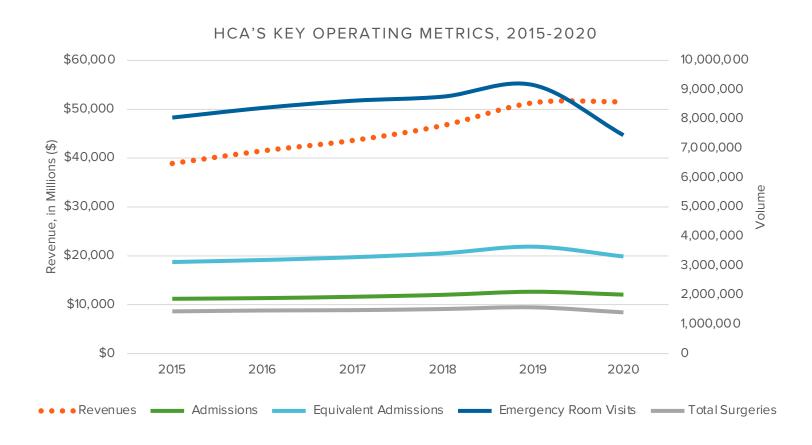


Source: HCA Form 10-K for years ended and December 31, 2018 and December 31, 2020.

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...And Defying the Laws of Economics

HCA had record earnings in 2020.

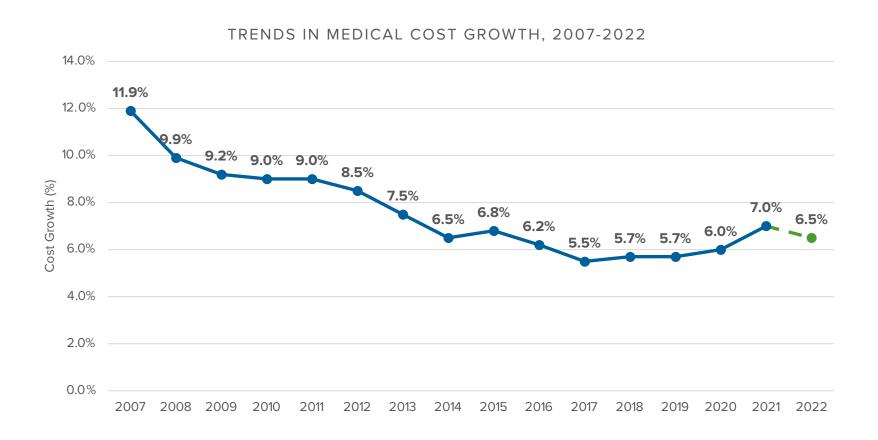


Source: HCA Form 10-K for years ended December 31, 2020 and December 31, 2018.

 $_{\odot}$ 2021 TRILLIANT HEALTH 146

Medical Cost Growth Projected to Decline, Limiting the Opportunity for Reimbursement Increases

A 6.5% medical cost trend is projected for 2022, which is lower than 2021 trends.



Source: PWC Health Research Institute's Behind the Cost Trend: Behind the Numbers 2022.

Primary Care Can Eventually be Marginally Profitable

Retail primary care providers such as One Medical anticipate negative margins in its acquisition of Iora Health which focuses on delivering care for Medicare beneficiaries.

FORECASTED FINANCIAL SUMMARY PRIOR TO ONE MEDICAL'S ACQUISITION OF IORA HEALTH ANNOUNCEMENT

One Medical Total Revenue % year-over-year	<u>2020</u> \$380М	2021E ⁽¹⁾ \$475M 25%
Total Care Margin % of revenue	\$145M 38%	\$180M 38%
Total Adj. EBITDA % of revenue	(\$14M) (4%)	(\$10M) (2%)
Iora Health ⁽²⁾	2020	2021E
Total Revenue % year-over-year	\$213M	\$299M 41%
		(00014)
Total Care Margin % of revenue	(\$35M) (16%)	(\$39M) (13%)

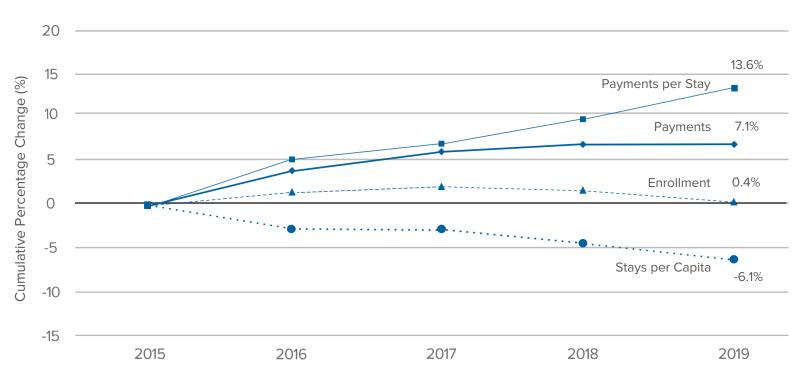
Source: One Medical - Iora Health Investor Presentation, June 2021.



Growth in Medicare Payments Driven by Price, Not Volume

From 2015 to 2019, payments per stay increased 13.6%, despite a 4.4% decline in inpatient stays per capita.

MEDICARE FEE-FOR-SERVICE IPPS PAYMENTS PER STAY VS STAYS PER CAPITA



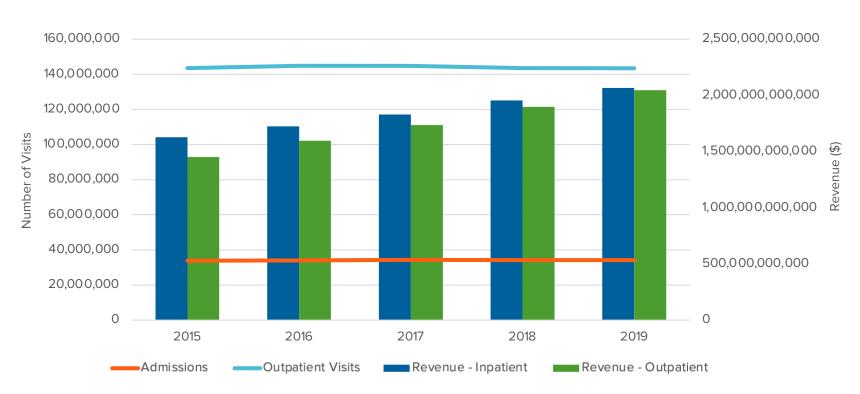
Note: Analysis includes fee-for-service (FFS) Medicare beneficiaries' inpatient stays across all inpatient prospective payment system (IPPS) hospitals. Further analysis by Medicare Payment Advisory Commission (MedPAC) and the Health Care Cost Institute reveal a similar trend among commercially insured patients.

Source: MedPAC March 2021 Report to the Congress: Chapter 3.

Charging Higher Prices in a Market with Low Demand and Increasing Supply is Ultimately Unsustainable

Hospital revenues have steadily grown as inpatient and outpatient visits have remained flat. The key question is how long will consumers tolerate 6% annual inflation against flat demand?

HOSPITAL INPATIENT ADMISSIONS & OUTPATIENT VISITS, 2015-2019



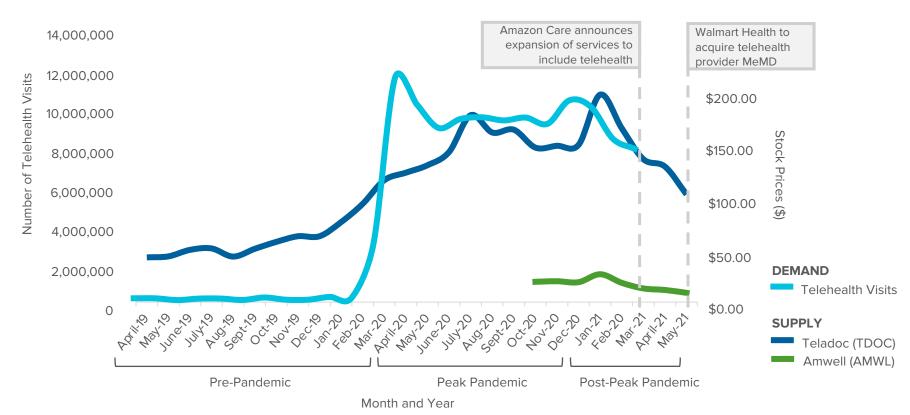
Note: Data shown for U.S. community hospitals. Total net revenue includes both inpatient and outpatient revenues. Source: American Hospital Association Statistics, 2021.

 $_{\odot}$ 2021 Trilliant health 151

Telehealth Meets the Laws of Economics

An already competitive telehealth market continues to add suppliers while demand declines from COVID-19 highs. Major telehealth providers' stock prices have dipped as more suppliers enter and patients return to office visits.





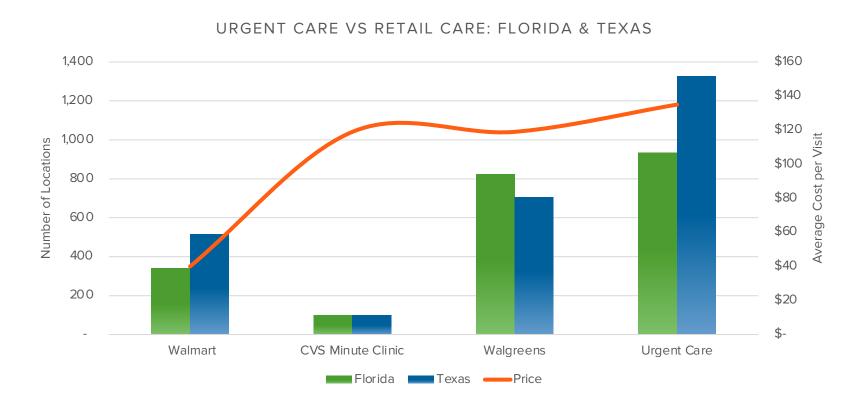
Note: Telehealth visit volumes reflect video-only encounters for all payers excluding traditional Medicare. Survey data released from The Kaiser Family Foundation (May 2021) suggests that approximately 6.6M Medicare beneficiaries utilized a video telehealth visit. American Well Corp (AMWL), also known as Amwell, went public on September 17, 2020.

Source: Trilliant Health national all-payer claims database; April 2019—March 2021. Stock trends obtained from publicly available data via Yahoo Finance, April 2019—May 2021.

 $_{\odot}$ 2021 Trilliant health 152

There is Wide Disparity in Urgent Care Pricing

Even "lower cost" urgent care centers will be hard pressed to compete with all other retail players, especially in markets like Florida and Texas with high and growing supply of Walmart and Walgreens.



Note: Costs reflect average 2020 prices. Florida and Texas were selected given the states' high concentration of retail brands and projected population growth (gaining Congressional seats). Source: Trilliant Health national all-payer claims database; price plans publicly available on Walmart, CVS and Walgreens websites.

Medicaid is No Longer Setting the Floor for Primary Care

Prices and reimbursement rates vary widely by market and pay type except for Walmart who has opted for simplicity and low-cost options.

COST COMPARISON FOR OFFICE VISITS

	Commercial	Medicaid	Walmart
Boston	\$145.89	\$74.56	\$40.00
Chicago	\$112.74	\$60.07	\$40.00
Dallas	\$123.37	\$53.08	\$40.00
Detroit	\$106.53 \$58.39		\$40.00
Houston	\$96.12	\$73.41	\$40.00
Phoenix	\$100.01	\$79.26	\$40.00

Note: Average prices reflected are from the year 2020. Source: Walmart website and Trilliant Health national all-payer claims database.

 $_{\odot}$ 2021 Trilliant health 154

Will Walmart Apply "Save Money. Live Better." to Healthcare?

Prices vary among retail providers. Walmart is conforming to its historic "low prices" strategy.

COST COMPARISON FOR KEY SERVICES

SERVICE	COST				
	♥CVS Health	Walgreens	Walmart \ Health	Urgent Care	
Office Visit	\$99 - \$139	\$89	\$40	\$137	
Flu Test	\$70 - \$100	\$66	\$20	\$102	
Strep Test	\$35 - \$45	\$25	\$20	\$102	
Lipid Panel	\$37	\$35	\$10	\$102	

Source: Walmart, CVS, Walgreen's website; Trilliant Health all-payer claims database.

YIELD: KEY INSIGHTS

To Compete in a Low Demand, High Supply Economy, Price is a Critical Lever

- The increasing costs of healthcare are artificially demand driven
 - The commercially insured population is shrinking relative to Medicare and Medicaid beneficiary growth.
 - Steady price inflation against a flat to declining demand defies the law of economics, creating opportunities for others to compete on price.
 - New entrants following the rules of economics are well positioned to increase their brand loyalty with consumers.
- Traditional providers cannot compete on the unit prices established by leading consumer brands
 - The Medicare cohort generating the greatest growth in demand is the population where hospitals have historically lost money.
 - New entrants will be similarly challenged to make margins on non-commodity services such as primary care.
 - The demand for lower price commodity services (e.g., telehealth) is limited to niche population cohorts with non-acute clinical needs.
- Providers that define value from the consumer's perspective will be those that earn their loyalty
 - Growing cost, or affordability, of care remains a key concern for majority of healthcare consumers.
 - Consumers will choose provider brands based on a variety of factors from access modality (e.g., digital) to location, with price as the most important.
 - Psychographics influences consumer choice more than demographics.

CONCLUSION

Winners in the Post-Pandemic Health Economy Play by the Rules of Economics

DEMAND

SUPPLY

YIELD

Burden of disease is not correlated with Demand for services or need for providers

- Disease-based demand projections incorrectly assume demand for comorbid individuals is 1:1
- Demand is a derivative of the Medicare age cohort and population migration.
- Growth in inpatient and outpatient demand has been flat to declining years prior to COVID-19.

The number of healthcare suppliers in any given market is larger than most recognize

- Every provider that underestimates supply, by definition overstates their market share.
- Projected need for physicians is inconsistent with recendemand trends.
- Underestimating supply limits our understanding of true consumer demand

The increasing costs of healthcare are artificially demand driven

- The commercially insured population is shrinking relative t Medicare and Medicaid beneficiary growth.
- Steady price inflation against a flat to declining demand defies the law of economics, creating opportunities for others to compete on price.
- New entrants following the rules of economics are well positioned to increase their brand loyalty with consumers.

COVID-19 did not significantly change demand

- Projected rate of demand growth varies by 0.1% between pre- and post-pandemic estimates.
- Densely populated markets will be most adversely affected for future demand post-COVID-19.
- COVID-19's acceleration of telehealth adoption is beginning to taper and suggests long-term use is limited to a discrete user profile.

Traditional providers of care, notably hospitals and health systems, are facing growing competition from consumer businesses

- New entrants have pre-existing sticky relationships wit consumers.
- There are numerous niche players focused on numerous niche markets.
- Scale and price advantage of new entrants and retail players increases the stakes of the existing "negative sum game".

Traditional providers cannot compete on the unit prices established by leading consumer brands

- The Medicare cohort generating the greatest growth in demand is the population where hospitals have historically lost money.
- New entrants will be similarly challenged to make margins on non-commodity services such as primary care.
- The demand for lower price commodity services, is limited to niche population cohorts with non-acute clinical needs.

Consumer loyalty is lowest where demand is increasing

- Women are more likely to split where they receive care across more providers.
- Consumers, particularly those with more care needs, prefer more traditional models of care and are less comfortable with digital modalities.
- Consumer decisions are driven by psychology more tha neighborhood.

There is an increasing number of suppliers for commodity services at commodity prices

- COVID-19 catalyzed the expansion of more telehealth providers.
- The increase in capital investments in retail and tele-based companies is catering to very small consumer segments of corresponding demand.
- Traditional healthcare providers are late market entrants

Providers that define value from the consumer's perspective will be those that earn their loyalty

- Growing cost, or affordability, of care remains a key concern for majority of healthcare consumers.
- Consumers will choose provider brands based on a variety of factors from access modality (e.g., digital) to location, with price as the most important.
- Psychographics influences consumer choice more than demographics.

 $_{\odot}$ 2021 trilliant health 157

Methodology

A variety of data sources were leveraged as part of this research, with most insights gleaned from proprietary Trilliant Health datasets. Trilliant Health's all-payer claims dataset combines commercial, Medicare Advantage, traditional Medicare, and Medicaid claims, which represents approximately 70 billion claim lines accounting for more than 300M Americans on a deidentified basis. The analytics were calculated using a variety of methods, and the projections were created using machine learning.

Certain trends exclude traditional Medicare claims due to the timing of release of certain data from Centers for Medicare and Medicaid Services (CMS). Additional data were sourced from a variety of publicly available sources, (and are noted in respective source notes) primarily: individual health system and company financial statements, the American Hospital Association (AHA), Johns Hopkins University COVID-19 Tracking, Centers for Disease Control and Prevention (CDC), Medicare Payment Advisory Commission (MedPAC), Modern Healthcare, and the American Association of Medical Colleges (AAMC).

Many trend analyses were exclusively focused on the largest markets – defined as the Core-Based Statistical Areas (CBSAs) – as representative and illustrative of broader national trends. As noted in the report, population shifts and changes in care trends are the primary drivers to understanding future market demand.

- <u>Population</u>: Population encompasses local demographic shifts (age, location, sex) as well as growth and declines due to migration.
- <u>Care Trends</u>: Care Trends encompass the local care patterns, disease burden, and healthcare technology
 adoption. Physician care patterns and patient disease burdens are unique to a market. Our model balances
 sensitivity to recent trends while referencing the global data to provide forecasts that are accurate, local, and
 insightful.

As a proxy for demand, we limited our modeling analysis to the most common surgical services given the contributory impact (in terms of volume and revenues) for providers. We only show forecast outputs for the 25th and 50th (median) percentiles to provide a conservative baseline. Unless noted otherwise, forecast projections account for the impact of COVID-19.

Acknowledgements

From whiteboarding the initial concepts to artfully articulating the intricacies of each data story, this report would not have been possible without the unwavering support and tireless efforts of my Trilliant Health colleagues.

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 $_{\odot}$ 2021 trilliant health 159

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