



Healthcare 2030

The consumer at the center

As evolving demographic and economic trends gain momentum, a consumer-centric healthcare system is becoming increasingly essential.



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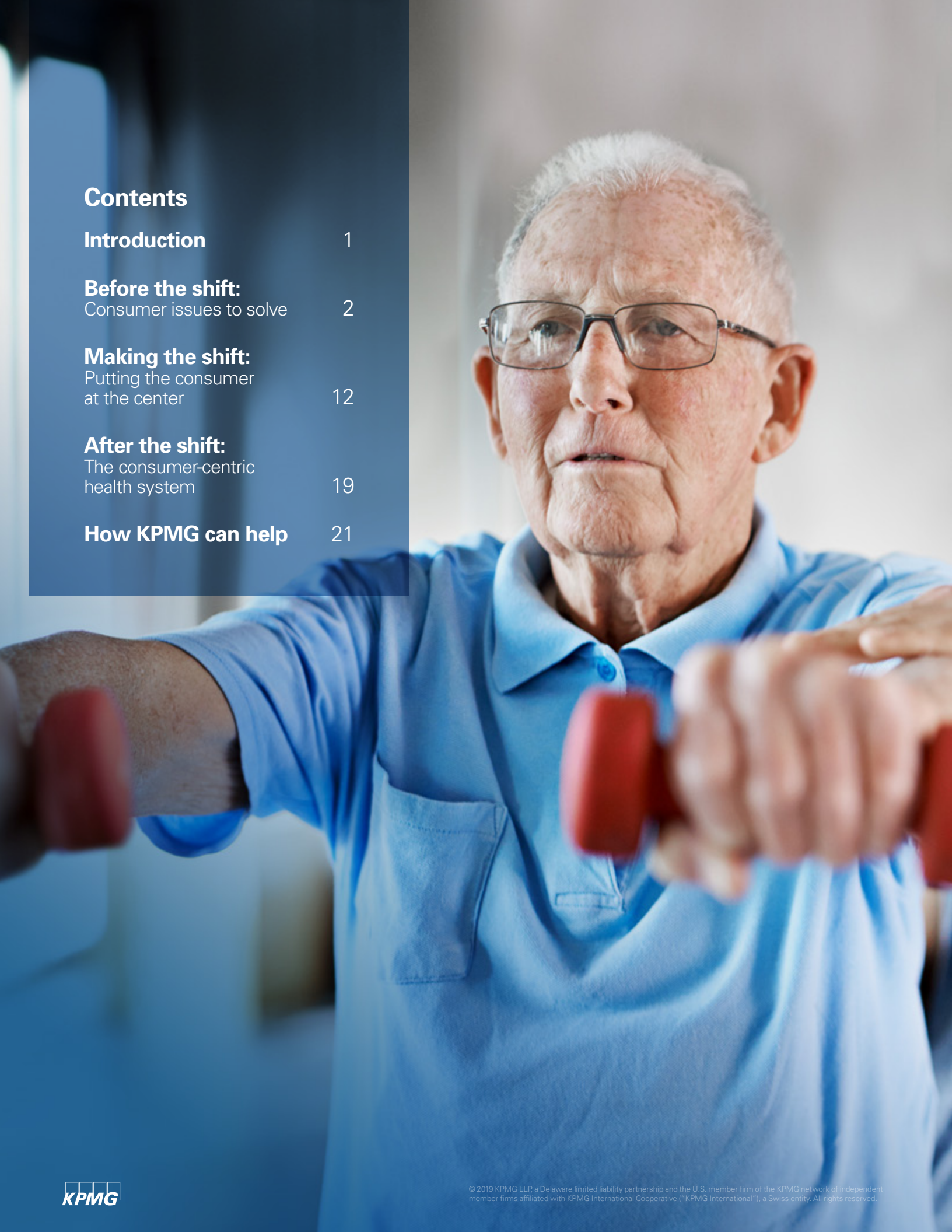
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In the next 12 years, the healthcare industry will face major demographic changes that will dramatically impact which services are needed and how they are delivered. The long-discussed movement of the *Baby Boom Generation* into the ranks of the retired will continue to occur, while *millennials* and other younger patient cohorts will exert more and more influence over healthcare delivery models.

Concurrent with these population changes are market factors that will also have a significant impact. There is a growing trend toward seeking medical treatment outside of the hospital at lower-cost, more convenient sites of care. The concept of “value” is now being defined and assessed by consumers. And, there are a number of high-profile technology disruptors poised to enter the healthcare arena in areas with significant consumer impact – from distributing drugs, to lowering the cost of health insurance, to serving as centralized, more transparent platforms for decision-making.

Faced with these demographic and market challenges, what are today’s healthcare organizations to do?

What if US healthcare – long subject to criticism for inflated pricing, sub-optimal outcomes and customer service challenges – transitioned to a truly consumer-centric delivery model? You might ask whether this is even worth imagining. We think it is. In fact, we believe a consumer-focused healthcare industry is not only possible, but inevitable. In this paper, we shed some light on how to get there.

BEFORE THE SHIFT:

Consumer issues to solve



1. The question of demand: A demographic divide



As millennials, Generation X, and baby boomers enter new life stages at the same time, there are simultaneous demands for both lower cost, convenient care delivery and better management of chronic illness and outcomes. The industry must evolve to meet the needs of these groups (and others) – both in terms of where they converge and where they deviate.

The young. In general, millennials are resisting engagement with the healthcare system, as is typical of adults in their 20s and early 30s. In fact, 54 percent say they have postponed care due to cost,¹ and 45 percent of those between ages 18 and 29 do not currently have a primary care physician (PCP).² Cost concerns and episodic healthcare needs drive this patient cohort to seek care on a *one-off* basis rather than through longer-term provider relationships.

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It is critical to remember, however, that the young won't always be young. They may stay healthy longer than previous generations—due to healthier eating habits, less smoking and the wealth of technology tools available to them, but only if the healthcare industry engages with them to encourage health-sustaining behaviors. The opportunity is there: Millennials in particular have shown that they are open to wellness programs, with 45 percent already using technology to measure fitness and health, and 45 percent turning to social media for research on provider ratings and relative costs.³

The aging. It is likely that many individuals currently entering retirement will live longer than earlier generations. However, they will also live sicker, increasing the need for complex care. Many of them will suffer from one or more chronic conditions, including diabetes, heart disease, cancer, hypertension, high cholesterol, arthritis and anxiety, among others.⁴

– By 2030, the older population is expected to grow from 35 million to 74 million, or nearly 21 percent of the total U.S. population.⁵ Even longer term, the census projects that people 65 and older will comprise almost a quarter of the U.S. population by 2060.⁶

– The number of people with three or more chronic diseases will rise from a comparatively modest 30.8 million in 2015 to 83.4 million in 2030⁷ – which will include approximately two out of every five people in the 65 and older age bracket.⁸ The most prevalent causes of death in this age group are heart disease (1,062 deaths per 100,000 people), cancer (915 per 100,000), chronic lower respiratory diseases (277 per 100,000), stroke (247 per 100,000), Alzheimer's disease (200 per 100,000), and diabetes (119 per 100,000).⁹

Although the overall percentage of the elderly population with chronic illness has held steady since 2008, the sheer numbers of retiring baby boomers mean that the healthcare system will have to manage more chronically ill patients than it did in earlier decades.¹⁰ For example:

– **Type 2 diabetes is projected to impact 55 percent more Americans than it does today**, with African Americans and Hispanic Americans far more likely to develop the disease than Caucasian Americans.¹¹

– **Heart disease prevalence is projected to increase by 10 percent** over the next two decades, reaching 40.5 percent of U.S. adults, or 116 million people, according to the American Heart Association.¹²

– **Alzheimer's Disease is expected to increase by 100 percent by 2030**,¹³ with one in eight, or 10 million, baby boomers developing the disease.¹⁴

It will be challenging, but imperative, to create a system that balances the needs of these very different demographics: If the statistics on chronic illness in older Americans bear out, there may be an increased need for acute care hospitals, despite the current uptick in hospital closures. At the same time, serving younger generations requires more care sites outside of the hospital that offer lower costs, greater convenience, better patient experiences, and coordination between health and wellness programs.

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NEXT STEPS:

Start serving different consumers in different ways, rather than taking a one-size-fits-all approach. Don't be lulled into complacency by short-term revenue increases driven by the increased number of baby boomers, their consumption patterns and increased life expectancy. Instead, to avoid a revenue cliff in 2030, start aligning delivery models with the preferences and behaviors of younger generations, now.

For more, see "Keep pace with consumers' evolving demands" (page 13)



2. The question of economics: The price of inaction



Today, Americans with five or more chronic conditions make up 12 percent of the adult population but account for 41 percent of total healthcare spending.¹⁵ Among

individuals with six or more chronic conditions, 70 percent have been taken to the emergency room, 33 percent have been hospitalized, and 50 percent have utilized post-acute care.¹⁶ The cost of caring for the sickest patients (6+ conditions) is twice as much on average as caring for those with (only) three or four conditions, with the majority of additional spending going to office visits, inpatient care and prescription drugs. For example:

- **Diabetes care has a price tag of \$245 billion a year** in medical costs and lost productivity, with 25 percent of the total amount driven by cardiovascular complications. The cost is expected to increase by approximately 53% by 2030 to reach \$622 billion.¹⁷
- **Heart disease costs will triple by 2030 to reach \$818.1 billion** annually, or 17 percent of total U.S. spending on healthcare.¹⁸
- **Alzheimer’s disease patients currently cost Medicare three times as much** as non-Alzheimer’s patients, and are projected to drive \$20 trillion in healthcare expenditures over the next 40 years.¹⁹

\$818B

Heart disease costs will triple by 2030 to reach 17 percent of total U.S. spending on healthcare.

Of course, lowering costs over time is dependent on early intervention and prevention measures.²⁰ It is worth noting that there are some successful prevention-oriented models today that help lower costs and, arguably, should be expanded and brought into other conditions. For example, enrollment in the Center for Disease Control's (CDC) Diabetes Prevention Program has been shown to reduce the progression from prediabetes to diabetes by 58 percent.²¹ The program is unique in that it brings together the resources of government agencies, private insurers, healthcare organizations, community and faith-based organizations, and employers.²²

In addition to prevention measures, more attention must be paid to whether spending on particular tests and procedures is necessary. For example, the U.S. conducts more MRI and CT scans than any comparable nation, which are prescribed at a level and with enough variation to call their necessity into question.²³ Further, poor access to primary care for a large portion of the population contributes to inadequate chronic disease management, adherence issues, and overuse of drugs and testing²⁴ — all of which come with a cost.

And yet, when it comes to comparisons to other nations, overall utilization is not dramatically higher in the U.S., as many believe. Instead, as emphasized in a recent study from the Commonwealth Fund published in JAMA, the true drivers of higher healthcare spending in the U.S. are the costs of labor, drugs/medical devices and administration of health systems.²⁵ If the industry plows ahead, business as usual, healthcare spending will continue to increase, putting additional strain on the overall U.S. economy. National healthcare spending has risen exponentially from a 5 percent share of the gross domestic product (GDP) in 1960 to 17.8 percent in 2016 and a prediction of 19 percent in 2023, according to the CMS.²⁶

National healthcare spending rose to 17.8% of GDP in 2016 and is expected to reach

19%

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NEXT STEPS:

Make bolder moves toward prevention programs, care optimization and administrative efficiency to drive a reduction in duplicative procedures, unnecessary treatments and suboptimal outcomes. In addition, systems should undertake fundamental value-enhancement programs to identify where spending leads to real value and where it does not.

For more, see "Commit to true value for outcomes" (page 14)



3. The question of preference: Elevating the patient experience



In addition to age-based clinical needs, it is also important to evaluate access preferences, to elevate the patient experience regardless of age. In doing so, it may be helpful to look at two categories of healthcare consumers—the *Wellness Focused* and the *Daily Health Managers*.

The Wellness Focused are a group of consumers who may not have PCPs but still see the value of preventing future illness through wellness-oriented programs. Although they will most likely be open to healthy eating and exercise programs offered by their health plans, there are opportunities for health systems to engage with them as well. In general, health systems have shied away from building consumer credibility in relevant ways. Going forward, they should start building out new capabilities to position themselves as sources of wellness, rather than as problem solvers.

When they are sick, younger members of this group are likely to use retail clinics versus visiting a PCP. In a recent study, 30 percent of millennials reported having used a walk-in clinic in the last year, versus only 14 percent of baby boomers.²⁷ Further, when it comes to telemedicine adoption, which can allow patients to receive treatment for increasingly complex conditions without having to travel to a doctor's office, millennials are outpacing baby boomers at 40 percent to 19 percent, respectively.²⁸

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Although it is increasingly likely that health systems will lose some wellness-oriented patients to retail clinics and virtual providers when it comes to routine care, the industry should be focused on forging partnerships so that referrals can be made to the health system if higher acuity care becomes necessary. Further, since this group of consumers will likely develop health challenges as they age, health systems should partner with these lower-cost providers of care on data collection and predictive analytics to evaluate the likelihood that an individual will develop a disease, as well as stratify patients according to geographic and demographic risk pools.

The Daily Health Managers may have challenges with early indicators of chronic illness, e.g., excess weight, elevated cholesterol, mild hypertension and prediabetes. Or they may already suffer with one or more chronic illnesses that require ongoing symptom and complication management. These individuals require coordinated treatment across inpatient and outpatient care settings, as well as on-demand communication with extended care teams that comprise both medical specialties and primary care. This will require online tools and mobile apps that drive behavior modification and allow real-time communication and data sharing with providers.

As they age, this group is increasingly expressing interest in receiving care in the home, rather than in long-term nursing facilities, hospitals and hospice. Called “home-based primary care” or “hospital-at-home,”²⁹ this model will require, among other things, a concerted effort to foster patient acceptance of telemedicine modalities; further, health systems need to collaborate with health plans to create value-based reimbursement models that acknowledge the progression of treatment from inpatient care to telemedicine and home care, and that reward providers for helping patients avoid complications and/or slow disease progression.

The patient experience preferences of the *Wellness Focused* and the *Daily Health Managers* are very different at present. However, over time, the two groups will find points of convergence. If the present disconnect between sites that offer wellness programs and those that offer illness management continues, there will be a lack of care continuity throughout the patient lifespan.

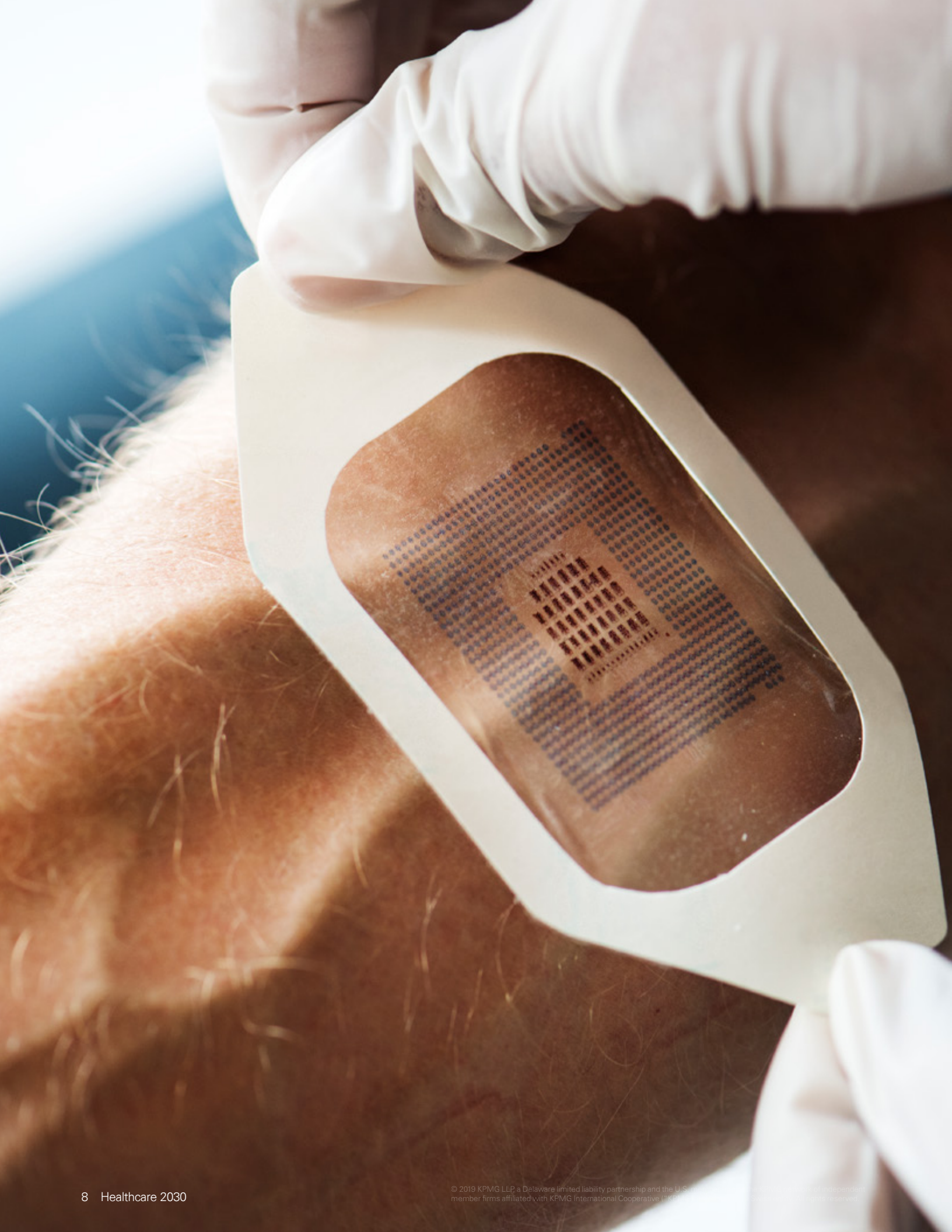
**Older Americans
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NEXT STEPS:

Forge connectivity and reciprocity between health systems, retail clinics, virtual care providers, rehabilitation centers, primary care providers, specialty physicians and home health providers. The goal is to create one layered delivery network through which patients can move seamlessly as they age and their needs evolve.

For more, see “Foster care continuity through layered delivery models” (page 15)



4. The question of disruption: New entrants and the old guard



As the demand for convenience gains traction, there must be a radical change in how care is delivered, as well as widespread adoption and reimbursement of digital health tools.

The question is, who will lead the charge? On the one hand, both payers and providers may have difficulty keeping up with the speed of technology innovation. On the other hand, given the barriers to entry and complexity of the regulatory landscape, many technology innovators have yet to be convinced that it is worth their while to make a full commitment to healthcare.

Still, it is clear that technology disruptors – with established data architectures and deep understanding of consumer behavior – will play a crucial role in the consumerization of healthcare. To the extent that health systems fight against this disruption, they risk being left out in the cold by high-profile technology leaders seeking bold entries into the healthcare arena. The ultimate aim for healthcare players should, therefore, be to use technology as an enabler of consumer-based healthcare, while ultimately still owning the patient relationship themselves.

NEXT STEPS:

Evaluate potential technology partners and types of partnership structures based on strategic goals. Approach integration in a manner that ensures a combined physical and digital experience, understanding that many existing models (e.g., retail) are not fully comparable. Instead, look for analogs in industries where the digital and physical experiences are intrinsically intertwined (e.g., hospitality).

For more, see “Drive convenience through strategic use of technology disruption” (page 18)

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Demographic

Millennials

Align with demands:

Staying healthy

Improve outcomes with:

Predictive analytics

Meet their preference for:

Retail / virtual care

Foster convenience with:

Wearables / telehealth

...and needs that

**Services
health status**

**Liberation of
across th**

**Layered
retail-lev**

**Integration
and technolo**

divisions...

Baby Boomers

Align with demands:

Managing chronic illness

Improve outcomes with:

Care management solutions

Meet their preference for:

Traditional care settings

Foster convenience with:

Symptom monitoring tools

both groups share

that reflect
, preferences

patient data
e lifespan

care with
el choice

of medicine
gy disruption



MAKING THE SHIFT:

Putting the consumer at the center



Once a healthcare organization has done the behind the scenes work on demographic and cost analysis, as well as consideration of patient experience and technology partner identification, there are several components we have identified as being integral to putting the consumer at the center of the healthcare system. In general, a consumer-centric healthcare industry should follow the lead of other consumer industries by taking an omni-channel approach to connecting with healthcare consumers and meeting their needs.

As detailed in the following sections, such an approach would align with consumers' evolving demands, reflect true accountability for improved outcomes, offer a layered network of alternative sites and modes of care, and integrate disruptive technologies to foster greater convenience.

1. Keep pace with consumers evolving demands



To be fair, consumerism in healthcare is complicated, given the emotional charge of illness and the complexity of the delivery system. At present, healthcare organizations are not well-versed in consumer needs and preferences. This challenge is heightened by the fact that consumers often make decisions through difficult-to-decipher behavioral motivations, which change as they move through various life stages or face chronic illness.

To truly understand consumer behavior, there must be a free flow of consumer data, regardless of care setting. Consumers are largely on board: A number of recent studies indicate that individuals are more than willing to share their medical data if it leads to the most appropriate care in the most appropriate settings, as well as improved customer experiences and better outcomes.³⁰ Across all consumer industries, more than 75 percent of individuals say they are generally happy to part with some level of personal information in exchange for greater personalization, better products and services, improved security and more value, according to a recent KPMG survey.³¹

In fact, availability, mobility and interoperability of clinical data help create the empowered customers that are so critical to a consumer-focused healthcare industry. Armed with a navigable picture of their medical histories, patients will be more in control of their own health and wellness needs, more apt to use digital instead of physical engagement when it improves their experience or outcomes, embrace new technologies to enable better chronic condition management, and opt for different types of care for different types of health events.

For their part, health systems need to start understanding and relating to individuals as people rather than as patients. This requires reframing how customers are approached, i.e., with a detailed understanding of not only their health information, but also who they are and what they want. Across all consumer industries, there have been shifts in how customers are categorized and segmented, with an overall trend toward more granular understanding of what they care about, how they behave and the factors that motivate them to change. Consumer packaged goods (CPG) companies, for example, spend billions of dollars to motivate change in how people buy detergent, shampoo and packaged food. By the same token, healthcare organizations need to make larger investments in multi-channel approaches to patient motivation, bearing in mind the age-based needs and access preferences discussed earlier in this paper.

Health systems need to start understanding individuals as people rather than as patients.

2. Commit to true value for outcomes



In a consumer-centric healthcare system, the focus on customer experience should be underpinned by an equal commitment to improving clinical outcomes. Health systems must make more significant investments in advanced technologies that can impact outcomes – e.g., genetics tools, risk stratification calculators, rare disease detection algorithms, machine learning, natural language processing and predictive analytics. Such investments are critical to caring for patients with early warning signs of chronic illness, as well as the shift to a healthcare paradigm less focused on treating illness than on prevention and cure.

Further, care management solutions can be used in the clinical setting to ensure that patients move through the healthcare enterprise safely and with appropriate care; enable two-way communication between patients and providers to better manage chronic conditions; and provide accurate measurement of care team performance so that all procedures, tests and treatments are warranted and not duplicative. Of course, the need for these tools will only increase as consumers age and struggle to manage multiple chronic conditions. Further along the spectrum will be technologies like artificial intelligence (AI), which is expected to be used in 90 percent of U.S. hospitals by 2025 to allow rapid diagnosis of chronic conditions like cancer and diabetes.³²

Finally, as consumers adopt data-driven transparency tools, we believe the industry will have to react more comprehensively to their expectations related to cost, quality and convenience. Armed with ready access to data on true costs, outcomes and peer satisfaction on par with the data available for most goods and services they purchase today, consumers will be truly empowered. In fact, the availability of such information in healthcare has already begun; as broader availability and adoption continue, healthcare consumers' expectations will increase exponentially.

Since many health systems lack the scale for these investments, this is an area where mutually beneficial partnerships will be critical. Health systems should explore a spectrum of alliance structures with innovative biotechnology companies, scaled payers, and even other health systems of larger scale and national prominence that don't compete in the same geographies. Finally, partnerships with technologists will be central to building advanced analytics capabilities that allow providers to blend historical medical data with personal preferences, thus providing a holistic approach to better outcomes and experiences across the lifespan.

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3. Foster care continuity through layered delivery models



As the industry looks to align patient needs with appropriate sites of care, it is important to understand that there is currently a lack of clarity about whether the number of hospitals in the U.S. and the census of patients they serve are on the decline or not.

There is evidence to suggest that some hospitals are not strong enough to survive.

For example, a recent Morgan Stanley report concludes that nearly 20 percent of the nation's hospitals are currently weak or at risk of closing.³³ The GAO reports that rural hospital closures from 2013 to 2017 more than doubled over the previous five-year period.³⁴ And the American Hospital Association reports that hospitals are closing at the rate of 30 a year and that, of 6,000 U.S. hospitals, eight percent are expected to close and another 10 percent are considered weak.³⁵

As traditional settings decline in number, there will be a simultaneous expansion of alternative sites of care. Patients will be able to receive care where and when they prefer across a variety of flexible formats, much the way many retail brands offer products through a variety of channels ranging from brick-and-mortar to online stores. The sites where healthcare brands treat patients would encompass varying degrees of acuity, diagnostic features, delivery mechanisms, size of physical footprint and levels of convenience for each customer segment served. Movement between care settings would be seamless and patients would be *known* no matter where they sought treatment.

Such a model would likely require a mechanism for directing patients to the right site of care at the right time. Just as Amazon has become a centralized clearing house for consumer goods, patients of all ages would benefit from having focal points – or *aggregators* – that knit healthcare services together, allowing more complex decision-making to occur. Aggregators would house and parse the data patients need to make medical decisions – from the best care center for a particular procedure, to physician recommendations, to comparative pricing, to how treatment for one condition might exacerbate another.

Patients will receive care where and when they prefer across a variety of flexible formats.

There are several critical components to the layered approach:

Retail Clinics. It is likely that retail clinics will evolve from their current focus on acute care to a greater role in helping patients manage chronic illness. Last year, nearly half of respondents to a recent survey said they sought care in a retail or urgent care clinic.³⁶ Further, 30 percent of those said they visited one of these sites after they were frustrated in their efforts to secure timely appointments with their PCPs. The fact that consumers will increasingly choose a site of care based on convenience should drive retail health providers to provide more sophisticated care than they currently do and direct patients to higher levels of care as needed.

Since health systems will not excel at all aspects of customer experience delivery, it is not critical that they own all aspects of layered care or develop new retail care capabilities themselves. The best approach will likely be to partner with entities that already have a retail presence and permission, while co-branding on health to create value for both enterprises in local markets.

Virtual Care. Services that transcend geography like telemedicine and other forms of virtual care are critical to the layered approach. Used strategically, these technologies allow providers to meet the needs of remote or homebound patients from one centralized hub and provide guidance to physicians in other locations who may be struggling with complicated cases. This model aligns with the concept that a consumer-centric healthcare system should meet the needs of all consumers, regardless of geography, mobility or economic status. At present, wealthy urban users are more likely to use telehealth services than rural users, likely due to broadband access challenges in some remote areas, according to a report from the US Department of Agriculture (USDA).³⁷ Health systems and clinics should partner with telemedicine providers to address this disparity.

Perhaps most critically, telemedicine can be used to preserve the lifetime value of the customer. Right now, healthcare is local, fragmented. If patients relocate for job changes or retirement, their relationships with local healthcare providers will likely end. Instead, healthcare organizations should develop virtual care capabilities to meet patients where they are with a diverse set of services and then evolve those offerings over time according to changing patient needs.

Tax considerations

It is important to note that, currently, the tax exempt status of non-profit hospitals is tied to their geography, as they are expected to demonstrate community benefit. If hospitals are no longer bound to physical locations, non-profit hospitals would have to advocate for another way to evaluate their community contribution. Alternatives to a geography-based community benefit standard might be measures more broadly tied to the triple aim across the healthcare system: expanded access to care, enhanced quality of care, and reduced cost of care. Another option might be to broaden the definition of a hospital's community to include its entire patient population, wherever individuals may be located. Until there is a redefinition of the community benefit standard, non-profit hospitals need to be mindful of protecting their tax exemption from federal, state and local taxes.



Critical Care in the Home. Increasingly, providing hospital-level care in the home will also be an integral part of a layered approach. Recent studies show that patients who receive high acuity care in the home have been more satisfied with their experience and realize equal or better outcomes than comparable inpatients, not to mention 19 percent lower costs.³⁸

Other studies have shown that, over time, a number of critical care procedures currently performed in hospitals – such as treatment for pneumonia, skin infections or even post-surgery recuperation – could be provided for 30 to 50 percent less in the home, according to research from the Johns Hopkins University School of Medicine.³⁹ Of course, to make this possible, delivery and payment reforms must continue to progress so that providers will be incentivized to prescribe in-home services for the post-acute phase of a patient's care.

In summary, this layered approach to healthcare delivery requires reciprocal relationships between health systems, retail clinics, telemedicine providers and home care providers, and, by extension, same-day surgery centers, rehabilitation centers, free-standing emergency rooms and micro-hospitals. Specifically, retail care may involve some aspects of virtual care that patients can access on site. By the same token, care in the home will likely rely on virtual technologies when it comes to monitoring of post-surgery patients and the chronically ill. Finally, providers that utilize virtual care must work closely with health systems and specialty physicians to ensure that there is two-way communication if patients should require higher-acuity care than they can provide.

This approach would move the industry away from an ownership model and more toward partnerships and joint ventures. Traditional healthcare entities, in particular, would need to assess whether they want to be fully owned and integrated providers, owners of broad services across the continuum, or general contractors of excellence that don't own anything, but simply function as portals that direct patients to appropriate sites of care.

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4. Drive convenience through strategic use of technology disruption



In support of the layered care paradigm, several recent studies have shown that timely and convenient access to healthcare is rising in importance in consumers' decision-making processes.⁴⁰ Currently, despite the fact that most consumers prefer to book appointments by phone, only about 40 percent are successful on the first try, according

to recent studies.⁴¹ And when it comes to younger generations, 58 percent of millennials and 64 percent of Gen Xers value online booking to the extent that they would switch providers in order to do so. Therefore, as we look to a consumer-focused future, more sophisticated and integrated forms of appointment scheduling are imperative.

It is important to recognize that convenience doesn't only refer to streamlining the scheduling process in traditional care settings. More and more, it means delivering a cohesive experience across all points of access. However, access won't only be facilitated by big-name companies and platforms. There are a wide variety of innovative startups making a real impact in healthcare already, with many more on the horizon. This year alone, there were more than 30 FDA approvals and clearances for new devices, apps and algorithms.⁴² For example:

- **Integrators for chronic disease management** and lifestyle modification programs are matching individuals with programs based on unique medical needs and preferences. (For example, Solera Health matches patients with chronic disease care providers.)⁴³
- **Mobile health apps** allow remote monitoring, virtual office visits and ePrescribing. (For example, the mySugr app is used for advanced diabetes management.)⁴⁴
- **Real-time decision making tools** use patient data to drive treatment recommendations. (For example, DreaMed Advisor Pro analyzes data from continuous glucose monitors, insulin pumps and self-monitoring efforts to determine insulin delivery recommendations for people with diabetes.)⁴⁵
- **Predictive analytics companies** are creating tools that forecast potential hospital readmissions and mortality risks among specific cohorts of patients. (For example, Medalogix makes outcome predictions for home healthcare patients.)⁴⁶
- **Behavioral analytics companies** promote behavior change and bill based on improved outcomes. (For example, Click Therapeutics offers a very successful smoking cessation program, as well as an upcoming program for Major Depressive Disorder.)⁴⁷

In the end, no matter which digital platforms and tools health systems adopt to further consumer-focused care, the technologies must be integrated seamlessly with the ongoing physical delivery of healthcare. In this way, healthcare consumers will associate outstanding digital experiences not just with technology providers but with the health system itself.

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AFTER THE SHIFT:

The consumer-centric health system

Ultimately, it is the intersection of the attributes presented in this paper that will drive a consumer-focused healthcare industry. Making this transition will depend upon a deep and segmented understanding of the consumer, commitment to the investments necessary to improve outcomes, a layered delivery model that ensures that consumers receive the right care in the right settings, and the use of technology to meet the growing consumer demand for convenience.

Healthcare organizations that take the necessary steps to put the consumer at the center of the healthcare ecosystem will be leaders in a new economy. Those who delay – or worse, succumb to paralysis – run the risk of having a less central role in the future. Instead of buckling under the pressure, healthcare organizations should take the first steps to reinventing themselves, today.



In this new delivery model, the healthcare consumer...

Will...	Won't...
Feel understood	Feel frustrated
Trust that their data will be used to improve care	Worry as much about misuse of their data
Visit care settings based on personal preferences	Settle for one-size-fits-all care
Expect health insurance coverage for telemedicine and home health services	Require hospital admission for all major health events
Be incented to pursue wellness/prevention activities	Seek medical care only after illness sets in
Receive customized provider recommendations	See a doctor who doesn't know patients' names
Make appointments easily online	Make multiple scheduling attempts

References

- ¹ PNC Healthcare (2015). The road ahead in US healthcare: *Will patients take the wheel?*
- ² Kaiser Health Tracking Poll – July 2018: Changes to the Affordable Care Act; Health Care in the 2018 Midterms and the Supreme Court; <http://files.kff.org/attachment/Topline-Kaiser-Health-Tracking-Poll-July-2018-Changes-to-the-Affordable-Care-Act-Health-Care-in-the-2018-Midterms-and-the-Supreme-Court>
- ³ J. Jiang (2018). Millennials stand out for their technology use, but older generations also embrace digital life, Pew Research Center.
- ⁴ Paola Scommegna, “Aging U.S. Baby Boomers Face More Disability,” accessed at www.prb.org/Publications/Articles/2013/us-baby-boomers.aspx, on Nov. 6, 2015; <https://www.prb.org/us-baby-boomers/>.
- ⁵ Federal Interagency Forum on Aging-Related Statistics. *Older Americans 2016: Key Indicators of Well-Being*. Federal Interagency Forum on Aging-Related Statistics. Washington, DC: U.S. Government Printing Office. August 2016. ; <https://agingstats.gov/docs/LatestReport/Older-Americans-2016-Key-Indicators-of-WellBeing.pdf>.
- ⁶ Rand Corporation (2017). Chronic conditions in America: Price and prevalence.
- ⁷ The Partnership to Fight Chronic Disease (2018). Chronic diseases taxing healthcare economy, Stat News.
- ⁸ Rand Corporation (2017). Chronic conditions in America: Price and prevalence.
- ⁹ Federal Interagency Forum on Aging-Related Statistics. *Older Americans 2016: Key Indicators of Well-Being*. Federal Interagency Forum on Aging-Related Statistics. Washington, DC: U.S. Government Printing Office. August 2016. ; <https://agingstats.gov/docs/LatestReport/Older-Americans-2016-Key-Indicators-of-WellBeing.pdf>.
- ¹⁰ C. Buttorff, T. Ruder and M. Bauman (2017). Multiple chronic conditions in the United States, Rand Corporation.
- ¹¹ America’s Senior Report Health Ranking (2016). United Health Foundation.
- ¹² American Heart Association (2018). Costs of heart disease in the United States will triple between now and 2030.
- ¹³ CDC (2018). Health and economic costs of chronic diseases.
- ¹⁴ Alzheimer’s Association (2011). New generation Alzheimer’s report calls Alzheimer’s defining disease of baby boomers.
- ¹⁵ C. Buttorff, T. Ruder and M. Bauman (2017). Multiple chronic conditions in the United States, Rand Corporation.
- ¹⁶ U. Sambamoorthi, X. Tan and A. Deb (2016). Multiple chronic conditions and health care costs among adults, National Institutes of Health.
- ¹⁷ W.R. Rowley, C. Bezold, Y. Arkan, E. Byrne, S. Krohe, MPH (2016). Diabetes 2030: Insights from yesterday, today, and future trends, Population Health Management; <http://www.altfutures.org/wp-content/uploads/2016/04/Diabetes-2030-Population-Health-Management-2016-pop.2015.0181.pdf>.
- ¹⁸ American Heart Association (2018). Costs of heart disease in the United States will triple between now and 2030.
- ¹⁹ Alzheimer’s Association (2011). New generation Alzheimer’s report calls Alzheimer’s defining disease of baby boomers.
- ²⁰ C. Buttorff, T. Ruder and M. Bauman (2017). Multiple chronic conditions in the United States, Rand Corporation.
- ²¹ National Institute of Diabetes and Digestive and Kidney Diseases, Diabetes Prevention Program (DPP); <https://www.niddk.nih.gov/about-niddk/research-areas/diabetes/diabetes-prevention-program-dpp>
- ²² National Diabetes Prevention Program: Working Together to Fight Type 2 Diabetes https://www.cdc.gov/diabetes/pdfs/library/socialmedia/NDPP_Infographic.pdf
- ²³ L. Rapaport (2018). U.S. health spending twice other countries’ with worse results, Reuters.
- ²⁴ E. Schneider, D.O. Sarnak, D. Squires, A. Shah and M.M. Doty (2018). Mirror, mirror 2017: International comparison reflects flaws and opportunities for better U.S. health care, The Commonwealth Fund.
- ²⁵ I. Papanicolas, L.R. Woskie, A. Jha (2018). *Healthcare spending in the United States and other high-income countries*, Journal of the American Medical Association, March 13, 2018 319(10):1024–39.
- ²⁶ I. Papanicolas (2018). Health care spending in the United States and other high-income countries, JAMA Network.
- ²⁷ U. Sambamoorthi, X. Tan, A. Deb (2016). Multiple chronic conditions and health care costs among adults, National Institutes of Health.
- ²⁸ Center for Telehealth and eHealth Law (2018). Survey says: Millennials love telemedicine.
- ²⁹ S. Landers, E. Madigan, B. Leff, R.J. Rosati, B.A. McCann, R. Hornbake, R. MacMillan, K. Jones, K. Bowles, D. Dowding, T. Lee, T. Moorhead, S. Rodriguez, E. Breese (2016). The future of home healthcare: A strategic framework for optimizing value, Home Health Care Management & Practice 2016, Vol. 28(4) 262–278.
- ³⁰ J. Bresnick (2018). Most patients willing to share health data, engage online, EHR Intelligence.
- ³¹ KPMG 2018 CEO Outlook, KPMG International.
- ³² R. Das (2016). Five technologies that will disrupt healthcare by 2020, Forbes.
- ³³ A. Baxter (2018). Morgan Stanley: 20% of hospitals at risk of closure, HealthExec.
- ³⁴ T. Reed (2018). GAO: These are the rural hospitals most likely to close, FierceHealthcare.
- ³⁵ C.F. Bloomberg (2018). U.S. hospitals are closing at a rate of 30 annually – and the pace is likely to climb, St. Louis Post-Dispatch.
- ³⁶ Kryus (2017), 2017 Patient Access Journey Report: What a survey of 1,000 patients reveals about how healthcare consumerism is changing the patient journey to find providers.
- ³⁷ P. Stenberg (2018). Rural individuals’ telehealth practices, United States Department of Agriculture (USDA).
- ³⁸ Cryer L, Shannon SB, Van Amsterdam M, Leff B. Costs for “hospital at home” patients were 19 percent lower, with equal or better outcomes compared to similar inpatients. *Health Aff (Millwood)*. 2012;31(6):1237-1243. doi:10.1377/hlthaff.2011.1132.
- ³⁹ L.Landro (2018). What the hospitals of the future look like, Wall Street Journal.
- ⁴⁰ Kryus (2017), 2017 Patient Access Journey Report: What a survey of 1,000 patients reveals about how healthcare consumerism is changing the patient journey to find providers.
- ⁴¹ ibid
- ⁴² D. Muoio (2018). FDA roundup: The major device, app, and algorithm approvals of 2018 (so far), mobihealthnews.
- ⁴³ K. Gooch (2017). Disruptive healthcare companies to watch in 2017, Becker’s Hospital Review.
- ⁴⁴ Startus Insights (2018). Healthcare innovation map reveals emerging technologies and startups.
- ⁴⁵ D. Muoio (2018). FDA roundup: The major device, app, and algorithm approvals of 2018 (so far), mobihealthnews.
- ⁴⁶ K. Gooch (2017). Disruptive healthcare companies to watch in 2017, Becker’s Hospital Review.
- ⁴⁷ M. Zweig (2018). Q3 2018: An entrepreneurs’ market leads to digital health’s biggest quarter yet, Rock Health.

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