



THE OLIVER WYMAN

# HEALTH INNOVATION JOURNAL

INSIGHTS FROM THE CUTTING EDGE OF  
AN INDUSTRY IN TRANSFORMATION

# INTRODUCTION

Welcome to the inaugural issue of the *Oliver Wyman Health Innovation Journal*. This collection of insights revolves around topics that our community feels are driving the current healthcare discussion and will be central to the anticipated transformation of the industry over the next decade. It reflects the latest thinking at our firm and of transformational industry leaders.

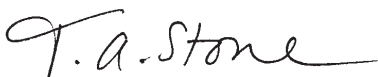
Many of the observations and recommendations in the report come directly out of research being done at Oliver Wyman's Health Innovation Center (OWHIC) and with our OWHIC Leaders Alliance. Our goal has been to help create a healthcare system that is driven by innovation and the needs of consumers and that ultimately creates value for companies and the public alike.

Central to OWHIC's mission is the dissemination of the ideas and practices that will transform healthcare – and that means providing a platform for the industry's forward-thinking leaders who are challenging traditional models and systems. For this reason, we have included insights from healthcare trailblazers, such as Highmark Health, Castlight Health, and Color Genomics. It also means tapping into innovations implemented outside of our community, where companies from other industries – American Airlines, as an example – are making breakthroughs in areas like customer engagement with substantial implications for healthcare.

Disruption, of course, is nothing new to healthcare. Ours is an industry in perpetual motion – with new therapeutic and technological advances continually reshaping its various segments and functions. Empowered consumers, personalized medicine, and solutions that put the entire ecosystem in the palm of a hand are reshaping how we define healthcare as well as how we price it and deliver it. To remain relevant, none of us can afford to stand still; none of us can afford to resist re-evaluating our missions and business models.

Understanding the forces behind today's transformative trends and seeing the future market scenarios are critical to preparing for that tomorrow. This journal shares perspectives from the frontlines of that disruption and represents our firm's commitment to helping the industry move forward. It is intended to challenge your thinking and assumptions. I hope you enjoy it, and I look forward to continuing the discussion.

Sincerely,



**Terry Stone**

Managing Partner, Health & Life Sciences Practice  
Oliver Wyman



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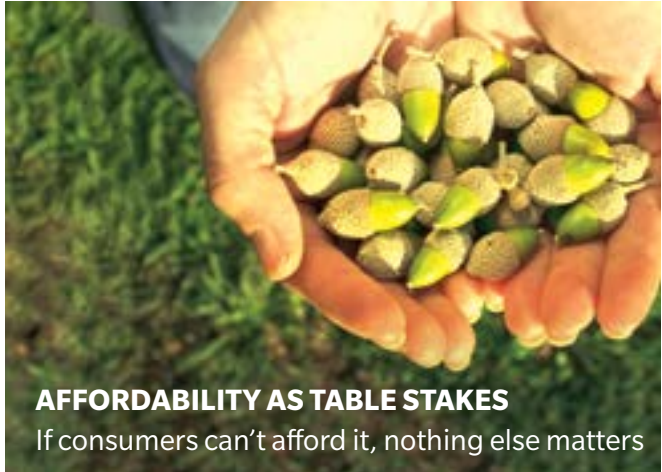
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# INDUSTRY INTERRUPTED

Disruption in healthcare will be driven by the power of its trapped – and highly exploitable – value

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**H**ealthcare in the United States has long looked like an industry immune to disruption, with institutions too deep and interdependencies too intricate to allow radical change. Take, for instance, the division of the healthcare dollar: In 1960, 37 percent went to hospitals, 24 percent to doctors, and 11 percent to drugs; today, those shares remain effectively the same.

The rules of the game are well defined. To win, players need scale: scale in assets and facilities; scale in the ability to bundle services that align with benefit structures; scale in the ability to meet the broad needs of national employers; and, when negotiating, scale in the share of local market spending commanded. Scale has made those that achieve it essential to their markets, and in recent decades both payers and providers made sure to increase theirs.

Yet, even the most powerful business model can eventually run out of steam. Today, regulators are beginning to block mergers that limit competition as more and more geographies fall under the control of entrenched players; consolidations that do occur increasingly involve distressed assets. Both insurers and health systems are living with declining margins, which in turn has limited their ability to invest in the business. Companies are accelerating layoffs and looking for additional ways to reduce costs. The scale-based model may not be dead yet, but it is no longer a way to increase value.

## OUT WITH THE OLD

Worse, the traditional benefits of scale – cost synergies and efficiencies that deliver value to customers – have never been realized in healthcare. Players got bigger, but rarely better. It turns out achieving scale worked against innovation, ossifying the industry.

As the old business model withers, a new one is beginning to emerge. Based on our work with the healthcare industry and Oliver Wyman research of numerous other industries

in disruption, we believe that in the next five years several foundational aspects of the healthcare market will be overhauled as organizations – both challengers and nimble incumbents – embrace new rules that are just now being written.

For healthcare, it is time to prepare for a post-scale world.

## UNLEASHING THE VALUE

One of the most important ways industries transform themselves is by exploiting trapped value. Trapped value is like potential energy for business: the difference between the value a company is creating and the value it could be generating, based on the needs of its customers.

Today the potential energy of healthcare is high, as both consumers and employers suffer with less-than-optimal products, high costs, and inefficiencies across the value chain:

- Costs have increased drastically, but outcomes are not demonstrably better
- Pricing is opaque, and it is difficult or impossible to assess the value of the product
- The experience of interacting with the system – across health plans, providers, and pharmacy – has remained complex, confusing, and frustrating
- Product evolution is painfully slow, with little innovation or differentiation
- The industry is dominated by generic offerings that try to serve everyone, and therefore serve no one well

As healthcare's trapped value accumulates, the demands and expectations of consumers, employers and policymakers are mounting

as well, with the gap between what is wanted and what is offered widening. Bottom line: Consumers, employers, and policymakers find healthcare's seeming inability to provide affordable care efficiently, consistently, and conveniently to verge on the intolerable.

Clearly, the company or companies that unlock healthcare's trapped value will reap rich rewards. And the catalytic regulatory, technological, and social forces that have fueled the rise of Amazon, Google, and many other innovators are increasingly being felt in the healthcare arena. Regulatory changes are enabling new reimbursement models; new data sources and insights promise to revolutionize diagnostic capacity and personalized care; and consumers are beginning to expect their doctors and insurance companies to provide the same convenience and personalization as online shopping or ordering a Lyft. (See Exhibit 1.)

As these forces take hold in healthcare, they will make it possible to compete and deliver value in new ways: Organizations will deploy their resources differently, investing in a new and different mix of assets. The basis of commerce, profit, and strategic control will shift to respond to a new set of rules.

## THREE PATHS TO INTERRUPTION

Other industries provide clues to what a post-scale healthcare world will look like. In each industry that has faced interruption, we recognize in retrospect how releasing trapped customer value through business-design innovation has dramatically reshaped the industry. Whether we're talking about brick-and-mortar stores versus Amazon or networks versus streaming, the shifts in value and relevance have been enormous.

## EXHIBIT 1: THREE MAIN CATEGORIES OF MARKET FORCES

ECONOMIC &  
GOVERNMENT  
FORCES

- **Regulatory changes** to reimbursements, consumer subsidies, requirements for health plans, and licensing rules shape the rules of healthcare
- **Sharing economy** reduces personal ownership of assets and changes nature of employment
- **Global economy** encourages inter- and intra- border business transactions/exchange of goods and services
- **Geopolitical instability** will impact the rate of economic growth and geographical mobility for patients

TECHNOLOGICAL  
ADVANCES

- **Big Data/Analytics** provide greater leverage to reduce costs, increase supply, and improve outcomes via machine learning and artificial intelligence
- **Cyber-physical** systems (sensors/ Internet of Things) integrate digital capabilities and physical surroundings, increase monitoring/ interactions with environment
- **Healthcare advancements** increase life expectancy and boost immunity (e.g. genomics, earlier interventions)
- **Platforms** permit portability and collaboration among people, data, and transactions (e.g. application programming interfaces, cloud)

SOCIOLOGICAL  
SHIFTS

- **Time poverty** amplifies customer demands for convenient access to products and services
- **Quantified self and hyper-personalization** allow for constant data collection, monitoring, and customization
- **Longing for human connections** as personal interaction becomes more scarce and valuable with infrequency
- **Ageing population and longer life expectancy** increase interest in health and wellness
- **Paradox of choice** draws individuals to companies that simplify decision-making
- **Trust shift from authority** to crowd as alternative sources of advice

The real question is, "Who or what will be the disruption that forces healthcare out of its increasingly less profitable comfort zone?"

We see three vectors along which healthcare's interruption is likely to occur. Each addresses core elements of the value trapped by the industry today. Each is already beginning to move from ideas and hypotheses to evidence and momentum. Taken together, the three provide the basis of a new, post-scale healthcare industry that operates in a fundamentally different way.

EDGING TOWARDS  
CUSTOMIZATION

As an industry, healthcare has favored standardization. On the payer side, this means one-size-fits-all insurance plans with nearly identical coverage and networks; on the provider side it means an office experience that's the same for a healthy millennial or a person with complex, chronic illness. As a result, it's almost always too slow and unresponsive to serve the needs of the acutely ill, but it's also too cumbersome, expensive, and inconvenient for everyone else. Formal structures, such as regulation and an intractable business model – especially



when coupled with ongoing market consolidation – have reinforced this approach.

The industry's first steps in the direction of customization and personalization have been rather tentative. Insurers and providers have created more focused business-to-business bundles based on relatively standardized episodes of care, such as hip and knee conditions, but they have not translated these into a form that lets consumers make productive choices among them. They've created new, narrower provider networks, but the focus in almost every case has been on controlling costs, not improving patient experience.

Meanwhile, digital entrepreneurs have created a dizzying number of new products designed to capture some of the health and wellness coverage that has crept into health plans. The explosion has confused consumers with too many or unclear choices, and most have opted to remain on the sidelines for now.

That said, we expect to see the pace and depth of change grow in the near future, as healthcare organizations use targeted, curated solutions to unlock value. And there are early signs across the industry that this sort of unbundling and customization is starting to take place. For instance, several companies are finding success with innovative packages and services targeting specific segments of the Medicare Advantage population. And health plan innovators are beginning to target younger consumers not well served by one-size-fits-all healthcare by offering convenience-oriented service bundles that include telemedicine, online interfaces, and convenient retail storefronts.

Unbundling and customization have many precedents across industries. In retail, a business model once based on in-store and catalog-shopping only has given way to a model where consumers can also buy online and pick up in the store or have the product delivered home. In the latest iteration, some retailers like Bonobos or Everlane offer only a limited number of garments in stores that customers can try on and then order them online on the spot.

The cable industry once sold content in the form of packages of cable channels – premium and basic. Today, it is watching consumers walk away from packaged bundles and turning to curate-it-yourself alternatives like Netflix and Hulu.

Unbundling services and products is a challenge for established industry players, but it offers opportunities for companies to understand their customers better so they can meet their needs better. Whether established players in healthcare wish to take advantage of the situation or not, the industry today is starting to face many of the same conditions that allowed – and ultimately forced – these other industries to transform almost overnight.

## THE NEW FRONT END

Healthcare today establishes and maintains “relationships” with consumers through its management of their care. For the integrated health system, the predominant front end is primary care; for pharmacies, it's local retail counters; and for health plans, it's the point of enrollment or activation. For most customers, the traditional models are wildly inconvenient, difficult to access, and seemingly expensive most of the time.

The past two decades have seen a proliferation of new access models for lower-acuity episodes – telehealth, urgent care, retail

clinics, and the like – plus services like mail-order prescriptions and member portals. Yet, these innovations have done little to change how consumers actually utilize the system. And even if they were fully used, these models fall short of our experience in every other aspect of life.

We have come to expect our interactions with business and other institutions to be ubiquitous, on demand, and personalized. Healthcare is none of these things. As a result, a growing segment of healthcare consumers – led by millennials, family caretakers, and price-sensitive consumers with high deductible coverage – is primed to choose a different path the minute someone is smart enough to offer it. That they haven't already is either a sign that the new access/interface models are not well known enough yet – or the new models just aren't giving the public what it needs.

As consumers, we've learned to use, and often love, new front ends in many areas of life – from Apple's App Store to Facebook's half-newspaper, half-watercooler feed, to Amazon's virtual megamall. These technology-enabled access models don't just help us get what we want, where and when we want it – they also build intimate relationships with us.

A similar process has begun to play out in healthcare. Consumer-facing processes like scheduling and health-plan enrollment are increasingly automated, and additional functions, such as billing and payment, are attracting similar interest and investment. More important, we're seeing the emergence of healthcare platforms that help consumers select physicians, understand their conditions, and connect with health and wellness tools, all in a highly personalized way.

## Consumers, employers, and policymakers find healthcare's seeming inability to provide affordable care efficiently, consistently, and conveniently to verge on the intolerable.

Meanwhile, clinics in pharmacies and other retail outlets like Walmart are gaining traction, covering more conditions and offering attractive prices. But their real potential is not just in offering more locations for care. Rather by embedding the front end of care in the texture of our daily lives, they can begin to make healthcare immersive and ubiquitous.

As these changes and others spread through the industry, it will be increasingly easy – and attractive – to “cut the cord” to traditional healthcare.

## NEW INFORMATION AND INTELLIGENCE

Healthcare today is organized around experts – physicians, researchers, actuaries – whose training and experience put them at the center of healthcare decision making. They are a vital resource, but also a bottleneck – an entrenched power structure resistant to change. And in an

age of exponentially increasing healthcare information, there is more and more reason to wonder how – and whether – they can keep up.

At the core is the physician. The healthcare industry's fundamental unit of activity is the doctor visit; health plans are organized around physician networks; the regulatory system centers on licensure and reimbursement limits. As biological understanding and medical science have advanced generation by generation, we have counted on the clinician to serve as the channel through which that knowledge is translated into optimal health outcomes.

While physicians will continue to play a central role, care as a process is going to change. Over the past two decades, healthcare has created an ocean of data on clinical encounters, claims, prescription drug fulfillment, and much more. In theory, this data should enhance the effectiveness and efficiency of physicians and other skilled professionals. In practice, however, progress has been slow.

There are certainly solutions in the market to help segment populations, identify gaps in care, and predict and prevent health exacerbations. But for the most part, they are reactive and limited in scope. In particular, they use very little data about the “me” being served – my benefit, the product I buy, my experience, my treatment, my role in an actuarial pool. While healthcare can be rightly considered a data business, it has struggled to be an information business. And the way we deploy and utilize human talent has changed almost not at all.

However, this situation should change dramatically over the next decade. First, the amount and nature of available information is beginning to explode: New data is entering the system from rapid advances in genomic,

proteomic, and biomic analysis; from capture and mining of clinical data across an increasingly ubiquitous electronic medical record (EMR) infrastructure; and from user-generated data from wearable devices and smart(er) phones. And second, advances in computer science have reached a point where machines can be used to make sense of the enormous pool of data, apply intelligent and learning algorithms, and deliver insights beyond the intrinsic ability of unassisted human intelligence.

Organizations that harness this new level of data to generate deeper insights about populations and individuals will be able to outperform and extend human capabilities, drawing on immense pools of information and analyzing them with advanced analytics and artificial intelligence. They will extend our knowledge of significant patterns and relationships affecting health. The tools may be new, but the dynamic is old and powerful: Better knowledge leads to better medicine.

## NEW MODELS, NEW OPPORTUNITIES

These three vectors of change are conceptually simple, but their implications are immense. The new healthcare industry they point toward will be smarter. Consumers will be better, more intimately served by those who provide care. Their treatment will be differentiated by condition, stage of life, and other personal factors. Insights about each individual will be as important as overall populations, or even more important. Information will be the basis of new business models – for incumbents to embrace as their future or for challengers to exploit in disrupting the status quo.

Most significantly, this new system will be capable of learning – about people and their

needs, as well as the roots of disease and the effectiveness of treatments. It will help us figure out how to engage and motivate patients to care for themselves and how to empower healthcare professionals to do a better job for more people.

Over the next decade, if not sooner, we expect to see the emergence of a healthcare system radically different from what any of us – either as consumers or as members of the industry – have experienced. Value and strategic control will no longer be based on scale. Business designs, operating models, profit models will all be reborn in forms that we’re only now beginning to understand. To participate in that change will not be a check-the-box exercise. It will demand an extraordinary level of commitment, not just to the profitability of companies but to understanding and connecting with a new kind of consumer – and allowing their needs to guide us in the right direction.

US healthcare has delivered enormous value – to the population, the economy, and the global base of scientific knowledge. Its next contributions will almost certainly

**Unbundling services and products is a challenge for established industry players, but it offers opportunities for companies to understand their customers better so they can meet their needs better.**

arise out of interruption and reconfiguration.

In a new world with new rules, industry has an opportunity to unleash new value, using new technologies and processes in new and unexpected forms. It is up to leadership teams – boards, senior executives, and medical leaders alike – to rise to the challenge.

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# TAILORING TO THE INDIVIDUAL'S NEEDS

START WITH SEGMENTATION,  
BUT DON'T STOP THERE

The Meaning of Consumer Centricity

Loyalty that Matters

Medical Magnetism

Amazon-ing of Healthcare



# THE MEANING OF CONSUMER CENTRICITY

First, providers and payers need to understand what drives consumers

Patrick Barlow  
John Rudoy

There may be a certain irony in the fact that healthcare – which gets to know consumers more intimately than almost any other industry – has more trouble than most figuring out what it means to be consumer-centric. But such is the case.

In healthcare, consumer-centric remains an emerging concept. The complexity of the services, payment structures, and even emotions involved seems to have made “consumer-centric” an excellent, yet hard-to-achieve aspiration.

Thus, the answer may be to look outside healthcare to businesses where putting customer needs first has made more progress – and consult one of the leading gurus of innovation, Harvard Business School professor Clayton Christensen. In 2016, Christensen came up with a simple question that industries must answer to understand how they can become more consumer-centric: “What job is the customer trying to get accomplished when they buy a certain service or product?”

## WHY CONSUMERS BUY

Christensen first applied this “Jobs To Be Done” framework to the fast-food chain McDonald’s in a study of why people bought milkshakes. It turned out that people bought milkshakes in the morning before 8:30 – a surprising timeframe for the biggest milkshake sales of the day – because they were looking for something that would keep them engaged as they traveled to work, something easy to handle while driving or otherwise commuting, and something that would keep them full through the morning. Later in the day, another peak sales period developed around parents picking up their children from school and wanting an experience they could share with them as they discussed how the day had gone.

When McDonald’s tried to increase sales by offering more flavors or improving the ingredients, it missed the mark. What customers needed was a thicker milkshake that would last longer and an easier, faster way to buy it that didn’t involve waiting on a line of people getting full meals.

So what is the lesson here for healthcare? A busy mother bringing in a child with an ear infection doesn’t just want a same-day appointment and a prescription – although both are obviously a given for getting this job done. The mom also is looking for peace of mind – that the ear infection isn’t something more serious, that there is a treatment that will allow the child to be comfortable and for her to get some sleep, and finally, that the doctor cares as much about her child as she does. All those things require – besides the same-day appointment and prescription – giving the doctor time to listen and answer questions. It may even require a follow-up call the next day to check on the patient’s progress.

## WHAT PATIENTS WANT

When healthcare providers start thinking about the motivations of patients and the jobs to be done for them, they will stop thinking of the consumer healthcare path as merely a series of services and activities. They will begin to make healthcare more consumer-centric.

How might the industry recast its multitude of offerings, procedures, services, and products using this "Jobs To Be Done" lens? The first step is to move beyond a narrow view of healthcare – a patient sitting with a doctor in an exam room or waiting for an MRI at a hospital. The industry must think through the full spectrum of activities individuals undertake in the quest to improve and maintain their physical and mental health.

These activities are often fraught with uncertainty. Consumers struggle with making and sustaining healthy choices related to nutrition and physical activity. They have trouble fitting medical care into their busy lives, with its 9-to-5 weekday schedule. They are unsure how their health decisions today will affect their finances tomorrow. What's more, they are increasingly being forced to navigate the system not only for themselves and their children, but also for their aging parents. Taking this broader perspective, it is

clear that the most salient consumer health issues are often ones never addressed within the four walls of most medical facilities.

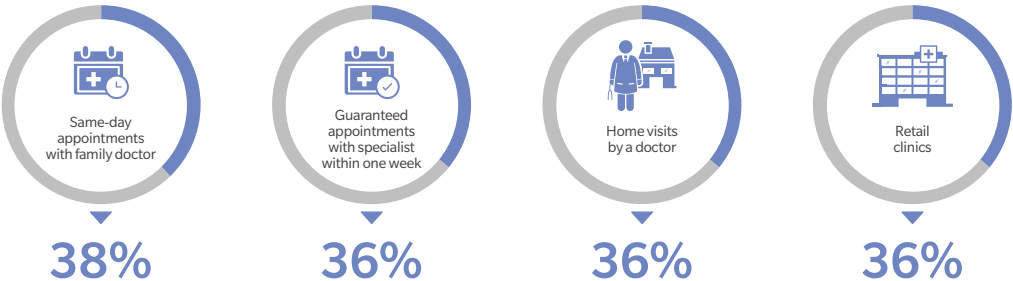
## THE HEALTHCARE JOURNEY

To achieve consumer-centricity, healthcare organizations must start to visualize the consumer journey from start to finish, even if that journey takes them outside of traditional healthcare. Using findings from the 2017 Oliver Wyman survey of over 2,000 healthcare consumers, we have compiled five steps to help healthcare leaders tackle the most pressing Jobs To Be Done for healthcare consumers:

### 1. Streamline access to healthcare:

Consumers are done with a healthcare model that has them waiting weeks for a routine appointment. The Oliver Wyman survey found that consumers want healthcare on their terms, and on their schedule. That means they are looking for guaranteed same-day access, telemedicine options, evening and weekend hours, and even in-home visits. In a world in which you can do a session with a psychiatrist by phone or receive immediate medical guidance from a smart speaker, traditional healthcare needs to catch up or risk being marginalized.

**EXHIBIT 1: WHAT CONSUMERS ARE WILLING TO PAY FOR**  
Percent of respondents "definitely" or "maybe" willing to pay for services



Source: Oliver Wyman analysis



## **2. Demystify the financial implications**

**of healthcare:** Over the past few years, consumers have taken on more and more financial responsibility for their own healthcare. Most consumers, however, remain perplexed when it comes to determining how their decisions affect their costs or how those expenses might be balanced against the likely outcomes. Guidance on the financial implications of healthcare decisions was one of the top needs identified in the Oliver Wyman survey; but such guidance is, for the most part, not forthcoming in today's healthcare system.

## **3. Make clinical decision making easier:**

The rise of narrow healthcare networks may not be a negative. Consumers in our survey saw narrow networks as potential value-add features that they would actually pay extra for. The catch: Those networks had to be curated to include only the highest-quality, highest-value, most convenient providers. Consumers don't want a glut of meaningless choice; they want the tools, information, and guardrails to make good decisions. That may include a healthcare navigator, available in-person or via a preferred electronic channel, and access to user-friendly, personalized data that helps them chart their own path.

## **4. Support consumers as they care for**

**others:** The changing demographics of America are contributing to a burgeoning sandwich generation caring for both their children and aging parents. These caregivers are actively looking for ways to improve their

healthcare, our survey shows. Given the expanding population of seniors, finding a way to serve this demographic is critical for healthcare organizations. Among needed caregiver solutions: Streamline the sharing of health and financial information; expand the approach to telemedicine to allow caregivers to join visits remotely; and extend support for travel and lodging.

## **5. Help consumers maintain active,**

**independent lives:** The current healthcare system excels at solving acute issues. It is far less effective at maintaining overall health and wellness. Yet, one of the top concerns of the aging baby boomer is precisely the latter. They worry about their declining mobility and increased reliance on others for support. Given those concerns, top projects to pursue shouldn't be new hospitals, but rather facilities geared toward helping people stay active and participate. Such a facility might include fitness areas; in-house nutritionists; places to shop for healthy meals and learn how to cook them; and access to support groups to help maintain behavioral health, to name a few.

The healthcare industry must begin to recognize that consumers know what they want even if they can't always articulate it or pick it out amid industry jargon. If healthcare providers and payers want to be driven by consumers and their needs on this journey to health and wellness, then they're going to have to let consumers take the wheel occasionally.

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To review the 2017 Consumer Survey of US Healthcare, visit: <http://www.oliverwyman.com/our-expertise/insights/campaigns/2017/consumer-survey.html>

# LOYALTY THAT MATTERS

## Lessons from outside of the industry on how to engage customers

**Bridget Blaise-Shamai**

**Sam Glick**

**Julie Murchinson**

Across industries, loyalty programs have emerged as an important tool for increasing consumer engagement. In creating familiar names like My Starbucks Rewards, Hilton Honors, Amazon Prime, Walgreen's Balance Rewards, AAdvantage, and many other variations on the theme, brands have provided themselves with a channel through which they can actually drive consumer behavior to align with organizational goals.

Though most loyalty programs aim primarily to generate revenue, they have the potential to do much more for an industry like healthcare: They offer important models and insights for payers and providers in their quest to manage consumer behaviors, deliver more efficient care, and improve outcomes (See Exhibit 1.)

To achieve parallel success to these best-known examples, healthcare needs first to address three key barriers:

### 1. Episodic consumer engagement:

Nearly 45 percent of consumers see their primary care physician once a year or less, providing little opportunity to build a strong consumer-system relationship

### 2. Lack of consumer data and insight:

Institutional knowledge and data on individual consumers and various consumer segments needs to be developed

**3. Undifferentiated experience:** The consumer experience is not currently tailored to individual needs, communication preferences, and lifestyles

### NO. 1: TURNING EPISODIC CONSUMER ENGAGEMENT INTO CONTINUOUS ENGAGEMENT

Since its launch, AAdvantage has invested significantly in embedding its brand name in the broader consumer experience, partnering with other companies to develop programs that deepen the consumer relationship — for example, the Citi/AAdvantage credit card, which allows consumers to use everyday spending to enhance their airline status. AAdvantage has deployed several other programs, including a single sign-on mobile application and new security lines for members at O'Hare International Airport to reduce hassles and improve passenger experience.

While there is no direct corollary, healthcare organizations could improve consumer engagement by expediting efforts to reduce consumer-related frictions in a holistic manner.

When it comes to friction points, payers and providers have already made significant progress in mapping consumer hassles. They have learned that two of the most

significant hassle points are encountered before the consumer even interacts with the payer or provider – the inability to schedule same-day appointments and limited customer understanding of what is covered by a benefits package. While most of these identified hassles are being managed through point solutions, such as concierge teams and telemedicine, the next stage should center on connecting these touchpoints to create a holistic, frictionless experience.

**NO. 2: OVERCOMING THE CURRENT LACK OF CONSUMER INSIGHT WITH DATA COLLECTION AND ANALYTICS**

For AAdvantage, robust data analytics has been the primary driving force in AAdvantage’s evolution. Even with relatively old technology, the program is developing a 360-degree view of the consumer that even enables predictive analytics. As a result, AAdvantage can identify consumers who intend to exit the program and trigger targeted customer-management actions. Further, the program has determined discrete

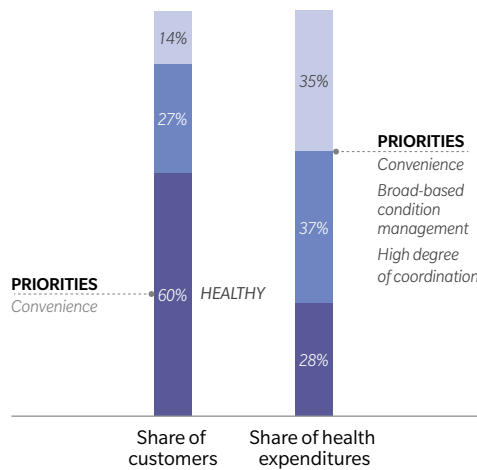
and relatively inexpensive ways – such as flight upgrades – to engender high customer satisfaction and loyalty “bang for the buck.”

Healthcare payers and providers know data analytics is becoming critical to the future and are thinking creatively about how to best use the pools of data available. Kaiser Permanente, for example, collects system-wide patient data in disease registries that it uses to create local and national medical benchmarking. Through such repositories, Kaiser helps its frontline workforce better understand consumers’ health needs. This has further informed population health management approaches and shaped benefit design.

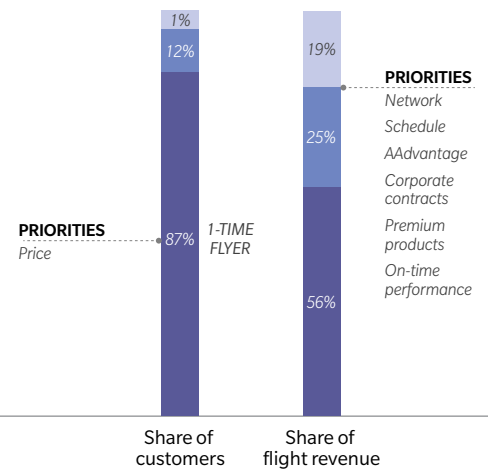
The payer and provider network also could use data to better understand how consumers make decisions. To achieve this, networks need to figure out how to incorporate data from other parts of the consumer experience, including preferences, purchasing patterns, and broader socioeconomic factors. By segmenting consumers at a more granular level, they hope to pinpoint opportunities for new care delivery-

**EXHIBIT 1: HOW HEALTHCARE AND AIRLINES COMPARE**

HEALTHCARE CONSUMER PREFERENCES



AIRLINE CONSUMER BREAKOUT



Source: Oliver Wyman analysis  
 1 Does not equal 100 percent due to rounding

mechanisms – such as retail health – and improve consumer engagement.

### NO. 3: CREATING A CUSTOMIZED EXPERIENCE OUT OF UNDIFFERENTIATED CARE

The AAdvantage model is built on a premise of differentiated experiences. Like healthcare, the airline consumer market is extremely segmented; one percent of passengers drive nearly 19 percent of revenue and 87 percent of passengers, mostly first-time fliers, drive 56 percent of revenue. AAdvantage has analyzed these segments to pinpoint priorities and create unique goalposts and experiences that ultimately drive spending at all levels.

In healthcare, an array of innovations, such as telemedicine and concierge services, are being deployed to improve the consumer experience and healthcare to people in new modalities. Consider Livongo, an innovator that, after pinpointing the specific needs of diabetes patients, developed a specialized model that couples smart monitoring technology, real-time coaching, and seamless sharing with caregivers.

A future of seamless integration across payer and provider tools is technologically possible, but healthcare is not there yet. Further investment is necessary to change the core customer experience.

Organizations also will need to identify patient “type” based on existing data to make customization work from the patient

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*A version of this article first appeared on [healthevolutionsummit.com](http://healthevolutionsummit.com).*

perspective. What might success look like? Busy consumers can visit their local pharmacy for radiology screening, or young millennials can be diagnosed via videoconferencing. Seniors may be able to book a doctor’s appointment and the cab to take them there in the same phone call.

## LOOKING FORWARD

Given the gap that exists between payers and providers and consumers, bringing loyalty program insights to healthcare opens up a number of new opportunities to improve the customer experience, including:

- Connecting with patients by appreciating them as consumers of a broader range of experiences and products
- Deepening our understanding of consumers by leveraging data from beyond healthcare
- Enhancing and expanding data collection and analysis and then transition to predictive analytics
- Deploying personalized customer experiences to meet individual consumer needs and preferences

There is great potential for healthcare organizations to get consumers interested and invested in their healthcare. Engagement has the power to both better serve the consumer and improve the efficiency and sustainability of the industry as a whole.

# MEDICAL MAGNETISM

Learning the formula for building the kind of loyalty that keeps consumers coming back

Helen Leis

Paula Sunshine

Do consumers feel the same kind of warm, fuzzy feeling toward their healthcare providers or insurers that they do toward their smartphones? Simply put, they don't, and that lack of loyalty has the healthcare industry concerned – as well it should be.

Maybe it's easy to understand. You can't play Candy Crush on your insurer's website, and texts from your doctor are usually to remind you about an appointment you may not be that enthusiastic to keep. Most of us don't even see our doctors that often or need to file insurance claims regularly. While patients can give providers and payers four stars in satisfaction surveys, healthcare organizations aren't really sure they'll promote them with their friends, or more importantly, even come back.

Are healthcare providers and payers magnetic enough to build consumer loyalty?

## SEMPER FI?

The test is whether consumers feel like they have something to lose if they look elsewhere. And most in the healthcare industry doubt whether they build the kind of enduring love and fidelity that iPhones or Androids have been able to generate with their respective users – even after devices literally burst into

flames or suffer buggy upgrades and bad design changes.

Loyalty isn't reserved for mobiles. Take Southwest Airlines. Its combination of low-ish fares, surprise sales, friendly desk agents, two free bags, A-B-C boarding groups, and wisecracking flight attendants has produced a significant number of consumers who literally arrange their travel itinerary, even vacations, around the availability of Southwest flights. Sure, Southwest loses bags and suffers flight delays the same as any airlines, but United Airlines, for example, gets inundated with 20 times the number of complaints for the same problems. Is the airline 20 times worse, or does it just lack the magnetism of a Southwest? Has it failed to build the bond that lets passengers excuse some problems?

Such magnetic organizations and product lines provide lessons for healthcare providers and payers trying to become indispensable partners with their consumers. And the lessons begin with understanding the value being provided.

## HOW IT ADDS UP

The basic formula for corporate magnetism:

### F + E + \$ = Magnetism

**F stands for functionality:** What burning consumer problem is a company or industry trying to solve, and what hassles is it going to eliminate? An iPhone, for example, fulfills so many different functions and solves so many problems: It's a newspaper, book, wallet, address book, daily planner, camera, family photo book, and journal. It never loses train tickets; it provides maps and directions on command; and it plays the music the owner loves – and the data it stores syncs with – and the information syncs with other electronic devices automatically. The byproduct: the undying loyalty its owners feel towards the product and Apple.

One would think healthcare would have functionality in the bag – after all, it keeps you alive and healthy. But it comes at a big price – expense, scheduling hassles, confusion, a lack of trust. Most healthcare consumers experience a thicket of

administration and complexity between them and the care they need. First, it's finding a doctor that's in-network with convenient appointments. Then, there's the unwelcome paperwork and opaque language from their insurance company. How can a consumer feel loyalty to organizations that act like they don't trust or welcome them? Providers and payers who remove those obstacles are on their way to magnetism and creating lasting relationships, especially when their competitors aren't following suit.

## IS THERE LOVE?

**E stands for emotional appeal:** What does your brand stand for? Do customers believe that you view them as the center of the universe? Do they love you? Do you love them? Consumers need to trust that you will be there when they need you – even if they don't need you that often. That requires anticipating their needs and filling them.

Amazon shoppers, for instance, know that they can get virtually anything they want – often overnight and sometimes the

### EXHIBIT 1: WHY COMPANIES SHOULD WANT EMOTIONALLY ENGAGED CONSUMERS

A variety of behaviors that create financial value for the companies they patronize

EMOTIONALLY ENGAGED CONSUMERS ARE...



Source: Oliver Wyman analysis

## It's not always about being the least expensive. Just ask iPhone users.

same day – at a competitive price, never moving from their home. They can rely on dozens, if not hundreds, of reviews to help ensure that they'll be happy with their purchase. There's an even bigger emotional component with healthcare purchases.

Consumers are often already stressed and worried when they interact with providers and insurers. They are looking for solace, and as a healthcare organization, you can provide it if you recognize the kind of things they need – a caring person to speak with, a company trying hard to solve their problem. In other words, make them feel better, in addition to addressing their medical needs and paying for their care.

### VALUE VERSUS COST

**\$ stands for value, not cost:** Whether it's actual or perceived, customers need to feel they have received something valuable from their healthcare providers. It's not about being the least expensive – any iPhone buyer can tell you that. Southwest doesn't necessarily

offer the cheapest flights, and Amazon's prices aren't rock-bottom for every item, but their customers know that a better deal from an equally reliable brand may not be worth the effort finding it and may not arrive on the doorstep when they want it. Consumers already believe that healthcare and insurance cost too much. Even when there's no room to reduce that cost, there is always room to increase the value.

The weight of each component in the magnetism equation may vary depending on your customer population. Baby Boomers have entrenched low expectations of the healthcare system, which makes beating them not that hard. Millennials will pass over providers who don't let them book appointments or get test results on their phones. Caregivers – whether of children or aging parents – are desperately looking for a partner to ease their burden and may be the most loyal consumers of all if you can offer them solutions and support.

Ultimately, everyone – healthy or sick – seeing a healthcare provider is feeling a little stress over what they may find. Remembering that as you design a system may already put you ahead of the pack.

Healthcare hasn't yet seen its iPhone, its Southwest, its Amazon. But that doesn't mean it can't. Developing magnetism may be just a function of how much you appreciate the consumer you're trying to attract.

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is senior vice president and chief marketing executive of Independence Blue Cross.

# THE AMAZON-ING OF HEALTHCARE

Can – and will – the tech giant bring its efficiency and ease of use to a barely digitized industry?

**Sam Glick**  
**John Rudoy**

Amazon's \$13.7 billion acquisition of Whole Foods has closed, and the same day, the technology giant began disrupting the grocery industry by promising to cut the upscale chain's pricing. The category-killer added another notch to its belt, and almost immediately, everyone was asking, "What's up next?"

The most popular answer: an industry well in need of digitalization and a laser-focus on the customer – the dysfunctional \$3 trillion healthcare sector in the United States. It has been widely reported that Amazon has a "secret" team working on healthcare-related projects and has been developing a strategy for entering pharmacy services. It recently launched a one-hour delivery service for non-prescription drugs in the company's favorite testing city, Seattle.

Amazon entering healthcare would not be surprising. The problems facing the industry are tailor-made for an Amazon solution: There's a lack of price transparency in an ever-more expensive landscape; the inability to compare offerings from various types of providers;

the programmatic inflexibility of an industry that is fragmented and difficult to navigate; and finally, its cleaving to brick-and-mortar solutions in a digitalized world.

## HEALTHCARE MORE LIKE SHOPPING

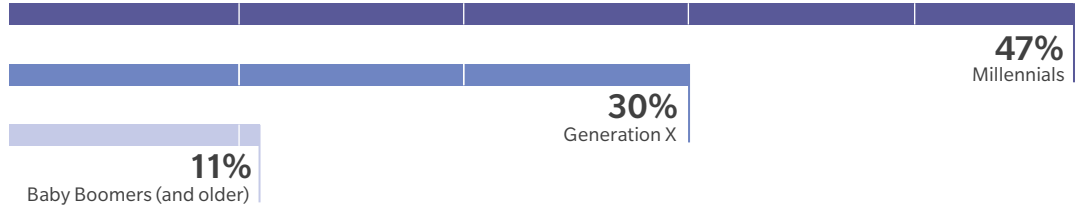
In fact, a survey that we recently conducted of more than 2,000 US health consumers reveals that Americans – and young adults, in particular – are ready for a change. Millennials – 74 million strong in the US – seek a healthcare experience that looks like other experiences in their lives. They want healthcare that is personalized and digital and extends beyond the traditional world of sick care to areas like fitness and nutrition – in other words, healthcare that feels more like shopping on Amazon.

One attractive plus for Amazon: It could enter the industry and make an impact without ever having to buy a hospital or employ a large stable of providers. Just as it recognized in book publishing and other consumer product



**EXHIBIT 1: INTEREST IN NEW HEALTHCARE PRODUCTS OR SERVICES BY GENERATION**

Percent of respondents expressing high degree of interest



Source: Oliver Wyman and Fortune Knowledge Group analysis

lines, Amazon would understand that the critical influence points in the healthcare system are not necessarily within healthcare’s traditional four walls.

The average American sees the primary-care physician about twice a year, but shops for food between once and twice a week and engages in exercise or sports for about two hours a week. Far more time is spent thinking about these wellness activities, considered peripheral to core healthcare services, than on actual healthcare. And with Americans paying more of their medical costs out of their own pockets, they are becoming more aware of the value of prevention versus spending money to get well.

**A WELLNESS INFRASTRUCTURE**

If Amazon decides to enter this emerging wellness space, it would do so with an established infrastructure – the 431 Whole Foods stores. Given that Whole Foods is already a purveyor of fresh and organic

foods, it wouldn’t be a stretch to re-invent the grocery store chain with an emphasis on nutritional health through the addition of nutritionists and advisors who could help consumers buy and cook healthy. A recent Oliver Wyman survey of shoppers in the United Kingdom found that 60 percent believe it is their supermarket’s responsibility to help them eat healthier, so consumers seem to want this.

Another US-focused Oliver Wyman survey found that almost 80 percent of consumers who had visited a health/wellness clinic within a grocery store, discount retail store, or drug store within the past two years described the experience as the same or better than a traditional doctor’s office. Amazon could follow the lead of Walmart and Target and also incorporate pharmacies in Whole Foods.

You also could imagine a business model in which Amazon acts as a supercharged health insurance broker, using its consumer insights to more accurately estimate each customer’s risk in order to pair them with an appropriately priced insurance product. This is what private exchanges attempt to do now, but in general have failed to make major inroads, arguably because the information that is collected is relatively narrow, making the depth of personalization somewhat shallow.

## CREATING A MARKETPLACE

Amazon's tech savvy also could transform telehealth services. The company is reportedly already exploring a telehealth platform and health apps for its Echo smart speaker. If these come to fruition, an Amazon app could help you order up a nurse practitioner or a personal trainer, or it could help you schedule an acupuncture session or refill a prescription. While there are already digital startups in this space, none have the breadth that an Amazon would have.

Ultimately, Amazon could create an online marketplace for healthcare services in the same way retailers sell their goods on the Prime platform, providing consumers Amazon-style reviews, transparent pricing, and comparative shopping. It already has built a similar marketplace for in-person services via its Amazon Home Services.

What Amazon offers the healthcare industry is a fast-track to a 21st century business model – one that consumers will find familiar and comfortable. While most of the industry would probably dread its arrival, Amazon may in fact be just what the doctor should be ordering.

**One attractive plus for Amazon: It could enter the industry without ever having to buy a hospital or employ a large stable of providers.**

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A close-up photograph of a hand holding a small, green plant stem. The background is a blurred field of similar green plants, suggesting a farm or garden setting. The lighting is bright and natural, highlighting the texture of the hand and the plant.

# **AFFORDABILITY AS TABLE STAKES**

**IF CONSUMERS CAN'T AFFORD IT,  
NOTHING ELSE MATTERS**

Measuring the Value of a Drug

Do the Right Thing: An Interview with Castlight

Disrupting Distribution's Status Quo

The DNA of Effective Prevention



# MEASURING THE VALUE OF A DRUG

As one of the fastest-rising categories of healthcare costs, pharmaceuticals need to develop a metric that explains pricing

**David Campbell**  
**Joseph Mocanu**

**H**ow much is a drug worth? The healthcare industry as a whole has not developed a consistent method for pricing drugs, though each side of the transaction has its own approaches and priorities on placing a value.

Payers want to pay as little as possible, and only for drugs that have been proven effective. Pharmaceutical companies want to justify whatever price they have attached to a drug, and may cite its cost of development, or compare the drug's regimen to the cost of alternative treatments. Clinicians and patients rarely even know the price and tend to focus on three things when it comes to a drug: Does it work, how bad are the side effects, and is it covered by insurance?

If we don't know how to measure the value of a drug today, how can we hope to get prices under control for the next generation of therapies? The more we discover about the nature of disease and the more we use the vast datasets available with genomics, microbiomics, and metabolomics, the more the value question will dog us. These studies will inevitably encourage the development of new treatments and even cures benefitting

ever smaller pools of patients; some may even be tailored to individual genetic profiles.

## HARD TO PAY FOR

Six- and even seven-figure price tags are also inevitable because we are taking on more and more impossible-to-treat diseases. For example, the cancer immunotherapy drug Keytruda™ from Merck costs \$150,000 per year, but offers hope to many who once would not have survived a year with their cancer. Recently, Novartis achieved landmark approval for the first CAR-T based cell therapy, Kymriah™. After demonstrating an unprecedented remission rate of 83 percent in a very tough to treat cancer patient population, it is expected to be priced at \$475,000 per treatment. (Exhibit 1.)

If highly personalized drugs don't make it complicated enough to assign value, then what about conditions like HIV and many cancers that now need multiple drugs, often from different manufacturers? How do we compute the value of an individual agent in an HIV cocktail or a personalized breast cancer regimen? Should we even try? Initiatives like British Columbia's Personalized Onco-

Genomics Program aim to create tightly tailored treatments. When each patient receives a different combination of drugs, a broad attribution of effectiveness becomes anywhere from impractical to impossible under current healthcare-financing models.

As payers and providers move to value-based reimbursement models, they cannot continue to operate without a consistent method of valuing drugs, because they will be unable to determine whether they should approve the use of a given drug for a given patient. Even if it's best for the patient, the payer may take a financial hit. Payers already face the problem of covering the cost of a cure that requires a significant upfront outlay (for example, Harvoni for Hepatitis C, with a price tag of \$95,000), only to lose the now-healthy patient to another payer who reaps the entire benefit of that investment.

## SHARING THE RISK

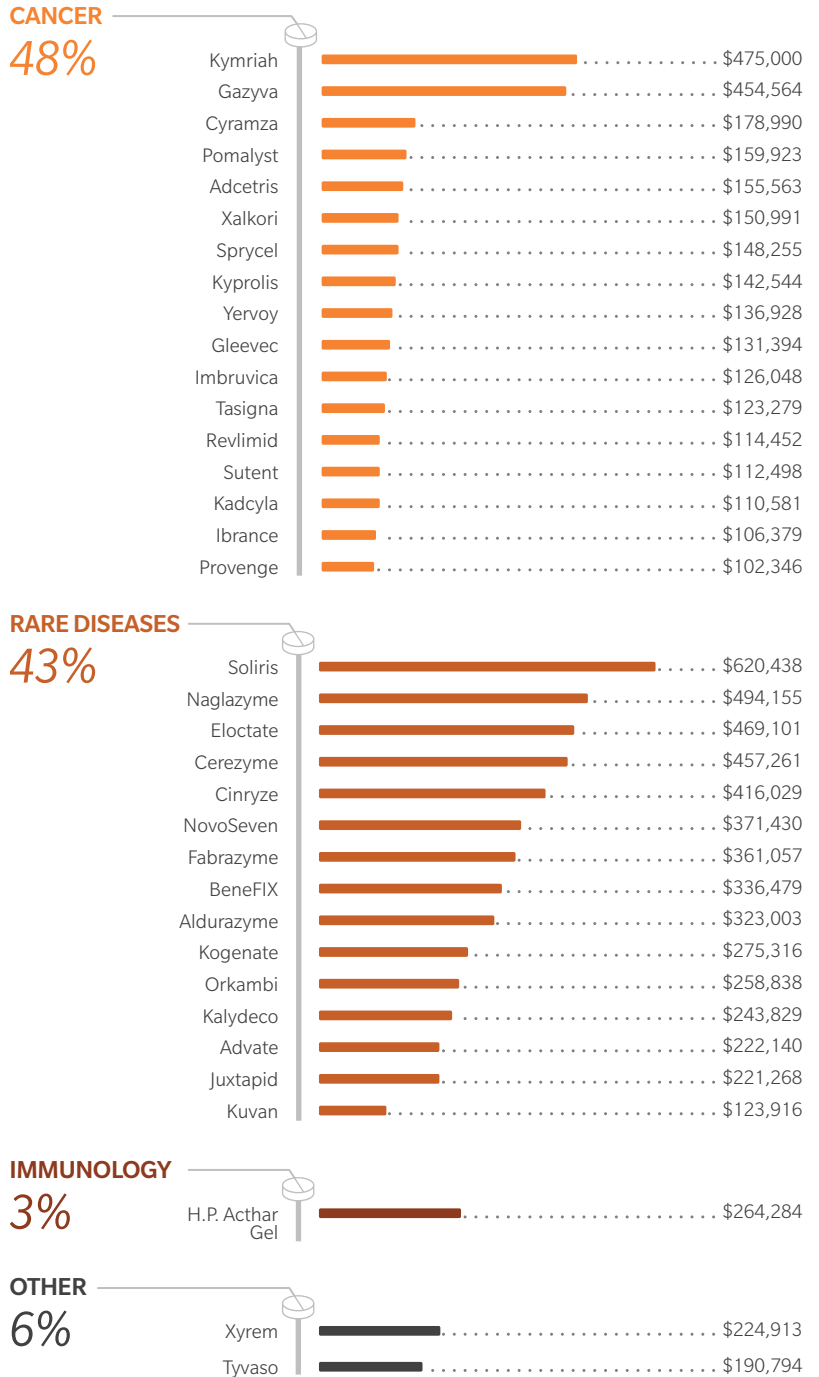
When providers start to share the payers' risk, they will get burned the same way. Physicians may hesitate to prescribe treatment regimens with front-loaded costs, depriving these regimens of the success that they may deserve for their overall clinical effectiveness. Under a fee-for-service system, we created incentives for over-utilization. Now, under value-based care, we may inadvertently create incentives for under-utilization of some of our potentially most miraculous tools, if we don't take precautions.

And what should those precautions be? Here are a few ideas:

**Pay for the outcome, not the drug.** If we agree on how much a disease should cost to treat by current methods, we can agree that a new drug costing less is a good value. In a partnership with the Centers for Medicare and Medicaid Services (CMS), Novartis

### EXHIBIT 1: THE WORLD'S MOST EXPENSIVE PHARMACEUTICALS

Here is a list of the 35 drugs that cost over \$100,000. Given that many of them let patients live longer, are the high prices reasonable?



Source: EvaluatePharma®, 2016 and September 2017, ©Evaluate, www.evaluate.com; FiercePharma; and Oliver Wyman

## Under value-based care, we may inadvertently create incentives for under-utilization of some of our potentially most miraculous tools.

agreed to absorb the cost of providing Kymriah™ to Medicaid patients if the patients do not respond within the first month of therapy. For diseases that are horrendously expensive to treat – late-stage cancer, life-long enzyme replacement therapy, or Hepatitis-C liver failure that requires a transplant as examples – the drugs could still be a good value even if their price is only slightly less horrendous than the treatments they replace. But the pharmaceutical companies involved would have to prove it.

**Amortize the payments.** If a pharmaceutical company wants five figures per treatment for a drug, the company should be willing to spread the cost over several years, during which the payer can track the patient's progress. If the patient switches insurance companies during

the time of the payments, even if they have finished the treatment, the new payer would take up the payment schedule, thus ensuring that the original purchaser doesn't bear the entire risk. And if follow-up shows that the drug hasn't worked as promised, the maker would be required to forgo at least some of the remaining balance. This method would encourage drug makers to be rigorous in pre-market research regarding effectiveness and not oversell their products. It would also encourage better post-market research – a chronic Achilles' heel of our current system.

**Be open to coalitions.** Increasingly, treatments will have multiple components. Payers, providers, and pharmaceutical companies should work together and share the reward for good results. Under the current payment system, the pharma company is just another supplier, but as drugs become more personalized, their makers must function more like an active member of a care team.

The drugs now in development hold promises that we could not have dreamed of only a couple of decades ago. But we must find better ways to determine the value of those promises if we want them to be kept.

### **David Campbell**

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# DO THE RIGHT THING

## How Castlight is uncovering the levers that create better healthcare consumers

**John Doyle**  
**Derek Newell**  
**Sam Glick**

*When Castlight Health launched in 2008, its business model was a radical one for the times. The company aimed to help employees with high-deductible insurance plans spend their money more wisely by informing them in advance how much they would have to pay for medical procedures.*

*But Castlight's leaders recognized that simply making healthcare and pricing information available wasn't going to be enough to change consumer behavior. Guiding consumers to the right care, in the right place, at the right time would require a deeper level of engagement.*

*Less than a decade later, Castlight has remade itself into a comprehensive health navigation platform that steers consumers to best-in-breed healthcare and wellness providers and then works to engage them in their own care through incentives and sophisticated digital marketing.*

*To find out more about Castlight's new vision of its place in the healthcare ecosystem, Oliver Wyman partner Sam Glick spoke with John Doyle, the company's CEO, and Derek Newell, its president.*

**SAM GLICK:** When Castlight started, it was about letting healthcare consumers see in advance what a given provider charges so they could make good decisions. But you've changed your focus. Why?

**JOHN DOYLE:** Our assumption going in was that there would be a huge upwelling of consumers reacting to the availability of this price data. Instead of following a "random walk," they would find reasonably priced, high-quality providers. What we learned was that only a minority of users do just that – most don't. We're not going to create the smart healthcare consumer overnight because the behavioral inertia in the space is so strong.

**DEREK NEWELL:** But even if we're never able to create educated healthcare consumers at scale, that doesn't mean that consumers won't be able to make better decisions. As we all know, when you get into a complicated healthcare journey, it's difficult for anybody.

We think the future lies not in simple transparency, but in analyzing claims data to understand what people should be doing, and then use digital marketing techniques to steer them to the right resources. Think of the way Google makes predictions about what you're searching for as you type – predictive search instead of the passive search. With a similar



## We think the future lies not in simple transparency, but in analyzing claims data to understand what people should be doing, and then use digital marketing techniques to steer them to the right resources.

approach we can, for example, help people find centers of excellence for their surgery or steer them to a service that provides second opinions instead of going straight to the surgeon's office.

**GLICK:** So you're actively making recommendations. That's quite a change from the transparency approach, where you just inform consumers and leave them to work things out for themselves.

**DOYLE:** Many employers were reluctant to be very directive about what kinds of choices their employees should make. But realistically, we know from the data that some procedures and providers are better than others, and if large employers want to make their healthcare spend more efficient, they need to start steering employees toward them. And we're starting to see a much greater willingness to do that.

**GLICK:** How do the employees react to it?

**NEWELL:** There's a lot of research showing that if you give people no choice they're upset, but if they have too many choices, they're overwhelmed. They don't know

what to do. Our goal is to give people the right choices – three to five great providers, not 20 or 100 – and not just serving up data without recommendations. If they have a credible source saying, "Here are three reliable options," it's very helpful.

By solving some of the challenges of navigating the healthcare system, we have a way of engaging consumers above the deductible.

**GLICK:** What do you mean by "above the deductible"?

**NEWELL:** Price transparency makes the most sense in the context of a high-deductible health plan and a health savings account, both of which give consumers an incentive to shop wisely for healthcare because initially they're paying. For basic healthcare resources and purchases, that approach works.

But when someone goes into a complex health episode, when they go beyond their deductible, their buying behavior could change, because now they're not paying; the plan is paying. That's where we're focusing our efforts — developing technologies that work with people who are in the high-cost part of the healthcare spend, and encouraging good behavior in the most expensive procedures through assisted decision making.

**GLICK:** There are a lot of challenges on the health and wellness side, too. It's easy to get somebody to sign up for a gym membership after New Year's; it's hard to keep them going come March. How do you keep people engaged in their own health and wellness?

**NEWELL:** Every single consumer company in the world advertises. They put coupons out there. They put sales out there. They put economic and behavioral incentives out there

to get you to behave in a certain way, and they're successful at it. So let's adopt that for healthcare.

I'm not talking about using the old one-and-done model of incentives, the kind where you do a biometrics exam and come back next year: If you get good results, we lower your premium, if not, we don't. There's a whole year in between.

That's too infrequent. We think the right approach is to create micro behaviors we monitor in real time using the "digital exhaust" of our digital health partners. We then link those behaviors to benefit design: When you do a search that results in you going to a higher-quality, lower-cost provider, we'll give you an incentive. If you walk 10,000 steps every day, we'll reduce your premium a little bit. Tying it directly to your benefits has an incredible quality to sustain engagement, and we see dramatic improvements in biometrics.

**GLICK:** Last question. If you had all the time and money in the world, what would you each fix about healthcare?

**Realistically, we know from the data that some procedures and providers are better than others, and if large employers want to make their healthcare spend more efficient, they need to start steering employees toward them.**

**DOYLE:** I would wave a wand and immediately have everybody in the United States on a standardized data format for their healthcare data.

**NEWELL:** That's it, hands down, give everybody access to all their healthcare data in a place where, if they chose, they could expose it to a third party and could use it to create value for them. It might actually take all the money in the world to do it, but that's how I'd invest it.

### **John Doyle**

is chief executive officer of Castlight Health.

### **Derek Newell**

is president of Castlight Health.

### **Sam Glick**

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# DISRUPTING DISTRIBUTION'S STATUS QUO

## Who or what will control the future trading flow?

Howard Lapsley

Industry change is never fast; in fact, it's often agonizingly slow. This is especially true when the status quo is protected by incumbents who control the industry's trading flow.

In the health and group benefits space, the business-to-business (B2B) broker/consultant has long been the clearinghouse for the sale and configuration of employee benefits. Past attempts to go around the channel have largely failed, and for good reason: Employers like having trusted feet-on-the-street broker/consultants who can educate them on industry trends, and help select and structure their benefit programs.

However, the winds of disruption are upon us, driven by the mounting power of the consumer and technology advances. We now see the distribution engine, with the encouragement of an ever-increasing number of plan sponsors, start to shift its focus to the employee, pulling the supply and delivery players along with it. Innovators across the value chain are changing the focus of their business models to a business-to-business-to-consumer (B2B2C) approach from B2B.

The evolution is not dissimilar to the power shift that has been taking place in the media industry, since streaming video and watching television on mobile phones became realities. Suddenly, cable operators no longer call the shots; content does. A consumer doesn't have to pay Xfinity or Verizon Fios to watch a popular show; there are multiple channels and mediums available as alternatives.

Might the same be true for the incumbents in the healthcare distribution space? Will brokers continue to control the trading flow, or will consumer-centric content and/or user-friendly technology platforms be the center of gravity in the future distribution landscape? The likely winners are those that can curate the needed solutions across the value chain, leveraging the new technology via targeted partnerships.

## EMPLOYEES LOOK FOR VALUE

As health insurance premiums continue to escalate and employees take on more of the cost burden of their benefits, employees are demanding more value from their benefit dollar. There is ever-increasing pushback on one-size-fits-all plans; higher co-pays and deductibles; forced adherence to arcane health risk assessment requirements; long waits to see doctors in inconveniently located offices with limited business hours; and disconnected product choices across health, wellbeing, and ancillary. Our research, and research conducted by others, shows employees crave bundled, customized solutions that span the risk and wellness spectrum and are more relevant to their personal health and wellness needs.

The first wave of digital distribution platforms – most from broker- or consultant-led private exchanges – achieved only modest uptake because they missed what

employees really wanted. These efforts, focused on acquiring arms and legs, not hearts and minds, and pushed for membership primarily through promises of cost savings. That promise soon rang hollow, as those cost savings were achieved via skinnier benefits, further cost-shifting, or narrow networks. They depended largely on glorified spreadsheets with rudimentary choice algorithms and cartoon graphics.

Today, leading B2B2C platforms are focusing on consumer value and engaging the employee on selecting, or subscribing, to the benefits package that best meets their needs. Their goals involve engaging the employee throughout the year, not just at enrollment, on technology that is simple and convenient to use.

## TECHNOLOGY BRINGS DISRUPTION

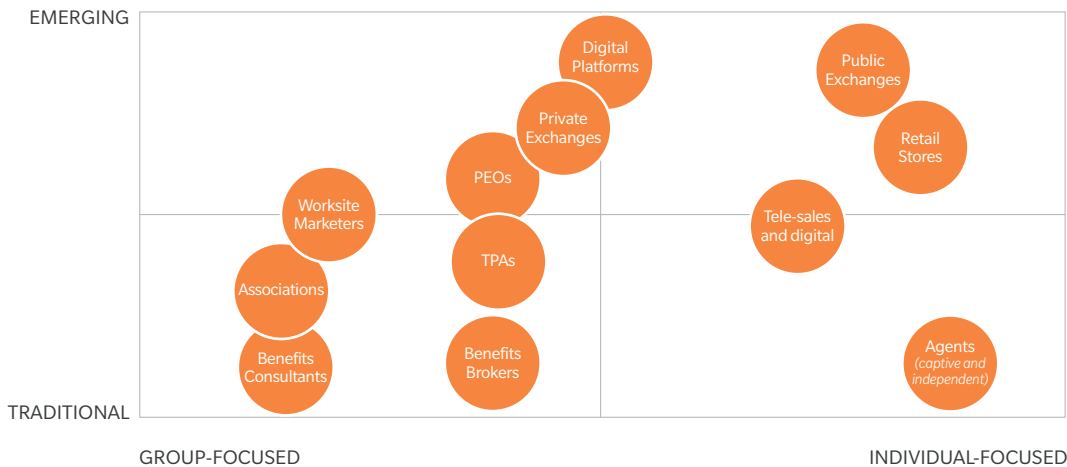
The next-generation digital platforms are emerging with navigation and choice algorithms, driven by machine learning and

a sophisticated understanding of behavioral economics. Data capture has become more advanced and distribution platforms are better able to engage, educate, guide, and deliver meaningful consumer-centric solutions, along with providing administrative ease and simplicity. (See Exhibit 1.)

Enabled by technology advances, and in response to shifting employee/consumer demands, we now have a different distribution landscape than we did 10 years ago. Brokers have consolidated to achieve scale and cover more areas of expertise; professional employer organizations and third-party administrators have emerged to outsource large areas of human resources administration; a flood of new technology platforms has entered the market focused on small-to-medium businesses, selling to both brokers (versus trying to disintermediate them) and carriers.

Some payers have had good success with proprietary platforms; and many of the large consulting houses are repositioning private

**EXHIBIT 1: WHICH WILL BECOME THE NEW LINCHPIN, AND WHICH SUPPLY DELIVERY COMPONENTS WILL BE NEEDED?**



Source: Oliver Wyman analysis

## Future winners will act as curators of digitally enabled networks of solutions, earning their keep from per-member, per-month payments or consulting fees.

exchanges as “marketplaces.” Emerging from the flurry is a new portfolio of consumer-centric solutions, both on the product and delivery front. Future winners will act as curators of digitally enabled networks of solutions, earning their keep more from per-member, per-month payments or in consulting fees than in ever-tightening commissions.

### IMPLICATIONS FOR PAYERS AND PROVIDERS

Customer demands and enabling technology are forcing insurers to rethink product development. And that is leading to benefit-stack innovation, such as benefits linked to wellness, linked ancillary-protection products, benefit and price bundling, life-stage solution packages, and more. Such benefit-stack innovation will allow payers to differentiate themselves, expand share of wallet (into integrated health, ancillary, wellness, and retail delivery), and protect against churn.

Meanwhile, providers are revolutionizing care delivery to meet employees’ needs with anywhere-anytime service and accessible delivery mechanisms – everything from retail to urgent care to tele-health to in-home. These new delivery systems will become more ingrained into the benefit stack, configurable via digital platforms focused on targeted value solutions.

To deliver these solutions, payers and providers will need to develop more select and targeted partnerships with distribution players. It’s not about trying to get as much shelf space across as many platforms and brokers as possible, but rather a very purposeful distribution portfolio strategy aligned with geographic and segment priorities, where distribution arrangements look more like joint ventures than traditional arms-length relationships.

Health- and group-benefits distribution, driven by consumer demands and new technology innovation, is being transformed. We already see successfully curated models and benefit stack innovation such as life-stage packages and linked medical-ancillary benefits. Brokers might still control the trading flow going forward, if they can control access, but how and what they sell will change dramatically. Payers and providers as developers of consumer-centric solutions can also become critical influencers, à la the content providers in the new media landscape. Those who fail to recognize this sea change in the distribution landscape – and those who are still asking “Are we there yet?” – will be left behind.

#### **Howard Lapsley**

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# THE DNA OF EFFECTIVE PREVENTION

How genetics can help cut treatment costs by getting prevention services to consumers most at risk

**Tony Wang**

Thanks to technology, we can finally retire the old business adage that says a consumer must be satisfied getting two out of three when it comes to good, fast, and cheap. Today, we have Google searches that provide high-quality answers to our questions in a matter of milliseconds – for free. Consumer electronics, like personal computers, smartphones, and flat-screen televisions, keep getting lighter, faster, and easier to use, and more affordable. In fact, the same can be said for a whole host of consumer products, from appliances to automobiles with autonomous driver-assistance features.

Technology has engendered a reasonable expectation among consumers for ever-higher quality products at ever more affordable prices. That is, except in healthcare.

Contrasted with our demand for consumer product perfection, we're appallingly tolerant when it comes to healthcare, despite its almost annual higher-than-inflation cost increases. Total healthcare spending in the US reached nearly \$3.4 trillion in 2016, and the Centers for Medicare and Medicaid Services (CMS) projects it will climb to \$5.5 trillion by 2025, outpacing the growth in gross domestic product (GDP) for the period. In fact, despite having the highest per capita

healthcare expenditure in the world, the US ranks towards the bottom among the 35 countries in the Organisation for Economic Co-operation and Development (OECD) in terms of most health outcomes. It trails other developed economies in such measures as life expectancy, health coverage rate, and deaths from preventable diseases.

What's going on here? How can we harness the power of technological innovation to achieve "good, fast, and cheap" for our industry? The unsung hero of efforts to bring affordability to medicine isn't better treatment; it's better prevention. And one engine that could be driving better prevention is genetics.

## PREVENTION THROUGH INCREASING PRECISION

One of the most productive things the healthcare industry can do to cut costs is move from treating disease to preventing it – or at least detecting it earlier. Studies show that five percent of the population accounts for nearly half of all healthcare spending. Identifying that five percent and treating them earlier could have a huge impact in both lives and money saved.

But prevention also can at times be an overly blunt instrument. Widespread PSA screening, to offer one notable example, has led to diagnosis of prostate cancers in men who would have otherwise died from other causes never knowing they had cancer. Universal wellness programs also miss the

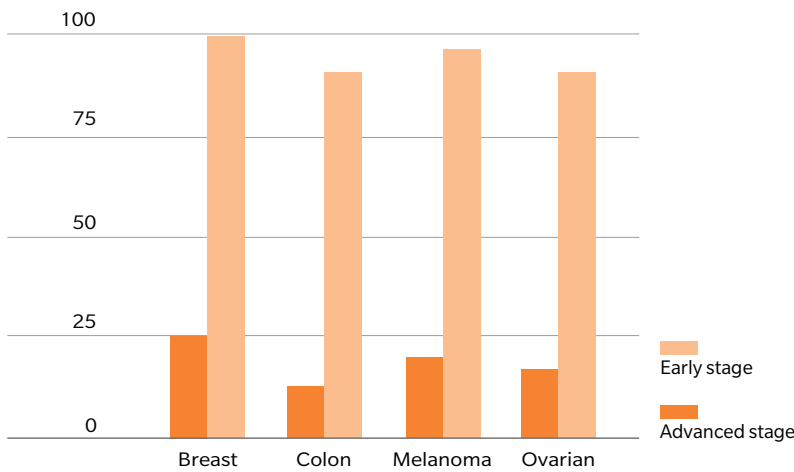
mark frequently, encountering roadblocks to getting people to do the two things they already know they need to do: Exercise more and eat less.

This is where precision prevention comes in. For self-insured employers, about one percent of their members accounts for more than 30 percent of their cost of medical claims. Advances in genetics can help identify those most at risk for certain diseases and put them on a path of early detection and prevention. Focusing on the population more likely to get sick allows us to precisely target our investments in prevention on the people who need it most.

For example, there are conflicting guidelines for how often women should get mammograms and at what age they should start. These varying one-size-fits-all recommendations contribute to confusion in an area where compliance is critical. But when a woman knows she has a mutation that puts her at greater risk for breast cancer the decision becomes a lot clearer. How much is there to gain? Earlier detection of all new breast cancer cases would have saved about 22,000 lives and reduced treatment costs by \$4.5 billion in 2017. (See Exhibit 1.)

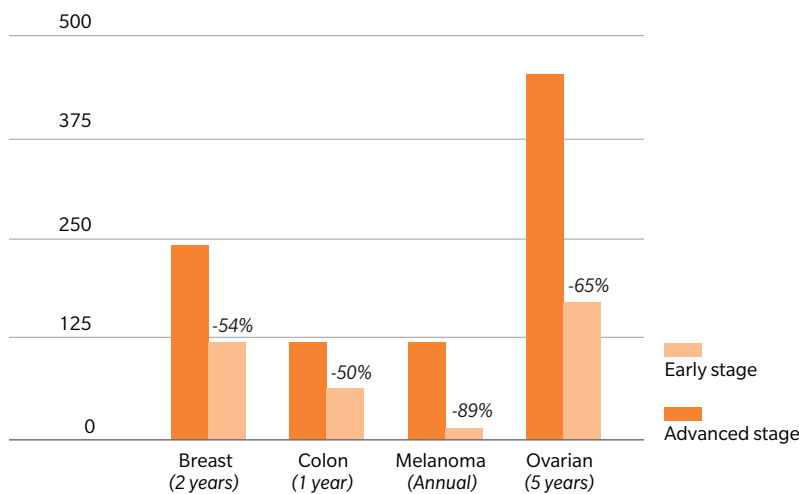
**EXHIBIT 1: EARLIER DETECTION IMPROVES SURVIVAL RATES...**

AVERAGE 5 YEAR SURVIVAL RATE BY STAGE  
%



**...AND REDUCES TREATMENT COSTS**

COST BY STAGE IN THOUSANDS OF US DOLLARS  
US\$ K



Source: Color Genomics Inc.

**CUTTING COSTS THROUGH TECHNOLOGY**

As the genetics industry has matured, the cost of determining a person’s hereditary risk for life-threatening diseases like cancer and heart disease has dropped from thousands of dollars to just a few hundred. Making important health information so much more affordable enables broad populations to take informed steps on prevention. It also provides opportunities for earlier intervention, as an informed consumer is more likely to get the necessary screenings that would enable early detection.

An informed patient is often a more efficient healthcare consumer. By shifting intervention from treatment to prevention, genetics can reduce the number of people facing difficult, uninformed spending choices. If I have cancer, I want to get well at any cost. If I'm just studying options for staying healthy, I can afford to shop around. It's at this end of the price elasticity curve where healthcare consumers have excelled at demanding high-quality, lower-cost options.

Driving these improvements in cost and quality in genetic testing has been software capable of conducting complex tasks reliably and at scale. For instance, custom tools like self-service health history collection and risk modeling enable genetic counselors to devote less time to administrative matters and more to direct care. Similarly, software saves clinical molecular geneticists and variant scientists untold hours spent on data collection, literature searches, and cross-referencing guidelines.

Finally, as improved access to genetics yields larger amounts of data, machine learning is providing key insights that allow us to interpret the information. For example, as scientists identify specific variants that require special attention, machine learning can find ways to flag variants that demand similar attention but might have been missed by manual review.

**One of the most productive things the healthcare industry can do to cut costs is move from treating disease to preventing it – or at least detecting it earlier.**

And beyond the effect of individual mutations, our understanding of the impact of multiple mutation permutations will accelerate with the assistance of advanced machine learning.

By improving outcomes and minimizing error rates and other costs from manual interventions, artificial intelligence and advances in genomics are moving us ever closer to our goal of more timely and efficient delivery of preventive services. And while it won't happen overnight, that will help unleash the power of consumers to demand better, faster, and cheaper in their healthcare.

**Tony Wang**

is chief operating officer of Color Genomics Inc.



# THE NEW HEALTHCARE ENTERPRISE

CREATING THE CONDITIONS  
FOR DISRUPTION

CEO Commentary: Why Highmark Health  
Chooses a Collaborative Approach

The Inevitability of Artificial Intelligence

Partnering for Change

Fighting Opioid Addiction with Data



# WHY HIGHMARK HEALTH CHOOSES COLLABORATIVE CARE

CEO Commentary: Holmberg on the benefits of being value-based and patient-centric

David Holmberg

Highmark Health has earned attention as the largest integrated healthcare system created by an insurer rather than a provider network. Our affiliated companies serve nearly 50 million people nationwide. We have also created a fully integrated delivery and financing model in western Pennsylvania that connects coverage from Highmark Blue Cross Blue Shield and care from the Allegheny Health Network (AHN), which includes eight hospitals, 2,800 physicians, and numerous Health + Wellness pavilions, urgent care facilities, outpatient surgery centers, and other home- and community-based health services.

But the value of our integrated approach to healthcare is not limited to what we own in our western Pennsylvania service area. Whether it involves our affiliated companies or external partners like Johns Hopkins Medicine, we believe the healthcare enterprise of the future should be fundamentally collaborative and built around certain shared strategic priorities.

First, the primary focus must be the consumer. That can't just be patient-centered care in hospitals. We must work together to get a 360-degree view of the entire healthcare journey and then, collaboratively, design

coverage, care and related services that are more responsive to the real-life needs of today's consumers.

## PRIORITIZING CUSTOMER VALUE

Second, a value-based framework must replace old, volume-driven, fee-for-service models. That includes value-based reimbursement – but also prioritizing value creation for the customer. The first step in overcoming fragmentation in healthcare is an industrywide commitment to defining and measuring value in terms of access, quality, safety, affordability, and the customer experience. That common starting point makes it easier to see how different stakeholders in the system can better work together to deliver such value.

Third, we must address the cost crisis. Rising healthcare costs are a national problem that constrains employers from hiring; drives up out-of-pocket costs and taxes for individuals; exacerbates disparities in access to quality care; and presents a risk of destabilizing our economy. Any effort to improve the healthcare system must prioritize cost control.

Last, we have to develop better ways to connect different stakeholders within the healthcare system in order to align goals, coordinate efforts, and share data and insights. Highmark Health makes those connections internally through our integrated delivery and financing system in western Pennsylvania, and through affiliated businesses in health information technology, and dental and vision products and services. The same mindset drives our collaborations with external provider network partners, such as Geisinger Health Systems in central Pennsylvania, and industry innovators like Quartet Health and Axial Healthcare.

## CANCER COLLABORATIVE

A good example of these strategic principles in action is the Highmark Cancer Collaborative, which brought together the best and brightest from Highmark Blue Cross Blue Shield, Allegheny Health Network, and the Johns

Hopkins Kimmel Cancer Center. The goals of this collaboration include:

- Improving patient safety, patient experience, and clinical outcomes
- Enhancing quality by increasing the use of evidence-based treatment and reducing unwarranted variations
- Lowering total costs of care
- Expanding patient access to high-value care

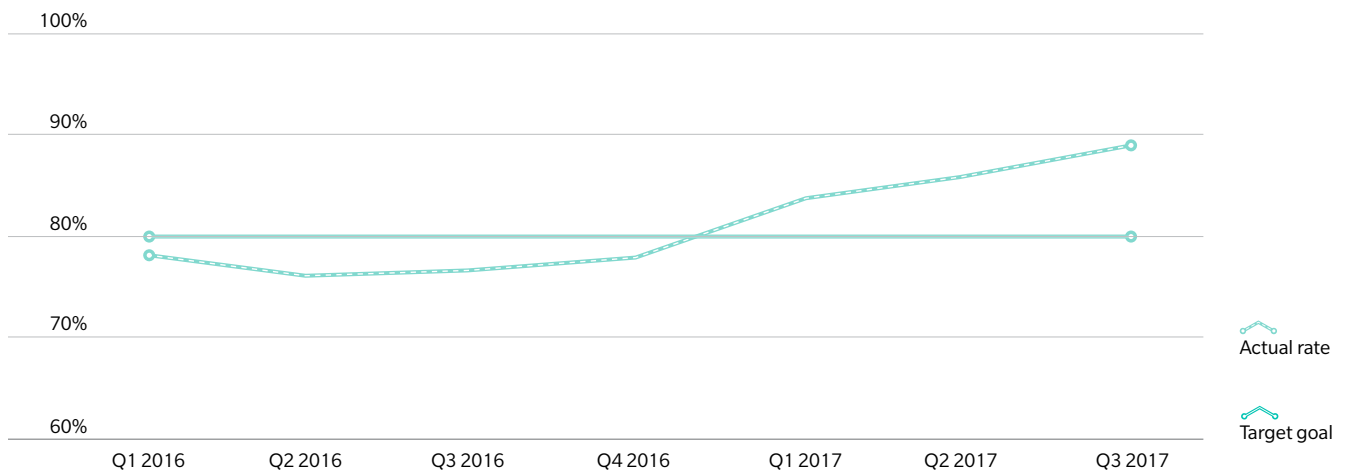
The Cancer Collaborative team is responsible for an evolving portfolio of long-term programs, but I'll share just two of its recent success stories.

To promote use of evidence-based treatment pathways, Allegheny Health Network clinicians and Highmark insurance professionals reviewed and unanimously chose a web-based, decision-support tool powered by the National Comprehensive

### EXHIBIT 1: COLLABORATING TO ENSURE EVIDENCE-BASED CARE

Participating oncologists in the Highmark Cancer Collaborative used the platform's recommended treatment pathways 83 percent of the time over the program's first seven quarters, beating its 80 percent target

TREATMENT PATHWAYS ADHERENCE RATE



Source: Highmark Health

Cancer Network. We then designed a Medical Oncology Pathways Program that gives clinicians free access to that tool and, among other things, rewards 80 percent or higher use of recommended pathways by removing prior authorization hurdles. The platform puts the latest, evidence-based treatment pathways at the doctor’s fingertips and can be integrated with electronic medical records and other data. It also includes cost information, allowing the medical oncologist and patient to have real-time conversations about treatment costs, where appropriate.

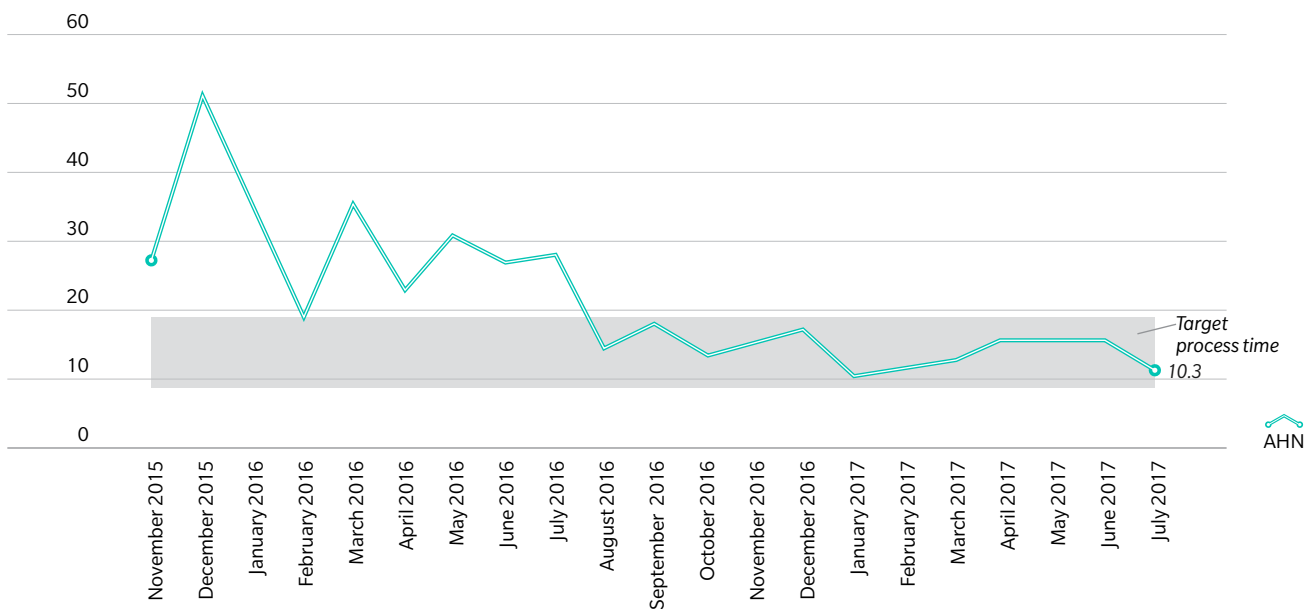
In Year One of this program:

- 28 physician practices across Highmark’s three-state insurance service area joined Allegheny Health Network in using the decision-support tool to aid more than 2,000 decisions
- Based on initial success, the program has been expanded to cover more than 96 percent of cancers faced by our health plan members
- Participating medical oncologists used the platform’s treatment guidelines 83 percent of the time on average during the first seven quarters, exceeding our target goal of 80 percent (See Exhibit 1.)

**EXHIBIT 2: CUTTING THE TIME BETWEEN TREATMENT AND PAYMENT**

The Episode-of-Care Reimbursement Program helps doctors establish a more predictable revenue stream

PROCESS TIME  
DAYS



Source: Highmark Health

To add perspective on cost implications, a national study in the *Journal of Oncology Practice* found that patients following evidence-based clinical pathways had 35 percent lower total costs. Another study found that hospital readmissions were seven percent lower when evidence-based pathways were followed.

**We have to develop better ways to connect different stakeholders within the healthcare system in order to align goals, coordinate efforts, and share data and insights.**

## STREAMLINING CARE

Another collaborative success is our Episode-of-Care Reimbursement Program, designed to remove systemic factors that can contribute to overtreatment, streamline the care experience for everyone involved, and provide physicians with a more predictable revenue stream.

Through this program, we are reducing the use of six-week radiation treatments for breast cancer in cases where evidence shows that a three-week regimen will be just as effective and less toxic.

We have a pre-agreed fee – with half paid when treatment begins, half at conclusion – based on appropriate care, not volume of care. We again remove pre-authorization based on compliance with standards. During Year One, this resulted in a 46 percent decrease in average cycle time between treatment and payment. (See Exhibit 2.)

In terms of quality and access, the collaboration with Johns Hopkins Kimmel Cancer Center has given people covered by our health insurance plans second-opinion consults for rare and complex cancers, increased the use of appropriate molecular

testing to optimize treatment, and tripled the number of clinical trials available to patients in western Pennsylvania.

That's a small taste of what can be achieved when different parts of the healthcare system put the consumer at the center and take a highly collaborative, valued-based approach to improving outcomes and controlling costs. Beyond just uniting payers and providers on the same platform, I'll add that the Highmark Cancer Collaborative includes regular meetings and check-ins between providers and Highmark's dedicated support team.

We have replicated this model of integration with other providers and are looking at how to make it work in additional areas of care as well. But what's driving us, and those with whom we partner, isn't a question of who can buy or build the biggest integrated healthcare system – it's a commitment to doing whatever it takes to make healthcare work better for our customers, and our nation.

### **David Holmberg**

is president and chief executive officer of Highmark Health.

# THE INEVITABILITY OF ARTIFICIAL INTELLIGENCE

Why healthcare needs the new technology

Sukanya Soderland

In its hospital complex in New York City, leading cancer center Memorial Sloan Kettering is partnering with IBM to create the medicine of the future. There, oncology specialists have been teaching Watson, a cognitive computing system probably best known for beating humans at the TV game show *Jeopardy*, how to interpret cancer patients' clinical information and identify personalized, evidence-based treatment options.

Watson mimics the human brain, digesting terabytes of data on certain cancers. Today, it is no smarter than the cumulative knowledge of the people who feed it information or the human-produced research it absorbs. But given the exponential growth in the amount of data on cancers coming available and the machine's ability to "learn," recognize patterns, and summon information instantaneously, it may be smarter one day.

Watson also allows doctors to share their knowledge, meaning eventually every doctor around the world can be as smart as the most experienced doctors in treating a particular problem. That can be a significant benefit for people not living near top-tier healthcare facilities. As Larry Norton, deputy physician in chief for breast cancer programs at MSK, puts it, "I think this is beyond an evolutionary step.

I think this is a revolutionary step. This has the potential of totally changing the way we conduct medicine."

## STREAMLINE AND OPTIMIZE

And that's the hope of artificial intelligence (AI) in healthcare. With its ability to sift, interpret, and order vast amounts of data, AI – with the help of advanced new algorithms – has the capability to streamline our \$3 trillion healthcare industry, optimizing everything from medical coding to who (or what) reads our X-rays and MRI scans. It will soon power an entirely new generation of clinical tools and help physicians develop – down to a genome – personalized treatment plans. Someday, a person may be able to present Amazon Alexa with a problem, answer a few of "her" questions, and get personalized recommendations or a home-delivery drone-drop of a prescription.

Watson has provided concrete glimmers of the potential of AI and machine learning. But even today, consumers and healthcare providers are already benefiting from these tech innovations – thanks to less high-profile, workaday solutions being deployed daily in hospitals globally.

Today, most of the AI applications in healthcare are tactical – small in scale or focused on back office operations. These applications target obvious friction points of inefficiency or waste in the healthcare system and offer tangible solutions. Yet, even the smallest applications help build the bridge to the solutions of tomorrow – the transformative AI that will eventually reinvent the clinical and delivery side of healthcare.

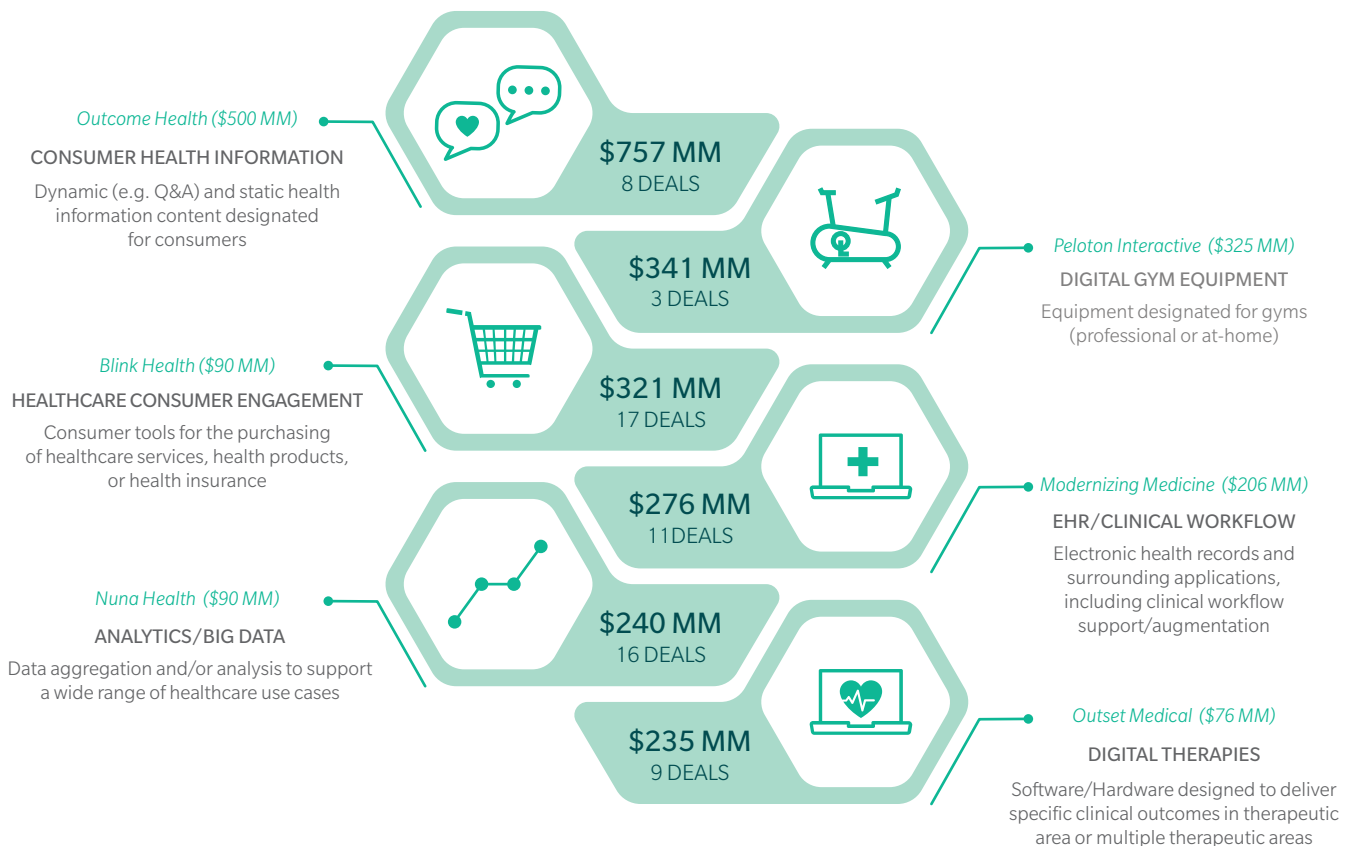
## EXAMPLES FROM THE FIELD

Here is some currently deployed, AI-inspired tech:

**Preventing healthcare-associated infections (HAIs).** On any given day, one in 25 hospital patients is sick from an HAI, according to the Centers for Disease Control and Prevention (CDC). Catalyst.ai™, from Salt Lake City-

### EXHIBIT 1: TOP CATEGORIES FOR INVESTMENT IN HEALTH INFORMATION TECHNOLOGY IN 2017

Investors are increasingly seeing the potential payback from digitalizing healthcare, an industry with too much data and too high costs



Source: Rock Health Funding Database



based Health Catalyst, utilizes “smart” data mining and machine-learning algorithms to reduce patients’ risk of these deadly HAIs in the hospital setting. By analyzing where and when patients are most prone to infections, hospitals can take proactive steps to change practice patterns and work processes to reduce the risk. One health system utilizing catalyst.ai can now predict with 87 percent accuracy which patients with a central line are likely to develop a potentially fatal central-line infection, allowing them to address risk factors and initiate therapy early to improve clinical outcomes.

#### **Getting people to take their meds.**

The annual cost of people not taking their medication or taking it incorrectly is estimated to be about \$300 billion. AiCures is a New York-based start-up that uses AI and facial recognition software on mobile devices to ensure people take their medication the right way. A recent study found that AiCures helped boost medication adherence in people with schizophrenia to nearly 90 percent.

**Reducing claims denials.** As many as 40,000 healthcare claims are denied in the United States each year. Claim denials are a major source of lost revenue for healthcare providers and a substantial source of stress for patients who then must pay for the care out of pocket. Often, the outstanding bills don’t get paid at all, leading to mounting bad debt for hospitals. DenialsIQ™ from GE Healthcare is an advanced-analytics solution that uses machine learning to address the problem of medical-coding errors, one of the principal causes for claims being denied. DenialsIQ first flags insurance claims not coded properly, and then helps healthcare providers understand the mistakes they’re making and how to avoid the denials in the future.

## INVESTOR EXCITEMENT

No doubt, the AI revolution in healthcare is happening now. One need only look at the investment community’s growing interest in ventures connecting AI to healthcare as an indication of its perceived potential.

In July, an analysis by Silicon Valley Bank cited 44 venture-backed deals that raised \$2.2 billion between 2015 and the first half of 2017 for startups developing diagnostic tools using AI or machine learning as part of their underlying technology. Large corporations, including Google, Amazon, Johnson & Johnson, General Electric, and Bristol-Meyers Squibb, are also dipping their toes into AI healthcare waters.

As the revolution is gaining momentum, it also faces a predictable resistance. Healthcare is a hyper-local industry that for the most part revolves around a key player – the physician and his or her judgment. It is not as if AI questions that judgment – after all, it’s physicians teaching the machines all they know. But doctors balk at consulting machines.

## THE DOUBTERS

Criticisms of AI innovations like Watson say they only end up confirming diagnoses by human doctors. In part, that’s because these machines at this point tend to be used by the most advanced hospitals around the world with the most experienced doctors. So it’s not surprising that they may not learn that much new yet.

Watson's limitations relate more to how AI and machine learning work. Their development is an iterative process, much the way our doctors are educated over multiple years at school and in residencies – except much faster and involving millions upon millions of data points.

When Watson is up to its potential, it will represent the cumulative knowledge of thousands of specialists. It will not provide diagnoses for only one type of cancer, but eventually for all of them – and other diseases as well. While there are doctors who can easily match and even best AI innovations on some diagnoses, they cannot match the technology on all of them. Nor can some doctors even match Watson.

## WHERE TO DEPLOY

No doubt, AI and machine learning are coming to healthcare. But innovators still need to decide the most productive places to make investments.

The first criteria: Innovators need to look for major pain points for the healthcare industry, ones that represent substantial sums lost to waste and inefficiency annually. For example, in 2017, it was estimated that hospitals will lose \$262 billion annually to insurance claims denials. That's a pain point.

Second, AI and machine learning work best when there is too much data for humans to process, keep updated or analyze efficiently. The CDC estimates, for instance, that annually about 1.7 million patients contract a healthcare-associated infection during a hospital stay, from which 99,000 will die.

### **Sukanya Soderland**

is a partner in both Oliver Wyman's Life & Health Sciences practice and its Digital, Technology, and Ops and Analytics practice.

**Artificial intelligence will soon power an entirely new generation of clinical tools and help physicians develop, down to a genome, personalized treatment plans.**

AI allows for the collection of the data related to those infections and detects patterns, which then point to optimal strategies to reduce them.

Finally, AI and machine learning should be introduced into situations in which formulas exist for attacking problems. This allows the technology to use algorithms to transform the results of hundreds, even thousands, of successful and failed pilots into optimized solutions that will reduce, even eliminate, problems.

Artificial intelligence is the future for every industry, but nowhere is it needed more than in healthcare, which is already drowning under mountains of data and out-of-control costs. Like it or not, this revolution is coming, and healthcare needs to prepare for it – and more importantly, support its growth.

# PARTNERING FOR CHANGE

## Five success factors for accelerating innovation through strategic partnerships

Marcia Macpherson

Innovation is always challenging, and it's particularly difficult for large organizations that already dominate their markets. Their cultures typically reward stability, incremental change, and risk aversion, and are not ideally equipped to deal with a disruptive environment like the one currently facing healthcare providers and payers.

Multiple levels of bureaucracy and organizational silos make communication and quick action difficult, and can slow the introduction of new products and services. New ideas may also threaten to cannibalize existing business, even though they offer more opportunity in the long run. Often, "the long run" plays a less important role in strategic planning when top executives' careers are riding on the next quarterly or annual results.

It's tempting to look for innovative partners: small, nimble, imaginative companies that aren't hobbled by corporate history, entrenched positions, and infrastructure, but need the help of established organizations to make their products and services take off and achieve scale. However, both sides must be open to change and be prepared to collaborate in ways that may not feel natural to their internal cultures. Many such partnerships are announced with great fanfare only to sink without a trace. In fact, it's rare to see one that has staying power and delivers the promised benefits to both sides.

## GETTING OFF THE GROUND

For these partnerships to even get off the ground, innovators have to figure out a way to break through the noise with flexible partnership options that reduce the risk for incumbents while still offering high potential value. At the same time, incumbents must be clear on the core problem they are trying to solve, or customer experience they are trying to enhance, so they can focus on the best partner for achieving that goal.

Based on our experience at Oliver Wyman, those that do succeed tend to share certain characteristics and strengths that can serve as inspiration for aspiring ventures:

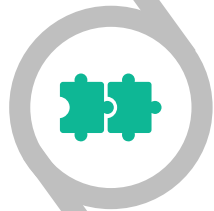
**Build a strategic partnership.** A successful partnership that addresses a strategic need – one that drives change – must involve the highest level of leadership in the incumbent's organization in order to break through historic entrenched positions. Both parties should feel that the risk is shared. Partnerships work best with innovations that rock the boat, because those require fundamental changes in the way people – whether staff or patients – relate to the organization. If a project doesn't rock the boat – if a department head can make a purchasing decision or slide a proven product or service right into the existing

**EXHIBIT 1: THE NEW RULES OF JOINT VENTURE MATCHMAKING**

Incumbents and innovators partnering to accelerate change

**BUILD A STRATEGIC PARTNERSHIP**

- To truly innovate, partners must be invested to achieve aligned and mutually beneficial goals; this requires a strategic partnership, not a traditional vendor relationship
- Innovation challenges norms and requires strong champions... if leadership is not involved, the solution either isn't truly innovative or isn't positioned for success

**ASSESS STRENGTHS AND POTENTIAL ROADBLOCKS**

- Evaluate how well your organization dovetails with the proposed partner and which resources the new joint venture can borrow
- Identify potential roadblocks that will reduce your innovator's ability to move fast

**PILOT PURPOSEFULLY**

- Aim small, miss small: have near-term goals and feasible pilots in order to test the solution and strengthen the relationship
- Incumbents often pilot using the employee base or employed physicians, reducing market risk and increasing freedom of control to deploy the solution

**CO-MANAGE ADVERSITY**

- Challenging the status quo will be just that, challenging; both parties need to be committed to helping manage through each other's pain points
- Cultures between incumbents and innovators are inherently different... strong alignment on common goals is necessary to push through problems when they arise

**SCALE SENSIBLY**

- Extending the partnership with increased market scale can be the true test; sensible plans require discretion and transparency from both parties
- Follow pilot successes with a feasible plan to scale, finding common ground across target markets or clients as natural places for initial extensions

Source: Oliver Wyman analysis

## Incumbents must be clear on the core problem they are trying to solve, or customer experience they are trying to enhance, so they can focus on the best partner for achieving that goal.

workflow – then maybe this is not the stuff of a partnership and should be handled as a typical vendor relationship.

Innovations intended to drive robust change need C-suite buy-in. This signals to the innovator that the partnership is being taken seriously, and the incumbent will devote real resources to helping develop and test the innovator's solution. It also signals to the lower levels of the incumbent organization that all options are on the table – even those that might cannibalize existing business lines or take resources from shorter-term projects.

### **Assess organizational infrastructure strengths and potential roadblocks.**

Incumbents should analyze how well their organization dovetails with the proposed partner. What resources can be borrowed from the existing organization's infrastructure, and which ones must be purpose-built for the innovation? What constraints or barriers need to be removed? It is critical to evaluate what components of the incumbent's business can best enable the new partnership without reducing the innovator's ability to be nimble.

**Pilot purposefully.** It's important to remember the fundamental principle of pilot projects: Aim small, miss small. Establishing near-term goals and feasible pilots can not only test the solution, but strengthen the relationship between the innovator and the incumbent. Using the incumbent's employees or employed physicians as the test population is a good way to minimize risk. While an innovation may reasonably take time to show a return on investment, interim metrics can signal whether it's on the right track.

**Co-manage adversity.** An incumbent organization and an innovator are not likely to fit together seamlessly and accomplish every goal exactly as planned. Manage accordingly. Build tight communication into the whole process. Bring both sides together frequently and regularly – every couple of weeks – to go through the nitty-gritty. Forget the notion of plug and play even if it's one of the innovation's putative selling points. Both parties need to be committed to helping manage through each other's pain points, and strong alignment on common goals will help the partnership push through problems.

**Scale sensibly.** The true test of a solid partnership is extending a successful pilot into larger markets. Follow pilot successes with a feasible plan to scale, finding common ground across target markets or clients as natural places for initial extensions.

A strategic partnership between an incumbent and an innovator requires working in new ways – for both sides. But disruptive scalable innovations are within reach if the parties can align their incentives and apply these five partnership tactics.

### **Marcia Macphearson**

is a Chicago-based partner in Oliver Wyman's Health & Life Sciences practice.

# FIGHTING OPIOID ADDICTION WITH DATA

Doctors need to recognize that overprescribing – even by days – can doom certain patients

**Bruce Hamory, MD**

**A**ddiction is a powerful, complicated disease. Genetic, environmental, and psychosocial characteristics all factor into a person's risk for dependency. When it comes to opioid addiction, who your doctor is also influences whether or not you will become addicted to these powerful pain medications.

That's because some doctors write opioid prescriptions more often, and for longer, than other doctors. Research shows that the likelihood of chronic opioid use increases with each additional day of medication supplied, so taking opioids for just five days instead of three – days, mind you, not weeks or months – can lead to long-term use. Do doctors appreciate that when they write initial prescriptions for nine days instead of three, they are increasing the risk of opioid addiction? Many do not.

Of course, there are people who need opioids for short-term pain management and for whom opioids are a legitimate treatment option. But easy availability and a lack of appreciation for the true risk of addiction have contributed to the opioid epidemic. To loosen opioid's grip on America, we need to curb overprescribing by helping physicians better understand what constitutes appropriate

use of opioids. Helping physicians navigate appropriate prescribing is an important next step in controlling the nation's opioid epidemic.

## MORE AND BETTER GUIDELINES

The medical community is beginning to see guidance on responsible prescribing. The Centers for Disease Control and Prevention (CDC) released guidelines for primary care clinicians who prescribe opioids for chronic pain. The American Society of Interventional Pain Physicians has issued guidelines for responsible opioid prescribing for treating chronic non-cancer pain. Many hospitals have also adopted their own guidelines.

But the available guidance is typically high-level and designed to avoid blatant misuse. What is missing is contextual relevance. As a physician, how do I know if I'm overprescribing for my specific patient population? What if some of the surgical procedures I perform are more involved than others, and those patients legitimately need that extra day of pills?

To shed light on what constitutes the appropriate use of opioids for a given

procedure and specific patient population, I am working with Dr. Marty Makary, a surgeon at Johns Hopkins and a national leader in patient safety, on a new initiative to give physicians visibility into standard prescribing practices. Through a detailed analysis of claims data from more than 100 insurance companies (collected over the span of five years), we are able to assess opioid prescribing patterns for specific procedures and types of patients. From there, we have been able to develop "appropriateness measures," as we call them, which show the range of prescribing patterns and identify the average number of pills prescribed for this procedure or that type of patient.

country – interviews conducted to develop a sense of what range of prescribing behavior could be considered extremely inconsistent with the practice of peer physicians, and thus potentially harmful to patients. The appropriateness measures also incorporate a thorough review of the clinical literature. They are intended to serve as actionable guideposts for physicians, helping them understand how their own prescribing patterns in a given situation compare to the standard practice of their peers, locally and nationally.

When we compare physicians' practices, even within a single hospital system, we see sometimes shockingly wide variations. For example, our analysis shows that the national average length of an opioid prescription after a routine caesarean section is less than five days. Yet, individual physicians prescribe them for zero to 10 days.

## DOCTORS DIFFER

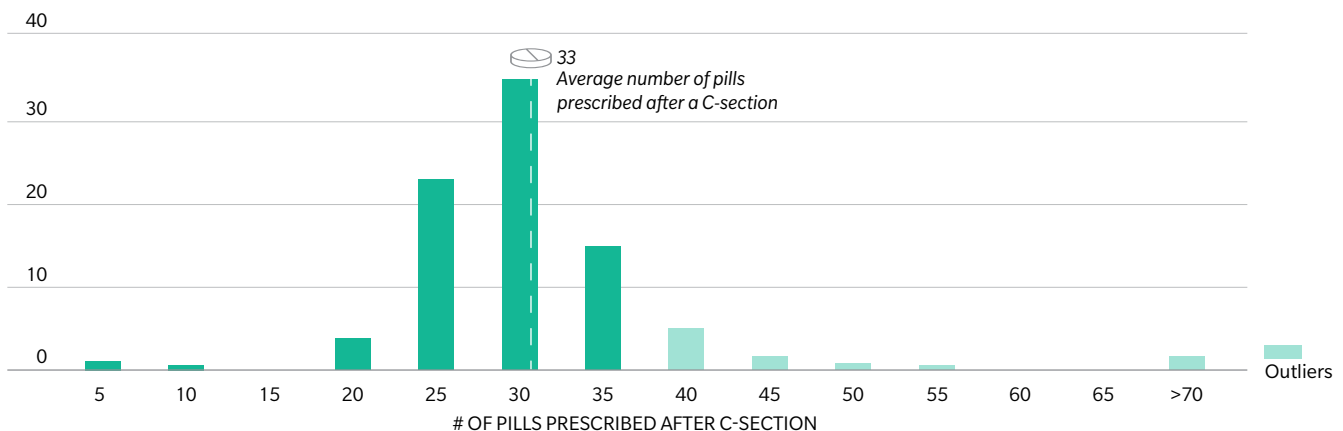
These measures are grounded in detailed conversations with specialists from across the

### EXHIBIT 1: IDENTIFYING THE OUTLIERS

*Practicing Wisely* has analyzed physician behavior across several medical practices to determine the normal range of opioids being prescribed and then identify those operating outside the generally accepted practice.

#### OPIOID PRESCRIPTION AFTER C-SECTIONS

% OF PHYSICIANS



Source: Oliver Wyman analysis, Practicing Wisely

The doctor who prescribes significantly more opioids than his or her peers is not lazy or a bad doctor; more likely, he or she simply does not have a clear understanding of what is suitable. But now, with appropriateness measures, we can empower individual physicians and healthcare organizations with the data they need to identify outliers and curb the high rates of unnecessary opioid prescriptions.

## Helping physicians navigate appropriate prescribing is an important next step in controlling the nation's opioid epidemic.

### DEFINING APPROPRIATE

Arming physicians with appropriateness measures can help them determine whether their prescribing behavior for opioids is consistent with peer-developed guidelines. The measures can also help administrators identify physicians whose prescribing patterns routinely fall outside the best-practice range. They could then partner those physicians with pain specialists and other experts to develop individual prescribing standards, based on the latest best practices.

Appropriateness measures do not seek to second-guess a physician's clinical judgment on individual cases. But when a provider's clinical judgment, manifested by his or her treatment patterns, consistently deviates from standard practice, it becomes an issue of patient safety as well as one of quality and cost. In the case of opioid prescribing, it puts people's lives and livelihoods at risk.

Our initiative is focused on bringing transparency to opioid prescribing behavior in a way that does not threaten the doctor-patient relationship. Instead, we are giving physicians the data they crave to understand their own and their peers' practice patterns. This approach of holding a mirror to physicians' own practicing patterns has been shown to spark meaningful behavior change without bringing a physician's clinical judgment into question.

This effort to develop appropriateness measures is an entirely doctor-developed, home-grown solution, one that uses the wisdom of clinicians to put actionable and relevant data into the hands of physicians. Doctors may have contributed – however unknowingly – to the current opioid crisis. And doctors can help bring us back from it.

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## **About Oliver Wyman**

Oliver Wyman is a global leader in management consulting. With offices in 50+ cities across 26 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. The firm's 4,000 professionals help clients optimize their business, improve their operations and risk profile, and accelerate their organizational performance to seize the most attractive opportunities. Oliver Wyman is a wholly owned subsidiary of Marsh & McLennan Companies [NYSE: MMC].

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We help our clients bridge the gap between their business today and their vision for the future.

## **Oliver Wyman Health Innovation Center**

In 2011, Oliver Wyman launched a Health Innovation Center (OWHIC) dedicated to promoting positive change in healthcare. OWHIC champions innovation by disseminating proven innovations; envisioning market-based solutions to today's and tomorrow's challenges; and establishing a cross-industry community of thought-leaders to share and shape ideas.

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