Heart of the matter

The COVID-19 pandemic is not merely changing one aspect of the health system, such as a new discovery or approach to public health; the crisis is “editing the DNA” of health systems around the world by accelerating what we call the New Health Economy (NHE). The NHE is the transformation of health systems into a modular ecosystem of delivery, innovation and wellness more closely tied to the consumer.

In many ways, this is an unprecedented time, and yet the world has been grappling with devastating epidemics for millennia. These outbreaks of infectious disease carry a profound human toll and ruinous disruption of economies. In their wake, they often bring change. Powerful disruptions brought by pandemics have led to invention and innovation, from local boards of health (an innovation developed by medieval communities struggling with plague) to vaccines (invented to prevent smallpox infections).

The COVID-19 pandemic appears to be delivering the “future of healthcare” much more quickly than anticipated. Data analytics is proving to be the difference between life and death when it comes to planning resources, classifying patients and strategic decision-making. Practically overnight, telemedicine has become the de facto medium
COVID-19 accelerators

- Virtualization of health
- Analytics-driven modeling and platforms
- Healing the supply chain
- Reframing risks
- Reprioritizing social determinants of health
- Treating affordability

New Health Economy ecosystem

- Platforms and support: Infrastructure/equipment and services to connect and facilitate
- Wellness: Includes nonclinical aspects (SDoH) that can affect an individual’s engagement with their well-being, health and healthcare
- Care delivery: Includes the clinical/medical services and supporting channels individuals can access
- Diagnostics and therapeutics: Includes R&D, product innovation, manufacturing, distribution and sale of medical devices, equipment and pharmaceuticals used in an individual’s care
- Financing and payment: Includes all sources of financing for an individual’s medical and wellness services

Source: PwC Health Research Institute analysis of COVID-19 accelerators of the New Health Economy ecosystem, which was first published in Surviving seismic change: Winning a piece of the $5 trillion US health ecosystem, PwC Health Research Institute, September 2016.
The virtualization of health: Accelerating beyond telehealth to virtualizing diagnostics, delivery, therapeutics and innovation

The virtualization of health has been with us for more than 50 years, since telehealth was born to help bring healthcare to remote areas. It enjoyed incremental growth over the decades, but as the New Health Economy took shape we saw more willingness to try it, but not increased utilization. Even with new technology such as smartphones and new payment strategies from governments, private insurers and employers to increase access, the rise of virtual health was slow.

But then came the pandemic. COVID-19 erected walls at major healthcare access points that could be overcome only through virtual health. New users of telehealth mean new uses for this type of healthcare delivery, especially for older consumers. Nearly one in five new users of telehealth during the pandemic were insured by Medicare (see Figure 2).1

Consumers likely will now seek and demand the safety, comfort and convenience of their home setting well past COVID-19. Eighty-eight percent of consumers who used telehealth for the first time during the pandemic said they would use it again. At-home diagnostics also will likely be in demand. Eighty-five percent of consumers HRI surveyed during the pandemic said that they would be comfortable testing themselves for COVID-19 at home. With demand for remote care spiking and health systems in many cases scrambling to improvise solutions, adoption and expansion of clinical/experience technologies that enable lower-touch care delivery are likely going to accelerate.

Many of the services that have been performed in a clinic, hospital or doctor’s office may need to be done remotely or at the consumer’s home. Innovations around diagnostics, point-of-service care and mobile care also could shift many services from traditional care settings, and providers will need to find new ways to make up this revenue. Those services that may be performed in a clinical setting will also look very different. Remote diagnosis, for example, will have implications for how pharmaceutical companies support physicians’ needs, such as how to give a patient a drug starter kit. The touchless concept, an emerging model in retail, may shift healthcare into care experiences that reduce the need for touching surfaces or other human beings. Finally, perhaps the consumer-centric movement will fully take hold, in which the consumer in her home is at the center of the experience.

Virtual health is an opportunity to shift from the traditional episodic model of care to one that is continuous and engages consumers when they are not directly interacting with the health system. Had a continuum of care model been in place when the pandemic hit, health systems might have had the ability to proactively engage high-risk patients virtually rather than cancel appointments.

Figure 2: HRI estimates that more than 16 million Americans used telehealth for the first time during the pandemic

During the pandemic, have you or a family member received healthcare treatment for the first time through a video telehealth visit?

Breakdown by health status of the 5% of consumers who said they used telehealth for the first time during the pandemic

Source: PwC Health Research Institute COVID-19 Consumer Survey, April 2-8, 2020
Base = 1,632 employed respondents (full time, part time, seasonal/ temporary, self-employed and student employed).
Does not include furloughed employees.
What will health system DNA edits look like?

- **Telehealth explosion continues:** With 16 million-plus new users during the pandemic in the US, many providers now have experience delivering virtual services. But according to Amy Amick, president and CEO of SPH Analytics, an Atlanta-based healthcare analytics company, providers are just scratching the surface of telehealth. “Many consumers are happy with telehealth as a simple way to get quick care,” Amick told HRI. “But providers and payers should capitalize on this interest by using it to fill gaps in chronic care management and mental health services.” Standardization of technology platforms and reimbursement also is necessary for telehealth to truly take hold.

- **Home diagnostics and wearables spread:** Moving beyond traditional virtual primary care to continuous monitoring, mobile devices now connect the health system to the “last mile” of the home. The shortage of home-based pulse oximeters in the US illustrates the consumer desire to be health connected at home. Services that support consumers with the technology required for remote care such as home diagnostics will be important.

- **Life sciences R&D and clinical trials go remote:** There has been a massive shift to recruit patients online, use artificial intelligence to make communication and scheduling more convenient, and move trial sites closer to consumers. When asked about participating in pharmaceutical research to develop a treatment or vaccine for COVID-19, 62% said that they would be more willing to do so if they could participate from home (see Figure 3).

- **Virtual workforce expands:** The explosion in telehealth has introduced virtual care not just to consumers but to the health workforce as well. Moving to virtual will require new workflows, digital upskilling, and the synthesis of people and technology in new combinations. The pandemic shed light on the ability for many administrative workers to be productive while working from home. Many health organizations will likely keep a portion of their administrative employees working from home permanently and significantly reduce their real estate footprint for administrative services going forward.

**Figure 3: Virtual trials may accelerate COVID-19 vaccine and treatment research**

Would you be more or less likely to participate in pharmaceutical research for a COVID-19 treatment if you were able to participate in the clinical trial from your home?

**Most likely to participate**
- Older (65+ years of age)
- Covered by Medicare
- White
- In the $100K household income bracket
- Most have chronic conditions, many complex

**Least likely to participate**
- Younger (18-24 years of age)
- Covered by a health insurance exchange plan
- Nonwhite
- In the $25K or less household income bracket
- Healthy skeptics who generally avoid interacting with the health system

What will health system DNA edits look like?

- **Interoperability blockers dissolve**: Business models that rely on systems not talking to each other may be at a disadvantage.

- **Consumers’ health needs revealed**: On the journey to whole health improvement, understanding how people live and what they want is crucial. The pandemic revealed multiple variables influencing consumer behavior that are important to understand for healthcare delivery as it moves more to virtual, retail and other convenient forms.

- **Communication moves from transactional to continuous**: Reengineering the transactional nature of how doctors and hospitals communicate with the consumers they serve. The “whitespace” of health is still largely unexplored.\(^5\)

- **Resources matched to needs**: The pandemic created multiple examples of a mismatch between needs and available resources in the drug supply chain, medical equipment chain and workforce. Scenario planning and modeling help provide a road map for sustainability. Governments and health organizations without these capabilities may risk ruin or irrelevancy.

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**Analytics-driven modeling, scenario planning and platforms: Building data and analytic capabilities to digitally connect consumers and health providers with resources**

In the New Health Economy, data analytics and data insights are a key platform to help deliver the right care at the right time, at the right place and to the right person. The pandemic laid bare the challenges faced by the world’s health systems to collect accurate real-time data, model scenarios and ultimately make decisions on where and when to place resources. Infection curves, mortality scenarios, and need estimates for ventilators and personal protective equipment were in short supply in the early stages of the pandemic.

Critical needs include accelerating interoperability and reducing data isolation. Relying more on artificial intelligence and prescriptive analytics will enable broader and more extensive real-time predictive insights—predictive across the community on health, consumer and economic dimensions, and also at the company level in strategic, financial and operational terms.\(^5\)

The need to invest in analytics, fueled by a seismic shift in consumer demand, will likely see the emergence of platform focused health companies that attempt to be the digital front door to the health system. Health systems, payers and pharmaceutical and life sciences companies are being asked to invest in these leading-edge platforms, with significant uncertainty over return on investment, and often in areas that are not traditional strengths. With this demand also come privacy and cybersecurity risks that should be closely managed. Payer, provider, and life sciences executives agree that ensuring cybersecurity and privacy is the largest barrier to digital strategies.\(^6\)

This may clear the ground for new entrants with deep pockets, a high risk appetite and the required consumer trust to partner or step in and help enable and orchestrate these experiences. We could very well see new virtual health or retail-focused players begin to orchestrate consumers’ care experience in a larger way (and capture a large chunk of value). A similar trend will likely play out in the traditional health delivery system as more consumer focused and cost-efficient solutions are developed to respond to short-term financial pressures and longer-term consumer experience opportunities.
What will health system DNA edits look like?

- **The regulatory process is disrupted:** Regulatory bodies allow emergency use, expedited reviews and substitutions, but health organizations often don’t understand how to manage through these processes until it may be too late.

- **Supply chains focus on basic inputs:** Building a resilient supply chain means being able to spin up or source the smallest input in the chain. The pandemic revealed gaps around swabs, vials and other commodities that held up more sophisticated tests and treatments.

- **Access to real-world data is preferred:** Compressed timelines may mean that regulatory bodies, the delivery system and consumers will be relying on nontraditional data for just-in-time diagnostics, drugs and treatments. Access to consumer data and data analytics capabilities likely will be an advantage in the New Health Economy. “Traditional data sources, such as claims, only tell us a small part of the patient story,” said Vipin Gopal, chief data and analytics officer at Eli Lilly and Co., in an interview with HRI. “Digital solutions enable us understand the patient in a much deeper fashion, paving the way for personalized patient engagements and improved outcomes.”

- **Governments and consumer advocates require supply chain transparency:** Life science supply chains are expected to require more reporting and transparency of active ingredient inventory, in-process inventory, and finished goods inventory.

- **A resilient workforce manages the supply chain:** The future life science workforce should build collaboration and digital acumen, helping improve and make better use of facilities and digital infrastructure as well as introducing efficiency through automation.

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Heal the links in the supply chain: Rethink supply chain resilience and strengthen through collaboration

The pandemic has revealed one area of neglect in the New Health Economy: the global web of interconnected nodes for the movement of drugs, medical supplies, technology and innovation. For example, the COVID-19 crisis has highlighted the US medical supply chain’s reliance on foreign manufacturing facilities, which led to some drug shortages related to the pandemic. For all FDA-regulated drugs, only 28% of facilities that manufacture active pharmaceutical ingredients (APIs) are located in the US, according to the FDA. The European Union provides 26% of APIs, while India provides 18% and China 13%.

The life sciences industry, in the crisis, has responded to needs as they have arisen. The industry spun up quickly to work on therapeutic candidates and vaccines, but limits on cooperation, data sharing, filing clinical trials and even basic medical supplies such as swabs hindered the most efficient and effective progress. In many cases, health organizations had to create their own collaborations when resources became constrained.

Before the pandemic, the industry was also challenged with more complicated supply chain needs related to gene and cell therapies. “Patient-specific products require patient-specific supply chains,” Matthew Lakelin, vice president of scientific affairs at TrakCel Ltd., a UK-based provider of logistics software and services to gene and cell therapy companies, told HRI. “Time constraints can be quite short, and the shipping conditions are quite specialized. And critically, many of these treatments are ones of last resort for a patient. They’re intended for desperate patients who are gravely ill. If a product gets lost, you may not have a second chance at treatment, so your supply chain has to have a lot of technical capabilities and safeguards that a traditional supply chain might not require.”

Life sciences and health companies can build a stronger, more agile and more resilient supply chain, one with more focus on multiple nodes for supplies and inputs that can help reduce risk from natural disasters, pandemics and disruptions. The ability to collaborate quickly likely will require information sharing and investments in relationships with other parts of the industry, nongovernmental organizations and governmental entities.
Reframing risk: Risk shifts that move at the pace of viruses and technology innovation

The New Health Economy was already wrestling with how governments and policy bodies create an adaptable regulatory framework. The challenge has often been technology and innovation outpacing regulatory change. The pandemic has revealed another gap: the pace of viruses, which requires a quick response and often with limited information. Opening or shutting commerce, tracking and tracing people, opening new supply lines, expanding the scope of practice for clinicians and paving the way to quick drug approvals are decision points that should have had close collaboration between government and the private sector, and many were not prepared.

An analysis by HRI found that the FDA issued an astounding 30 guidance documents related to medical products or supplies for COVID-19 in March 2020. The deluge dwarfs previous years in comparison. Regulatory bodies were under pressure to address the pandemic and responded with expedited reviews and new guidance.

The economic impact of COVID-19 in some systems has already moved significant healthcare risk from consumers, employers and private insurance and into the government. As COVID exposes the high costs of some healthcare systems and systemic inequities in care access, calls for government intervention and policy changes should only grow louder.

What will health system DNA edits look like?

- **Rules of the road change quickly**: Health systems were caught between new regulations meant to help protect health and privacy, and governmental policy changes to help protect economies during the pandemic. Supply chains were protected and opened up, cities were locked down and reopened, and requirements around social distancing and tracking were put in place—sometimes overnight. Health organizations now have to be even more nimble.

- **Workforce restructures around licensing**: With supply/demand curves for pandemic treatment needs in fluctuation, health workers were often spun up and stood down in rapid succession. There was much redeployment and retooling of labor as therapists and pharmacists filled gaps created by shortages of nurses and doctors. For some roles, practicing “at the top of your license” was put to the test during the pandemic.

- **The balance between safety and speed reimagined**: “Desperate times call for desperate measures” is not something you want to hear about healthcare. The pandemic is stress-testing how regulators handle innovation, from emergency orders for testing antiviral treatments, to the use of real-world evidence, to accelerated clinical trials. Health organizations likely will need to have their feet in both worlds: traditional regulatory processes as well as expedited sprints that may require faster moves with limited data or nontraditional sources of data to help prove efficacy and safety.

- **Reimbursement rearranged**: Providers that have largely depended on volume have been affected the most, with demand for elective procedures sharply declining as COVID-19 progressed. The hospital system has dealt simultaneously with preparing for surge needs for COVID while seeing dramatic loss of volume for all other electives that dramatically weakened their financial positions overnight. This could lead to health systems being more open to risk-based reimbursement, resulting in its rapid growth. “If you think of those physician compensation plans that are most vulnerable right now, they’re the ones based on volume,” said Travis Singleton, executive vice president at Irving, Texas-based physician staffing firm Merritt Hawkins and Associates, in an interview with HRI. “If there is ever a time to change the compensation plan, now is the time as no compensation plan was built for this.”
Reprioritization of social determinants: Moving social determinants of health to the front door of healthcare

Increased stress, lack of exercise and reduced access to nutritious foods were issues that spiked for consumers during the pandemic (see Figure 4). Feelings of isolation and loneliness became the leading social factor affecting health, reported by 18% of consumers surveyed by HRI. These were also challenges that could not be totally solved by health systems. The chasm between social service organizations and health organizations widened during the pandemic and laid bare the need for new priorities and resources. Governments and health organizations, including the pharmaceutical industry, must have the capability to interact with people and their communities directly.

Figure 4: Americans report more problems with social determinants of health during the pandemic

Which, if any, of the following challenges in your daily life are impacting your ability to adopt a healthy lifestyle?

Note: Selected options displayed. Other options included: Not getting enough sleep, lack of motivation to become healthier, smoking, access to affordable housing, alcohol consumption, etc.

PwC Health Research Institute COVID-19 Consumer Survey, April 2-8, 2020

Eighty percent of a person’s health is determined by their ZIP code.16 People born into communities that lack adequate education, employment, sanitation, food or transportation have health and life expectancies that are much lower than average. COVID-19 has not been a great equalizer and instead has thrown these differences into sharp relief. Data emerging from the first COVID wave clearly shows how the disease has shortened the time scale we have to deal with our health inequity problem, with communities that possess a poorer health outlook suffering the most extreme consequences.

Beyond digital and virtual experiences, new care models are expected to evolve that can work within the consumer’s home by providing timely access to physician, specialist and mental health services; engage them more continuously in their well-being; and help improve their productivity and quality of life.
What will health system DNA edits look like?

- **Mental health moves to the front:** The pandemic blocked health access because of infection control measures and then caused stress, loneliness and depression. Mental health access was so crucial that some employers and businesses addressed it with new workplace benefits. Health organizations should deliver combined services that help prioritize brain health as a way to improve other chronic and acute conditions.

- **Community organizations connected to their constituents can have the most access and trust:** Often the health system has the least influence on people’s health because it is not a trusted source of information and influence. False rumors about how the virus spreads and quack cures sometimes ran rampant through communities. Health systems that cannot engage and ally with trusted community groups may be sidelined in future crises.

- **The life science view expands beyond supporting patient services:** Historically the pharmaceutical and life sciences industry views social determinants as barriers to medication adherence, but this narrow view should expand. Now the industry should use its data and reach to bring wellness to underserved communities and better connect social and health services with wellness, digital therapeutics and nutraceuticals and not just sick care.

- **Health systems connect to the social system:** Sending someone home from the hospital without adequate support, nutrition and home care may be a boomerang back to the same health problem. Data sharing among and between health organizations and social service organizations was found lacking even in countries with primarily government-run systems. Integration of health and social systems through technology, data sharing and shared communication and planning is crucial.

Treating affordability: As resources tighten, definitions of transparency and value become more refined

Before the pandemic, there were many calls for more value in the health system. In fits and starts federal and state agencies required elements of price transparency and reporting of drug costs. Employer coalitions were beating the drum of more value for the healthcare dollar, and consumers were forgoing care as cost shifting placed more of the burden on their wallet as the first payer of health costs. “We are at a turning point in terms of what employers are doing,” said Mike Thompson, president and CEO of the National Alliance of Healthcare Purchaser Coalitions, in an interview with HRI. Everyone was searching for more value in the healthcare system, and then the pandemic hit.

Unemployment has surged and with it a massive shift of consumers away from their employer-based plans. Medicaid, ACA insurance plans and COBRA are available for those eligible, but many who are unemployed or have lost family income may now be uninsured. Families likely will have to triage their budgets among housing, food and healthcare, and the focus on value is expected to increase. About one-quarter (23%) of consumers responding to an HRI survey in April 2020 said they were delaying care as a result of the COVID-19 pandemic (see Figure 5). Price transparency matters more than ever when resources are tight and the health system will now be faced with the challenge of prices versus volume. If drugs, procedures and visits aren’t seen as valuable to consumers, employers and governments with a shrinking budget, volume will decline.
The long arc that has gently bent toward more transparent and lower-cost care has been accelerated by the pandemic. The future of value in the New Health Economy requires health organizations to rethink fixed costs, redeploy resources and operate in a state of permanent cost containment.

What will health system DNA edits look like?

- **Employer activists**: These new employer activists are taking bold new steps in their efforts to contain costs. They are negotiating contract prices, setting up their own provider networks and, in some cases, building parallel health systems to take care of their own employees at more manageable costs.

- **Consolidation increases**: In the short term, valuations for some companies may be low and make enticing targets. In the longer term, fixed costs should be spread and value chains should be well-aligned. The result should be continued health organization horizontal alignment, new vertical combinations and private equity and new entrants strategically buying health services.

- **Leaner operations**: Health organizations likely will accelerate toward lower cost ways of doing business. With more patients potentially covered by Medicaid and more hospitals possibly eligible to participate in 340B drug pricing programs, margins are expected to be under pressure. This might force internal cost reductions, from delaying management to triaging patients to the lowest cost clinicians and settings to revisiting how many drug sales representatives are really needed. After 10 years of a bull market, companies should zero-base the operating model and investment budget.

- **Innovative pricing**: Pricing models for drugs and supplies are expected to become more segmented and nuanced to reflect unique product characteristics, competitive dynamics and patient needs. For example, biopharmaceutical companies are experimenting with different pricing models such as health outcomes contracts, mortgage models and subscription pricing.\(^\text{19}\)
Editing the DNA of the health system: What does the modular ecosystem look like now?

Where do we go now? The pandemic has revealed gaps in our systems. The asymmetry of health and social status made it more difficult for some to shelter in place than others. The polarization of governments and their people on how to react to the pandemic and how resources would be distributed within and between nations revealed that it is difficult to be “all in this together” when resources become scarce. Underlying health vulnerabilities meant that the demographics of age, health status and income could be destiny, resulting in severe sickness and even death.

More and more, a prolonged u-shaped or w-w-w trend seems highly likely. In either case, the need for disruptive and transformative change to the healthcare system (both supply and demand sides) can gain widespread appeal with COVID-19 as the catalyst. But the other byproduct of the pandemic was through the disruption of technology and the rapid reconfiguring of health systems. Addressing the challenges and benefiting from the disruption can continue if health leaders take bold action now to embrace new ways of working and build trust with consumers.

The trends we described in the previous section taken together start to inform possible new elements of healthcare systems in a post-pandemic New Health Economy. We evaluate these new “DNA structures” and the possible end-state scenarios that are informed by varying levels of adoption.

Rise of the digital platforms

With the accelerating growth in technology fueled by the seismic shift in consumer demand, new players emerge in the market offering integrated consumer-centric and seamless digital offerings providing better access points and safer member-focused care. Pharmaceutical and life sciences companies, payers and health systems are expected to partner with these emerging players to drive a shift in their cost structure and create a differentiated offering in the market. Revenue from direct-to-consumer digital solutions is expected to grow nine-fold from 2018 to 2025.\(^\text{20}\)

Consumer connections through digital orchestrators

New entrants, especially major technology players from other industries with large pockets and risk appetite, are expected to enter the market and disrupt the way care is delivered. They simplify the whole experience through process, technology and supply orchestration with a broader focus on personalized population health, including behavioral health and public health interventions. These digital orchestrators may siphon off 30% of traditional office-based profit from 2018 to 2025.\(^\text{21}\)

Incumbent-led virtually integrated clinical experiences

Health systems continue to gradually increase the share of risk-based revenue while differentiating through reorientation of care delivery around the consumer. Pharmaceutical companies are expected to create consumer access platforms for remote clinical trials and R&D. Health systems likely will build digital capabilities and infrastructure to help reduce overall utilization through virtual care delivery and improved primary care. Profit for office-based care — the likely “quarterback” for the system — is expected to increase by 30% from 2018 to 2025.\(^\text{22}\)

Combining the public-private models of care

The high cost of healthcare and the inequities in public health interventions and preparedness are expected to lead to governments expanding partnerships with private organizations to help manage population health and social determinants. The government likely will also take the risk of the entire population. New players are expected to emerge to help accelerate interoperability and make data more accessible to manage broader population health. Revenue for emerging care avenues is expected to increase five times from 2018 to 2025 as public-private partnerships become essential to a model in which the government fixes the revenue pool.\(^\text{23}\)
The no-regrets moves that can edit the DNA of your health organization and prepare you for the New Health Economy

Pharmaceutical and life sciences companies

- Have virtualization permeate the whole organization: Automating education, marketing and promotion and intentionally designing high-performing virtual brand, R&D lifecycle, clinical study and special projects teams.
- Rethink real productivity of investment: Zero-based budgets move incremental cuts and investments to rethinking and redirecting to encourage faster strategic change.
- Digitize patient and provider support: Invest in new infrastructure, including digital therapeutics, to help serve patients and providers in a virtual environment. Forge partnerships with health systems to integrate digital therapeutics into clinical workflows in electronic medical records.

Payers

- Double down on interoperability: Lead efforts to promote information sharing from health research through to delivery.
- Enable remote operations: Accelerate redeployment of infrastructure to distributed and remote work.
- Enhance modeling and projection capabilities: Build next-generation modeling capabilities that can interconnect health, actuarial and consumer data to target specific member groups with communications and direct them to the right sites of care or social services.

Providers

- Build digital capacity: Create vertical or virtual integration or partnership with digital companies to help develop a positive consumer experience.
- Redesign the patient experience: Extend into a post-pandemic world with a heavily virtual system that can address chronic care and more complicated conditions. Coordinate care seamlessly between virtual and physical settings. Establish a referral model that connects consumers to ancillary services.
- Redeploy resources and workforce to virtual health: Now is the time to build primary care teams of the future and enable them with technology.
- Build trust for consumers to engage: Build better capacity for communication and delivery during disruption.
- Manage vulnerable populations: Partner with community groups to advance social and community care models.

Government and community organizations

- Double down on incentives: Promote the accelerated adoption of new payment models emphasizing wellness and transparency and rewarding value.
- Align incentives: Help providers, community organizations and social services so they can work together on addressing people’s whole health needs.
- Push transparency: Develop more sustained transparency policies that illuminate true out-of-pocket costs for consumers.
Conclusion: The future modular health ecosystem

At the highest level, these new DNA structures are expected to be influenced by consumer demand and supply-side shifts. But the influence may wax and wane over time and be highly dependent on local market dynamics.

Consumer demand shifts are expected to hinge on how health organizations respond to price sensitivity and calls for price transparency. How quickly will clinical and experience technology evolve to support different care delivery models such as retail and virtual? To what extent will healthcare organizations expand to deliver public health interventions?

Consumers will also influence the pace of these new structures. How many organizations will be able to coordinate and orchestrate care across providers and payers with data integration and connected workflows? How will changes to supply chains, materials, people, facilities and capital affect care access and capacity? To what extent and how quickly will medical cost risk shift to health systems, payers/employers or the government?

The speed of evolution may turn on how these questions are addressed. Health organizations should pivot to establish a new identity or business model. Resources should quickly be deployed into portfolio investments including more immediate no-regret moves and longer-term strategic capabilities. Finally, new ways of working should be established to change the culture into one that embraces the DNA of the New Health Economy.
About this research

This report gathered insights prior to and during the COVID pandemic including a consumer survey, executive interviews and data analysis. From April 2 to 8, PwC’s Health Research Institute conducted an online survey of 2,533 US adults representing a cross section of the population in terms of insurance type, age, gender, income and geography. The survey collected data on consumer perspectives about the healthcare landscape before and during the COVID-19 pandemic, including their use of health services and thoughts about how they will interact with the health system in the future. HRI interviewed a variety of health leaders on their vision for how the health system will change because of the pandemic. HRI also used scenario outputs from the PwC Strategy& dynamic strategy model that look at long-term financial shifts within the health ecosystem.

About the PwC network

At PwC, our purpose is to build trust in society and solve important problems. We’re a network of firms in 157 countries with more than 276,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at pwc.com.

About PwC’s Health Research Institute

PwC’s HRI provides new intelligence, perspectives and analysis on trends affecting all health-related industries. HRI helps executive decision-makers navigate change through primary research and collaborative exchange. Our views are shaped by a network of professionals with executive and day-to-day experience in the health industry. HRI research is independent and not sponsored by businesses, government or other institutions.
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