
# WINNING A LOSING GAME

## HEALTHCARE EDITION

# 1

## POKER PLAYERS KNOW

that if you sit down at the table and cannot figure out who the "mark" is, then it is you.

Health system executives don't have to wonder. In a world of payer consolidation, new market entrants, technology, alternative payment models, changing federal and state regulations, pharmaceutical innovations, benefit plan design, and consumer choice, hospitals and health systems have been dealt the worst hand. ***Now, more than ever, hospitals and health systems need to grow revenue and increase market share by successfully acquiring net new patients while keeping their existing patients loyal.***

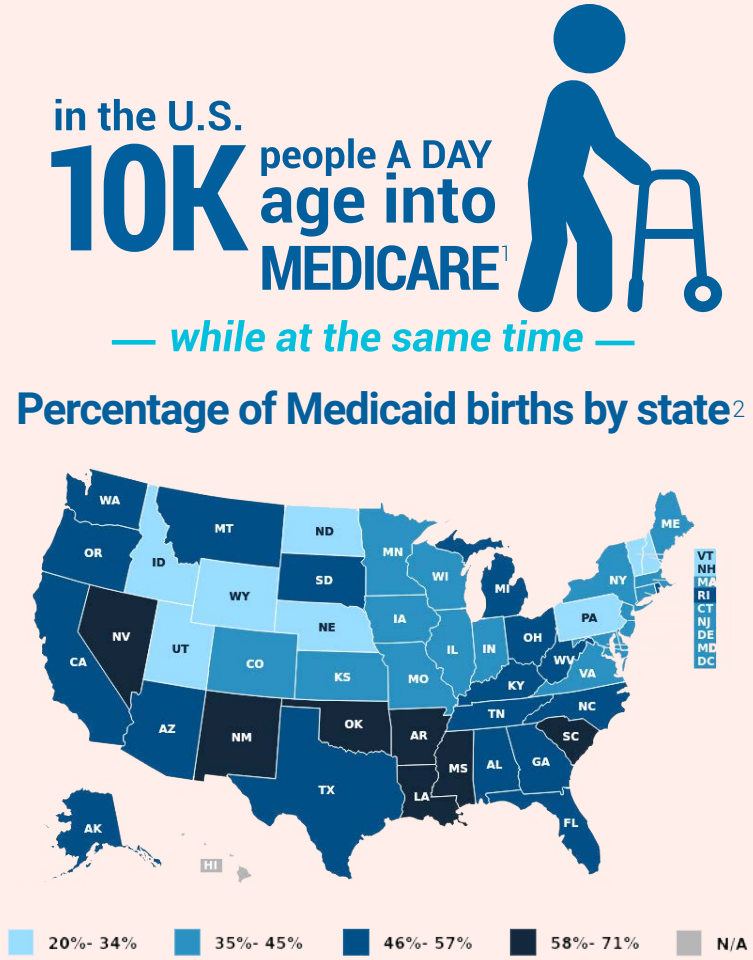
Since Benjamin Franklin co-founded Pennsylvania Hospital in 1751, hospitals and health systems have invested significant resources in training executives to focus on the activities inside the four walls of the hospital, which Peter Drucker described as "altogether the most complex human organization ever designed."[1] This historic focus on the physician as the hospital's customer has persisted for decades because consumers have not objected to being treated as "patients" by hospitals and physicians. In fact, patients have faithfully followed doctors' orders, particularly with respect to referrals for services. Assuming that patients will follow doctors' orders is no longer sufficient; neither is believing that physicians are referring all of their cases to you.

Irrespective of healthcare policy, healthcare economics continue to incentivize the migration of healthcare services delivery from inpatient to outpatient settings. According to research by Deloitte, outpatient revenue as a percentage of total hospital revenue has increased from 28% in 1994 to 48% in 2018.[2] More importantly, according to 2018 data from the American Hospital Association, both inpatient and outpatient hospital volumes gradually declined from 2017 to 2018, which has not happened since 1983.[3] This trend will accelerate as the Centers for Medicare and Medicaid Services (CMS) increases the number and type of surgeries that can be performed in outpatient settings and eliminates the "inpatient only" list by 2024.[4] The pandemic has also forced shifts in behavior with consumers increasingly seeking outpatient settings out of fear of contracting SARS-CoV-2 from a hospital visit.

What is required to operate a thriving healthcare system in the United States has changed since 1751, if slowly. For decades, hospitals have relied on revenue from commercially insured patients to subsidize the losses from caring for Medicare, Medicaid and charity patients. Unfortunately, the number of commercially insured patients inexorably decreases, with the ~10,000 citizens who become Medicare eligible every day being "replaced" by the 10,388 average daily births, the majority of which are financed by Medicaid.[5],[6],[7]

Healthcare systems need to respond to today's challenges, and today's most pressing challenge is this:

**The hospital business is a negative-sum game.**




*CREATES A*

**NEGATIVE SUM GAME**

*FOR COMMERCIAL MARKET SHARE*

Game theory is infrequently, if ever, discussed in healthcare systems, but nothing will have a more profound effect on the performance of America's hospitals in the next 20 years.

"The most difficult problems are negative-sum situations, where the pie is shrinking. In the end, the gains and losses will all add up to less than zero. This means that the only way for a party to maintain its position is to take something from another party, and even if everyone takes his or her share of the "losses," everyone still loses in comparison to what they currently have or really need. This type of situation often sparks serious competition."[8]

There is no doubt that the pie is shrinking for health systems and hospitals. As a result of the pandemic, the Commonwealth Fund projects that almost 15M Americans lost commercial health insurance.[9]

There is no way to win a losing game without competing, but there are a number of ways to compete seriously: winning key battles, cutting losses early, losing less frequently, and losing by a smaller margin than the competition. However, winning more or losing less than the competition is virtually impossible without accurate and actionable information.

Market share is the most important metric to measure wins and losses, so analyzing market share correctly is fundamental to survival. However, most healthcare systems fundamentally misunderstand market share, in large part due to their historic focus on inpatient care. Similarly, most healthcare systems misunderstand the market forces that determine market share.

In reality, much of what healthcare executives refer to as "analytics" is actually benchmarking. For decades, health systems have calculated what happened in the past, compared it to what they believe is true about other hospitals, reported it to the Board of Directors, and then turned back to trying to make the medical staff happy. For decades, health systems have endured without ***analyzing*** information and without making ***data-driven*** strategic decisions.


Healthcare systems must adapt to survive, much less thrive. In the words of General Eric Shinseki, **“If you don’t like change, you will like irrelevance even less.”**

Over the next few pages, we will examine the essentials in winning a losing game for those health systems who understand that change is imperative, as we did in our eBook, ***Doors are Open but the Beds are Empty: How to Grow Surgical Service Lines when Patients Don’t Want to Come to the Hospital***.

In this series, we offer strategies and tactics to win key battles, lose less frequently, lose quickly, and lose by a smaller margin. Our objective is simple: we believe hospitals are the lifeblood of vibrant communities, and we want you not only to survive but to thrive.

# 2 LESSONS FROM NICK SABAN ON THINKING LIKE A CHAMPION


Alabama won another college football national championship this year, the seventh for Coach Nick Saban in the past 16 years. With the win, Coach Saban surpassed another Alabama coach, Bear Bryant, who previously held the record for most national championships by a coach. The secret? Coach Saban said this after the game:

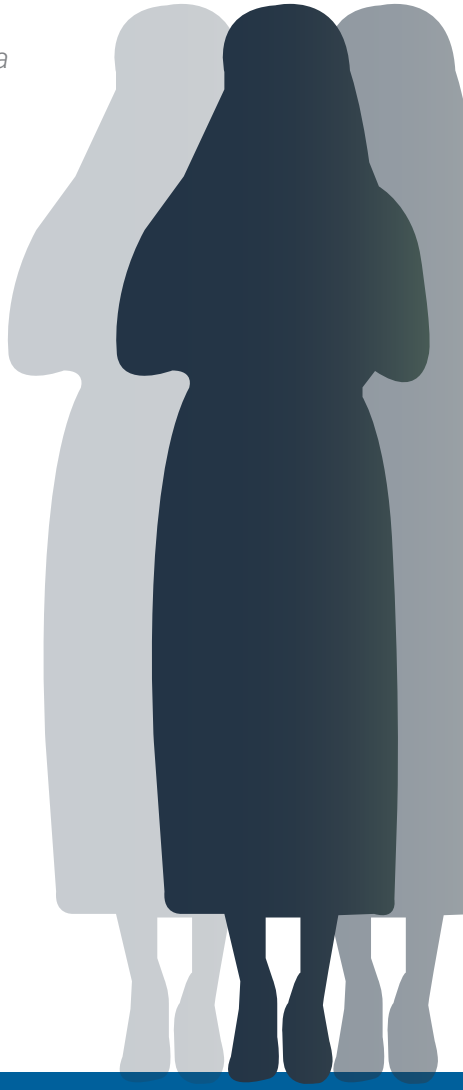
> *"You heard me say before, I hate to lose. And I don't care how much you win, you still hate to lose," Saban said during an appearance on 'SportsCenter with Scott Van Pelt' on January 11, 2021. "And you can talk about the seven that we've won, but the two that haunt me are the two that we lost. Don't ask me why it's that way."*[10]

At the press conference minutes after winning his sixth national championship in 2018, Coach Saban said this:

> *"In 24 hours, you probably need to move on…because there's another challenge. You created a target for yourself in the future in terms of people who want to beat you."*[11]

Being a winner begins with the correct mindset, which Coach Saban describes this way:

> *"I think everybody should take the attitude that we're working to be a champion, that we want to be a champion in everything that we do. Every choice, every decision, everything that we do every day, we want to be a champion."*[12]



To survive, and hopefully thrive, every health system must have a competitive mindset. Historically, the notion of "competing" in the "hospital business" was considered crude or impolite by many, with one consistent exception: Catholic nuns.

Every health system executive has heard these four words: "No margin, no mission." Those words were the motto of Sister Irene Kraus, who in 1986 became the founding president and CEO of the Daughters of Charity National Health System. Sister Irene's "hard-nosed business ability" during her tenure was foundational to Ascension's market position in Austin, Indianapolis, Jacksonville and Nashville today.[13] Sister Mary Jean Ryan became the first president and CEO of SSM Health in 1986 and served in that role for 25 years, leading SSM to become the first health system to receive the Malcolm Baldridge National Quality Board. Meanwhile, Sister Patricia Eck of Bon Secours Mercy Health has demonstrated her competitive skill for more than 50 years against formidable competitors in South Carolina, Virginia and, more recently, Ohio.

Now, more than ever, "no margin, no mission" should be the rallying cry for every health system. The competition is no longer the hospital across town. Instead, it is every healthcare provider in a market, plus four Fortune 10 companies: Walmart, Amazon, CVS Health and United Health Group.

# How do you put "no margin, no mission" into practice?

FIRST, have the right mindset. Sister Irene, Sister Mary Jean and Sister Pat undoubtedly know the words of the Apostle Paul to the Philippians: "Have this mind among yourselves…", and they humbly and shrewdly positioned their health systems to generate margin in order to further their noble mission.

SECOND, to paraphrase Socrates, know who you are and who you are not. Health systems occasionally try to be something they are not, like insurance companies or long-term care providers or technology incubators or, more recently, artificial intelligence labs. If your system hasn't been operating a Medicare Advantage plan for at least a decade, then now is probably not the time to start. If most of your employees turn down offers from Google and Amazon and Facebook to work for you, congratulations; if not, then trying to build world-class analytics platforms may not be the best investment of resources.

THIRD, don't confuse strategy with serendipity. Demography is not destiny, except for Geisinger Health, and you cannot move mountains to replicate their market footprint. There will never be another Kaiser Permanente because no other health system evolved from a workers' compensation insurance plan.

FOURTH, embrace Coach Saban's mantra that "every choice, every decision, everything that we do every day" matters. What you choose to do is as important as what you choose not to do, and choosing to wait until next quarter or next fiscal year is a very definite, and usually detrimental, choice.

FIFTH, ***think*** like the market leaders, even if you cannot act like them. As we noted, Walmart and HCA never stop thinking about and investing in growth, and they never stop competing for the hearts and minds of consumers. Walmart and HCA are formidable competitors today because of decisions that were made 20, 30, 40 and even 50 years ago.

FINALLY, don't delay. Building a championship team takes time, even for the greatest competitors of all time. After six national championships since 2009, ***most*** Alabama fans have forgiven Coach Saban for Alabama's 6-6 record in his first season, which included a loss to the University of Louisiana-Monroe. The reason? In 2007, Coach Saban did not have "his" players on the field playing to his standard. After the 2007 season, Coach Saban "ran off" a few of the players who could not compete at the highest level.

SIMILARLY, the healthcare adage that "you can't fix a bad market" is undoubtedly true. Many of the hospitals that have closed over the past 20 years are in markets that simply cannot support a hospital, whether because of population or economic changes or demographic trends. What is increasingly concerning is the how that reality is manifesting in the largest cities in the U.S., such as the announcement last week of the closure of hospitals in Los Angeles and Chicago.[14] In "distressed" situations, moving faster is even more important.

Every health system has unique opportunities and unique challenges; there is no "template" approach to competing effectively, no matter what consultants from New York and Chicago and Boston say. Understand who you are, what you are doing, and the unique aspects of your journey to develop your strategy to compete.

Hospitals are the most noble part of the healthcare system, treating the next patient who walks through the door, no matter their symptoms or condition and without respect to that patient's ability to pay. Hospitals are also, according to Peter Drucker "altogether the most complex human organization ever designed."[15] The challenges faced by hospitals are uniquely difficult, and the events of the past 12 months have only increased that difficulty, and there is no sign that things will get better.

As the Dalai Lama reminds us, "There are only two days in a year that nothing can be done. One is called yesterday, and the other is called tomorrow…"

**"There are only two days in a year that nothing can be done. One is called yesterday, and the other is called tomorrow…"**

# 3 WHY HEALTH SYSTEMS DON'T KNOW THEIR ACTUAL MARKET SHARE

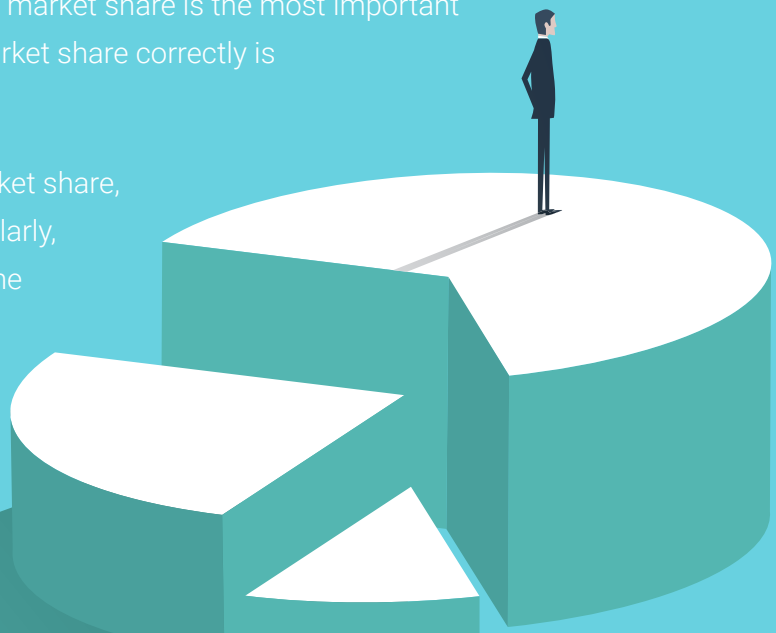
## The hospital business is a negative-sum game.

In a negative-sum game, "the only way for a party to maintain its position is to take something from another party, and even if everyone takes his or her share of the 'losses,' everyone still loses in comparison to what they currently have or really need. This type of situation often sparks serious competition."[16]

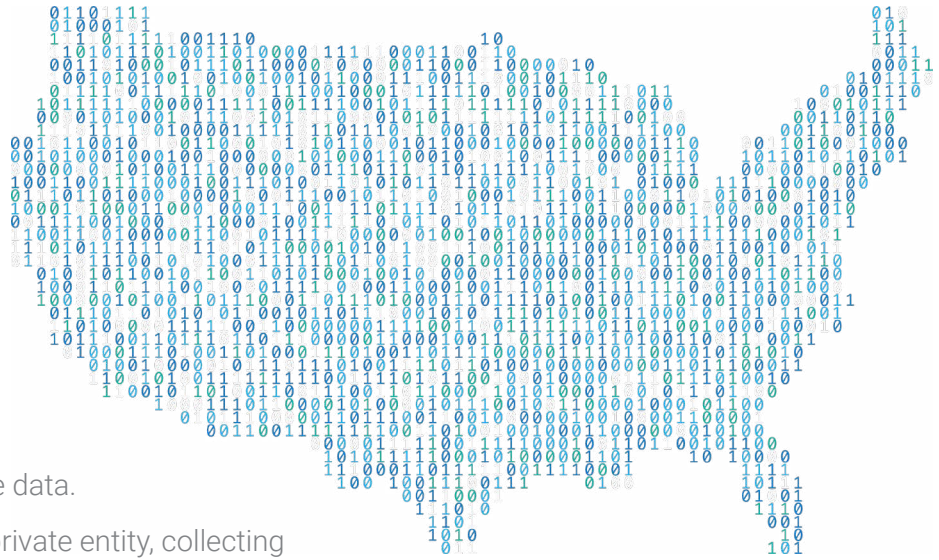
In any competitive market, especially a negative-sum market, market share is the most important metric to measure wins and losses. As a result, analyzing market share correctly is fundamental to survival.

Most healthcare systems fundamentally misunderstand market share, in large part due to their historic focus on inpatient care. Similarly, most healthcare systems misunderstand or underestimate the market forces that determine market share.

Why? Because many health systems, including many of the most well-regarded health systems in the country, develop and execute operational and financial strategies based on self-reported data about inpatient admissions, aka "state data."



## The Siren Call of State Data



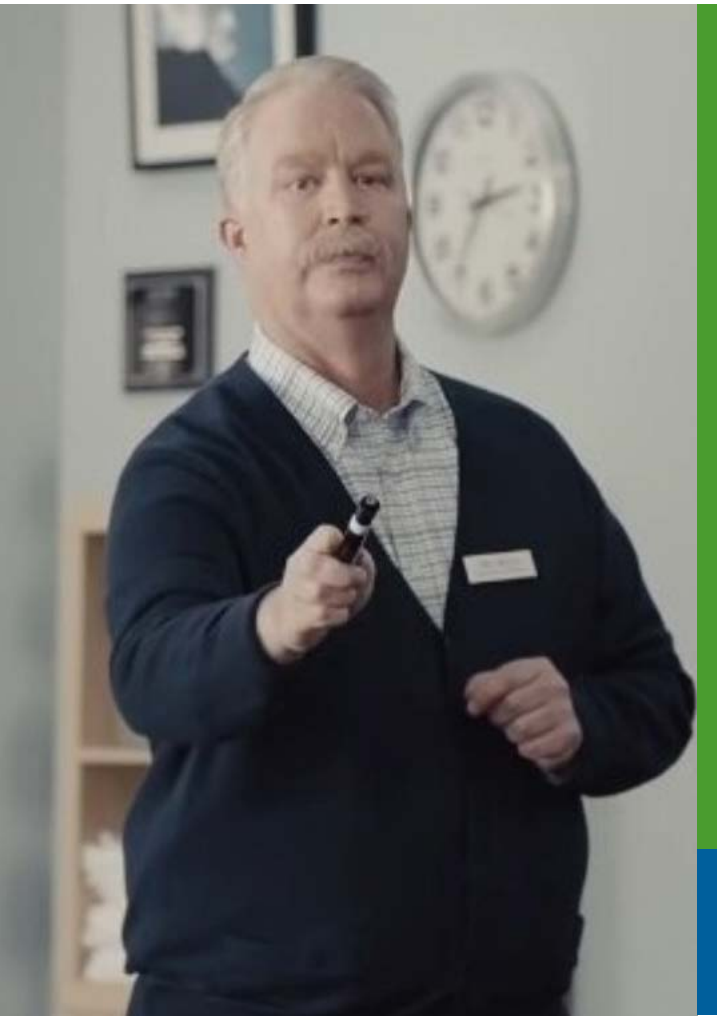
What is state data, and how is it collected? According to the National Association of Health Data Organizations (NAHDO),

> **"there are three models of governance for state health data agencies, which may impact release of data and allowable uses:**

1. A state agency with a legislative mandate collecting the data.
2. A delegated authority, such as hospital association or private entity, collecting data under a state mandate.
3. A private agency, usually a hospital association, collecting the data voluntarily from its members and community hospitals."[17]

NAHDO summarizes the following characteristics of state data:

- They are population based, representing a known population that is defined by residence within geographic or political boundaries.
- Are increasingly being used for community assessment, providing information about preventable, avoidable hospitalizations, including ambulatory care sensitive conditions.
- Data contain a large volume of observations on all patients hospitalized in short-term-care facilities in a state (federal hospitals and specialty hospitals are often excluded from state data collection requirements).
- More states are adding data elements important for public health and research to their discharge data in response to national standards and user needs for example Ecodes and POA (present on admission).
- Data are based on national standards established by the National Uniform Billing Committee and thus, are relatively comparable across states.
- Data quality is usually higher than other injury data as data is collected by licensed/certified professional medical record coders and serve as the basis for payment.



NAHDO omits several salient facts. Not only is the data self-reported, but in many cases, it is entrusted to the employees of a small lobbying association, aka the state hospital association. Trusting state data requires believing that every hospital in the state reported the data correctly in accordance with a consistent methodology while simultaneously believing that lobbying organizations are extremely proficient at data ingestion, normalization, de-duplication and analysis. Data use agreements prohibit publishing a laundry list of obvious mistakes, but it is clear to us that de-duplication is not a strong suit for many organizations. And, "relatively comparable" is most definitely a relative term.

The reality is that health systems have survived ***in spite of their reliance on state data***. If Progressive Insurance's Dr. Rick held a seminar for health system executives, he would undoubtedly make them repeat this mantra: **"State data is useless."**

How can something so useless be so esteemed? Why do health system executives blindly trust state data? In what other industry are strategic plans developed and millions and billions of dollars invested based on a subset of data gathered by industry lobbyists?

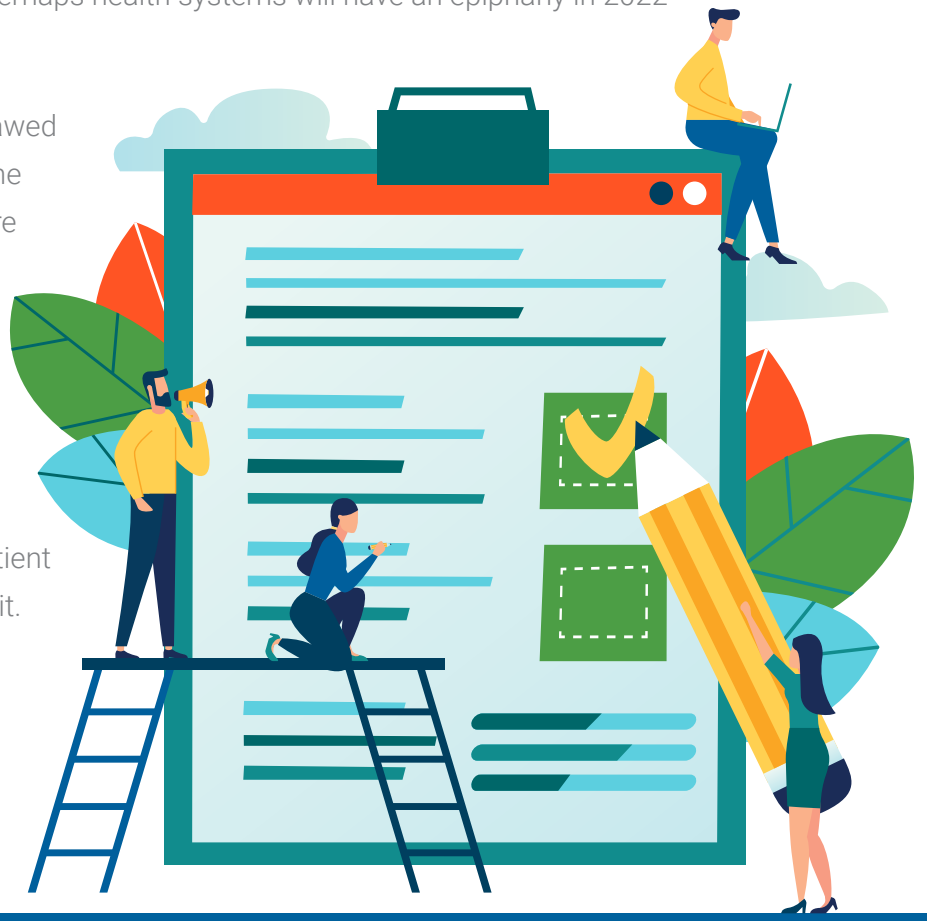
## Because state data is completely self-referential.

Health system executives have complete confidence in state data because they evaluate ***all*** of the reporting agency's work against what it reports about ***their*** hospital. In a stunning combination of circular logic and confirmation bias, health systems validate their belief in what is reported ***by*** the reporting agency by comparing it to what the health system reported ***to*** the reporting agency, without regard to whether what they reported was accurate. Voila!

Assuming, for argument's sake, that all state data is accurate, it is still completely useless as a predictive tool. What's past is not prologue in healthcare, as 2020 manifested in stunning fashion. Perhaps health systems will have an epiphany in 2022 and 2023 when the 2020 state data is released.

Even if state data were both accurate and predictive, it is fatally flawed by its focus on inpatient care, which represents less than half of the volume of, and charges for, the care delivered in the U.S. healthcare market.[18] This trend will accelerate with elimination of the "inpatient only" list by 2024.[19] Moreover, CMS's National Health Expenditure (NHE) projections indicate that from 2024-2028 increases in hospital spending will be driven by Medicaid, while physician and clinic spending will be driven by Medicare and private health insurance.[20] The NHE projections were developed before the pandemic shifted consumer preference towards outpatient settings out of fear of contracting SARS-CoV-2 from a hospital visit.

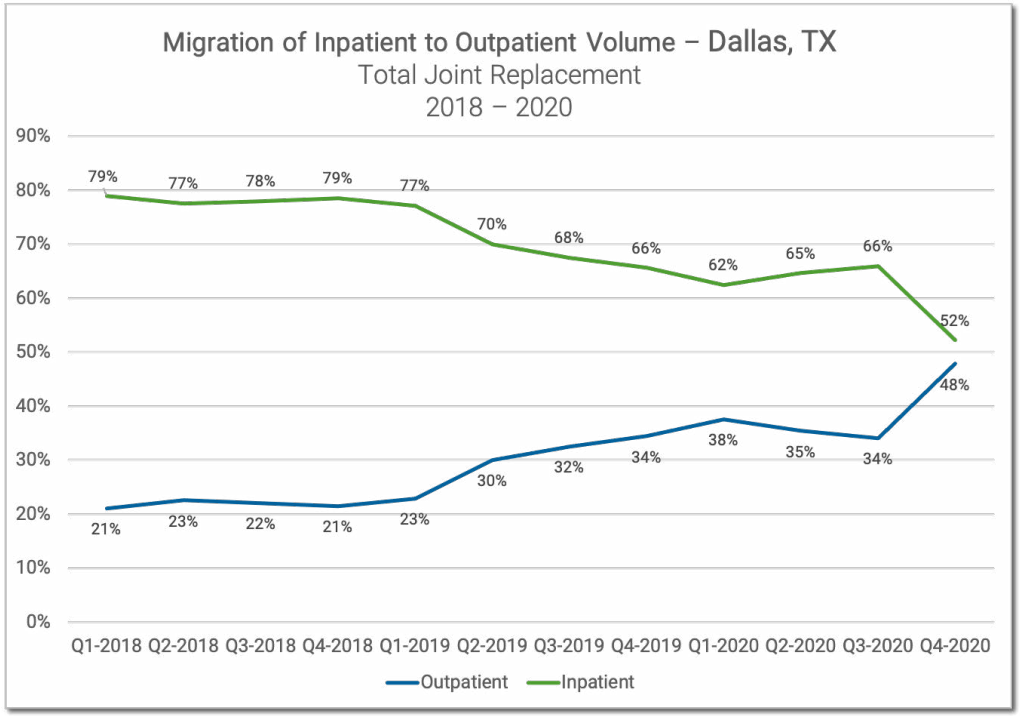
If state data is neither accurate nor predictive nor representative, what should health systems do to win a negative-sum game?



## How Consumer-Focused Enterprises Think: "Total Addressable Market", not "Primary Service Area"

I am embarrassed to admit that, in a previous role, I purchased a dozen or so "market share reports" from HCIA-Sachs/Solucient before I figured out that the reports always seemed to define the Primary Service Area according to the Pareto principle. Today, my only comfort is to imagine that I could fill McCormick Place with health system executives like me.

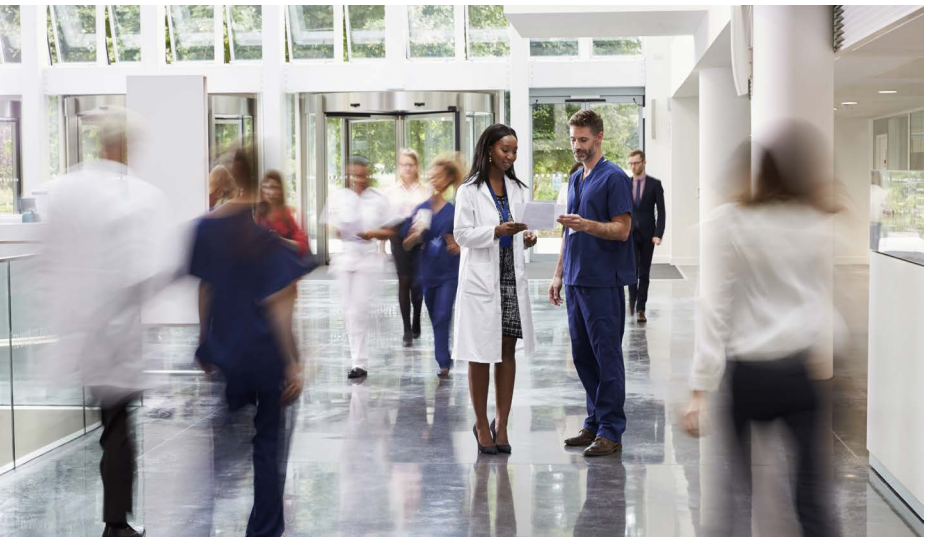
Twenty years later, it is obvious to me that the proportion of a health system's inpatient admissions as compared to other hospitals in the area is increasingly irrelevant, because the available market for profitable inpatient admissions is declining, as this analysis of the Dallas-Fort Worth Metroplex makes clear:




**Want to see what's happening in *YOUR* market?**

In a negative-sum game, particularly in an industry that, according to projections by the Commonwealth Fund, lost 10% of its best customers in a matter of months, understanding market share is essential.[21] Why? Because only with a comprehensive understanding of the competitive dynamics in local markets can healthcare systems effectively allocate scarce resources across their enterprise. Only with a comprehensive understanding of the individuals in each market can healthcare systems compete effectively for a shrinking number of commercially insured patients.

To develop a better understanding of the consumption of all healthcare services in your market requires the right mindset as well as the right information.



**How do consumer-focused enterprises think?**

FIRST, unlike health systems, consumer-focused enterprises do everything they can to understand consumers in their market, both customers and prospects, how much business the competition has, how and where to reach the customers of the competition, whether those customers are valuable, and how to take those customers away from the competition.

SECONDLY, unlike health systems, consumer-focused enterprises assume that they do not have all of the business of their customers. Notably, those in negative sum industries understand that the key measure of success is not whether they do more but whether the competition does less.

THIRD, consumer-focused enterprises are keenly aware of their product mix, which is analogous to a hospital's service lines. Everyone knows that Whole Foods does not sell gasoline, and 7-Eleven does not sell New Zealand Lamb Shank. In contrast, hospitals strive to be all things to all potential patients, branding every service line as a "Center of Excellence", which is diametrically opposed to the "focused factory" strategy proposed by Professor Regina Herzlinger in her 1996 book "Market Driven Health Care."

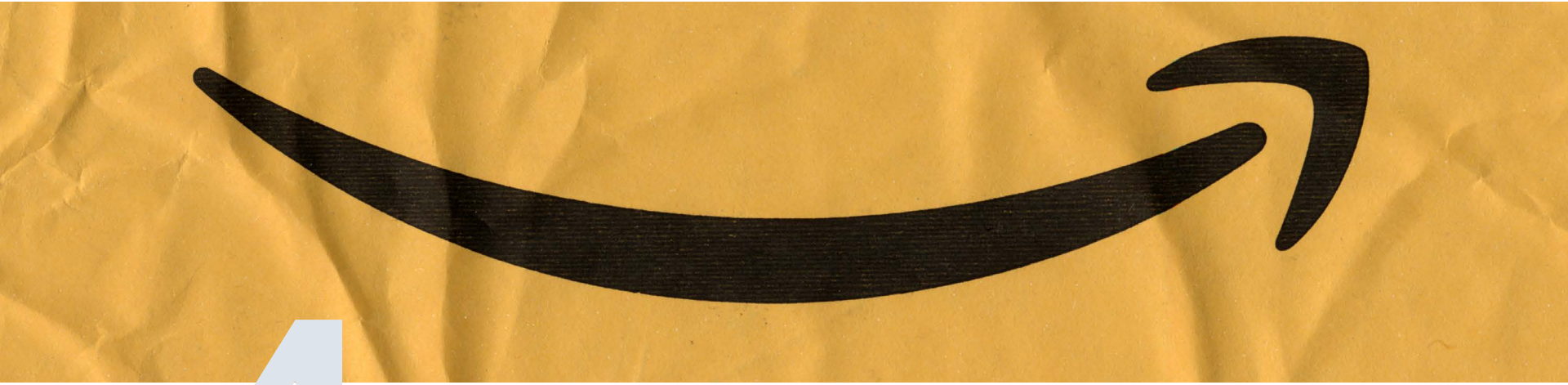
**With a changed mindset comes a completely different set of questions:**

What is the total available market of healthcare services, both inpatient and outpatient, that your system does or could provide within a defined geographic market?

- What are the general and specific growth trends in that market? Are new competitors entering that market?
- Who are all of the competitors in that market who provide any services similar to those of your health system?
- What is your market share percentage and trend by service line for the entire market?
- Optum Care, aka UnitedHealth Group, has more than 53,000 providers and more than 1,450 clinics serving more than 19M (commercially insured) lives.[22] How many providers and clinics and patients does Optum have in your market?
- Having answered all of these questions, which service lines can/should you grow? Which service lines should you abandon?
- There is no way to win a losing game without competing, but there are a number of ways to compete seriously: winning key battles, cutting losses early, losing less frequently, and losing by a smaller margin than the competition. However, winning more or losing less than the competition is virtually impossible without accurate and actionable information.

So, ask yourself: Do I know who my patients are? Do I understand their preferences, buying power, or future needs? Then compare what you know about your patients to your service lines, access points, and patient experience initiatives. How well is your system meeting and anticipating the needs of the consumers in your market? The answer to that is how to gain market share.

## Does your system have the resources it needs to make decisions to compete?



# 4 THINKING ABOUT CUSTOMERS – AND PRICING – LIKE AMAZON

In *Winning a Losing Game Part III, Why Health Systems Don't Know Their Actual Market Share*, we noted that

> *"unlike health systems, consumer-focused enterprises do everything they can to understand consumers in their market, both customers and prospects, how much business the competition has, how and where to reach the customers of the competition, whether those customers are valuable, and how to take those customers away from the competition."*

One thing that every other industry outside of healthcare does is to understand customer preferences and price sensitivity for a basket of products. In their 2001 paper "Conditioning Prices on Purchase History", Alessandro Acquisti and Hal R. Varian noted this:

> *"Many industries, including supermarkets, airlines, and credit cards, have compiled vast databases of individual consumer transactions and have used them to study purchase behavior and to make specific offers to individual consumers, via direct mail or other forms of targeted*

> *marketing. Many companies have become expert in using tracking tools to refine marketing strategies (see Bailey [1998], and Dayal et al. [2001]). Since so many transactions are now computer mediated, and these computers can easily be networked to data centers, sellers now have the ability to access databases of past purchases in real time. This allows them to condition current offers to consumers on their previous purchase behavior. Sellers can offer each individual a different price, a particular prize or coupon, or personalized recommendations. With computer mediated transactions, price discrimination on an individual basis becomes quite feasible."*[23]

As Barry C. Lynn noted last year in "The Big Tech Extortion Racket" in Harper's Magazine,

> *"But Amazon's license to discriminate is fast moving into something else, a system where each consumer is charged the maximum amount that he or she can pay. Many businesses have long dreamed of charging individual buyers different prices or delivering different levels of service for the same price. But until the advent of the internet and the ability to spy on the most intimate thoughts and actions of individuals, businesses could not do so effectively."*[24]

At first blush, this concept sounds nefarious. Upon reflection, this concept is simply a sophisticated algorithmic approach to something that health systems have done for decades: chargemaster management. The difference is that Amazon has a very specific strategy to maximize its yield from its customers, while health systems have a nebulous hope that a union official with a BCBS indemnity plan will walk through the door tomorrow.

Unlike Amazon, a hospital's pricing strategy is completely divorced from the price that a consumer might willingly pay. This fact is a relic of how the healthcare system works, which a well-known health system executive describes this way: "exactly as it is designed." Historically, health systems have rightly focused on the physician as the hospital's customer for two reasons.

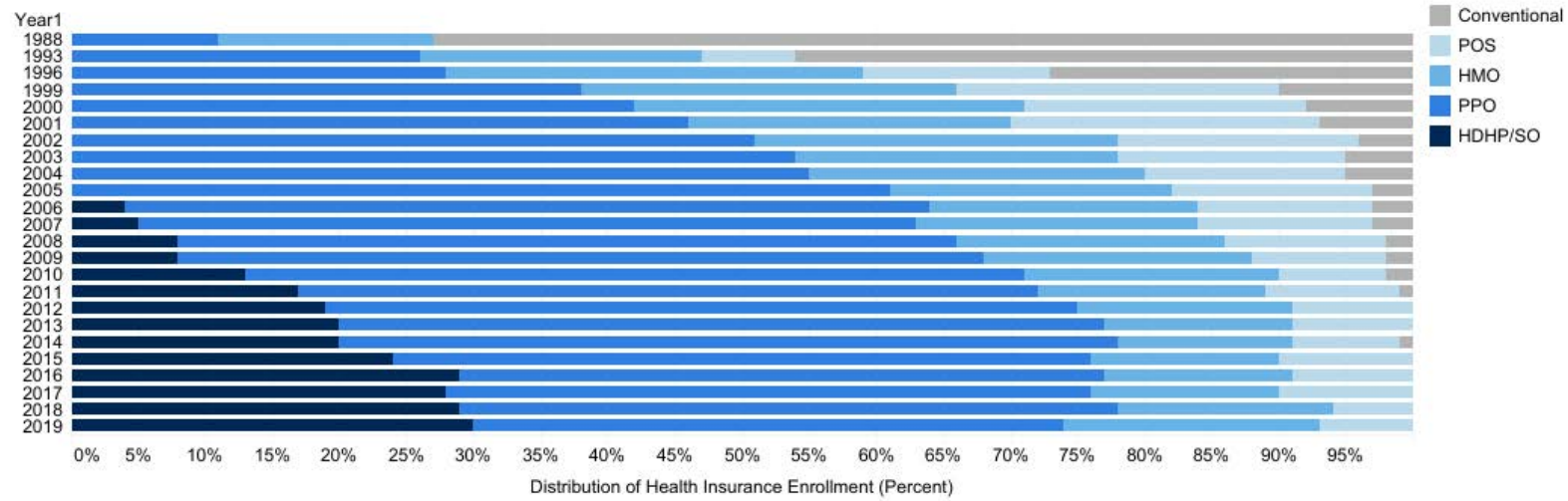
FIRST, health systems are separated from their customer, always by the physician and often by health insurers and employers.

SECOND, consumers have never really objected to being treated as "patients" by hospitals and physicians. In fact, for decades "patients" have faithfully followed doctors' orders, particularly with respect to referrals for services. As a result, healthcare providers have not been required to market or sell their services to the end users of those services to increase market share.

That approach is no longer sufficient. Irrespective of healthcare policy, healthcare economics continue to incentivize the migration of healthcare services delivery from inpatient to outpatient settings. This trend will accelerate as the Centers for Medicare and Medicaid Services (CMS) increases the number and type of procedures that can be performed in outpatient settings and eliminates the "inpatient only" list by 2024.[25] And, as a result of the pandemic, healthcare consumers have (finally) realized that healthcare services can be accessed in a variety of ways.

Will consultants continue to recommend that chargemasters be set at 400-500% of Medicare rates? Yes. Will that help your system influence consumers to make decisions in your favor? No, because consumers are increasingly sensitive to their increasing out-of-pocket costs, as shown here:

Chart 1.20: Distribution of Employer-Sponsored Health Insurance Enrollment by Type of Plan, 1988 - 2019




Source: The Kaiser Family Foundation and Health Research and Educational Trust. Data Released 2019. Employer Health Benefits: 1999, 2002, 2006 – 2018.
https://www.kff.org/health-costs/report/2019-employer-health-benefits-survey/
PPO: Preferred Provider Organization; HMO: Health Maintenance Organization.; HDHP/SO: High-Deductible Health Plan with Savings Option
(1) Conventional plans refer to traditional indemnity plans.
(2) Point-of-service (POS) plans not separately identified in 1988.
(3) In 2006, the survey began asking about HDHP/SO, high deductible health plans with a savings option.

American Hospital Association™
Advancing Health in America

As high deductible plans proliferate, and more information is made available to healthcare consumers, patients will increasingly behave more like the consumers they are in every other aspect of their lives. In this key battle, do you have a winning strategy?

## Developing a Price Strategy vs. Managing the Chargemaster

How can a chargemaster be strategic? Said differently, how can charges and price become more "connected" to increase customer acquisition?

First, to be clear, no strategy can impact "fixed" rates, such as Medicare and Medicaid fee schedules. However, a health system's inability to impact most of its revenue makes it imperative to be strategic about the balance of its revenue.

With that caveat, the advent of CMS' Hospital Price Transparency rule should be a catalyst to understand the opportunity in your market. Here are a few questions you should ask to understand the opportunities in your market:

### Are your competitors complying with the Price Transparency rule?

If not, it is a sign of their weakness. Either they lack the ability to comply, i.e., they do not have the resources or knowledge to comply, or they are unwilling to comply, i.e., they are hiding something, probably the delta between how much they charge for and the quality of a particular service. Either alternative is an opportunity to engage with consumers about the pricing of your health system.

### Do your system's negotiated rates reflect current and future demand?

There are many hospitals with market-leading rates, but market-lagging share, for specific service lines. Only dominant academic medical centers can charge market-leading rates for routine services by "tagging" their tertiary and quaternary service lines, such as trauma and burn units. It is all too easy for payers and employers to steer patients away from outlier rates for routine ambulatory care, like X-rays. Where are your system's negotiated rates inconsistent with your market share? Where are your system's negotiated rates misaligned with future demand for healthcare services?

Even more importantly, you should begin to think about markets and consumers – not patients – like Amazon and Walmart do, with questions like this:

| | |
|---|---|
| 1. | What is the total available demand for healthcare services from all of the consumers in a defined geographic market? |
| 2. | What is the future demand for all services from all of the consumers in your market and how will it evolve? |
| 3. | What healthcare services do the consumers in your market want? How do these services differ across different consumer segments? |
| 4. | What healthcare services do/will they need? Which of these are you best equipped to handle? |
| 5. | What are they willing to pay for those services? |
| 6. | Which services that your system provides are “substitute goods” in a macroeconomic sense?[26] |
| 7. | How competitive is your system’s price for the substitute healthcare goods in your market? |

# 5 COMPETING AGAINST THE G.O.A.T.

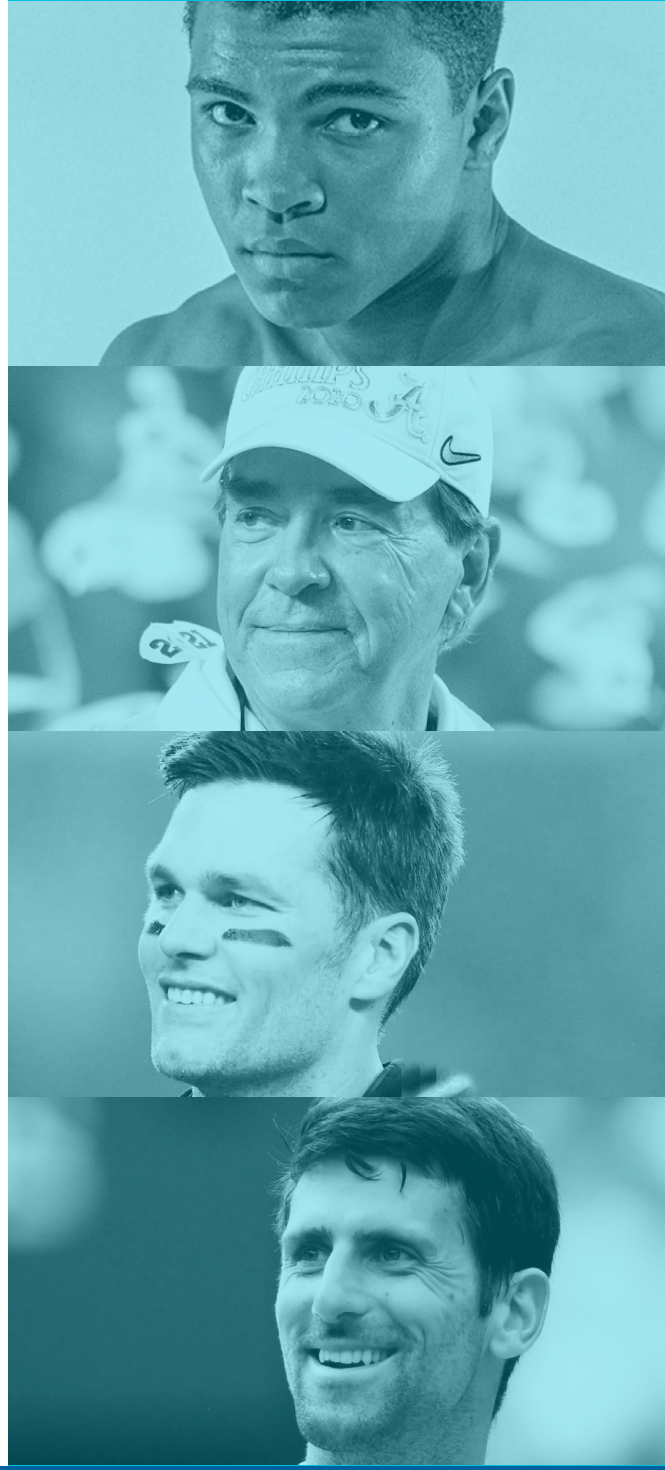
Until 1992, the word “goat” was used in sports to describe someone who made a crucial mistake to cost their team a game, with Bill Buckner’s misplay of Mookie Wilson’s “little roller up along first” in Game 6 of the 1986 World Series forever etched in the minds of Red Sox fans.[27]

In 1992, Muhammad Ali’s wife incorporated “G.O.A.T., Inc.”, a logical step for the man who referred to himself as the “greatest of all time.”[28] As Ali also liked to say, “it’s not bragging if you can back it up.” With that, a term of derision turned into one of acclaim: The Greatest Of All Time.

2021 has already been quite the year for GOATs, with Nick Saban winning his seventh national championship, Tom Brady winning his seventh Super Bowl, and Novak Djokovic winning his ninth Australian Open title. Whether or not you revere Muhammad Ali or Nick Saban or Tom Brady or Novak Djokovic, it is difficult not to acknowledge their excellence.

**2021 has also confirmed another GOAT: HCA.**

HCA competes like Muhammad Ali, by being stronger and faster than the competition; like Alabama, by executing their game plan to near perfection; like Tom Brady, by countering the myriad schemes designed to stop him; like Novak Djokovic, by outlasting the competition.



HCA has four "championship games" per year, i.e., quarterly earnings reports. HCA reported its 2020 results on February 2 and filed its annual report with the Securities and Exchange Commission on February 19. This statement from the earnings press release sums it up best:

> *"Same facility admissions and same facility equivalent admissions declined 3.4 percent and 7.5 percent, respectively, in the fourth quarter of 2020 compared to the prior year period. Same facility emergency room visits declined 21.0 percent in the fourth quarter of 2020, compared to the prior year period. Same facility inpatient surgeries declined 6.7 percent, and same facility outpatient surgeries declined 5.1 percent in the fourth quarter of 2020, compared to the same period of 2019. Same facility revenue per equivalent admission increased 14.1 percent in the fourth quarter of 2020, compared to the fourth quarter of 2019, due to increases in acuity of patients treated and favorable payer mix in the current quarter."*

In the midst of a global pandemic, HCA had its best year ever as measured by revenue, gross profit, operating income, pre-tax income and EBITDA despite erosion in virtually every operating metric.[29] HCA's performance was simply amazing – the greatest of all time in the history of the hospital business.

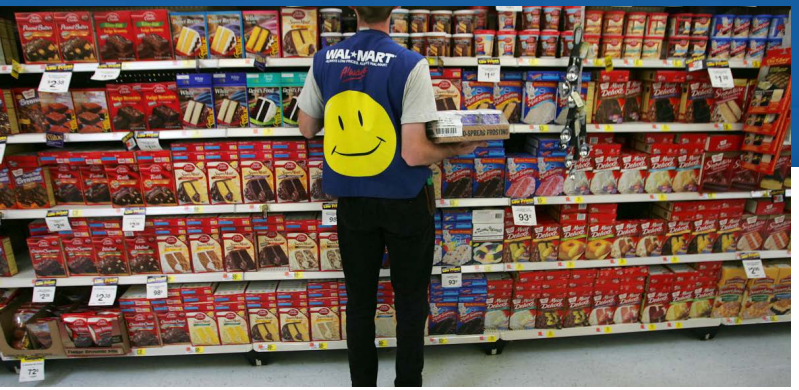
## There are two key differences between HCA and the other GOATs.

FIRST, the GOAT almost always gets their opponent's best game. Every opponent facing Ali or Coach Saban's Crimson Tide or Brady's Patriots or Djokovic has that game or match "circled on the calendar" for days or weeks or months in advance, with players and coaches alike focused on playing their best game against the GOAT. Those opponents know that, in the words of Ric Flair, professional wrestling's GOAT: "To be the man, you gotta beat the man." HCA competes like these GOATs, but few of their opponents play their best game consistently against HCA. And the compounding effect of dozens of health systems failing to compete effectively against HCA every day is that HCA is the GOAT.

SECOND, Ali, Saban, Brady and Djokovic play for titles and rings and trophies and endorsement deals, the "spoils of victory." In contrast, HCA is playing a negative-sum game, the proof of which is the ever-so-slight sequential year-over-year decline in inpatient revenue payer mix.

HCA has been executing their plan to compete in the negative-sum game that is the hospital business for decades. Has your health system been executing your plan for a negative-sum game for decades? Does your system even have a plan for a negative-sum game against HCA and Optum and Walmart and Amazon? If not, then consider another Ali quote: "Don't count the days. Make the days count."

# 6 THE IMPACT OF PRICE ELASTICITY




Highly competitive markets have price elasticity; monopolistic markets do not. Transparent markets have price elasticity; opaque markets do not.

Healthcare has long been an opaque market, but as Bob Dylan might say, "the times, they are a-changin."

Healthcare is so historically opaque that reference pricing is highly lauded by Health Affairs and numerous pundits. However, the experience of CalPERS in using reference pricing reveals how far healthcare is from a consumer driven industry.[30]

In reality, reference pricing is just another example of being a price-taker, and most hospitals have been price-takers for years. With past as prologue, it should be expected that hospitals would prefer reference pricing to price elasticity, because it requires only concession, i.e., being a price-taker, as opposed to competition, i.e., pricing strategically with the goal of maximizing the demand for the health system's supply of services.

The extent to which health systems are "successful" price-takers is highly correlated with three factors:

- the level of competition in the payer market;
- the extent to which a hospital provides a service that is scarce clinically (trauma, burn or pediatrics) or competitively (i.e., regulated by Certificate of Need);
- the First Law of Real Estate: Location, location, location.

While some of these factors may be slow to change, other inherent competitive barriers upon which health systems have historically relied are eroding quickly. Dozens of California-based technology companies are here to help liberate patient health records, making switching physicians easier. The pandemic accelerated the transition to virtual care, and insurance companies are eager to disrupt established referral patterns through captive telehealth platforms, the latest example of which is the acquisition of MDLive by Cigna's Evernorth division. Health systems should be even more concerned about the commoditization of primary care access by retailers whose scale allows them to operate profitably without relying on ancillary service revenue.

## The question for every health system is how long being a price-taker is a sustainable strategy.

Amazon and Walmart are not price takers, and Amazon and Walmart are unparalleled in their understanding of price elasticity. Walmart's "Smiley the Rollback Man" advertising campaign, which debuted in 1990, flaunts that expertise:

Historically, price elasticity in healthcare has been rarely discussed, for many legitimate and logical reasons. The looming convergence of a number of different factors suggest that understanding price elasticity will soon be mission-critical, including price transparency initiatives enforced by regulators and embraced by employers, the inexorable rise of deductibles, and the inevitable consequence of competing in a negative-sum game.

Where to begin? First, with the fundamentals.

**The formula for price elasticity of demand is this:**

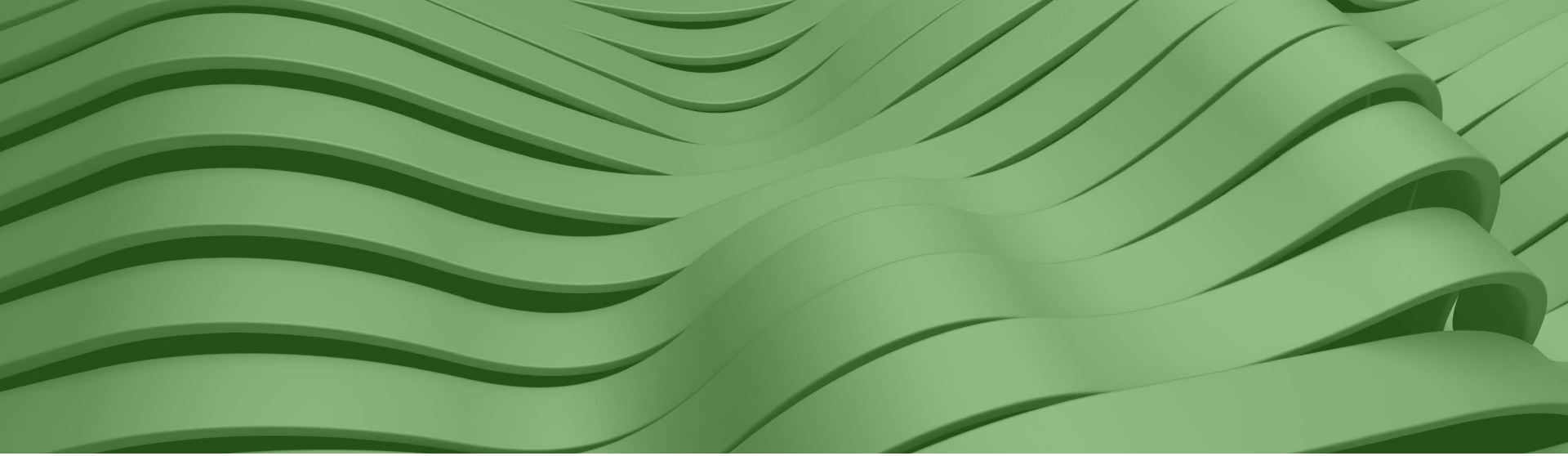
$$\text{PRICE ELASTICITY OF DEMAND} = \frac{\text{Percentage of change in quantity demanded}}{\text{Percentage change in price}}$$

**What does the formula represent?**

*"If the actual figure given by the formula is greater than 1, demand is elastic; if it is less than 1, demand is inelastic; if it is equal to 1, demand has unit elasticity. Demand is unitary elastic where the proportionate change in quantity demanded and price are equal."*[31]

Jill Avery, a Senior Lecturer of Business Administration at the Harvard Business School, offers these thoughts about pricing in an interview with Harvard Business Review:

> *"Setting the right price for your product or service is hard. In fact, determining price is one of the toughest things a marketer has to do, in large part because it has such a big impact on the company's bottom line. One of the critical elements of pricing is understanding what economists call price elasticity…[which] shows exactly how responsive customer demand is for a product based on its price…*



Products and services can be:

**Perfectly elastic** where any very small change in price results in a very large change in the quantity demanded. Products that fall in this category are mostly "pure commodities," says Avery. "There's no brand, no product differentiation, and customers have no meaningful attachment to the product."

**Relatively elastic** where small changes in price cause large changes in quantity demanded (the result of the formula is greater than 1). Beef…is an example of a product that is relatively elastic.

**Unit elastic** where any change in price is matched by an equal change in quantity (where the number is equal to 1).

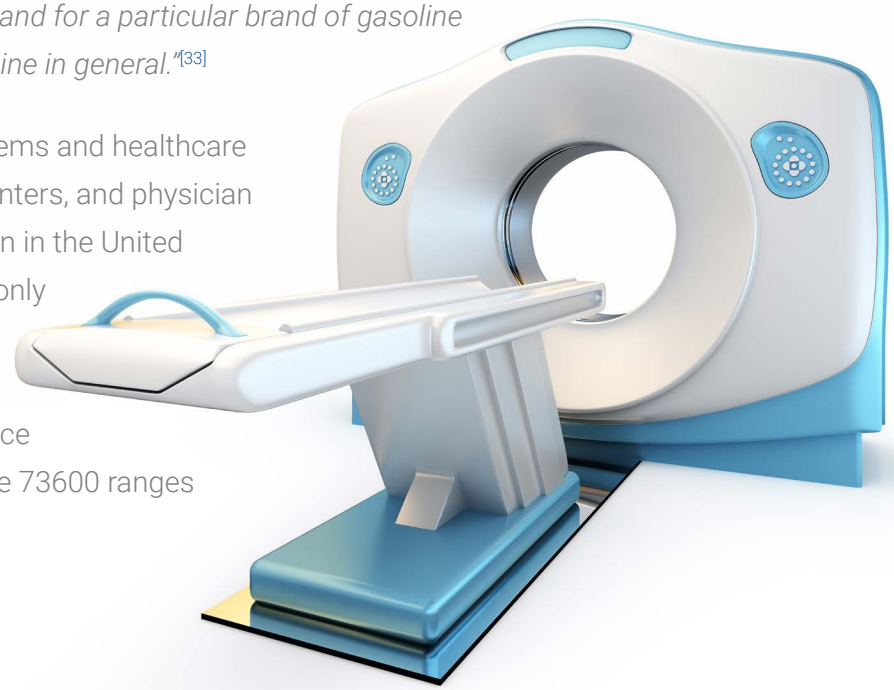
**Relatively inelastic** where large changes in price cause small changes in demand (the number is less than 1). Gasoline is a good example here because most people need it, so even when prices go up, demand doesn't change greatly. Also, "products with stronger brands tend to be more inelastic, which makes building brand equity a good investment," says Avery.

**Perfectly inelastic** where the quantity demanded does not change when the price changes. Products in this category are things consumers absolutely need and there are no other options from which to obtain them. "We tend to see this only in cases where a firm has a monopoly on the demand. Even if I change my price, you still have to buy from me," explains Avery."[32]

Viewed objectively, health systems seemingly believe that all healthcare goods are perfectly inelastic. While that notion is historically understandable, it is increasingly unsustainable from a policy standpoint and fatally flawed from economic theory:

> *"The price elasticity of demand for a good or service will be greater in absolute value if many close substitutes are available for it. If there are lots of substitutes for a particular good or service, then it is easy for consumers to switch to those substitutes when there is a price increase for that good or service. Suppose, for example, that the price of Ford automobiles goes up. There are many close substitutes for Fords—Chevrolets, Chryslers, Toyotas, and so on. The availability of close substitutes tends to make the demand for Fords more price elastic.*
>
> *If a good has no close substitutes, its demand is likely to be somewhat less price elastic. There are no close substitutes for gasoline, for example. The price elasticity of demand for gasoline in the intermediate term of, say, three–nine months is generally estimated to be about −0.5. Since the absolute value of price elasticity is less than 1, it is price inelastic. We would expect, though, that the demand for a particular brand of gasoline will be much more price elastic than the demand for gasoline in general."*[33]

Healthcare has many more substitute goods than health systems and healthcare providers would like to believe. Between hospitals, imaging centers, and physician clinics, there are more than 15,000 X-ray machines in operation in the United States performing more than 500,000 ankle x-rays where the only clinical requirement is that the patient be still for five seconds while a radiology technician pushes a button. While it is virtually impossible for there to be a clinical difference in the procedure, the commercial reimbursement for CPT code 73600 ranges from $29 to $202.



The fact that the **Price Transparency Rule** includes 70 CMS-specified "shoppable" services implies that CMS believes that there are at least 70 healthcare services for which there are an abundance of substitute goods.

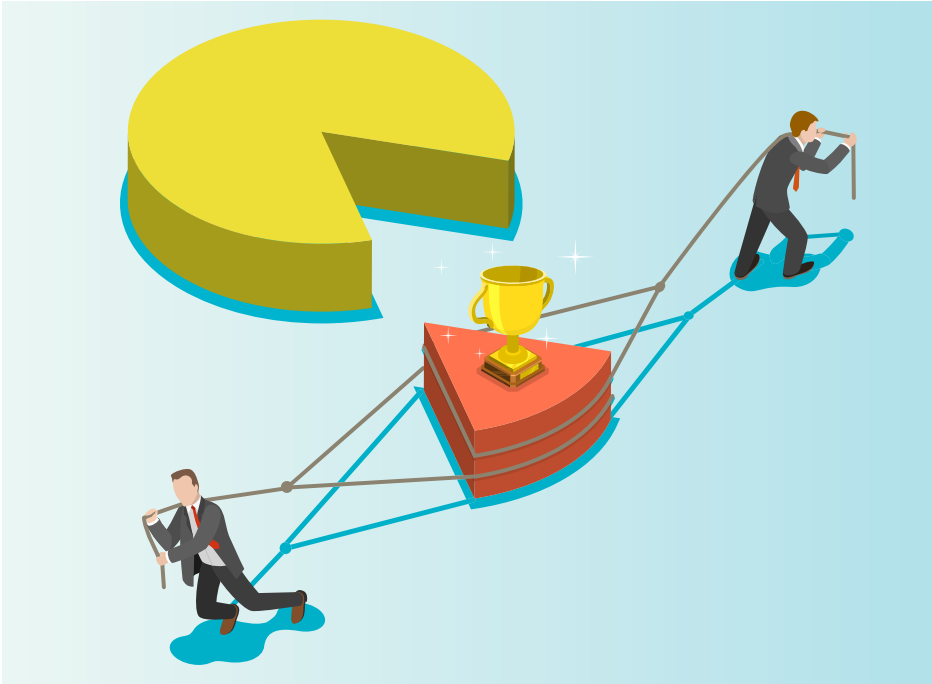
In 2008, we published the first **Hospital Value Index™** in an attempt to measure "outcomes per dollar, or value for money." The 2009 Hospital Value Index™ defined value this way:

> *"Value in healthcare is the same thing as value with any other commodity, product or service. Value is the combination of what you receive in exchange for what you paid and the likelihood that you will want it again. The elements of healthcare value include price, quality, efficiency, effectiveness, outcomes, process, experience and on-going perception, to name a few points on our radar. Inherent in value is the cost required to create the good, and the relationship of that cost to its price, demand and availability."*

Price elasticity is effectively a proxy for the "tipping point" of value, as it demonstrates the point at which the consumer's evaluation of one variable – price – is sufficient to outweigh the other variables of quality, efficiency, convenience, etc.

The measure to which you understand the scope of the problem is the immediacy with which you start to solve the problem. The real problem is that this is an extraordinarily difficult problem.

The business problem is that all health systems underestimate the supply of healthcare services in their markets, which inevitably results in underestimating the total available market for healthcare services. The result? ***Every health system overestimates their market share.***



The technical problem is that merely beginning to understand price elasticity in a $3.2T market requires a real "big data" approach. The challenge is not what you read about in the healthcare press about the volume or variety or velocity of data; the real challenge of "big data" is data engineering, i.e., distributed computing at scale, which is essential for the most important "v" – veracity.

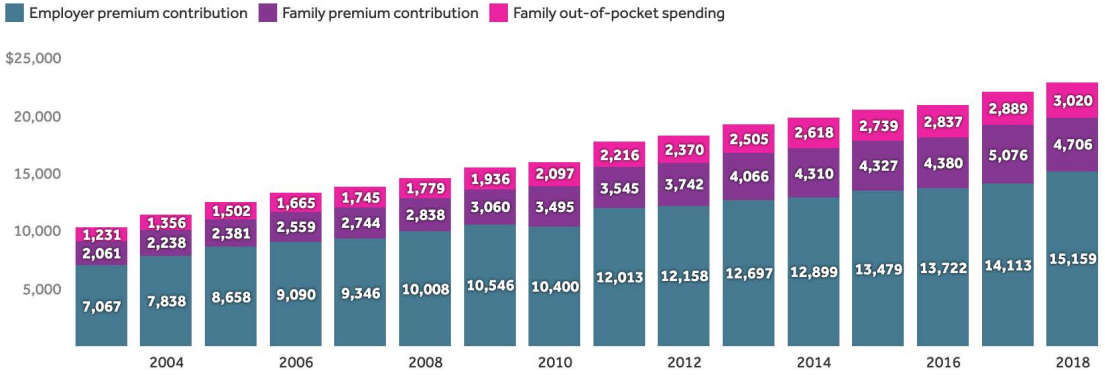
The problem of price elasticity is infinite, which is why Amazon and Walmart constantly change their pricing.

As consumers pay more for healthcare, the more consumers will pay attention to price. And pay more they are, as the **Peterson-KFF Health System Tracker** reveals: The average deductible for both individual and family coverage more than doubled from 2008 to 2018, while the average annual employee contribution increased by ~60% for individual, employee +1, and family coverage.[34]

The problem of price elasticity is an analytics problem, not a consulting problem, which means it cannot be solved via a consulting engagement with one of the usual suspects.

There are a few firms that can solve the problem, and three of them are your competitors: Optum, Walmart and Amazon. None of them has solved the problem…yet. They will solve the problem, at least better than – and before – the 2,000,000 healthcare providers in the United States. And, when they do, they are unlikely to share the answers, which will make virtually every healthcare provider a price-taker.

**Health spending by and on behalf of families with large employer coverage, 2003-2018**




Note: Out-of-pocket costs are inflated from 2017 to 2018 because data are not yet available. Large firms have one thousand or more employees.

Source: KFF analysis of IBM MarketScan Commercial Claims and Encounters Database and KFF Employer Health Benefits Survey, 2018; Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2017

Rest assured that the payers will not try to be clever like **certain health systems by refusing to post negotiated prices for plan years beginning after January 1, 2022**:

> *"The final rules also require plans and issuers to disclose in-network provider negotiated rates, historical out-of-network allowed amounts, and drug pricing information through three machine-readable files posted on an internet website, thereby allowing the public to have access to health coverage information that can be used to understand health care pricing and potentially dampen the rise in health care spending."*[35]

Payers desperately want to see those prices, especially those Blue Cross Blue Shield rates…and then they will use them against you. Perhaps, then, healthcare providers will finally "get religion" about the importance of consumer choice and price elasticity.

If you don't believe us, consider our track record. **Our 2007 prediction** of Walmart's healthcare approach has aged well, as has our 2008 prediction of the components and weighting of value-based care as compared to **what CMS has designed**.

In a negative-sum game, the winner is often the party that loses the least.

## Do you know how much you have to lose? If you want to know, let us know.

## Contact us to discover the growth potential in your market.

growth@trillianthealth.com

Trilliant Health

INTELLIGENT PATIENT ACQUISITION™

TRILLIANTHEALTH.COM


[1] Peter Drucker, Classic Drucker: Essential Wisdom of Peter Drucker from the Pages of Harvard Business Review, (Harvard Business School Publishing Corporation), 54.

[2] https://www2.deloitte.com/us/en/insights/industry/health-care/outpatient-virtual-health-care-trends.html

[3] https://www.darkdaily.com/outpatient-visits-to-hospitals-decline-year-to-year-for-first-time-in-35-years-affecting-clinical-laboratories-and-other-in-hospital-services/#:~:text=The%20AHA%20surveyed%206%2C146%20hospitals,0.09%25%20over%20the%20previous%20year.

[4] https://www.cms.gov/newsroom/fact-sheets/cy-2021-medicare-hospital-outpatient-prospective-payment-system-and-ambulatory-surgical-center-0

[5] https://www.kff.org/medicare/state-indicator/total-medicare-beneficiaries/?activeTab=graph&currentTimeframe=0&startTimeframe=8&selectedDistributions=total&selectedRows=%7B%22wrapups%22:%7B%22united-states%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

[6] https://www.cdc.gov/nchs/fastats/births.htm

[7] https://www.kff.org/medicaid/state-indicator/births-financed-by-medicaid/?activeTab=map&currentTimeframe=0&selectedDistributions=percent-of-births-financed-by-medicaid&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

[8] https://www.beyondintractability.org/essay/sum

[9] https://www.commonwealthfund.org/publications/issue-briefs/2020/oct/how-many-lost-jobs-employer-coverage-pandemic

[10] https://www.saturdaydownsouth.com/alabama-football/the-key-to-nick-sabans-greatness-alabama-coach-still-haunted-by-title-game-losses/?mc_cid=f252b1acb5&mc_eid=fb6610fe7a

[11] https://www.inc.com/carmine-gallo/nick-sabans-24-hour-rule-is-key-to-success-in-sports-business.html

[12] https://www.inspiringquotes.us/author/9955-nick-saban

[13] https://www.chicagotribune.com/news/ct-xpm-1998-08-30-9808300289-story.html

[14] https://www.beckershospitalreview.com/finance/chicago-los-angeles-hospitals-slated-to-close.html

[15] Peter Drucker, Classic Drucker: Essential Wisdom of Peter Drucker from the Pages of Harvard Business Review, (Harvard Business School Publishing Corporation), 54.

[16] https://www.beyondintractability.org/essay/sum

[17] https://www.nahdo.org/data_resources

[18] https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/highlights.pdf

[19] https://www.cms.gov/newsroom/fact-sheets/cy-2021-medicare-hospital-outpatient-prospective-payment-system-and-ambulatory-surgical-center-0

[20] https://www.cms.gov/files/document/nhe-projections-2019-2028-forecast-summary.pdf

[21] https://www.commonwealthfund.org/publications/issue-briefs/2020/oct/how-many-lost-jobs-employer-coverage-pandemic

[22] https://www.optumcare.com/about/about.html

[23] https://www.heinz.cmu.edu/~acquisti/papers/privacy.pdf

[24] https://harpers.org/archive/2020/09/the-big-tech-extortion-racket/

[25] https://www.cms.gov/newsroom/fact-sheets/cy-2021-medicare-hospital-outpatient-prospective-payment-system-and-ambulatory-surgical-center-0

[26] https://www.economicshelp.org/blog/glossary/substitute-goods/

[27] https://www.youtube.com/watch?v=7ujwjqIldwU

[28] https://www.grammarphobia.com/blog/2016/07/goat.html

[29] https://www.macrotrends.net/stocks/charts/HCA/hca-healthcare/financial-statements

[30] https://www.healthaffairs.org/do/10.1377/hblog20150707.049155/full/

[31] https://www.economicsdiscussion.net/price-elasticity-of-demand/price-elasticity-of-demand-with-formula/25223

[32] https://hbr.org/2015/08/a-refresher-on-price-elasticity

[33] https://open.lib.umn.edu/principleseconomics/chapter/5-1-the-price-elasticity-of-demand/#:~:text=Constant%20Price%20Elasticity%20of%20Demand%20Curves&text=This%20means%20that%20price%20changes,in%20quantity%20demanded)%20is%20zero.

[34] https://www.meps.ahrq.gov/data_files/publications/st524/stat524.pdf

[35] https://www.federalregister.gov/documents/2020/11/12/2020-24591/transparency-in-coverage