

Top health industry issues of 2019: The New Health Economy comes of age

In its 13th year, PwC Health Research Institute's annual report highlights the forces expected to most powerfully affect the industry in 2019.



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Heart of the matter

The US health industry has often lagged other industries—think tech, retail, hospitality when it comes to modernizing. Once thought to operate outside the greater US economy, the industry—with its byzantine payment system, complicated regulatory barriers and reliance on face-to-face interactions—is being disrupted. Finally, there's robust evidence that what PwC calls the New Health Economy is kicking into gear.

Consider the following:



Eighty-four percent of Fortune 50 companies are involved with healthcare. Those include technology companies, telecommunications companies and financial services firms along with traditional healthcare organizations.¹



Venture capital funding for digital health startups is projected to top \$6.9 billion in 2018, an increase of 230 percent from five years ago.²



Private equity firms, long operating on the margins of the US health industry, closed 487 healthcare deals in the first three guarters of 2018, more than double the number of deals they closed a decade earlier.³



A number of novel deals and partnerships were announced in 2018, including those involving CVS and Aetna; Amazon, Berkshire Hathaway and JPMorgan Chase & Co.; United Health Group and DaVita Medical Group; and a flurry of providers big and small. These new partnerships—and the many that don't garner headlines but reshape their local markets—will transform the industry in 2019.



American consumers have told PwC's Health Research Institute (HRI) since 2013 that they're eager to embrace more convenient, digitally enabled and affordable care;⁵ finally, they're finding it, with options that resemble the choices they have in other parts of their lives (see Figure 1).

The US health industry is looking less like a special case, an asterisk in the US economy, and is beginning to behave like other industries. So for 2019's top health industry issues report, instead of focusing on issues only US health organizations face, HRI for the first time is featuring business issues common to all industries: deals, business and tax strategy, risk and regulatory issues, workforce trends and digital transformation. The details may be healthcare, but the business issues are shared with many other parts of the economy.

In the digital arena in 2019, life sciences companies will market digital therapeutics and connected devices targeting atrial fibrillation, hemophilia, substance abuse, birth control, depression, diabetes, epilepsy and other conditions. In 2019 the health industry will see value lines created by innovative providers and payers that have figured out how to subsist—comfortably, thank you very much—by serving almost entirely Medicaid or cash-strapped patients.

Figure 1: Consumers are ready to embrace a new era of care delivery



of consumers are interested in having a "menu" of care options offered by multiple providers, allowing them to choose care from local providers or virtual care from specialists across the country.



who had a hospital stay in the last two years believe at least a few of their recent in-person interactions with providers could have occurred virtually.



would choose to receive hospital care at home if it cost less than the traditional option.



of consumers surveyed by HRI said they would be somewhat or very likely to try an FDA-approved app or online tool for treatment of a medical condition.



would be comfortable receiving health services from a technology company such as Google or Microsoft.

Source: PwC Health Research Institute consumer survey, May 2018

The industry will continue to be transformed in 2019 by deals made by private equity firms, new entrants and other companies flush with cash thanks to 2017's tax reform. The industry's regulatory side, beset with turmoil over the past two years, will settle into predictability in 2019, with campaigns from the FDA and CMS to streamline regulation, address drug spending and foster greater transparency in prices consumers pay for everything from ER visits to prescription drugs.

Even the future of the Affordable Care Act (ACA) appears largely secure in 2019 despite attempts over the past two years to repeal the law or fundamentally weaken it.6 The Trump administration's approach to the ACA—and to health regulation overall—will create new winners and losers throughout the industry.

Of course, challenges remain.

The sort of transformation the health industry is undergoing requires vast new skills from its workforce. Nearly one in two provider executives surveyed by HRI in 2018 said that their workforces' skills remain an obstacle to organizational change.⁷ Half of payer executives surveyed by HRI said they want new hires to arrive with informatics and data analytics skills.8 In contrast, six in 10 pharmaceutical executives surveyed by HRI said their workforce has the skills needed for an evolving digital economy.9



Cost also remains a serious challenge for the industry. HRI projected that medical cost trend will be 6 percent in 2019, about the same as it has been for the past five years.¹⁰ That remains unsustainably high, with American consumers, employers and government payers increasingly unable—and unwilling—to absorb the ever-increasing spending. Aiming to reduce costs, health organizations are making inroads on addressing social determinants of health, but their efforts remain nascent.

Healthcare remains a potent political issue, topping Americans' list of concerns in a survey HRI conducted just weeks before the midterm elections. 11 Politicians from both parties seeking office at the national, state and even local levels prominently touted their healthcare positions in their campaigns in the weeks before Nov. 6.

Government's role—the question at the heart of the differences between the two parties' approaches—won't be settled in 2019, but health organizations can expect that policy will increasingly be made by state politicians and bureaucrats. That will make it harder for organizations operating in more than one state to develop comprehensive business strategies.

So what are health organizations to do in 2019? Some may find private equity as a deals partner or as an unexpected purchaser of assets they wish to offload. All organizations likely will have to adjust to a deals market fueled, in part, by the \$186 billion that was held by top health companies overseas at the end of 2016 that became available for favorable repatriation under the Tax Cuts and Jobs Act of 2017.12

Others may begin to develop value lines—akin to a Southwest Airlines of healthcare inspired by strategies created by companies living off some of the lowest reimbursements in the nation. Others may find these strategies useful in fine-tuning their bottom lines.

Still other organizations may find that other industries can teach health a lot about upskilling their workforces in a tight labor market. HRI found one Fortune 50 telecommunications company that's spending \$1 billion training its workers in cloud computing and data analytics, helping some obtain advanced degrees and what it is calling "nano" degrees.¹³

Change has come to the US health industry at last. Healthcare is joining other industries, such as financial services, that have aggregated data, cut out middlemen and made it easier for their consumers to engage. The industry also can look to these other industries for ways to increase efficiencies, improve customer experience and foster price transparency. The pressures of adapting to that change and seizing the opportunities it represents are spurring a wave of innovation in business models that hasn't been seen in a long time.¹⁴ The long-term beneficiaries of these new models, new pairings, and new ways of delivering care likely will be the Americans who depend on the industry to keep them well as long as possible and to return them to wellness, or as close to it as possible, when they fall sick.

In 2019, these Americans may be one step closer to a system that serves them better and more conveniently at a fair price.

The US health industry is looking less like a special case, an asterisk in the US economy, and is beginning to behave like other industries.



In 2019, new entrants and biopharmaceutical and medical device companies will bring to market new digital therapies and connected health services that can help patients make behavioral changes, give providers real-time therapeutic insights, and give insurers and employers new tools to more effectively manage beneficiaries' health.

The arrival of digital therapeutics—an emerging health discipline that uses technology to augment or even replace active drugs in disease treatment—is reshaping the landscape for new medicines, product reimbursement and regulatory oversight. This means that new data sharing processes and payment models will be established to integrate these products into the broader treatment arsenal and regulatory structure for drug and device approvals. Connected health services, enabled by devices that transmit data or connect to the internet, give additional visibility into care delivery and new ways to improve patient outcomes.

As digital therapeutics and connected devices have transitioned from concept to reality, investors have poured a staggering \$12.5 billion into digital health ventures in 2017 and 2018. 15 Compared with 2013, this level of investment represents an increase in funding of 230 percent, while the average funding deal size grew 67 percent over the same period.¹⁶

"Digital therapeutics are the next frontier."

-- Sai Jasti, GlaxoSmithKline

Figure 2: Drug, device and technology manufacturers are using four primary methods to validate digital therapeutics



FDA approval or clearance for use: This approach requires regulatory review of clinical information to validate health claims made by the product, technology or combined service.



Observational studies or pilot programs: Observational data collected from clinical trials, or from real-world pilot programs, can demonstrate new products' or services' effects.



Registered clinical trials: Clinical trials conducted and registered with a regulatory authority such as the FDA or the European Medicines Agency are the gold standard for demonstrating safety, efficacy and patient outcomes.



Retroactive studies:

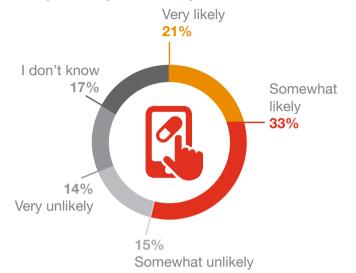
Retroactive studies can be used to calculate financial outcomes associated with a new product or connected health service, and may be used as a comparison with existing treatments.

Source: PwC Health Research Institute

Unlike branded companion apps and online portals, digital therapeutics and connected devices are clinically validated by the FDA and target specific health outcomes (see Figure 2).17 The FDA already has approved some new digital therapies, such as Boston-based Pear Therapeutics' Reset mobile application for the treatment of substance abuse, and Stockholm, Sweden-based Natural Cycles' birth control app. The Natural Cycles app already has over 900,000 registered users, according to a company statement. 18 Many other connected devices designed to treat diabetes, central nervous system disorders and other conditions—in concert with an active drug, or not—are expected to enter the market in 2019.

Figure 3: A majority of consumers surveyed are interested in FDA approved digital apps or online tools to treat their medical conditions

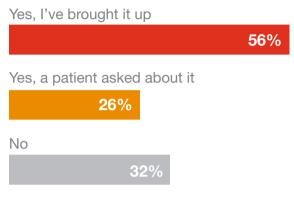
If an FDA-approved app or online tool was available to treat your medical condition or a family member's medical condition, how likely would you be to try it?



Source: PwC Health Research Institute consumer survey, September 2018.

Figure 4: Physicians are incorporating digital therapies in their interactions with patients

In the past 12 months, have you discussed an app or digital program with a patient related to their diagnosis or treatment?

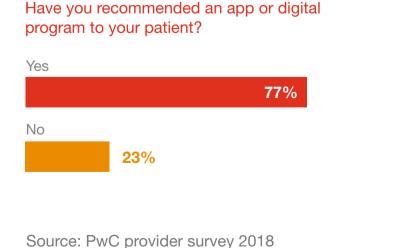


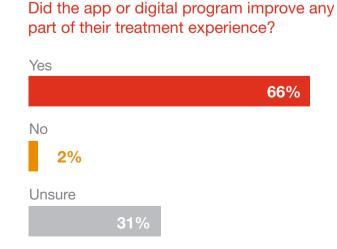
Source: PwC provider survey 2018

The majority of American consumers want new digital therapies and connected devices as treatment options (see Figure 3 and Figure 4). More than 50 percent of consumers surveyed by HRI said they would be somewhat or very likely to try an FDA-approved app or online tool for treatment of a medical condition.

The same consumers also are more likely to feel comfortable sharing their medical or health information, according to HRI survey data. Physicians are interested in these tools as well (see Figure 5).

Figure 5: Most physicians have recommended digital treatments with success





The FDA's Digital Software Precertification Program is expected to begin awarding approvals starting in 2019. Nine biopharmaceutical, device and technology companies are working as partners with the "pre-cert" program in a pilot phase that began in 2017.19 The program's goal is to reduce the amount of submission materials required from manufacturers of software-based medical devices and expedite the review process for companies that demonstrate a "robust culture of quality and organizational excellence, and who are committed to monitoring real-world performance," according to the FDA.²⁰

The ability to induce behavioral change in patients is a distinguishing characteristic of the new digital therapeutics and connected devices. For patients struggling with substance abuse or depression, cognitive behavioral therapy (CBT) principles are taking the form of customized content delivered to individual patients through mobile apps. Results from clinical studies of Pear Therapeutics Reset substance abuse app, for example, show increased abstinence from alcohol, cocaine, marijuana and stimulant substance use compared with patients who didn't use the app.21 Gaia AG, based in Hamburg, Germany, is developing individually customized digital CBT approaches to treat depression, epilepsy, compulsive gambling and back pain, among other conditions.²²

Seamless health data collection and sharing can help patients make positive lifestyle changes and can help physicians intervene to prevent poor outcomes. Boston-based Akili Interactive has developed digital treatments with direct therapy to treat cognitive deficiency and improve symptoms associated with medical conditions across neurology and psychiatry. The company is preparing to submit a prescription video game targeting ADHD patients to the FDA for approval.²³ Connected devices are moving from diabetes and central nervous system disorders into new therapeutic areas such as respiratory, cardiovascular and rare diseases.

In the respiratory area, GlaxoSmithKline (GSK) is partnering with Propeller Health, a Madison, Wisconsin-based digital therapeutics company, which uses digital sensor technology to track and optimize patient inhaler usage. The partnership's goal is to learn how this technology can help improve patient engagement and medication adherence, said Sai Jasti, commercial data officer at GSK, in an interview with HRI. "Digital therapeutics are the next frontier," said Jasti. "I think we will see a lot more collaboration between pharmaceutical and technology companies to drive this forward, ultimately to the benefit of patients."

As more digital therapeutics and connected devices come onto the market, biopharmaceutical companies will have to change their approach to product discovery and development, focusing on solutions that have demonstrable outcomes for patients, providers, insurers and employers.²⁴ New entrants and technology firms—Apple received an FDA clearance in September for its smart watch ECG and an algorithm for detecting atrial fibrillation—will continue to develop products using their strengths, including user interface, consumer engagement and sensor technology. Also in September, the American Medical Association proposed new billing codes for 2019 for remote patient monitoring and digital consults, which could speed physician adoption of connected health services.²⁵



Focus on outcomes, not just endpoints. To succeed in the digital therapeutics era, pharmaceutical and life sciences companies must venture more deeply into care delivery. Organizations that can become an integral part of giving patients positive health outcomes—using real-world data and enhancing the connection between patients and providers—also will be able to design new payment and contracting models. Biopharmaceutical companies may look to the medical device industry to further understand the skills and processes necessary to move from selling products to creating healthcare solutions.²⁶



Evaluate the impact of digital therapeutics and connected care solutions on your practice. New health data streams coming in from patients' devices and mobile phones may disrupt provider practices even as they help improve care delivery. Evaluate workflow processes for new data streams, including integration in electronic medical health records. Successfully integrating new patient data into physician practices may improve in-person visits, making health discussions more efficient and informed by real-world patient behaviors.



Explore partnership models focused on demonstrating results. Innovation Health, an insurance provider created jointly by Virginia-based Inova Health System and Aetna, is testing digital therapeutics and financial models to better understand these new products' effectiveness.²⁷ Digital therapeutics and connected devices may make it easier to construct value-based contracts and other outcomes-based financial models with payers and providers to drive adoption. Subscription pricing for digital therapeutics or connected device solutions, for example, could make pharmacy spending more predictable and efficient.



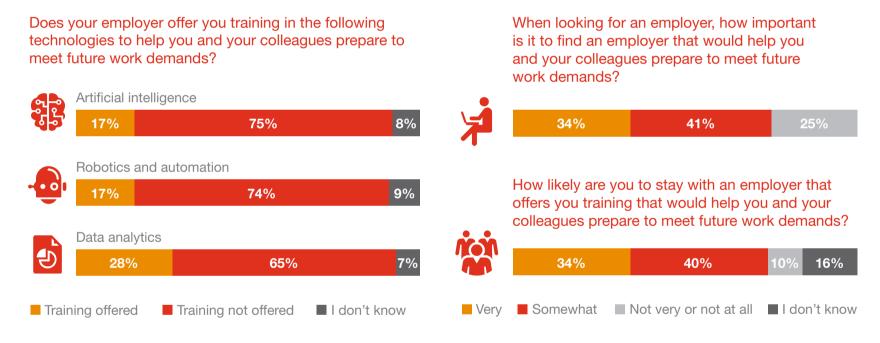
In 2019, healthcare companies new and old will identify which employees—from the back office to the front lines and all the way up to the C-suite—have to be upskilled or reskilled to get the most out of new and impending investments in technologies such as artificial intelligence (AI) and robotic process automation (RPA). These technologies will be critical in helping companies continue their shift into providing care anywhere through telehealth. They also will help reduce transactional tasks for the 63 percent of US health workers who say the work they do requires a great deal of manual entry or analysis, allowing them to enhance their analytical IQ.²⁸

Healthcare companies are trying to figure out how to accomplish this training, and every company is affected. Out of provider executives HRI surveyed on the subject, 45 percent say their workforce's capabilities are a significant barrier to organizational change.²⁹ Fifty-five percent of payer executives say it's very important for new hires to be skilled in informatics and data analytics, second only to customer service.³⁰ Six in 10 pharmaceutical executives surveyed by HRI said their workforce has the skills needed for an evolving digital economy.³¹

Companies could choose to hire external talent, but that strategy presents significant challenges: Thirty-five percent of the skills workers will need will change by 2020, and the required skills will continue to evolve, according to the World Economic Forum.³¹ For example, 20 percent of workers are expected to rely on artificial intelligence to do their jobs by 2022, according to Gartner Inc.³² Al and process automation are expected to eliminate 1.8 million jobs while creating 2.3 million new ones reliant on a more skilled workforce.33

Forty-two percent of US workers surveyed by PwC said they agreed or strongly agreed that automation would put jobs at risk of elimination.³⁴ This first wave of automation in healthcare has affected finance functions the most. While upskilling an employee may take time, companies that invest in making employees digitally fit should be ready for the technological challenges of tomorrow and beyond. These investments could create two types of competitive advantages: A better skilled workforce, and a workforce that is less likely to leave (see Figure 6). A recent HRI survey found that healthcare workers are more likely than those working in other industries to think training on new technologies would help them do their jobs more effectively. They also were more likely to say they would stick with an employer if the training was offered.

Figure 6: Few health companies are offering training in emerging technologies, but doing so could improve recruitment and retention



Source: PwC Health Research Institute consumer survey, September 2018 35

For companies concerned about disruption, upskilling and reskilling make for a nimble, sustainable strategy. More specialization will be needed, and competition for the talent with those skills will be fierce. Thirty-eight percent of executive respondents to PwC's 2018 global CEO survey said they're extremely concerned about the availability of key skills as a threat to business growth, and 38 percent said they were extremely concerned about the speed of technological change.³⁶ A recent PwC survey found that 75 percent of US workers are willing to learn new skills or completely retrain to remain employable.³⁷

Training in RPA and AI can help healthcare professionals practice at the top of their licenses and abilities, automating tedious work that adds little value and freeing them up to focus on higher-value tasks such as spending more time with patients and customers. This could increase employee job satisfaction and may also help professionals glean new insights from existing data. For example, physicians could use machine learning to reanalyze old charts and medical images to develop new care standards or determine with a higher degree of confidence whether a patient has a specific condition.

"In most cases, artificial intelligence isn't getting rid of people in an organization," said Peter Durlach, senior vice president of healthcare strategy and new business development at Nuance Communications Inc., in an interview with HRI. "What Nuance's Al product does is amplify the core capabilities of humans to make them more productive and efficient. We help unburden care teams and give them more time to take care of patients by providing efficient new ways to capture clinical information and deliver real-time intelligence for better decision-making. It's about augmenting human intelligence—not replacing it."

For all healthcare companies—and especially those affected by recent dealmaking—2019 will be a time to invest in increasing their existing workforce's efficiency and productivity to ensure they can compete at the top of their abilities and licenses.³⁸ The convergence of healthcare and digital also is driving companies to rethink how they operate and who their competition is. As many technology companies in the Fortune 50 (20 percent) are now involved in healthcare as traditional healthcare companies, according to an HRI analysis.³⁹ This translates to new competition for many healthcare companies, which face the deep talent pools and customer skill sets of technology companies such as Apple Inc. and Amazon.

While much of the initial upskilling waves will focus on back-office employees, including those working in information technology and human resources, companies should give equal thought to their customer-facing employees to improve how they deliver healthcare to patients. Some workforces already anticipate this change. Thirty-nine percent of physicians think virtual health use will significantly increase in the next 10 years, according to an HRI survey.⁴⁰

"It's about augmenting human intelligence - not replacing it."

Peter Durlach, Nuance Communications Inc.

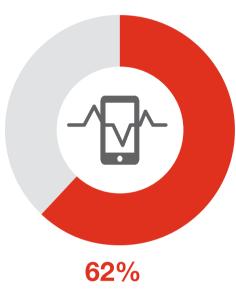
Consumers and patients, too, seem willing to adopt this model of "care anywhere and everywhere," which increases the promise of new business models emerging to serve consumers more conveniently (see Figure 7).41 But training will have to emphasize the soft skills of using technology. Patients, for example, should see doctors' faces—not the backs of their heads—while the doctors use a technology platform.

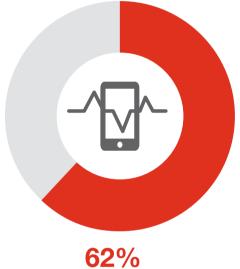
Figure 7: The majority of surveyed consumers are willing to use digitally enabled home healthcare technologies

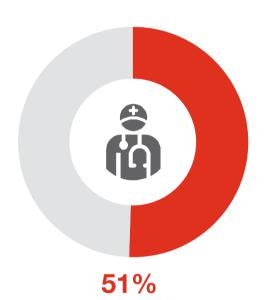
How likely are you to do the following?

Check vital signs at home with a medical device attached to your phone?

Have a live visit with a physician via an application on your smartphone?

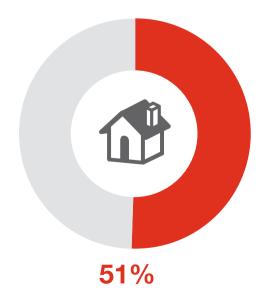


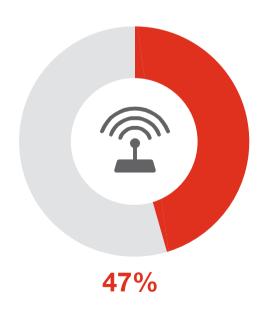




Have pacemaker or defibrillator checked at home wirelessly by your physician?

Have an echocardiogram (ECG) at home using a medical device attached to your phone, with results wirelessly sent to your physician?





Source: PwC Health Research Institute consumer survey, February 2018



Modernize the HR strategy. Before rolling out any technology training program, health companies should develop incentives and performance metrics for employees who align with the digitally fit culture they seek to develop. They also should revisit their recruitment and retention strategies to compete for a gig workforce that is attracted to a virtual work environment.



Consider how best to train your employees. Companies looking for better ways to train their employees in technology use can embrace digital tools to engage and educate them. Many companies lack in-house training capabilities—either expertise in training or the learning management system required to train a national workforce and will have to partner with external organizations to deliver advanced training. Some healthcare companies—and in particular academic medical centers—are already aligned with educational institutions and may be able to advance more quickly.

An example of those who partner to train their employees is AT&T, which is working with the online training platform Udacity and the Georgia Institute of Technology to teach such skills as data science and cloud computing. The arrangement also helps employees obtain low-cost master's degrees and so-called "nano" degrees, which focus on a single subject.⁴² The company plans to spend more than \$1 billion training its workforce to be ready for the future instead of relying on technology that's expected to soon be obsolete.⁴³

Academic institutions may be able to adapt by incorporating training on intelligent automation into their curricula. Learning how to design data-driven, evidence-based care plans using AI or RPA could make the clinicians of tomorrow more capable and effective caregivers.⁴⁴



Consider which employees should get top priority. Healthcare companies already have experience training their employees on technological systems, including one notable example: electronic health records. As they did then, companies won't have to train every employee immediately and they won't have to train each employee at the same level. Consider your company's immediate needs and which employees might benefit most, such as leadership and key staff who can spread knowledge to others. For example, Nokia Corp. has said that it will train all its employees on the basics of machine learning, while a pool of experts will consider ways to implement the technology more broadly.⁴⁵ Identifying those employees can yield rapid benefits for a business.

Some employees, such as a hospital system's IT team, will soon need strong abilities in a given subject area, such as developing a technology. Others, such as nurses or social workers, may need fewer capabilities in using that technology once it's deployed. Fifty-one percent of employees whom HRI surveyed said they felt that training in AI, RPA and analytics would help them do their jobs better. 46 These skills should be developed in tandem with strategic goals to ensure a company is ready to act on its strategy. Companies also should consider measuring employee engagement and success. Just because an employee has access to training doesn't mean that employee will or has time to—take advantage of it.



Tax reform has only just begun for healthcare companies

The healthcare industry will begin to feel substantial effects of the 2017 Tax Cuts and Jobs Act in 2019. The law will create both new possibilities for companies looking to turn their tax savings into competitive advantages and novel challenges for organizations facing new taxes. At the same time, emerging trade pressures may create uncertainties for companies hoping to maintain the status quo.

Portions of the healthcare industry are responding to tax reform's known effects in different ways (see Figure 8). For-profit companies generally are benefiting from tax reform because of lower tax rates on earnings (reduced from 35 percent to 21 percent beginning in 2018) and the ability to repatriate foreign cash at a favorable rate (15.5 percent for cash holdings as of Dec. 31, 2017 and zero US federal income tax for new foreign earnings starting in 2018). Some companies already have repatriated significant holdings, though the law doesn't compel them to do so.

Many payers and providers don't have foreign operations, so they won't benefit from the repatriation provision, or they may not have positive taxable income to realize these benefits. In addition, other provisions of the law could negatively affect payers, providers and life sciences companies. For example, the global intangible low-taxed income (GILTI) provisions require a US shareholder to pay a minimum aggregate US and foreign tax on its share of the earnings of its controlled foreign corporations. And the base erosion and anti-abuse tax (BEAT) provisions impose an additional corporate tax liability on domestic and foreign companies operating in the United States that make certain deductible payments to foreign-related parties.

Figure 8: What major tax provisions will matter most in 2019?

Provision and explanation	Magnitude of impact	Payers	Providers	Pharma/Life Sciences
Reduction of individual mandate penalty to \$0	High			
Movement to a territorial tax system	High			+
Repatriation of foreign holdings at 15.5 percent rate	High			+
Medical device excise tax in effect in 2019	High			
Increased standard deduction for individuals may decrease charitable contributions to non-profits	Moderate			
Unrelated Business Taxable Income (UBTI) changes will likely result in new expenses for non-profits and payers, such as taxes on qualified parking benefits	Moderate			
R&D tax credit will require longer periods of capitalization (5-years in US starting in 2021; 15 years for foreign spending)	Moderate			
Orphan tax credit cut in half to 25 percent	Moderate			
Net investment excise tax on educational foundations may affect academic medical centers	Low			
New 21% excise tax imposed on tax-exempt employers that pay "excess" compensation to "covered employees" over \$1 million	Low			
		+ Positive	Neutral	Negative

Source: PwC Health Research Institute and PwC National Tax Practice analysis

In 2019, healthcare organizations may find it necessary to restructure their businesses to accommodate new rules on unrelated business taxable income (UBTI); assess how taxes and refunds could affect their Medical Loss Ratios; determine how best to invest cash previously held outside the US; and restructure their supply chains to accommodate a new territorial tax system and emerging trade uncertainties, among other actions. 2019 also will mark the first calendar year in which most companies file a tax return reflecting a complete fiscal year under the new tax law.

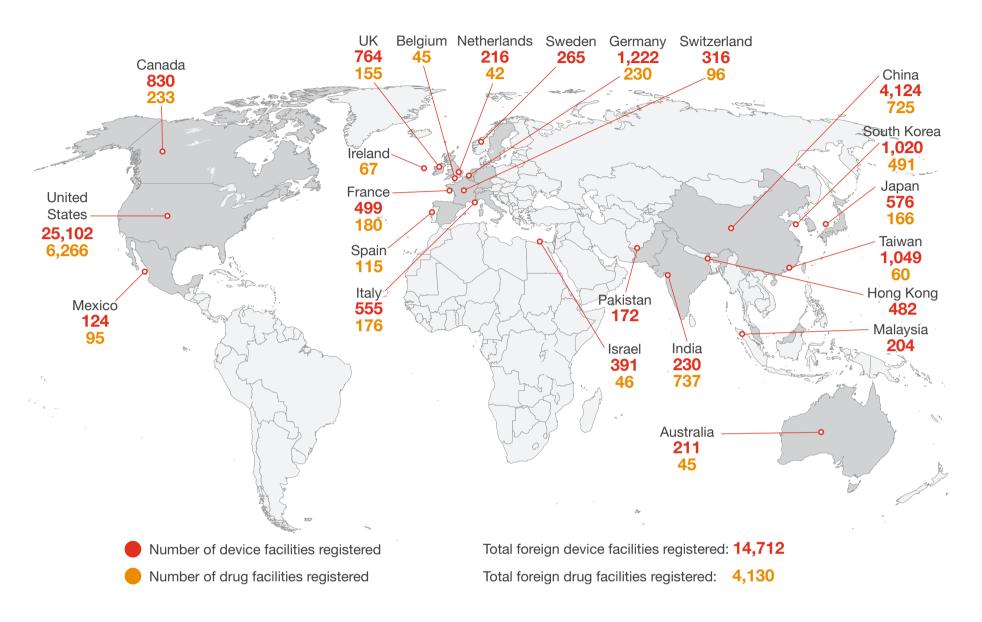
Tax-exempt entities in some cases will have greater tax liabilities under the law's rules that require such organizations—nonprofit hospitals, for example—to include the value of certain fringe benefits offered to employees, such as qualified transportation and parking benefits, as UBTI. The law also eliminated an incentive for some individuals to contribute to charitable organizations by almost doubling the standard deduction.

As with any major new law, the act didn't change the tax system the moment it was signed.⁴⁷ While many of the law's provisions have gone into effect, the IRS and Treasury Department are still developing guidance on its numerous complex rules. The terms "Secretary shall" or "by the Secretary" appear 51 times, each indicating where the IRS or Treasury is required to release guidance or regulation. Beyond that, the IRS still must weigh in on dozens of smaller issues, including definitions and which entities a specific provision applies to. The pace of Treasury and IRS guidance may accelerate by the end of 2018. While organizations are grappling to understand tax reform's complicated effects on their business operations, changes to the global trade environment and the introduction of new trade tariffs may complicate their operations and supply chains, increasing their costs or forcing them to restructure to maintain efficiencies. The United States has proposed changes to its dealings with several prominent trading partners, including Mexico, Canada and China. Several changes are expected to go into effect in 2019.

Most affected by tariffs may be the pharmaceutical and medical device sectors, which have a significant global manufacturing footprint and could see notable disruptions as they seek to move raw materials and finished products from global manufacturing facilities to their paying customers in the US (see Figure 9). US medical device manufacturers could face higher costs for materials, especially those made of metal, while drug manufacturers could see increased costs for chemicals used in manufacturing. Hospitals could face higher costs for medical goods or shortages if supply chains face major disruption.

2019 will mark the first calendar year in which most companies file a tax return reflecting a complete fiscal year under the new tax law.

Figure 9: There are more than 18,800 medical product manufacturing facilities registered with the FDA representing more than \$167 billion in annual value



Source: PwC Health Research Institute analysis of FDA facility registration data, Sept. 10, 2018

The medical device trade group AdvaMed told HRI that it identified \$3.5 billion in products affected by a recent round of tariffs China imposed in retaliation against US tariffs, adding up to \$754 million new annual taxes. For the US life sciences industry, which exports tens of billions of dollars in medical products each year, reciprocal tariffs could endanger revenues by making US-made products less competitive with foreign counterparts.



Be prepared to act. For both tax reform and trade-related issues, many companies are now in a holding pattern, awaiting guidance and action by government regulators before responding. On trade, while some actions will have recently gone into effect, others—such as trade tensions with China—are ongoing. This gives companies time to fully understand and analyze their business, partners and supply chains. Companies should consider a range of options, including business unit reorganizations, and be ready to act quickly to realize potential gains from changes to the tax code or trade environment. Prepared companies can rapidly realize advantages over their competitors by taking such actions as reorganizing business units to reduce tax liabilities.



Use tax savings to position for success. Some healthcare companies will have access to a substantial amount of capital to help them gain a competitive advantage. Before tax reform enactment, healthcare companies in the S&P 500 held an estimated \$186 billion in cash overseas at the end of 2016, according to a Credit Suisse analysis, and they may now begin repatriating those funds at favorable rates.48

Companies can spend their tax savings in different ways, including reinvestment, acquisitions and stock buybacks. How they spend that money will affect the public's perception of them, according to respondents to an HRI survey. Sixty to 72 percent of respondents would have a positive opinion of a life sciences company, health insurer or hospital that used its tax savings to hire more staff, while 38 to 39 percent would have a negative opinion if the same company were to repurchase shares of its stock from investors.⁴⁹



Figure out what operational changes the new tax law will require. Companies must come to terms with a simple fact: The old way of doing business may no longer be the most effective or efficient way under the new code. The changes may require new supply chains, business unit reorganizations, benefit redesigns for executives and staff, investments in technology and staff training. Operational agility will permit companies to act quickly when necessary, but that will require planning and creativity.



Despite its high costs and mammoth size, the US health industry is lacking a "value line" of products or services, its own version of a Southwest Airlines that eases the cost of travel, a Costco Wholesale that sells its products and services at a known markup, or an Uber that transports people with a click of a button. These companies offer premier customer experiences at low, transparent costs, balancing in-person and virtual interactions with employees who are laser-focused on the consumer. In 2019, a health industry increasingly pressured to do more with less will take lessons from emerging companies that have figured out how to deliver value to the uninsured and underinsured—traditionally deemed unprofitable—and turn a profit.

A lower-cost value line is an important growth strategy in a healthcare ecosystem in which average deductibles have tripled over the last decade and are now almost \$1,300 for an individual with employer-based insurance, making healthcare costs a difficult financial decision even for the insured. Fifty-two percent of consumers with a high-deductible health plan say it would be hard to afford the deductible. 50 Also, nearly 30 million Americans remain uninsured, and Medicaid covers more than 60 million people.⁵¹ (see Figure 10)

52% of consumers with a high-deductible health plan say it would be hard to afford the deductible.

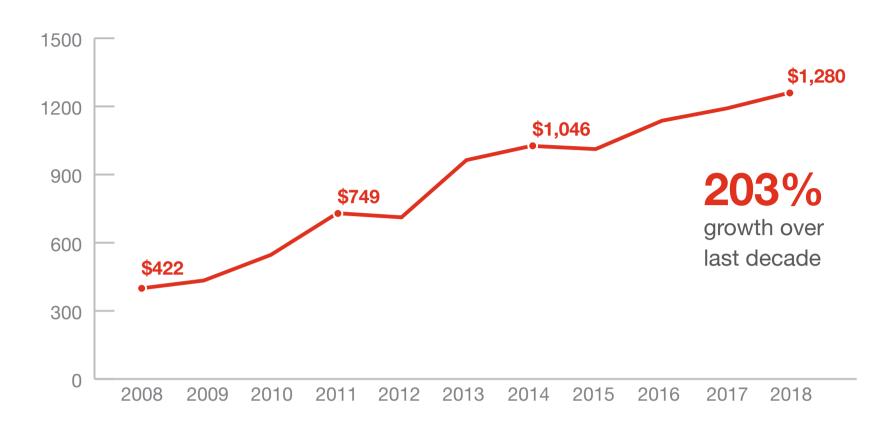


Figure 10: Average deductible for employer-sponsored plans over the past decade

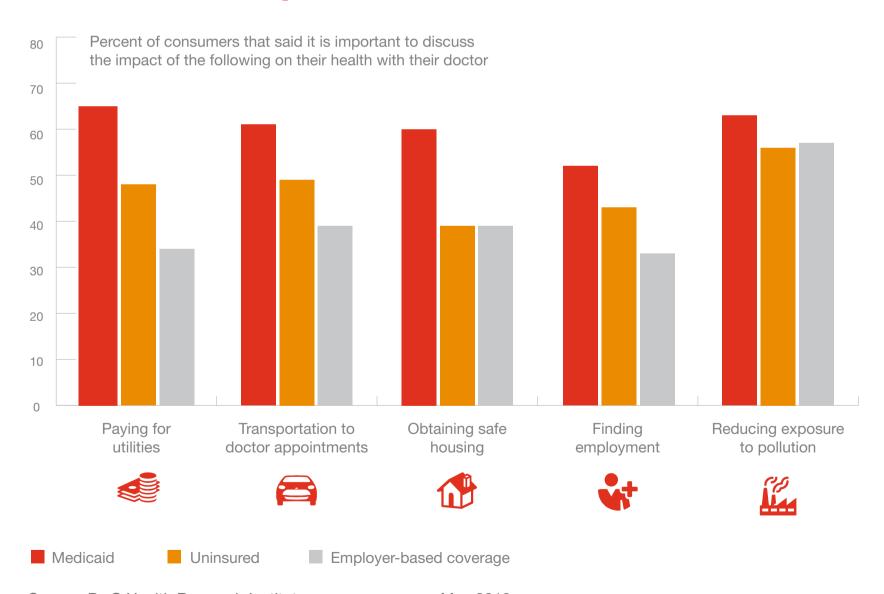
Source: PwC Health Research Institute analysis of Health and Well-being Touchstone survey, 2018

In response to these pressures, some healthcare companies are starting to build new, lower-cost delivery models to capture this market, bucking the trend by reducing fixed costs, rethinking which clinicians deliver care and addressing the social determinants of health.

Ardás Family Medicine in Denver provides walk-in-only service to refugees predominantly enrolled in Medicaid—and does so profitably.⁵² Since 2012, Ardás has seen more than 10,000 patients, with 97 percent of revenue coming from Medicaid.⁵³ "They don't teach you that you can open your own practice and structure it to make money off Medicaid," Ardás founder Dr. P.J. Parmar said in an interview with HRI. How does Ardás do it? "There is no one magic bullet," Parmar said. Ardás operates on a walk-in basis rather than handling appointments, in a space designed to move people in and out quickly. It works with only one payer and has built a model around the customer experience, with evening and weekend hours and over-the-counter medications available in the office.⁵⁴

New York City-based Cityblock Health, which contracts with health plans to serve low-income and vulnerable communities, sees significant opportunity to deliver and manage care differently for Medicaid beneficiaries. 55 "Medicare Advantage has been a gold rush for provider-plan partnerships," said Robbie Pottharst, chief operating officer of Cityblock Health, in an interview with HRI. "Medicaid has the added complexity of plans and patient populations that vary by state, requiring a highly tailored approach, but also creating an opening for new care delivery models." The company receives a set amount of money per patient each month and takes on the financial risk of managing those patients' care.56 Cityblock creates "Neighborhood Hubs" with local healthcare teams that deliver a high-touch care experience to address complex medical, behavioral health and social needs. Consumers want to address the social determinants of health, with Medicaid patients in particular recognizing their importance (see Figure 11).

Figure 11: Social determinants of health are perceived to be of greater importance to the health of Medicaid patients



Source: PwC Health Research Institute consumer survey, May 2018

CareMore, an integrated health plan and care delivery system that serves Medicare and Medicaid patients in 10 states, is measuring and treating loneliness in the senior population through its Togetherness Program.⁵⁷ CareMore uses direct interventions such as weekly phone calls from CareMore employees and volunteers and home visits from social workers who connect patients to community-based organizations.⁵⁸ Early results are promising: Emergency room use declined by 5 percent and acute hospital admissions by 11 percent per 1,000 patients.⁵⁹ "Loneliness is an epidemic in plain sight," said Dr. Sachin H. Jain, CareMore chief executive officer, in an interview with HRI. "We treat it as an unavoidable part of aging."

Even some technology companies are finding ways to apply their business models to addressing the social determinants of health. In 2017, Uber began partnering with healthcare organizations to transport patients to medical appointments. The company formally launched Uber Health in 2018.60

Some companies are anchoring themselves on transparency; 77 percent of consumers whom HRI surveyed said they want to see more of that in healthcare.61 Dallas/Fort Worth-based CityDoc Urgent Care lists self-pay prices for office visits and add-on services such as labs and X-rays on its website. 62 CVS Health takes a similar approach with its MinuteClinics.63

Generic drugs have long been the value line for pharmaceutical companies.⁶⁴ With 15 percent of consumers responding that they have skipped or delayed getting medicine in the past 12 months because of cost, generics alone aren't enough.65

For years, pharmaceutical companies have offered programs that help people afford their medications. HRI expects that in 2019 those programs will expand to help people manage their health and other aspects of their lives. For example, Sanofi's Patient Connection program includes its Resource Connection service, which connects patients to nutritional assistance, transportation help, housing support and more. 66

"Loneliness is an epidemic in plain sight. We treat it as an unavoidable part of aging."

-Dr. Sachin H. Jain, CareMore



Recognize your consumer segments that need value.

Consumers with high-deductible health plans, Medicaid consumers and those without insurance all have varying needs for value lines. They also have varying health needs and preferences that should be considered when creating these value lines.⁶⁷ Providers that understand the consumer segments they want to serve can design an operating model for the future—perhaps as "integrators" serving a payer mix and consumer base that are both diverse, or as "health managers" targeting the frail elderly, complex chronic, chronic and mental health consumer segments.⁶⁸



Consider partnerships to deliver lower-cost, highquality care. Scottsdale, Ariz.-based Redirect Health is working with employers nationwide to make it easy and affordable to provide healthcare to even low-wage employees.⁶⁹ For example, the company offers employees unlimited primary care visits paid for by their employer. Redirect Health is in talks with hospitals about collaborating to reduce unnecessary and expensive utilization by uninsured and Medicaid patients. 70 Such partnerships would let Redirect Health manage those patients' ongoing care and avoid unnecessary, pricey emergency room visits that often go unpaid or under-reimbursed, so that hospitals can concentrate on where they are needed most.



Go beyond the prescription coupon. Pharma has yet to fully embrace the idea of value lines other than generic drugs and patient financial assistance programs. It could build on existing patient support programs to tackle social and lifestyle barriers to patient adherence. Pharma also could do more with outcomes-based payments, with which the price paid for a drug is linked to its economic or clinical performance.⁷¹ These companies also could develop value lines in the direct-to-consumer market with digital therapeutics such as Natural Cycles, a contraception app approved by the FDA in August 2018.⁷² The app costs \$80 a year and doesn't require a doctor visit or prescription.73

77% of consumers say they want more price transparency in healthcare.



For years private equity firms have invested in healthcare, but now the pace is guickening as they step up their presence in a highly fragmented health industry, seizing on consolidation opportunities to build a better business model. Private equity's acquisitions and investments in the health sector have become increasingly diversified and frequent; they include such things as new entrants in technology and convenient care delivery, contract research organizations, and ophthalmology and dermatology practices. HRI expects this trend to accelerate in 2019, giving traditional healthcare companies opportunities to sell all or portions of noncore assets and double down on their core competencies, or partner with private equity in acquisitions in which they would otherwise be competing against each other or unable to act on their own.

A private equity sector bursting with cash and searching for deals means more of that money has flowed into the healthcare system over the past decade. In 2009, private equity firms completed over 200 healthcare deals, and by 2016 this had tripled to more than 600 deals (see Figure 12).

The healthcare industry saw a high level of deals in general in 2017 and 2018, involving both private equity and corporate buyers. As those deals are completed, many may be looking to sell noncore business units, prime targets for private equity firms looking for a proven business model and solid cash flow. 75,76 Private equity's purchases of healthcare divestitures are expected to continue in 2019 as the sector looks to invest the cash it has raised, a reported \$624 billion ready for investment across industries as of July 2018.77

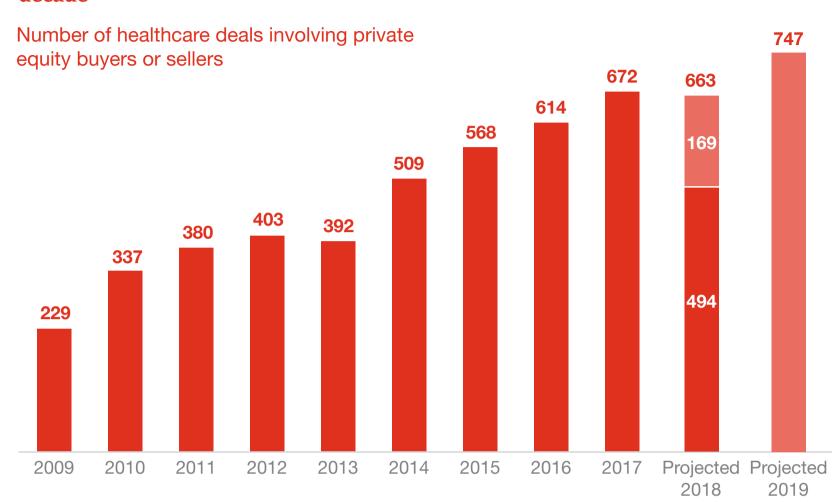


Figure 12: Private equity activity in healthcare has steadily increased over the past decade

Source: PwC Health Research Institute analysis of PitchBook Data, Inc.74

Private equity firms are approaching corporate entities more frequently, hoping to persuade them that some assets can be better managed by specialist private equity firms, said Don McDonough, managing director of JLL Partners, in remarks at the September 2018 Mergermarket Healthcare M&A Forum.⁷⁸ "More and more, PE firms are driving these types of carve outs," he said, according to Forbes.

Corporate healthcare buyers increasingly find themselves competing for deals with private equity firms that are more aggressive in the bid process, said Jonathan Piques, director of corporate development and strategy for Owens & Minor, a Richmond, Va.-based healthcare logistics and medical supplies company, in an interview with HRI. "This presents an opportunity for corporate buyers to partner with private equity, spreading the risk of the transaction and increasing the number and types of deals that corporate buyers can pursue," he said.

An example is the July 2018 deal involving TPG Capital; Welsh, Carson, Anderson & Stowe; and Humana to purchase Louisville, Kentucky-based Kindred Healthcare, a national healthcare services company that operates long-term acute care and post-acute care facilities. 79 The \$4.1 billion deal complements Humana's existing capabilities while capitalizing on private equity's strengths to enable growth.80

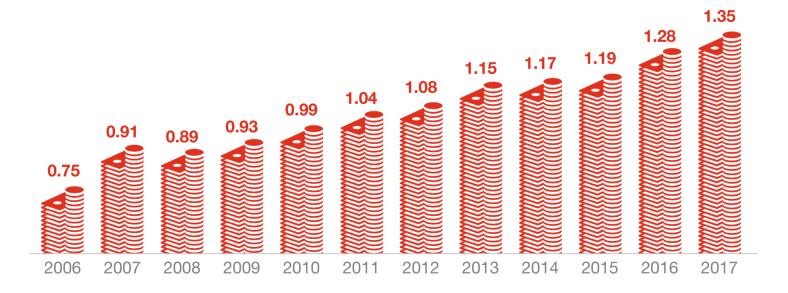
Partnerships between private equity and healthcare buyers also are evolving beyond acquisitions, with some healthcare companies spinning off noncore assets and coinvesting with private equity in the new company. In September 2017, Pfizer and LifeArc, a medical research charity, partnered with Bain Capital and OrbiMed to create SpringWorks Therapeutics, an independent company that develops treatments for underserved patients.81 HRI expects to see more co-investing in 2019; it gives healthcare companies a chance to keep their portfolios diversified while mitigating some of the operational and financial risks that come with diversification.

Private equity's increased role in deals isn't unique to healthcare; rather, it reflects private equity's increased investments across the economy (see Figure 13), which is the result of increased debt financing and fundraising by private equity, both driven by low interest rates. 82 As private equity firms seek to balance their investments in more volatile industries, such as technology, with investments in more stable industries that are less prone to a recession's effects, the growing healthcare industry may appear even more attractive.

CMS projects that national health spending will rise to 20 percent of the economy by 2026, up from 18 percent in 2016.83 That growth creates opportunity for private equity to grow its footprint in the industry; healthcare companies also should be seeking their own opportunities.

Figure 13: Total assets under private equity management have increased by \$600 billion since 2006

Private equity assets under management in the US (in trillions)



Source: PwC Health Research Institute analysis of PitchBook Data, Inc.



Recognize that the market is ripe for divestitures.

Healthcare companies should consider selling noncore business units to private equity firms that have money to invest and may be more apt than a corporate buyer to purchase a single business unit. As megadeals complete, newly consolidated entities should consider shedding noncore assets, with private equity as a potential buyer.



Partner with private equity to unlock possibilities for growth and scale. Companies across the industry should consider where they might partner with private equity firms when pursuing growth or expansion efforts, as the private equity sector may provide strategic advantages beyond key additional financing. "Viewing private equity as a banker is shortsighted," said Dawn Von Rohr, senior vice president of strategy for Albany, N.Y.-based AMRI, a global contract research and manufacturing organization purchased by The Carlyle Group and GTCR LLC in 2017. "Private equity can drive deals forward quickly. Once the deal has closed, they can provide a strategic view, understanding industry trends through their portfolio of investments and advising on growth opportunities."



Understand that private equity is accelerating change in the industry and eyeing disruptors. Private equity investment in healthcare isn't going to single-handedly improve care quality, enhance the patient experience or reduce healthcare costs to consumers. But it likely is fueling the efforts already in place. Private equity firms bring capital and experience from other industries that can contribute to the healthcare industry's efforts to rein in costs and achieve better outcomes. For example, in May 2014, Los Angeles-based private equity firm Varsity Healthcare Partners acquired Baltimore-based Katzen Eye Group to form EyeCare Services Partners Holdings LLC

(ESP).84,85 ESP has since made multiple acquisitions and now provides practice management services to ophthalmologists and optometrists across 46 clinics in five states.86 On its website, ESP touts increased reimbursement and elimination of administrative burden as benefits of selling a practice to ESP.87

At the same time, private equity has its eyes on disruptors, monitoring their effects on investments and proposed deals. In rare cases, it invests in disruptors, as in The Carlyle Group's investment in San Francisco-based 1Life Healthcare, the parent company of national, membership-based primary care practice One Medical. The investment was announced in August 2018.88

"Viewing private equity as a banker is shortsighted...they can provide a strategic view, understanding industry trends through their portfolio of investments and advising on growth opportunities."

Dawn Von Rohr, AMRI



Two years into the Trump administration, the Affordable Care Act (ACA) remains law, but Republican lawmakers and the administration have reshaped parts of it through legislative, regulatory, budgetary and legal actions. In 2019, these actions will create new winners and losers.

Healthy individuals and small businesses seeking cheaper premiums will benefit in 2019, as will payers selling short-term, limited duration insurance and supporting association health plans. New entrants specializing in underinsured and uninsured consumers may find new markets thanks to Republican actions to expand access to these plans. Financial services companies, makers of nonretail medical devices and employers offering high-cost insurance plans all will enjoy modest gains too.

On the losing end of these policies and decisions are middle-class consumers seeking comprehensive coverage on the ACA exchanges, and providers and payers dependent on patients covered by Medicaid or ACA plans living in conservativeleaning states that are more skeptical of the law. Some ACA revenue-raising provisions have been delayed or eliminated, exacerbating their situation.

The administration's efforts to chip away at the ACA can be seen around the law's edges through softening individual and employer mandates, expanding access to health insurance plans that don't conform to ACA rules, reducing operational and financial support for individual exchanges, dialing back on Medicaid spending and expanding the use of health savings accounts (see Figure 14).

President Donald Trump, his administration and the Republican party campaigned in 2016 on repealing and replacing the ACA but failed to do it in a single piece of legislation in 2017.89 "Repeal and replace" as a political rallying cry fell away in this fall's midterm elections, but in 2019, reshaping the law will remain a goal for the president, his administration and Republican lawmakers.90

Figure 14: ACA in 2019 is creating new winners and losers

Goal	Actions	Impact	Winners	Losers
Soften ACA individual and employer mandates	Individual mandate penalty reduces to \$0 on Jan. 1, 2019; HHS reduces paper- work to claim hardship exemption for 2018 tax year filed in 2019	In 2019, increases number of uninsured by 4 million, reduces individual markets by 3 million, reduces Medicaid population by 1 million	Consumers wishing to purchase short-term, limited duration insurance (STLDI) or go without coverage; new entrants serving cash customers	Providers in states that don't replace penalty; payers dependent on ACA exchanges
Expand consumer choices for health insurance	Expanded access to association health plans (AHP) and STLDI through rule-making process. Sales began late 2018, with 2019 as first full year	In 2019, enrollment in STLDI increases by 600,000, decreasing on- and off-exchange enrollment by 500,000; AHP enrollment expected to be 4 million by 2023	Payers selling STLDI and supporting administration of new products in states that allow sales; healthy individuals, self-employed and small employers seeking cheaper coverage	Providers in states embracing sales; payers heavily dependent on nongroup and small group sales in states allowing sales; middle-class nongroup consumers seeking comprehensive coverage
Withdraw federal support for ACA exchanges	In 2019, reduced ACA enrollment periods, reduced funding for navigators and advertising	7% decrease in ACA enrollment between 2016 and 2018, when 11.8 million enrolled	Sellers of STLDI and AHPs	Providers serving large numbers of ACA patients; payers dependent on ACA exchanges
Repeal, delay or suspend ACA taxes and fees	Delays on taxes on payers, high-cost employer- sponsored insurance and nonretail medical devices	Reduction in federal revenues of \$14.6 billion in fiscal year 2019	Payers, employers offering "Cadillac" plans; medical device companies	Federal coffers
Reduce federal Medicaid spending	Approvals of Section 1115 waivers are allowing creation of state Medicaid work requirement programs. At least three states will operate programs in 2019	In Arkansas, 4,300 beneficiaries were cut in September	States with work requirements may see modest decreases in state Medicaid spending.	Payers and providers serving Medicaid beneficiaries in states with work programs
Expand use and usability of health savings accounts (HSAs)	Congress will consider several bills in 2019 to increase allowable contri- butions and goods and services eligible for HSA funds	If legislation passes, federal revenues would decrease by about \$650 million in the first fiscal year	Affluent consumers; financial services companies servicing HSAs; providers serving patients with high deductibles and well-financed HSAs	Federal coffers

Source: PwC Health Research Institute

Christopher Holt, director of health care policy for the Washington, D.C.-based American Action Forum, can foresee a scenario in which Republicans feel compelled to take another run at the ACA. "There's certainly the potential for another round of 'repeal-and-replace' efforts in some form," he told HRI in an interview. "There are elements inside Congress and the administration that feel that changing the ACA is why they're here. They'll want to push, and it will be hard for congressional leaders not to play that out."

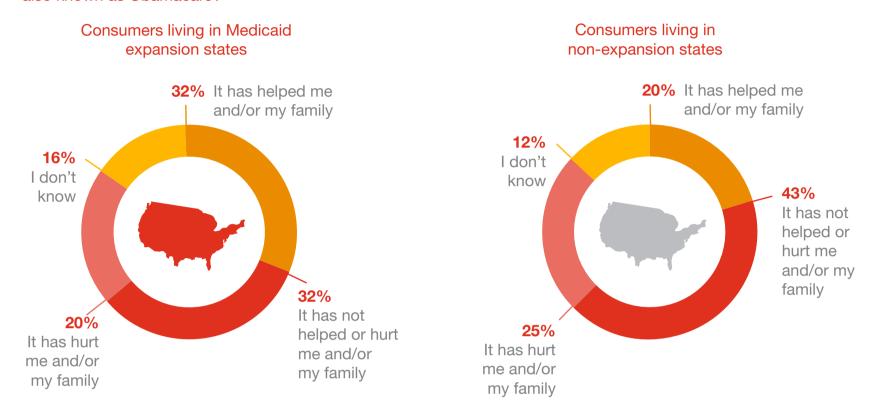
These endeavors are occurring against a backdrop of general industry deregulation, including CMS' campaign to reduce reporting requirements and paperwork for providers and the FDA's efforts to streamline medical product reviews. 91,92 The health industry also is contending with the president's proposed and enacted tariff increases on Chinese exports to the US—including some medical products and materials used to make them—which have triggered Chinese tariffs on American exports. 93,94

In 2019, providers, pharmaceutical and medical device companies will benefit from deregulation, while some life sciences and durable medical equipment companies may be caught in the middle of the US and China's simmering trade war.

Nine years after the ACA's passage, Americans remain ambivalent about the law. Residents of the 34 states and the District of Columbia that expanded Medicaid under the law were more likely to say the law helped their families than respondents living in the 17 states that didn't expand Medicaid, according to an HRI survey conducted shortly before the 2018 midterm elections.

Figure 15: One in three Americans living in states that expanded Medicaid under the ACA say the law helped them⁹⁵

Which of the following statements do you agree with the most about the Affordable Care Act, also known as Obamacare?



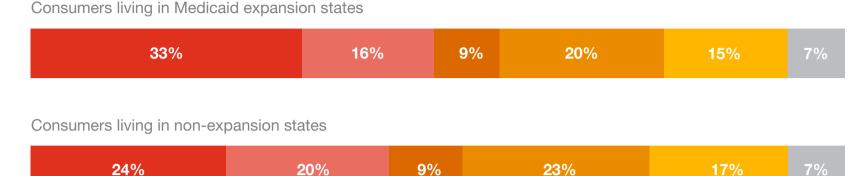
Source: PwC Health Research Institute consumer survey, September 2018

Respondents living in Medicaid expansion states also were less likely to say the law had hurt their families (see Figure 15). While residents of expansion states were more likely to favor strengthening or modifying the law than those in non-expansion states, more than a third of expansion state residents said they favor repealing and/or repealing and replacing the law (see Figure 16).

Of all the actions that the Trump administration and Republican lawmakers took to affect the ACA, the one that will most strongly affect the health industry in 2019 is the reduction of the ACA individual mandate penalty to \$0 on Jan. 1, a change included in the Tax Cuts and Jobs Act of 2017.96

The Congressional Budget Office (CBO) estimates that 4 million Americans will choose to forgo coverage in 2019 because of the \$0 individual mandate penalty.97 Three million likely will be Americans who otherwise would have purchased comprehensive nongroup coverage, while 1 million likely will be people who would otherwise have enrolled in Medicaid, according to the CBO.98

Figure 16: What do you think lawmakers should do about the Affordable Care Act also known as Obamacare?





PwC Health Research Institute consumer survey, September 2018

This means the \$0 individual mandate penalty will have the most significant effect on Medicaid in 2019. This is in spite of CMS' headline-grabbing approvals of work requirement programs for Medicaid expansion beneficiaries in a handful of conservative-leaning states, including Arkansas and Indiana. 99 In Arkansas, the first state to establish a work requirements program, 4,353 beneficiaries lost benefits in the first three months for failing to comply with the program. ¹⁰⁰ In 2019, 170,000 Arkansas expansion beneficiaries will be subject to the requirements, according to the state. At least three states will operate under work requirements in 2019, with more likely to join.¹⁰¹

Providers and Medicaid managed care organizations serving Medicaid populations in Arkansas, Indiana and other states that eventually launch work requirement programs could see a slow attrition in coverage in 2019 as beneficiaries gradually lose coverage for failing to comply. Providers in these states could find themselves responsible for educating beneficiaries about the programs to help them remain compliant and also helping former beneficiaries understand why they lost benefits once they seek care.

The administration's new regulations allowing longer terms for short-term, limited duration insurance, which is exempt from many of the ACA's consumer protections, will create opportunities for payers selling and supporting these products in 2019, the first full year they will be sold under the new rules. 102 The same is true of association health plans. 103 In 2019, the administration's new rules will allow more people to join forces for coverage under these products, which may be subject to fewer restrictions than nongroup and small group plans under the ACA.104

The CBO estimates that an additional 600,000 people will buy short-term, limited duration plans in 2019, with up to 4 million additional people covered by association health plans by 2023. 105 Losers will include payers focusing on sales of ACA nongroup and small group coverage as hundreds of thousands of their customers swap those plans for the cheaper short-term and association ones.

Lawmakers also have made headway continuing delays of ACA taxes and fees, including the excise tax on nonretail medical devices, the fee on health insurance providers and the excise tax on so-called "Cadillac" employer-sponsored health plans.¹⁰⁶ Together, these provisions would have raised \$14.6 billion in revenue in fiscal year 2019.107

In 2019, lawmakers from both parties also may opt to increase the amount Americans are allowed to contribute to HSAs and expand the goods and services that can be purchased with those funds. 108 This decision, put forth in several bills under consideration, would modestly benefit financial services companies servicing these accounts and reduce federal revenue by about \$650 million during the first fiscal year. 109

The reason for the relative pittance? Only 13 percent of HSA account holders contributed the maximum allowable amount in 2016, according to a study by the Washington, DC-based Employee Benefit Research Institute. 110 An expansion would mostly benefit a relatively small number of affluent Americans, offering them a tax-sheltered way to pay medical bills and perhaps making it a little easier for the providers who care for them to chase down those bills.

Broadly, the administration's actions affecting the ACA have shifted power to the states, which means the fates of many providers and payers depend on decisions made by state lawmakers and bureaucrats. Empowered, states are nurturing innovation for the industry. New Jersey, Vermont and Massachusetts have individual mandate penalties to stand in for the \$0 federal one.111 Others, such as Alaska and Wisconsin, have opted to create reinsurance programs to pay high-cost ACA claims in an attempt to keep premiums down.¹¹² Others are still ripe for experimentation in the Medicaid space, even as budgets grow tighter. Which states will take on which initiatives is partially determined by their political makeup, though the goals are the same: fewer uninsured people and reduced healthcare costs.

"There's an incredible opportunity for states to be innovative," said Samantha Burch, senior director of congressional affairs at Chicago-based Healthcare Information and Management Systems Society, in an interview with HRI. "Health policy battles may get started on Capitol Hill, but they more often than not are won or lost in a statehouse."

Implications



Care delivery must move beyond the office and to a broader **team.** Anticipating less robust coverage on individual and nongroup markets due to the greater availability of insurance plans that don't conform to ACA regulations, providers and payers should develop plans for triaging patients and members to lower-cost care options, including telehealth or in-home nurse visits. Providers also should pair patients with the most appropriate clinician to address patients' immediate health issues. This could mean scheduling them with a nurse, dietitian, mental health specialist or social worker instead of a higher cost physician.

HRI found that a well-designed primary care team could result in savings of \$1.2 million per 10,000 patients served annually. 113 Providers and payers should enlist social and community support to address the social determinants of patients' health—such as obtaining reliable transportation or food security—and drive adherence to treatment plans with the goal of reducing avoidable hospitalizations and emergency room visits. Longer-term strategies should focus on tackling fixed costs, such as replacing certain physical infrastructure with virtual infrastructure and creating a value line of product and service options at different price points for patients.

Implications



Attention to drug prices will increase despite a slowdown in rule-making for manufacturers. An ACA provision that would implement monetary penalties on manufacturers that knowingly charge more than the ceiling price for a covered outpatient drug under the 340B purchasing program is scheduled to go into effect July 1. The Trump administration had previously delayed the provision. Lawmakers in 2019 will be increasingly interested in how 340B entities are using the benefit and whether or not savings generated by the program are making it to consumers or padding companies' pockets. Government scrutiny of drug prices is expected to continue. Seventy-three percent of Americans surveyed by HRI said they want the government to do more to control the cost of prescription drugs.

The frail elderly, consumers with chronic conditions and consumers with a mental illness most strongly endorsed government action. In July 2018, after drawing criticism from President Trump, drug companies Novartis and Pfizer announced they would freeze prices on their products in the US for the remainder of 2018.¹¹⁴



Insurance regulations are falling to states, creating a patchwork. States will be taking more direct action to secure their insurance markets in 2019, even as the methods for doing so become more variate, creating challenges for regulatory compliance. In all states, payers will be able to sell more products in the individual and group markets, but regulations of those products will differ. States that don't ban new products outright could still place greater restrictions on their use than federal regulations allow for.

At the same time, states will seek ways to stabilize marketplaces through federal assistance, particularly through reinsurance programs designed to reimburse payers with high-cost beneficiaries and slow individual plans' premium increases. 115 When making decisions in 2019, payers seeking to get the most out of new opportunities should avoid thinking of states as red or blue when they approach marketplaces and should instead closely follow state regulatory decisions.

Healthcare after the 2018 midterm election: As control shifts, certainty settles in

The Democrats' midterm wins likely will slow, but not stop, the Republicans' pursuit of their healthcare agenda, which has focused on recasting the role of the federal government in the US health industry. Without overwhelming control of both chambers and the power to override presidential vetoes, Democratic lawmakers will have little room to pursue their own agenda, which includes shoring up the Affordable Care Act (ACA), strengthening Medicare and Medicaid, expanding consumer protections and using the federal government to provide relief for consumers struggling with healthcare spending.

After two years, the Trump administration's approach to the health industry is relatively clear and predictable. Providers and payers can expect that more of their fates will rest with state lawmakers and regulators. Providers, especially in states that embrace administration policies, can expect the number of underinsured and uninsured patients to swell modestly. Providers also can likely expect the administration to continue to embrace value-based care models, including mandatory ones. Meanwhile, pharmaceutical and life sciences companies can expect the FDA's review process to become more efficient and that the agency will likely continue to seek ways to work more closely with industry.

Democrats will also control more gubernatorial seats after the midterms. Unlike Republican states, Democratic-run states are less likely to pursue Medicaid work requirement programs or embrace ACA-sidestepping health coverage. Instead, they are more likely to try to buttress the ACA, passing their own individual mandate penalties, formulating reinsurance programs to dampen ACA premium increases and funding advertising to encourage constituents to enroll for coverage. These states also are more likely to adopt legislation calling for greater transparency in drug price increases.

Americans are increasingly accustomed to the benefits awarded by the ACA, especially protections involving pre-existing conditions. The Democratic victories signal a tilt, if only slight, back toward an expansion of benefits facilitated by the federal government and its resources, and away from a deregulated approach in which consumers have more health coverage choices but fewer protections.

Over the next two years, healthcare companies will likely see a higher premium placed on transparency, which will extend beyond prices for goods and services to corralling new coverage practices. Political changes in Washington, DC, will likely give Democrats more influence over the health policy agenda, but fundamental business issues of how to slow rising costs, create better consumer experiences and implement new technologies will likely remain perennial industry issues. In 2017, national health spending was projected to have grown 4.6 percent, reaching almost \$3.5 trillion, according to an analysis by the CMS Office of the Actuary. By 2026, national health spending is projected to top \$5.7 trillion.

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About this research

This annual report discusses the top issues for healthcare providers, health insurers, pharmaceutical and life sciences companies, new entrants and employers. In fall 2018, PwC's Health Research Institute commissioned an online survey of 1,750 US adults representing a crosssection of the population in terms of insurance status, age, gender, income and geography. HRI also oversampled to obtain data on specific market segments. The survey collected data on consumers' perspectives on the healthcare landscape and preferences related to healthcare usage.

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