

Medical cost trend: Behind the numbers 2020

Health Research Institute

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The heart of the matter

American businesses are frustrated with rising health costs. Despite employers' efforts to control utilization of health services through higher deductibles and other cost sharing, medical cost trend still outpaces general inflation.¹ PwC's Health Research Institute (HRI) projects a 6 percent medical cost trend in 2020, a slight uptick over the past two years. After figuring in health plan changes, such as increased employee cost sharing and network and benefit changes, HRI projects a net growth rate of 5 percent. Even with employers' actions, market forces likely will still overrun efforts to quell them.

Prices—not utilization—are continuing to fuel healthcare spending. Utilization continues to be dampened by high deductibles and other cost sharing, but at the expense of employee satisfaction. In response, employers are inserting themselves more forcefully into the healthcare delivery equation. "Employers are pursuing market-based solutions to the price issue," said Michael Thompson, president and CEO of the Washington, DC-based National Alliance of Healthcare Purchaser Coalitions, in an interview with HRI. "If market-based solutions don't work, employers may push for healthcare to be regulated like a public utility."

Beyond the market forces prompting employers to boldly assert themselves, three inflators also are at work on medical cost trend in 2020:

- **Drug spending will grow faster.** Between 2020 and 2027, retail drug spending under private health insurance is projected to increase at a rate of 3 percent to 6 percent a year as the impact of generics on spending plateaus, biosimilars continue to see slow uptake and new costly therapies enter the market.² This growth in spending will occur amid intense focus on drug prices in Washington, DC, and on the presidential campaign trail.
- **Chronic diseases will continue to plague the populace.** Obesity and Type 2 diabetes continue to produce high rates of hypertension and cardiovascular disease. Sixty percent of adults have a chronic disease, with 40 percent managing two or more.³ For employers, per capita health spending on an individual with a complex chronic illness is eight times that of a healthy individual.⁴
- **Employees and their families will take advantage of greater access to mental health services.** Employers are beginning to recognize the importance of helping their employees manage their mental health and well-being. Nearly 75 percent of employers offer mental health disease management programs.⁵ Anytime access is expanded, costs will go up in the short term. But in the long term, employers may find that addressing mental health is a powerful deflator of medical cost trend. When a person has a poorly managed mental health condition and chronic disease, the costs can grow dramatically.

And yet employers and payers are finding ways to apply the brakes to medical cost trend in 2020 with their own deflators:

- **Employers will continue to open more expansive worksite clinics.** In 2020, more companies will take action to make sure healthcare is accessible to their employees, opening and expanding clinics as a strategy to control cost trend. Thirty-eight percent of large employers offered a worksite clinic in 2019, up from 27 percent in 2014.⁶ These clinics also are expanding the services they offer to include primary care and other services.
- **Employers and payers will nudge people toward lower-cost sites of care.** Payers are designing plans to encourage members to choose free-standing facilities and in-home care, rather than more expensive sites. How those benefits are designed and how employees perceive the costs will shape the effectiveness of site of care strategies. Payers and employers are aiming to grow the role of telemedicine as employees grow more comfortable with it, especially if out-of-pocket costs are lower and quality and experience don't suffer.
- **More employers will help employees maximize their benefit packages.** More than 80 percent of consumers surveyed by HRI with employer-based insurance would be interested in a "menu" of options for care across virtual and physical settings.⁷ But employees aren't always taking advantage of the special carve-outs their employers are offering. In 2020, more employers will improve communication to help employees navigate the system and make the most of their benefits, aiming for an experience that is more seamless with the rest of the traditional health plan networks.

More employers are taking matters into their own hands, becoming what HRI terms "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. They are forging powerful coalitions, such as Haven, comprised of JPMorgan Chase, Amazon and Berkshire Hathaway, and the Health Transformation Alliance, which counts 50 major corporations ranging from American Express to Marriott as members.⁸

The pressure that has been building for years is spreading to employees, who are not happy with the level of cost sharing. More than 40 percent of consumers surveyed by HRI who have high deductible plans through an employer said they would rather not have one.⁹ Many consumers struggle to afford their deductibles; 28 percent of HRI survey respondents with employer-sponsored insurance said they had \$500 or less in emergency savings.¹⁰

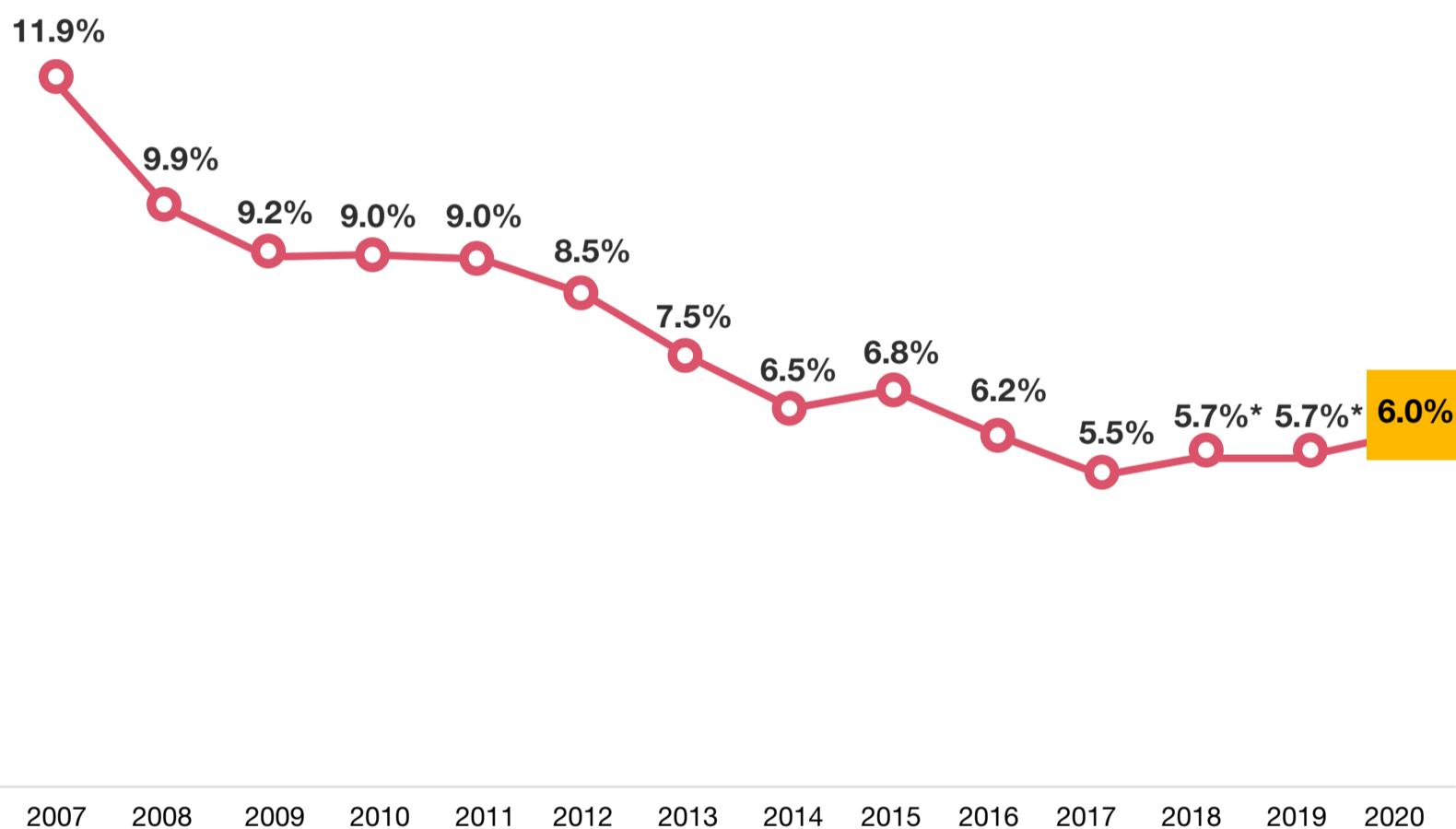
2020 likely will be, in some ways, a turning point in the long arc of employer-sponsored insurance, a year in which more employers fight back using new tools and strategies to control the ever-growing costs to their own organizations, their employees and their families. Dissatisfaction with the system is widespread among all stakeholders, and there is a sense among employers that it is time to think creatively and broadly about changing the system. In 2020, medical cost trend will continue its march upward, but not without employers working to slow and perhaps even stop that march.

Medical cost trend in 2020

HRI projects medical cost trend to be 6 percent in 2020 (see Figure 1). After accounting for plan changes to increase employee cost sharing or alter benefits, HRI expects the net growth rate in 2020 to be 5 percent.

For this research, HRI conducted 55 in-depth interviews with health industry executives, health benefits experts and health plan actuaries whose companies cover more than 95 million employer-sponsored large group members. HRI also analyzed results from an HRI national consumer survey of 2,500 US adults as well as from PwC's 2019 Health and Well-being Touchstone Survey of more than 550 employers from 37 industries.

Figure 1: Medical cost trend has been flat for two years but is expected to increase in 2020



*HRI adjusted its estimates for 2018 and 2019 down from those previously reported.¹¹
Source: PwC Health Research Institute medical cost trends 2007-2020

What is medical cost trend?

Medical cost trend is the projected percentage increase in the cost to treat patients from one year to the next, assuming that benefits remain the same. While it can be defined in several ways, this report estimates the projected increase in per capita costs of medical services and prescription medicine that affect commercial insurers' large group plans and large, self-insured businesses. Insurance companies use the projection to calculate health plan premiums for the coming year. For example, a 5 percent trend means that a plan that costs \$10,000 per employee this year would cost \$10,500 next year. The cost trend, or growth rate, is influenced primarily by:

- Changes in the price of medical products and services and prescription medicines, known as unit cost inflation
- Changes in the number or intensity of services used, or changes in per capita utilization

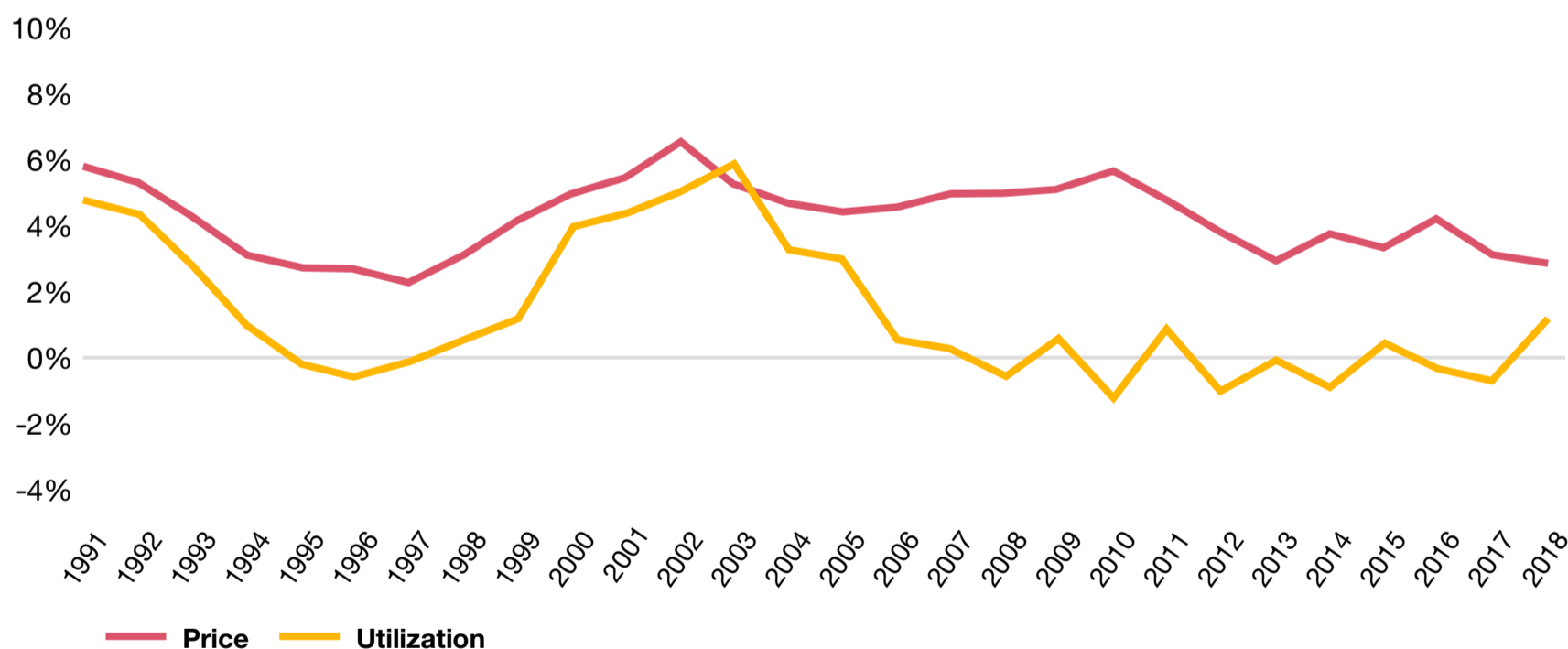
Putting trend in perspective

HRI spoke with healthcare industry experts and analyzed data to better understand what's happening to medical cost trend. Three broad factors emerged as key drivers:

Prices are driving healthcare spending. Healthcare prices continue to grab headlines, as scrutiny from consumers, lawmakers and the media intensifies. An analysis by HRI shows this attention to be justified (see Figure 2). Prices have been a larger component of employer benefit costs than utilization since 2004; utilization has hovered around zero percent growth since 2006. A recent study from the Health Care Cost Institute found that utilization by individuals with employer-based insurance decreased by 0.2 percent from 2013 to 2017 while prices rose 17 percent during that time.¹² In previous Behind the numbers reports, HRI identified provider megamergers and physician employment and consolidation as drivers of price and in turn medical cost trend, ones that HRI expects will continue in the short term.¹³ Further, the Centers for Medicare and Medicaid Services' Office of the Actuary projected in February 2019 that healthcare-specific price growth will accelerate between 2020 and 2027, driven by higher healthcare sector wages and an improving economy where consumers are less sensitive to healthcare prices as compared to recent years.¹⁴

Figure 2: Over the past 15 years, benefit cost growth has been driven by the prices of medical services and prescription drugs

Components of growth in employer benefit costs, 1991-2018



Source: PwC Health Research Institute analysis of CMS national health expenditure accounts, Kaiser Family Foundation data and Bureau of Labor Statistics data¹⁵

Employers are concerned that the prices they pay are much higher than those paid by Medicare. A study published in 2019 by the RAND Corporation with support from the Employers' Forum of Indiana and other employer coalitions found that self-funded employers across 25 states were paying on average 204 percent of the Medicare rate for inpatient hospital stays and 293 percent of the Medicare rate for outpatient services from 2015 to 2017, with large variation between states and hospital systems.¹⁶ Some states such as Michigan, Pennsylvania, New York and Kentucky had average rates of up to 200 percent of Medicare rates while others like Colorado, Montana, Wisconsin, Maine, Wyoming and Indiana had average rates of 250 percent or more of Medicare rates. The study also found that prices among hospital systems varied nearly threefold from 150 percent of Medicare rates up to 400 percent. "It's no longer just about the 6 percent trend," said Michael Thompson, president and CEO of the National Alliance of Healthcare Purchaser Coalitions, in an interview with HRI. "For employers, compared to other players in the healthcare industry, it is now about inequity in cost and misaligned incentives across the board."

Deductibles dampen utilization and spending as employees feel the pain. Average deductibles for employer-sponsored plans tripled between 2008 and 2018.¹⁷ This increase likely has led to a low utilization trend because employees are delaying or forgoing care due to their deductible. Employees often don't understand their financial exposure with high deductible plans. They may be skipping preventive care because of cost concerns, when in reality, the visit would be covered at no cost to them. Meanwhile, they may be surprised to return for a sick visit to the same doctor who provides their preventive care only to walk away with a bill. The difference between a preventive visit and any other visit is not one that consumers can easily discern themselves based on their interactions with the doctor, but it is one that can have major cost implications for the consumer, especially those on a high deductible health plan (HDHP). Collectively, higher deductibles and lack of clarity around financial exposure based on the type of visit has led to frustration. Forty-two percent of consumers surveyed by HRI with an employer-based HDHP said they were dissatisfied with their deductible.¹⁸

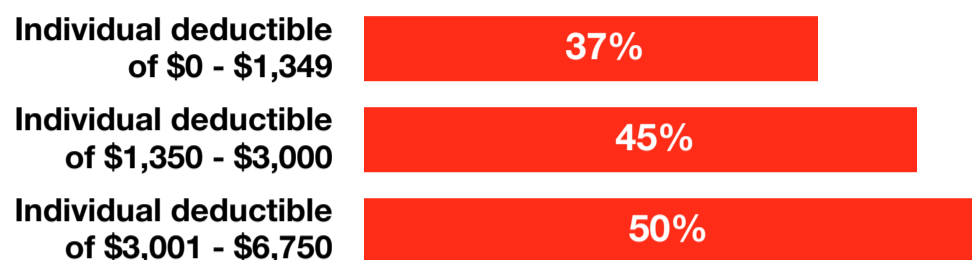
This frustration also may come from the fact that growth in employee cost sharing has outpaced growth in wages in recent years. An HRI analysis of Truven Health Analytics MarketScan Commercial Claims and Encounters summary data reported by the Kaiser Family Foundation found that cost sharing grew at an average annual rate of 4.5 percent from 2006 to 2016 while annual median wages grew at an average rate of 1.8 percent over the same time period.¹⁹ Interestingly, the share of total healthcare costs being paid by employees enrolled in an employer-sponsored health plan has remained relatively steady, around 15 percent of total healthcare costs, including medical and drug costs, from 2006 to 2016, according to the HRI analysis of the Truven data reported by the Kaiser Family Foundation. This may be because in spite of large deductibles, the dollar amount of out-of-pocket spending on healthcare costs under a qualifying HDHP offered by employers is capped by the IRS each year.²⁰ Additionally, deductibles do not apply to certain preventive services—those costs are absorbed by the employer.

Employees' disappointment with HDHPs may be driven less by what they are actually spending on healthcare and more by what they are at risk for spending and might be unable to afford. Twenty-eight percent of consumers surveyed by HRI with an HDHP through their employer said it would be hard to afford the deductible.²¹ In this survey, HRI found one-third or more of individuals and families with employer-based insurance and an HDHP don't have enough saved to pay for their deductible (see Figure 3).

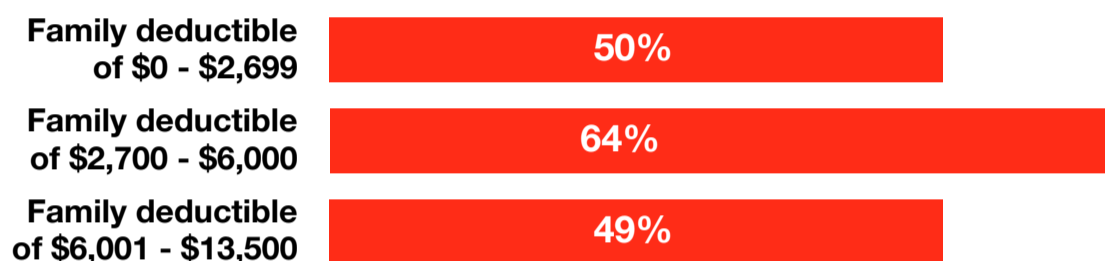


Figure 3: Families and individuals commonly don't have enough money saved to pay their deductible

For all deductible levels, across individuals and families, one-third or more did not have enough savings to cover their deductible



Consumers with an individual deductible who have less than their annual deductible saved



Consumers with a family deductible who have less than their annual deductible saved

Source: PwC Health Research Institute consumer survey, spring 2019²²

End of the cost-shifting story and the beginning of employer activism. The shift to HDHPs by employers seems to have stalled. With 84 percent of employers offering an HDHP option in 2019 and a tight labor market, employers may not be as quick to push HDHPs in 2020.²³ In its research, HRI found that employers feel they are reaching a point where they can't ask their employees to bear much more of the costs.

Enter the employer activist, eager for new ways to slow or drive down healthcare costs. Some employers are more aggressively negotiating with health plans and pharmacy benefit managers (PBMs) as well as exploring direct contracting with providers and pharmaceutical companies. Others are actively helping their employees manage their health and their healthcare spending. "Employers are very frustrated with slow progress and we are no longer willing to let the healthcare ecosystem evolve on its own. As key purchasers and payers of healthcare, self-insured employers are in a position to use their market power to accelerate the advance toward value-based care and increased system efficiencies," said Dr. Diana Han, chief medical officer and global medical director of Louisville, Kentucky-based GE Appliances, in an interview with HRI.

Factors affecting 2020 medical cost trend

Inflators

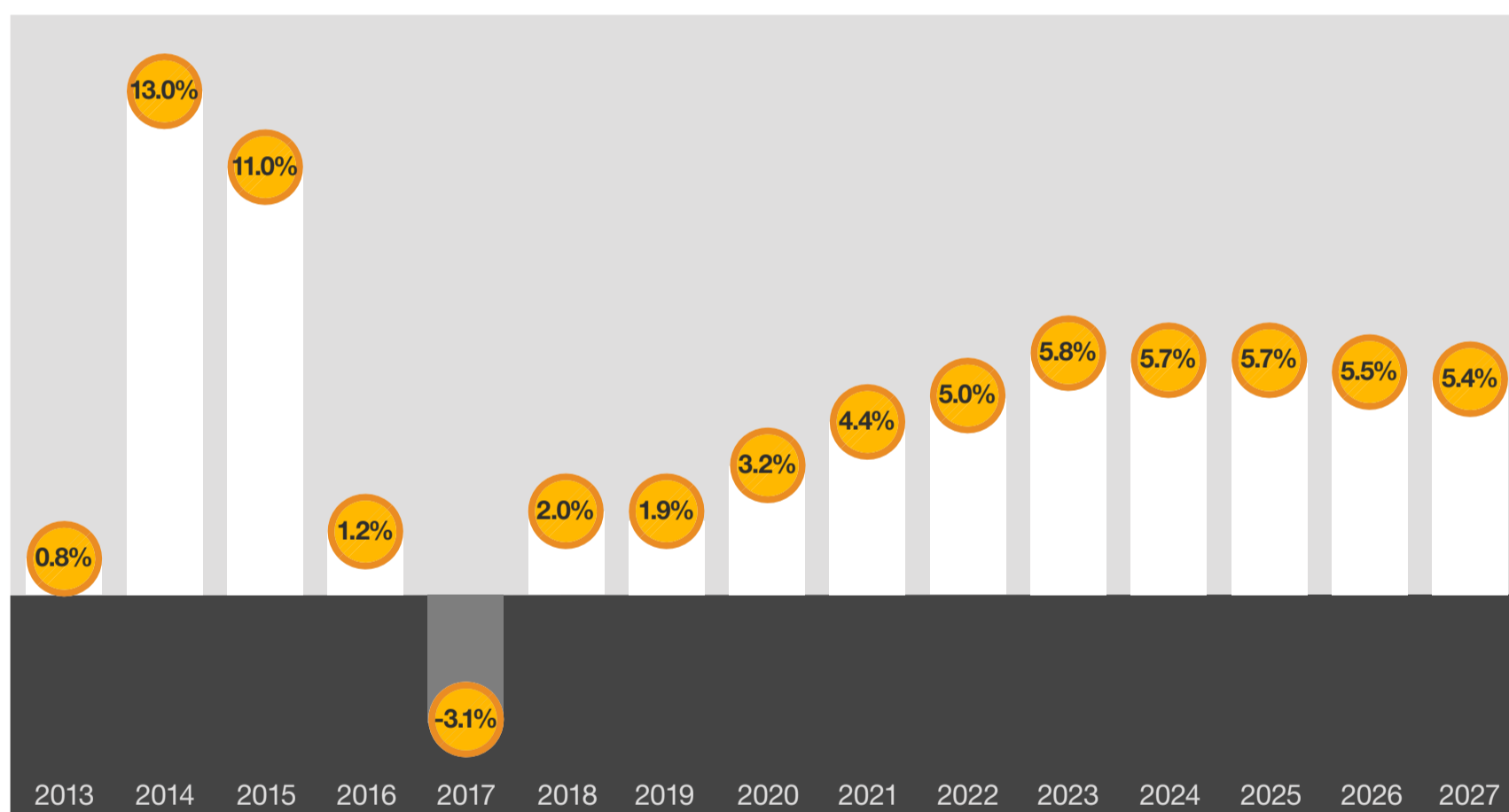


Drug spending will grow faster

Retail prescription drug spending growth for private health insurance peaked in 2014 and 2015 due in large part to the hepatitis C treatments entering the market, then fell to negative 3 percent in 2017 as the market rebounded from the impact of those treatments and leveled out in 2018 and 2019 (see Figure 4). But, starting in 2020, retail prescription drug spending growth for private health insurance will begin to increase, hitting between 3 percent and 6 percent annually through 2027.²⁴ The growth in spending can be attributed to the waning impact of generics on the market and the introduction of new drugs—primarily specialty drugs with higher price tags than previously seen, according to CMS.²⁵

Figure 4: Retail prescription drug spending growth will pick up from 2020 to 2027

Drug spending growth for private health insurance is expected to increase starting in 2020



Source: PwC Health Research Institute analysis of CMS national health expenditure data for private health insurance, historical data 2013-17 and projected data 2018-27

Generic competition will not affect 46 percent of the estimated sales revenue of the top 100 drugs through 2023.²⁶ There will be less opportunity for generics to dampen drug spending as the value of branded drugs coming off patent exclusivity decreases from 2018 through 2020.²⁷ Employer-based generic utilization rates hovering around 86 percent also means there is little room to grow.²⁸ Lastly, not all drugs coming off patent exclusivity will be eligible for traditional generic competition because many are biologics that will require biosimilar, not generic, competition.²⁹

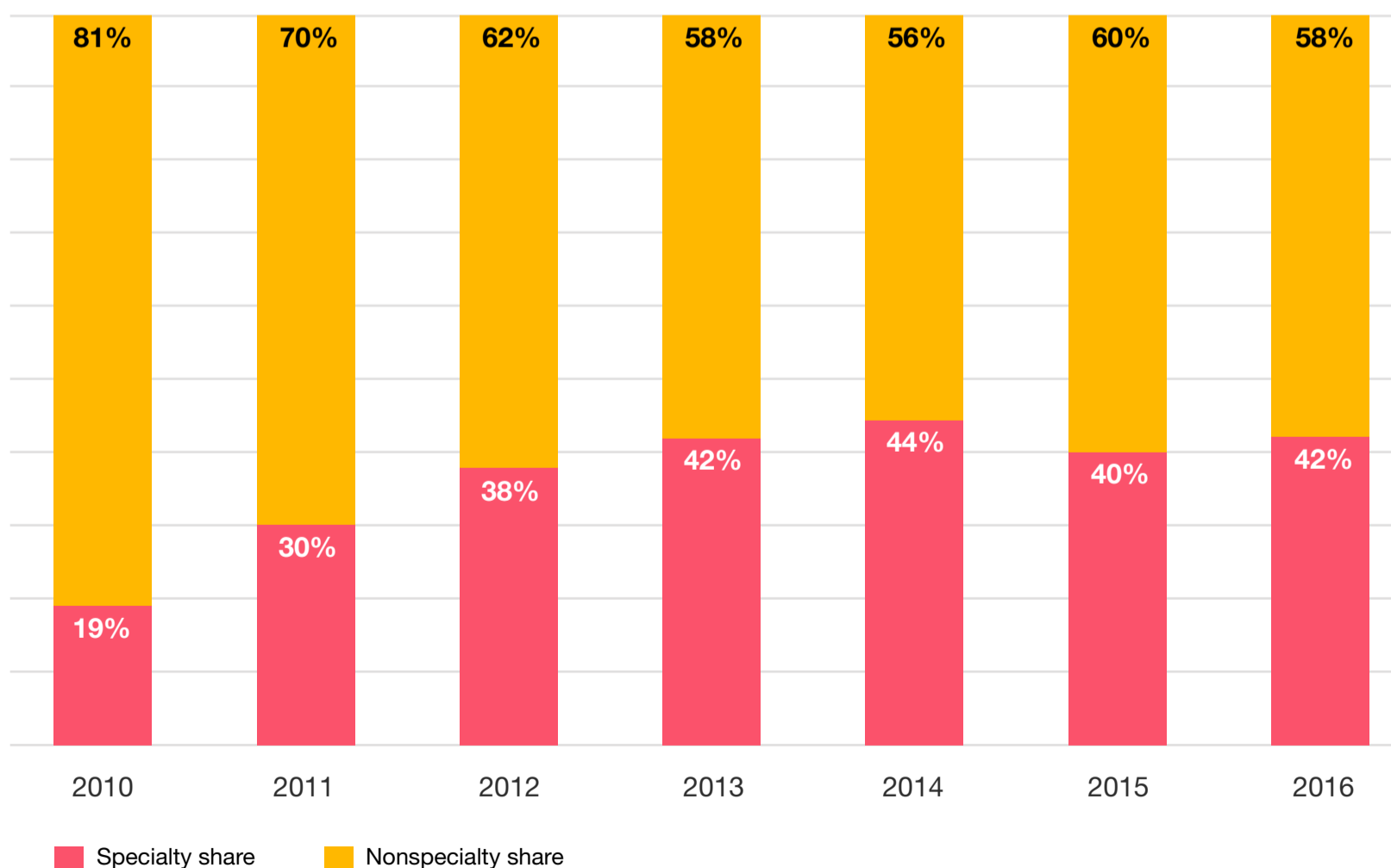
Biologics are a significant driver of drug spending.³⁰ They are complex and more expensive to discover, develop and manufacture than small molecule drugs because they are comprised of complex combinations of sugars, proteins or living cells.³¹ There are 20 FDA-approved biosimilars but only seven are actively marketed in the US as of June 13, 2019.³² In contrast, the European Union has 54 authorized biosimilars.³³

The US has been slow to take advantage of biosimilar competition to reduce spending on existing biologic drugs for many reasons, including the lack of biosimilars on the market, lack of clinician comfort with prescribing biosimilars and lack of awareness by consumers.³⁴ In a 2018 HRI survey of clinicians, of those who prescribe biologic drugs to their patients, 73 percent said they rarely or never prescribe biosimilars in place of biologics.³⁵ When asked what would motivate them to prescribe more biosimilars, clinicians said they would prescribe one if it were significantly cheaper for their patient.


Some providers and payers are seeing their biosimilar strategies translate into savings. In testimony to the House Energy and Commerce Committee in March 2019, Anthony Barrueta, senior vice president of government relations for Oakland, California-based Kaiser Permanente, said that the biosimilar Inflectra is used 75 percent of the time in place of the biologic Remicade at Kaiser Permanente, compared to only 3 percent for the rest of the market.³⁶ In his testimony, Barrueta attributed Kaiser Permanente’s success to “...evidence-driven formularies developed by our physicians and pharmacists, our ability as an integrated system to generate and disseminate unbiased information about drugs and our restrictive approach to marketing by pharmaceutical sales representatives in our facilities.”

Specialty drugs, which include biologics, constitute an increasing share of retail drug spending (see Figure 5). According to an HRI analysis of the OptumRx brand pipeline forecast from the first quarter of 2019, of the almost 300 drugs to be launched between 2019 and 2021, nearly two-thirds are specialty drugs.³⁷ Most of these specialty drugs will be high cost but also high impact—many of them being curative or life-saving treatments that could reduce employer costs over the long term. CVS Health estimates that by 2020, specialty drugs will account for 55 percent of US drug spending, including both retail drug spending and spending on administered drugs covered under the medical benefit, such as through infusions or intravenous injections.³⁸

Figure 5: Specialty drug spending is growing as a share of total retail drug spending



Source: PwC Health Research Institute analysis of employer drug spending data from Medical Expenditure Panel Survey, 2010-16³⁹



“We are at an inflection point with drugs in the pipeline. We thought hep C was expensive at nearly \$100,000 per treatment. Many drugs in the pipeline are life-altering and come with a price tag of \$1 million to \$2 million per treatment,” said Dan Rachfalski, senior vice president and chief actuary at Wellesley, Massachusetts-based Harvard Pilgrim Health Plan, in an interview with HRI. “As an industry, we have not figured out how to pay for these life-changing, extremely high-cost drugs.”

Employer and health plan executives interviewed by HRI said they are not concerned about one drug in particular but they do worry about a pipeline with such volatility in spending as these high-cost drugs come to market. Take Luxturna, for example, the curative gene therapy for individuals with certain inherited retinal disease. The treatment has a wholesale acquisition cost of \$425,000 per eye.⁴⁰ Zolgensma, the one-time treatment to halt the progression of spinal muscular atrophy in certain pediatric patients younger than two years of age, was approved by the FDA in May 2019 at a wholesale acquisition cost of \$2.125 million.⁴¹

Some pharmaceutical companies are turning to value-based arrangements.⁴² Luxturna’s manufacturer, Spark Therapeutics, announced it will pay rebates if patient outcomes fail to hit predetermined thresholds for short-term efficacy and long-term durability.⁴³ Zolgensma’s manufacturer, AveXis, a Novartis company, is exploring outcomes-based agreements with payers to solidify the long-term value of the one-time treatment in addition to allowing payers to pay \$425,000 per year over five years for the treatment, rather than paying the full price of the treatment upfront.⁴⁴

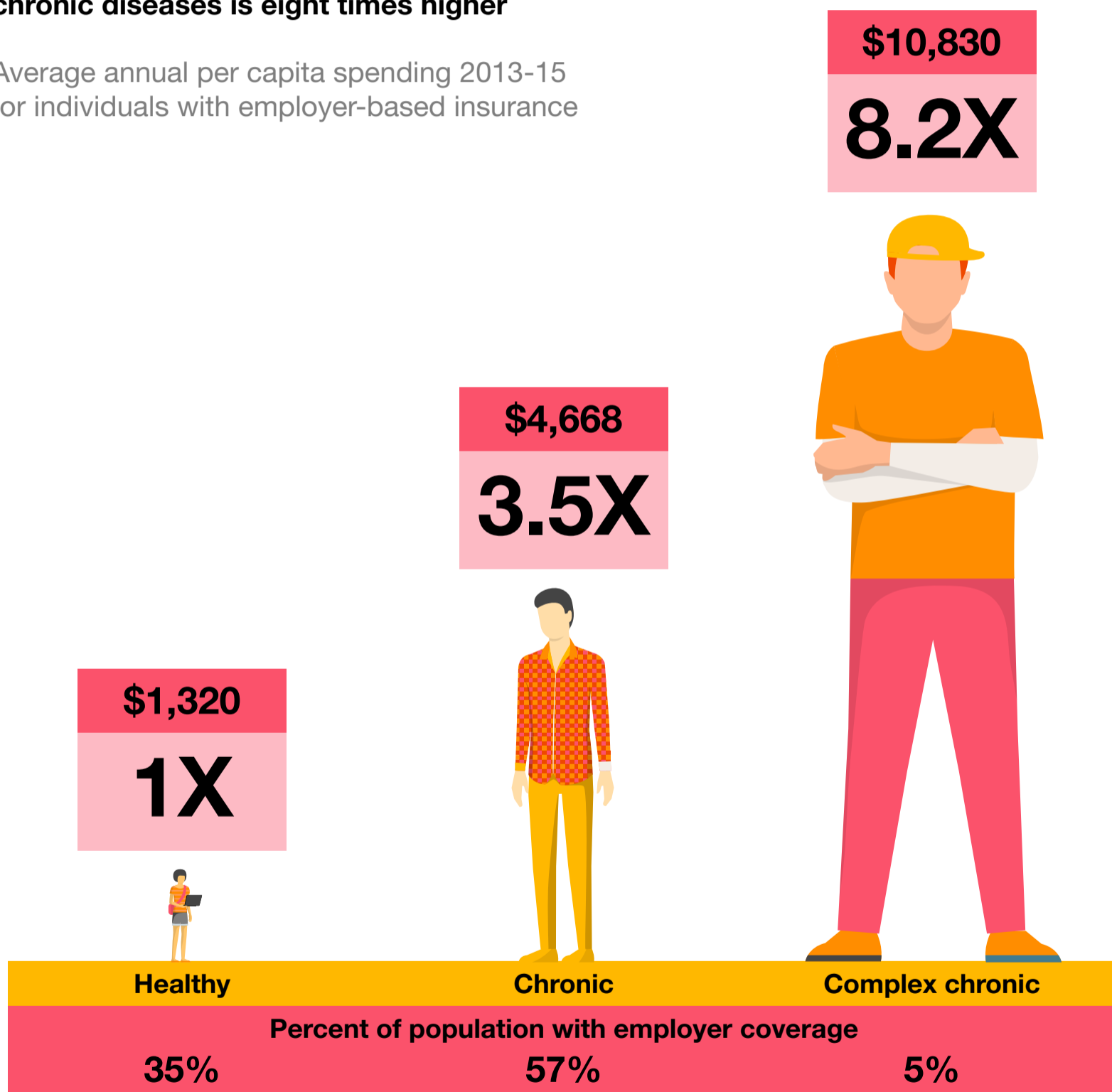
Regulators and lawmakers have proposed policy changes to address drug pricing and a perceived lack of transparency in the drug supply chain. Many of these proposals focus on Medicare Parts B and D drug spending.⁴⁵ While some of these proposals could affect how PBMs, health plans and employers approach commercial large group drug spending, it is too soon to tell the potential impact on 2020. “Employers are watching these proposals, specifically on point-of-sale rebates,” said Brian Marcotte, president and CEO of the National Business Group on Health, in an interview with HRI. “Pulling rebates forward to the patient at the point of sale provides patients with some financial relief but masks the underlying contracting problems across the supply chain.”

Chronic diseases will continue to plague the populace

Per capita employer spending on an individual with complex chronic diseases, defined as having one or more chronic diseases affecting multiple body systems and requiring complex disease management, is eight times that of a healthy individual (see Figure 6). Sixty-two percent of individuals with employer-based insurance have a chronic or complex chronic disease, making up 85 percent of total employer-based healthcare spending.⁴⁶ Two chronic diseases—obesity and diabetes—are on the rise among individuals with employer coverage, driving the utilization of healthcare services and inflating cost trend in 2020.

Figure 6: Spending by employers on individuals with chronic diseases is nearly quadruple that of healthy individuals while spending on individuals with complex chronic diseases is eight times higher

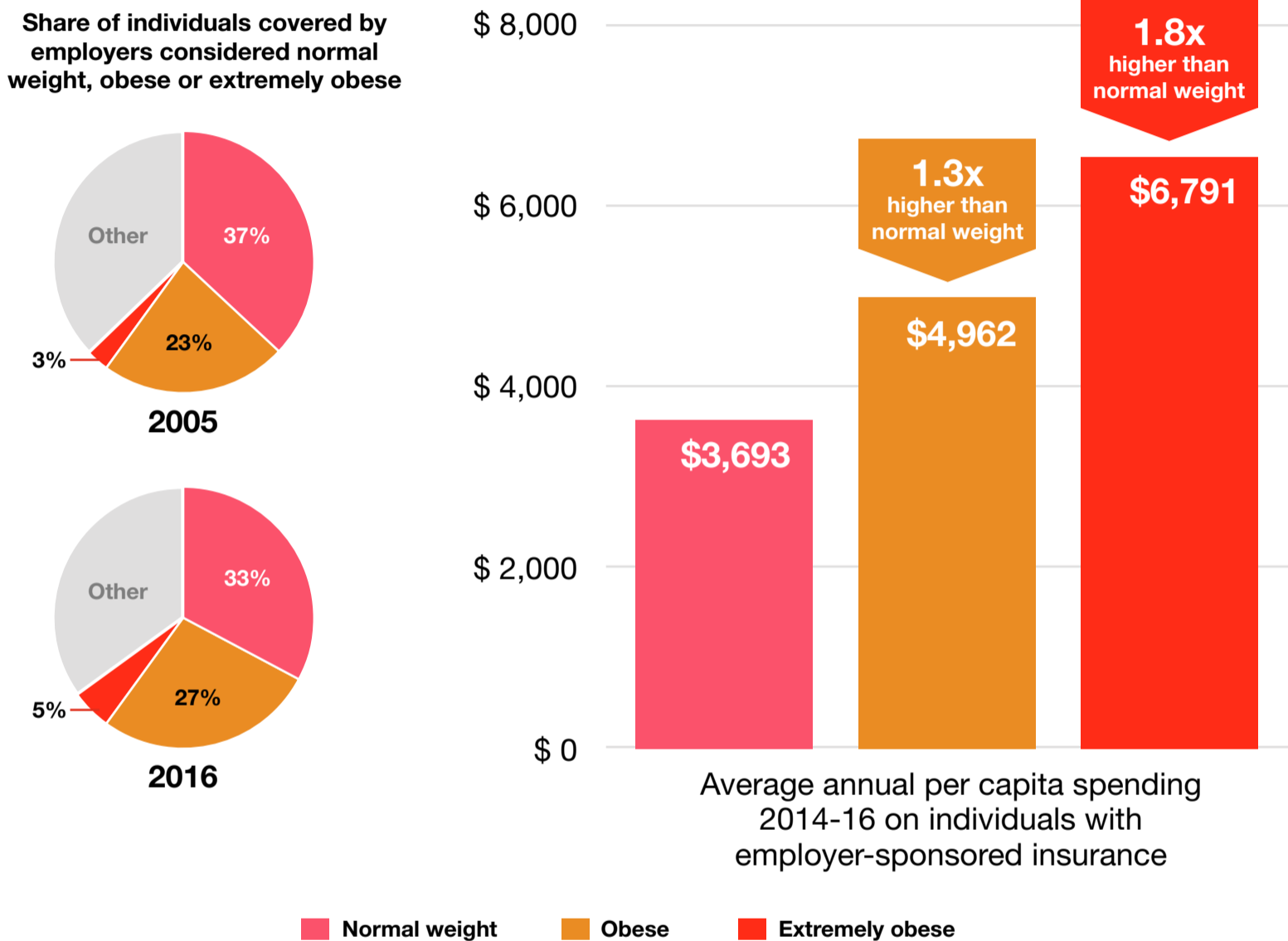
Average annual per capita spending 2013-15 for individuals with employer-based insurance



Source: PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2013-15
 Note: Consumers with chronic disease have problems affecting a single body system such as hypertension and require uncomplicated disease management. Consumers with complex chronic disease live with one or more chronic diseases affecting multiple body systems and requiring complicated disease management. Additionally, note that the percentage of the population with employer coverage considered healthy, chronic or complex chronic is 97 percent. The other 3 percent are either individuals with a mental illness as their primary health issue or individuals considered frail elderly—over the age of 75, living at home and facing health issues related to falls or dementia and suffer generally poor health.

Excess weight puts individuals at risk for multiple chronic diseases—from obesity to Type 2 diabetes to hypertension and cardiovascular disease.⁴⁷ Among individuals with employer-based insurance, 32 percent were obese or extremely obese in 2016, up from 26 percent in 2005. An HRI analysis found that the average annual spending between 2014-16 for an obese individual with employer-based insurance was 1.3 times higher than a normal weight individual, while spending for an extremely obese individual was 1.8 times higher (see Figure 7).⁴⁸

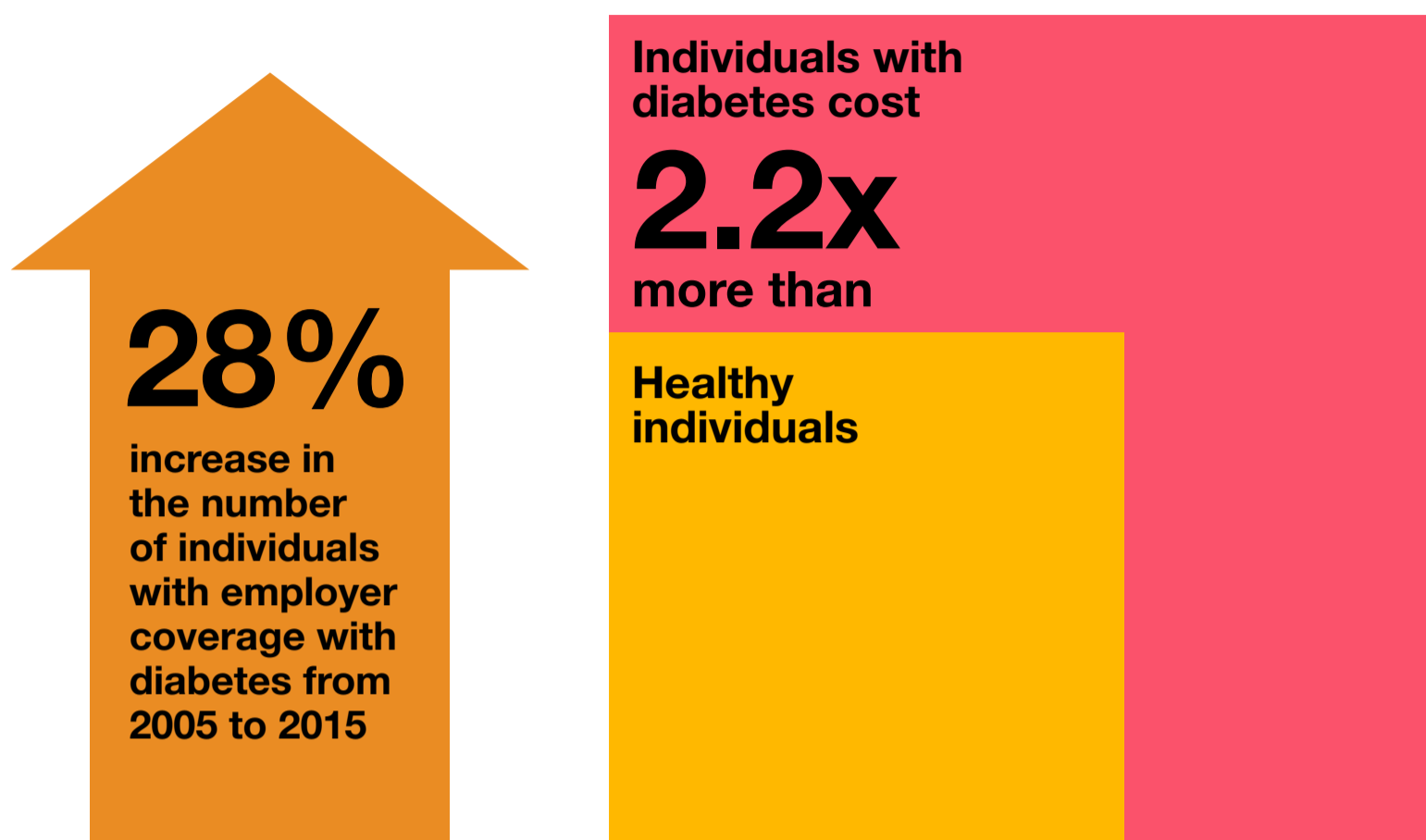
Figure 7: The percent of individuals with employer coverage who are obese has grown and these individuals cost employers 1.3 to 1.8 times more than individuals of normal weight



*Other includes the percent of the population that was underweight or overweight in 2005 and 2016.
 Source: PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2005 and 2014-16⁴⁹

The number of individuals with employer-based insurance who have diabetes has increased 28 percent from 2005 to 2015.⁵⁰ Average per capita spending from 2013-15 for individuals with employer-based insurance who have diabetes was 2.2 times higher than someone without any chronic conditions during that same time period (see Figure 8).⁵¹ With obesity as a risk factor for Type 2 diabetes, the rising obesity rate among the employer-based insured population is likely fueling some increases in spending on diabetes.⁵²

Figure 8: Individuals with diabetes cost employers 2.2 times more than healthy individuals



Source: PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2005 and 2013-2015

Note: Spending numbers included in this figure are average annual per capita spending for individuals with employer-based insurance, 2013-15.

In light of these trends, employers have implemented programs to combat and manage chronic diseases. In 2019, 86 percent of employers offered a diabetes management program, up from 70 percent in 2013.⁵³ And yet the rate of diabetes among individuals with coverage through an employer continues to grow. Many employees are looking to their employers to help manage their health; 42 percent of consumers surveyed by HRI with employer-based insurance said they believe their employer has a responsibility to help them manage their physical health and well-being.⁵⁴

Some employers are looking beyond traditional disease management to lifestyle medicine, which includes switching patients to a predominantly whole food, plant-based diet with regular physical activity, adequate sleep and programs to help manage stress, eliminate tobacco use and moderate alcohol consumption.⁵⁵ “The predominant mentality is that a chronic disease must be managed and that much of the control is out of the individual’s hands,” said Dr. Dexter Shurney, president of the American College of Lifestyle Medicine, in an interview with HRI. “With lifestyle-driven chronic diseases, this is not the case.”

Starting in 2012, Lee Health began offering its employees the Lifestyle Medicine Institute’s Complete Health Improvement Program, a nine-week facilitated program focused on plant-based nutrition.⁵⁶ To encourage compliance with the program, the Cape Coral, Florida-based health system pays the \$600 cost of the program upfront and deducts that amount from the employee’s paycheck if the employee does not complete the program. Since implementation, participation rates have remained steady as have savings, with Lee Health reporting approximately \$1,200 saved in healthcare costs per participating employee in the year following completion of the program.

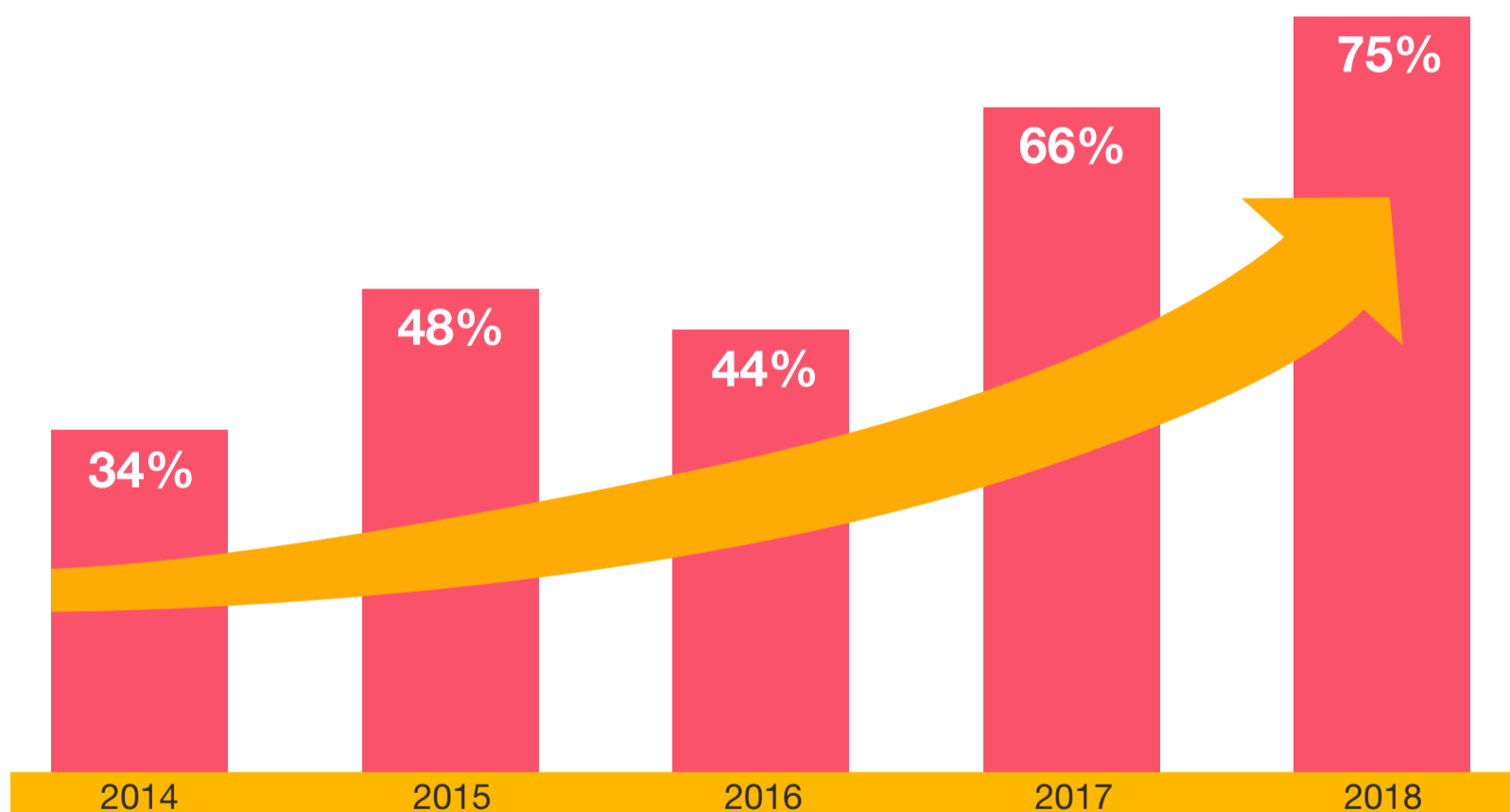


Employees and their families will take advantage of greater access to mental health services

Historically, employers have considered mental health benefits a lower priority than physical health benefits. This has shifted with the implementation of the Mental Health Parity and Addiction Equity Act of 2008, which changed the rules around cost sharing, treatment limits and scope of covered services for mental health services.⁵⁷ This law likely is driving increased utilization as access is expanded to comply with the mental health parity requirements.⁵⁸ Additionally, with initiatives such as the “Make It OK” program to destigmatize mental illness and the National Alliance on Mental Illness’ effort to foster open conversations about mental illness, a growing number of employers are encouraging employees to take care of their mental health by further expanding access to mental health services.⁵⁹ These efforts are expected to increase utilization and spending in 2020.

PwC’s Health and Well-being Touchstone survey revealed that 75 percent of employers offered disease management programs focused on depression and mental health in 2018, up from 34 percent in 2014 (see Figure 9). Yet only 27 percent of individuals with employer-based insurance surveyed by HRI who face depression and mood disorders, post-traumatic stress disorder, addiction and/or suicidal ideations as their primary health issue report participating in a mental health and well-being program over the last two years.⁶⁰

Figure 9: Employers offering mental health and depression programs, 2014-18

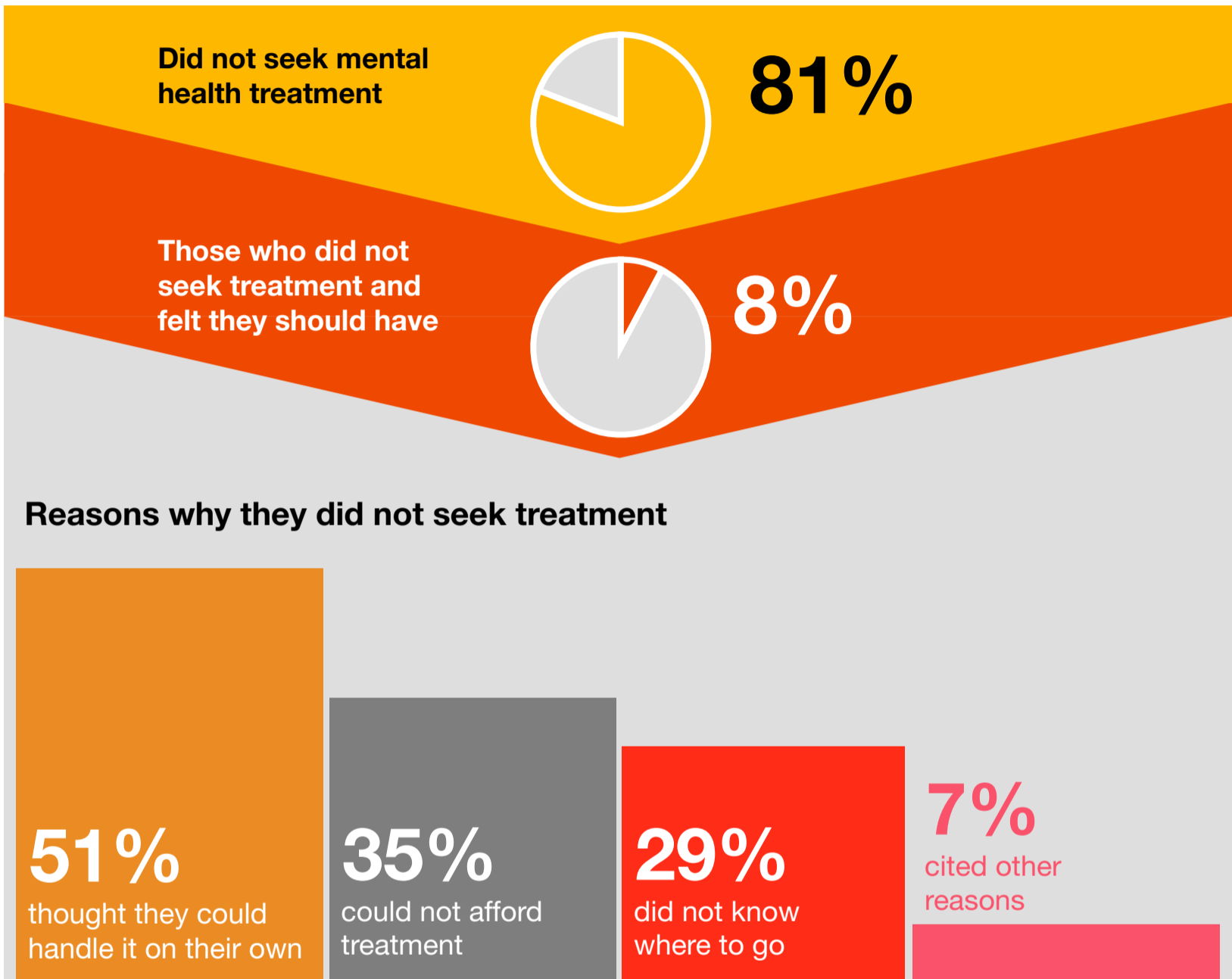


Source: PwC Health and Well-being Touchstone surveys, 2014-18

Note: Touchstone 2019 data are not cited in this figure as the question about mental health and disease management programs was asked differently in 2019, making the data for 2019 not comparable to the data from 2014-18.


Of consumers surveyed by HRI with employer-sponsored coverage, 81 percent said they had not sought out treatment for a mental health issue in the past five years.⁶¹ Eight percent of those consumers believe they should have, but many did not seek care because they thought they could handle their mental health on their own (see Figure 10).⁶²

Figure 10: Eighty-one percent of consumers with employer coverage have not sought out mental health services in the past five years; nearly 10 percent of them believe they should have



Source: PwC Health Research Institute consumer survey, spring 2019

Note: Survey respondents were asked to select all applicable reasons why they did not seek treatment; as such, these percentages will not total 100 percent.



In a recent HRI survey, 43 percent of respondents covered by an employer said they want their employer to help them manage their mental health and well-being—on par with the share wanting help with physical health and well-being.⁶³ Some employers are taking action by addressing the stigma surrounding mental health, integrating mental health services with primary care and other services, and improving access. Kenilworth, New Jersey-based Merck is piloting a task force at its headquarters that is focused on reducing the stigma around mental health through an eight-hour mental health first aid training for employees who volunteer for the task force.⁶⁴ The training teaches the volunteers how to identify someone who appears to need help, be a resource to that person and connect them to the appropriate resources.

GE Appliances integrated behavioral health services into primary care at its worksite clinics 18 months ago. Since then, GE Appliances has seen a significant reduction in opioid prescriptions compared to trends in community practices.⁶⁵

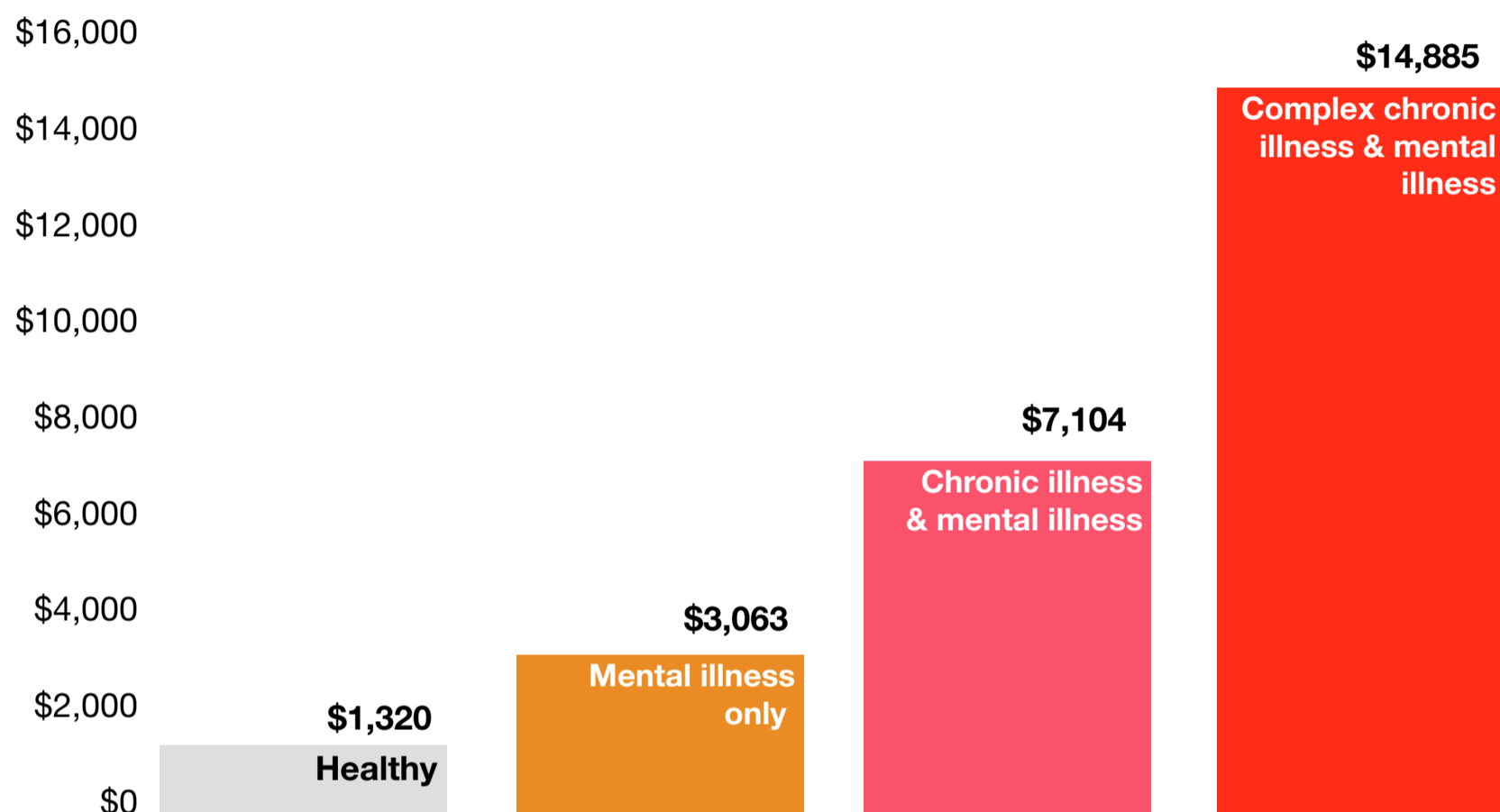
The South San Francisco-based biotechnology company Genentech has placed therapists from its employee assistance program (EAP) in its onsite health clinic.⁶⁶ Genentech located its EAP within the onsite health clinic to reduce stigma and integrate physical and mental healthcare. Genentech also offers its employees 25 free visits with the EAP therapists per family member each year, in person or virtually.

But finding the right care can be a challenge. “There is a gap between the supply of mental health practitioners who take health insurance and the demand for their services,” said Gregg Nevola, vice president of HR and chief rewards officer at the New York-based health system Northwell Health, in an interview with HRI. Twenty-one percent of consumers surveyed by HRI with employer-based insurance who have sought treatment for a mental or behavioral health issue in the past five years said it was difficult to find a mental health professional accepting new patients for the services they required.⁶⁷ Northwell Health rolled out an app to 30,000 of its 68,000 employees that allows them to assess their mental health and work to improve it.⁶⁸ The app identifies low acuity mental health issues and helps the employee deal with them while flagging higher acuity issues to be triaged for immediate care. “The app is one attempt to provide lower acuity care for employees outside of the traditional model so that the limited supply of practitioners can focus on moderate to severe cases,” said Nevola.

These severe cases could include the nearly 21 million individuals with employer coverage who have a mental illness accompanied by a chronic or complex chronic illness.⁶⁹ These employees incur two to five times more in healthcare costs than employees with mental illness and no chronic conditions (see Figure 11).

Figure 11: The cost of caring for individuals with employer-based insurance who have both a complex chronic illness and mental illness is five times more than that for individuals who have only a mental illness

Average annual per capita spending 2013-15 for individuals with employer-based insurance



Source: PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2013-15

“We find employers are open to spending money on increasing access to healthcare if they don’t think it is a waste,” said Ashok Subramanian, co-founder and CEO of New York-based Centivo, a health plan administrator designed for self-funded employers, in an interview with HRI. “When it comes to mental health, employers are generally happy to spend more money on care now if it means less spending later for more intensive care, lost time and lost productivity.”

Health systems also are addressing access issues and the intersection of physical and mental well-being. Ninety-five percent of provider executives responding to a 2018 HRI survey said it is important to partner with mental health organizations and 59 percent said they plan to invest more in extended care teams, including mental health professionals, over the next five years compared to the previous five years.⁷⁰

Deflators

Employers will continue to open more expansive worksite clinics

Dating back as early as the 1860s, worksite health clinics have flourished and fizzled over the course of 160 years, as employers have invested in them in bull markets and abandoned them during economic downturns.⁷¹ These clinics have been found to reduce the cost to deliver care, decrease absenteeism and improve productivity.⁷² Kaiser Permanente was even born out of a worksite clinic, established during World War II when Henry J. Kaiser brought physicians to employees working in the city's shipyards to keep them healthy and productive.⁷³ Worksite clinics are growing in number, and now there is evidence that many large and some midsize employers are doubling down on them to help prevent disease and drive more appropriate care utilization by employees. "People spend 40-plus hours a week at work. If you are going to improve health, the worksite is a great place to do it," said Emily Fisher Moore, health and wellness principal program manager at Genentech, in an interview with HRI. HRI expects these clinics will deflate medical cost trend in 2020.

Employers are seeing the opportunity in worksite clinics, especially large employers with 5,000 employees or more. PwC's Health and Well-being Touchstone survey found that 38 percent of large employers offered an onsite health clinic in 2019, up from the 27 percent that offered a clinic in 2014. An additional 13 percent said they were considering adding one.⁷⁴ Amazon, Apple and Tesla all opened clinics in 2018.⁷⁵

Worksite clinics are expanding beyond occupational medicine into primary care, preventive medicine, behavioral health services and alternative medicine. Thirty-six percent of consumers surveyed by HRI who have access to a worksite clinic said that the clinic offers an annual preventive health exam (see Figure 12).

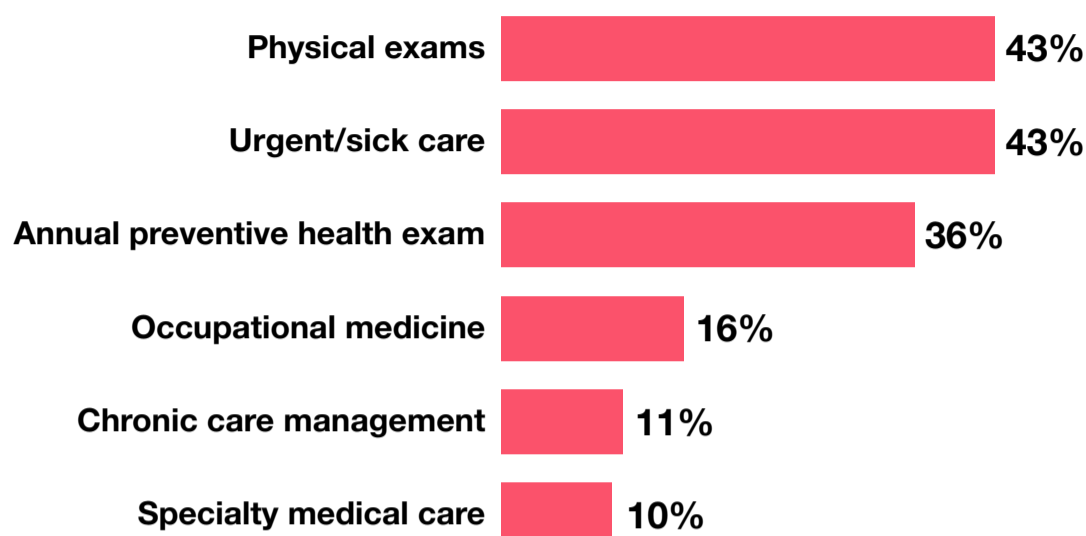
"Primary care is often thought about as binary: You're either healthy or sick," said Dr. Raj Behal, chief quality officer at One Medical, in an interview with HRI. "It's not a binary state, it's a continuum. The space between health and sickness is where future costs develop if not managed correctly. Worksite clinics provide employers with the chance to manage these costs, keep people out of the ER and prevent chronic diseases." One Medical has relationships with nearly 4,000 midsize and large employers, providing a "home base" with holistic direct primary care and digital health services near the workplace.⁷⁶

Oklahoma City-based Devon Energy, which consistently beat national medical inflation trends over the last few years, attributes this result in part to its worksite clinic led by OU Medicine physicians.⁷⁷ The company's 1,200 corporate employees and their families have quick access to urgent care, preventive care and chronic condition management services through the clinic. Retirees also have access. Satisfaction is high, said Colleen Dame, manager of compensation and benefits at Devon Energy, in a PwC-hosted webinar. Use of the clinic by Devon Energy employees skews toward primary care versus costlier specialty care. Preventive screening compliance is above industry benchmarks, Dame said. "We're screening and finding things that people didn't know about," she said. "Without that interaction with our clinic, they wouldn't have known what they needed to change to improve their health."

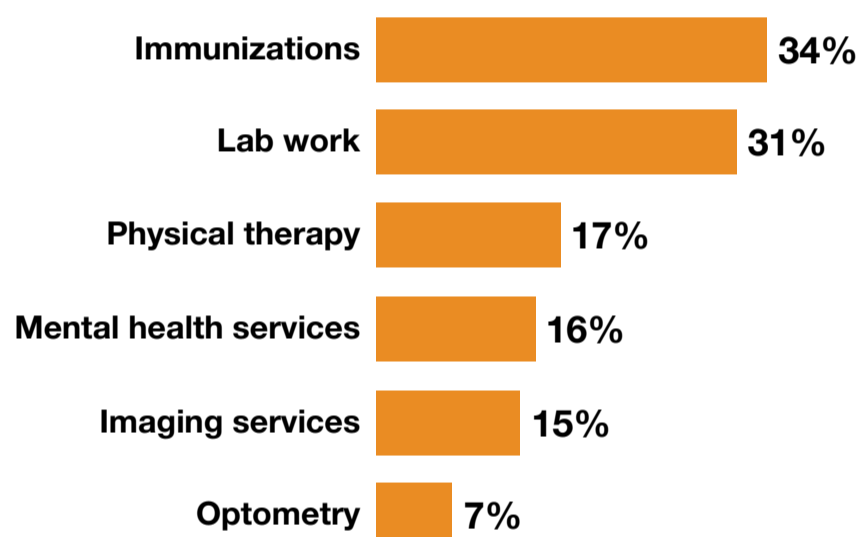
Figure 12: Worksite clinic services are expanding

What services does your employer provide at its onsite or nearby health clinic?

Primary and specialty care with a physician, physician assistant or nurse practitioner:



Extended care and services provided by therapists, nurses, techs, etc.:



Care support services:



Source: PwC Health Research Institute consumer survey, spring 2019

With a focus on lifestyle medicine, Genentech's 10,000-square-foot clinic has an extensive mix of services that integrate primary care and alternative medicine provided by acupuncturists and chiropractors.⁷⁸ The clinic includes space for health counseling, where nutritionists, therapists and health coaches work together, and also offers a range of other services including allergy shots, physical therapy, mental health services, STD screenings and women's health services. It even implemented the 12-week, National Institutes of Health recommended Therapeutic Lifestyle Changes program centered on chronic condition prevention and customized it to Genentech's employee population.⁷⁹

Some companies have even integrated medical specialty care into their worksite clinics based on the needs of their employees. Staff at New York-based Goldman Sachs have access to rotating specialists ranging from dermatologists and gynecologists to rehabilitation medicine doctors.⁸⁰


Employers and payers will nudge people toward lower-cost sites of care

For a long time, doctors directed where patients went for care and site options were limited. Now employers are having more of a hand in guiding patients, creating preferred channels for care delivery that align employee preferences with a growing continuum of care options to achieve the most value. In 2020, employers will strive to find the right mix of virtual and in-person benefit offerings and expand the scope of telehealth offerings. They also will begin to join the ranks of payers already encouraging their members to choose lower-cost options outside the hospital such as free-standing imaging centers and ambulatory surgery centers, and through telehealth. Some employers will use their worksite health clinics to encourage the use of high-quality, lower-cost care. Collectively, these moves are expected to deflate medical cost trend in 2020.

Some employers may persuade employees to choose the lowest-cost, most appropriate site of care through their care advocacy programs, which were offered by 74 percent of employers in 2019.⁸¹ For example, care advocates may help employees understand if a specialty care visit is needed or if a primary care visit would be appropriate for a specific health concern.⁸² Some may use benefit design to encourage employees to use the most appropriate site of care like Indianapolis-based Anthem does for its members. In 2017, the health insurer announced it would stop paying for outpatient MRI studies and CT scans conducted in a hospital setting, and instead send its members in nine states to lower-cost, free-standing imaging centers for these services.⁸³

Others may use lower copays or coinsurance to reach a similar outcome as Blue Cross Blue Shield of Massachusetts and Walmart. Starting Jan. 1, 2019, for most of its small group plans, Blue Cross Blue Shield of Massachusetts began covering imaging services at free-standing imaging centers so employees pay less than if they were to get images in a hospital setting.⁸⁴

After discovering high error rates in diagnostic imaging for its employees, Walmart—which covers 1.1 million employees and their dependents through its health plan—began encouraging employees in March 2019 to seek imaging services at centers the company has “identified as providing high-quality care.”⁸⁵ Employees seeking these services elsewhere are subject to higher cost sharing. With national average hospital charges for imaging services running anywhere from 170 percent to 308 percent of what is charged by free-standing imaging providers, HRI expects to see employers and payers encourage the use of free-standing imaging centers in place of hospital imaging.⁸⁶



Meanwhile, some large payers continue their strategies of purchasing various parts of the healthcare value chain, positioning themselves to have greater influence over where to direct patients for care. In recent years, Eden Prairie, Minnesota-based Optum, which runs UnitedHealth Group's population health business, has announced purchases of multiple physician groups, surgery centers and urgent care centers.⁸⁷ Through these purchases and others that are pending, Optum has significantly increased its ability to direct patients to lower-cost sites of care. In a similar move earlier this year, HCSC entered into a joint venture with Sanitas USA, a global primary care provider, to open 10 "advanced primary care medical centers" in Dallas and Houston, and eventually plans to introduce these centers in more states.⁸⁸

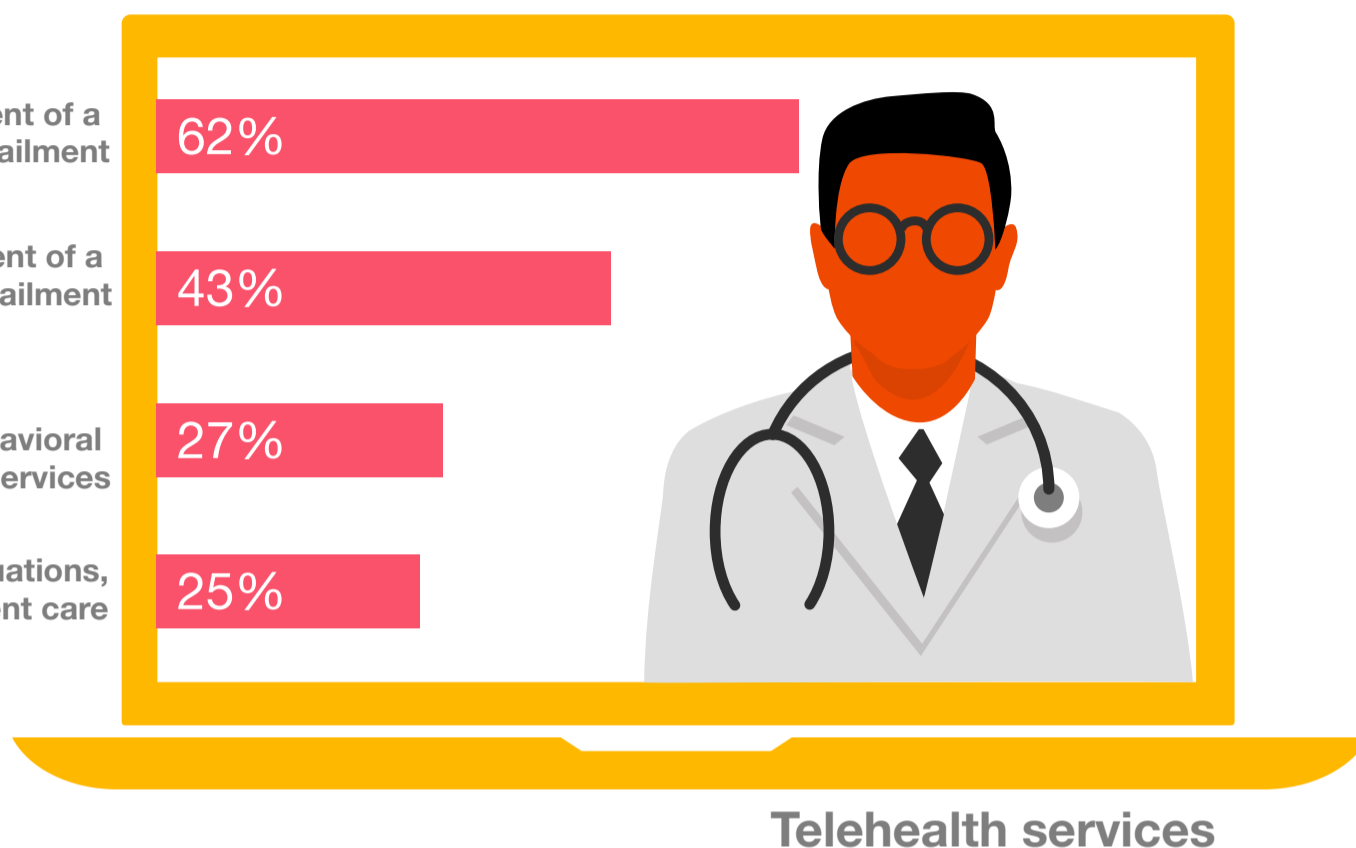
Employers and payers also are nudging employees to receive administered drugs in lower-cost ways, including in their homes. According to the Health Care Cost Institute, employer spending on administered drugs, such as those that must be infused or injected intravenously, increased 45 percent from 2013 to 2017.⁸⁹ The cost of infusion and intravenous medications in the home setting is lower than in a medical office or hospital outpatient center.⁹⁰ There is an overwhelming opportunity to realize savings—for example, only 4 percent of patients receive the infusible biologic Remicade, a drug that treats arthritis and certain bowel and skin diseases, in the home setting.⁹¹ The CVS Health-Aetna deal, which closed in November 2018, creates potential opportunities for Aetna's employer customers to save on these administered drug costs if the merged company directs Aetna members to CVS Health's own home infusion business, Coram, for those administered drugs.⁹²

Pittsburgh-based Highmark Blue Cross Blue Shield sees site of care optimization for medications as one of the top medical cost trend deflators for 2020.⁹³ "We are shifting high-end injectables down the care delivery spectrum from outpatient facilities to physician offices, and are now also working with specialty pharmacy benefit management vendors to administer medications in the home," said Bill Cashion, senior vice president and chief actuary, in an interview with HRI. The opportunity for savings and better outcomes is substantial.⁹⁴ Patients also tend to prefer home infusion therapy.⁹⁵

Employers continue to emphasize telehealth and make it an attractive care option for employees. In 2016, 41 percent of employers offered the benefit; in 2019, 86 percent did.⁹⁶ Sixty-one percent of employers set employee cost sharing lower for telemedicine visits than in-person visits in 2019.⁹⁷ Many employers and payers have added telehealth as an option for urgent care. But according to the 49 percent of consumers HRI surveyed with employer coverage willing to use telehealth, the most popular perceived use was ongoing treatment of a physical condition or ailment (see Figure 13).⁹⁸ Some employer activists already are responding by expanding telehealth offerings to target specific conditions, including chronic back pain.

Figure 13: Consumers with employer coverage willing to use telehealth would consider using it in place of these in-person services

49 percent of consumers with employer coverage said they are willing to use telehealth in place of an in-person visit. Of those, these are the services they are willing to use:



Source: PwC Health Research Institute consumer survey, spring 2019

An estimated 1.4 million individuals with employer-based insurance suffered from musculoskeletal issues in 2015 to the tune of approximately \$2.5 billion.⁹⁹ In partnerships with employers, San Francisco-based Hinge Health delivers a 12-week virtual physical therapy program to employees with chronic back or joint pain, focusing on sensor-guided exercise therapy.¹⁰⁰ The program provides patients with self-management tools that help them avoid prescription drugs or surgery and eliminates some of the barriers to in-person physical therapy, such as time constraints for appointments, costs of transportation and challenges to tracking outcomes and program adherence.¹⁰¹

According to a study conducted by Cleveland Clinic researchers of the digital platform VERA (Virtual Exercise Rehabilitation Assistant), patients' adherence to digital at-home therapy was almost 80 percent, compared with 35 percent to 70 percent for traditional physical therapy.¹⁰²

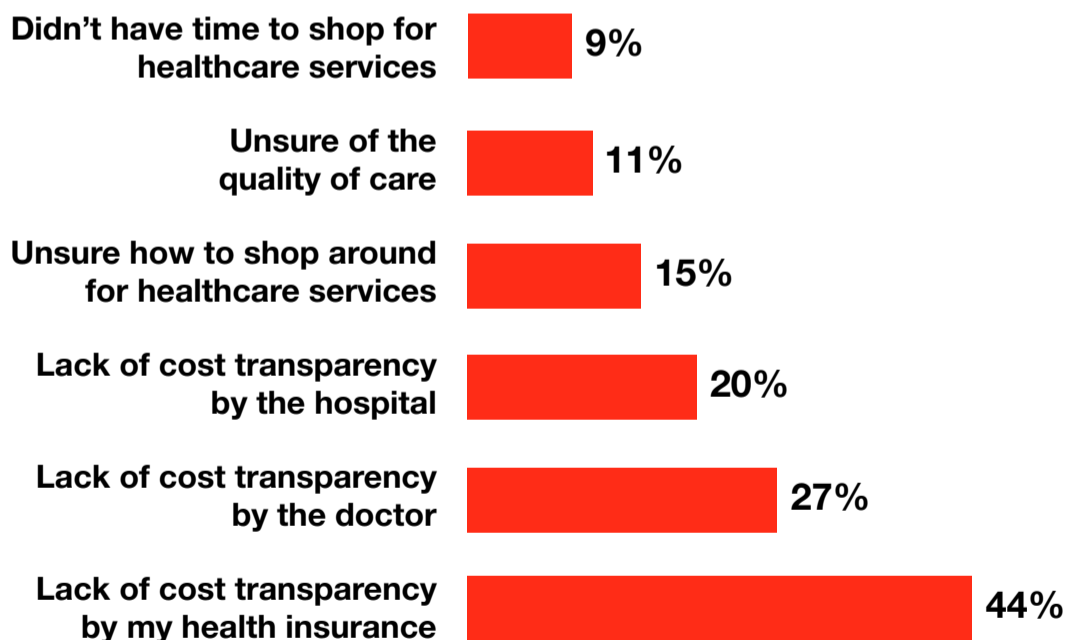
More employers will help employees maximize their benefit packages

A growing number of employers have taken an a la carte approach to their health benefits and network strategy—carving services out of the traditional health plan, adding on services and in some cases directly contracting for services, all in hopes of reducing costs and better managing utilization. The approach creates a menu of options for employees, who sometimes may not realize all that is available or how to use them to the fullest effect. Take the experience of a patient told by his doctor that he needs to lose weight. The doctor may not be aware of a weight loss program offered by the patient’s employer at little to no cost, and therefore does not recommend the program to the patient. Now, employers are looking to better coordinate and communicate why these special programs are offered to help employees maximize the benefits for all parties, by making cost-informed and quality-informed decisions about their care. HRI expects this integration to deflate medical cost trend in 2020.

The approach seems welcomed: Eighty-five percent of consumers with employer-based insurance said they would be interested in having a “menu” of options that balances in-person and virtual care.¹⁰³ In theory, a menu of care options gives employees choice and the ability to shop for the care best suited to them at the right price for them. In reality, less than 32 percent of individuals with employer-based insurance have shopped for any care in the past two years, with primary care being the most commonly shopped for type of care.¹⁰⁴ Of those who shopped for care, nearly 30 percent said it was difficult to do so, with the biggest barrier noted across all types of care as a lack of cost transparency (see Figure 14).


Figure 14: Lack of cost transparency by insurers and providers was the biggest barrier among the 30 percent of individuals with employer coverage who found it difficult to shop for care in the past two years

Barriers to shopping for care



Source: PwC Health Research Institute consumer survey, spring 2019

Note: Consumers who reported they had shopped for care in the past two years and found it difficult to shop for that care were asked to select the top two factors that made it difficult to shop.



“Point-of-service shopping for healthcare by consumers is not possible,” said Micah Weinberg, CEO of the nonprofit California Forward, in an interview with HRI. “Most of the time consumers don’t know what they are looking for or how to shop for it. Employers should be creating different networks so that employees shop for care during open enrollment, picking the network of providers and services that works best for them, rather than trying to shop for individual services.”

More employers are looking to take more of the work off employees by exploring high-performance networks—those with a limited set of providers showing better outcomes at a lower cost than a broad network of providers.¹⁰⁵ Direct contracting with providers and commercial accountable care organizations (ACOs), groups of healthcare providers who come together to provide high-quality, coordinated care to patients, are growing strategies among employers.¹⁰⁶ Both aim to reduce the prices paid by employers for services and better manage utilization through some form of risk sharing with those providers. In most cases, the direct contracts or ACOs offer integrated care from the start—typically directed by a primary care physician.

Beyond direct contracting, others are making it easier to navigate the options themselves. Genentech uses its onsite health clinic at its South San Francisco headquarters as a healthcare hub to help educate employees on physical and virtual services available at the clinic and outside of the clinic.¹⁰⁷

Even carve-out vendors are joining the effort to make it easier for employees to navigate their benefits. Carrum Health, a company that creates centers of excellence for certain surgeries using bundled payment arrangements with top-quality regional healthcare providers that it then sells to self-insured employers, takes an inventory of the health benefits its clients offer and the vendors they use.¹⁰⁸ The South San Francisco-based company then develops and uses workflows that keep patients and information moving between the vendors, including establishing referral protocols for it to refer patients to its employer clients’ other vendors when appropriate.

Centivo, a health plan administrator designed for self-funded employers, sees its role as helping employers organize a health plan designed around high performance and value for them and their employees.¹⁰⁹ One area of focus—referrals. An employer may offer special carve-out services, but if the employee is being referred elsewhere, it defeats the purpose. “We are making referrals data-driven and based on results,” said Ashok Subramanian, co-founder and CEO of Centivo, in an interview with HRI. Centivo also helps the employer play a more active role. “We help employers recognize it is their job to find, locate and help their employees get affordable, high-quality care. Once employers recognize this, we help them achieve it,” Subramanian said.

The health and wellness long game


For decades, employers have invested in health and wellness and prevention, yet participation remains low, according to a recent consumer survey conducted by HRI (see Figure 15). Also, despite the ubiquity of these programs, 29 percent of individuals with employer coverage surveyed by HRI said these programs were not offered to them in the last two years.¹¹⁰ The small population of employees who participate in their employers' health and wellness programs generally believe the programs have had a positive impact on their health.

Figure 15: Despite employers' investment in health and wellness programs, participation remains low

Comparison of employer offering with employee uptake and program impact



Source: PwC 2019 Health and Well-being Touchstone Survey; PwC Health Research Institute consumer survey, spring 2019



As employers consider modifying their existing health and wellness programs or implementing new ones, they might consider the following:

Focus on populations

Employers that have seen positive results have taken a data-driven approach to the design, tracking and measurement of programs targeted for their specific population. Merck has population health staff dedicated to segmenting its employee population to try to move them toward healthier groups.¹¹¹ HRI's survey of consumers found that those with chronic or complex chronic conditions were more likely to say the programs they've participated in have had a positive impact.¹¹² These groups also participated in health and wellness programs at a higher rate than healthy groups.

Invest in programs that work 'behind the scenes'

So many health and wellness programs require some type of action on the employee's part, making it hard for employers to get buy-in and participation. Many companies have started installing treadmill desks and desks that allow employees to sit or stand. Some companies are innovating by focusing on strategies that require less action on the part of the employee.

For example, Merck changed its cafeteria environments to encourage employees to buy healthy foods through food labeling, reductions in the percentage of sweet beverages and smaller ladle sizes for unhealthy dressings in the salad bar.¹¹³ As further incentive, healthy food prices have been reduced by 20 percent in the company's Boston office; results suggest employees are eating more healthy food.

New York-based startup Delos has received \$237 million over five years from investors to help build "wellness ecosystems" in commercial buildings that feature things such as easy access to water.¹¹⁴ The company evaluates building spaces to comply with wellness standards based on scientific research into the impact of indoor environments on health and well-being, then provides solutions accordingly.¹¹⁵ It also offers "Well" certifications for developers, employers and hotel operators to advertise to their consumers.

Show employees how it changes their lives

"Employers have been down the wellness road for 20 to 30 years with limited results," said Ken Beckman, vice president and actuary at Omaha, Nebraska-based Central States Indemnity, in an interview with HRI. "You have to make it clear to the employee that lifestyle medicine is not just another wellness program. Here is a way for you to reverse your diabetes, get off your medications, for example. Be clear in what you want them to do and what the results could be."

As employers explore new ways to achieve an ROI on their health and wellness programs, they should also find ways to communicate success stories from other employees to improve participation.



Measure success broadly

Employers should think about their future investments in health and wellness in terms of broader benefit costs, including the impact that changing employee behaviors can have not just for the company's health costs but also its short-term disability, long-term disability and life insurance costs. "It's like not changing the oil in your car; the engine blows up and it costs a lot of money," said Dr. David Levy, CEO of EHE Health, a preventive medicine company that Dr. Levy says partners with employers to offer the right age and gender evidence-based preventive health exams. "You can be defensive of cost and pay on the back end, or you can invest on the front end and reap the rewards of health, productivity and longevity that come about," said Dr. Levy. "Spend better early, instead of more later." Consider the economic savings of no one getting measles, he said. "When the measles vaccine was developed, it was not thought of as an economic return of a human being," said Dr. Levy. "These days you have to do the calculations."

Let wellness programs double as a recruiting tool

Health and wellness programs can change the outlook of employees toward their employers and attract future employees. Merck executives have an annual dashboard that gives them insights into the overall health and well-being of employees in the United States, including the percentage of employees considered at high health risk levels and the percentage of healthy foods sold in the cafeteria. The dashboard helps Merck assess how health and well-being improvement initiatives are aligned with C-suite objectives.¹⁶ Two years following implementation of the dashboard, Merck's employee survey results showed that US employees' belief that senior leadership cares about their health and well-being significantly increased.

"There may be a long-term imperative for employers to invest in the health and wellness of their employees' dependents and their broader communities—the future of their workforce," said Dr. Laura DeFina, president and CEO of the Dallas-based Cooper Institute, which conducts scientific research on preventive medicine and public health, in an interview with HRI.

Things to watch

HRI has identified forces that may affect employer healthcare costs in the years to come. While HRI does not expect these forces to impact medical cost trend in 2020, all are worth monitoring for potential impacts to trend beyond 2020.

Transformative technologies

5G networks

5G, the next generation of wireless network technology, will be up to 20 times faster than the currently available 4G.¹¹⁷ 5G technology likely will transform the healthcare industry—improving the capabilities of virtual imaging, diagnosis and treatment; enabling the internet of things (IoT) to connect machines, mobile devices and sensors to allow them to communicate with each other; and even making remote surgeries possible that span beyond the current scope of robotic-assisted surgery.¹¹⁸ Researchers at the Ericsson 5G Tactile Internet Lab in King's College London are exploring the use of 5G to enable a doctor to make a diagnosis or perform surgery remotely on any patient in the world.¹¹⁹ While the use cases in healthcare and beyond are many, few are being used with frequency in healthcare practice today.

Precision medicine

Precision medicine takes into account differences in patient's genes, environments and lifestyles, and tailors treatment to each individual.¹²⁰ It is being explored to treat cancer, grow tissue, personalize diets, and bring overall awareness of genetics to employees.¹²¹ Philadelphia-based Jefferson Health collaborated with California-based Color, a provider of physician-ordered, CLIA-certified genetic testing and other population health management services, to offer their employees personalized genetic testing coupled with genetic counseling.¹²² The health system rolled out the benefit in fall 2018 and as of April 2019, 7,000 of its 33,000 employees—21 percent—had participated in the testing. To encourage employees to take advantage of the program without worrying about privacy, Jefferson Health asked that it not be provided the genetic information about their employees, even in aggregate. The next phase of this program will be to evaluate whether the use of this genetic testing is enhancing compliance to screening guidelines for cancer and helping promote early detection—something that ultimately saves not only healthcare dollars but also lives.

Digital therapeutics and connected devices

Digital therapeutics is an emerging health discipline that uses technology to augment or even replace active drugs in disease treatment. Along with connected devices, digital therapeutics are gaining traction by helping patients make behavioral changes, giving providers real-time therapeutic insights and offering insurers and employers new tools for managing beneficiaries' health.¹²³ Unlike branded companion apps and online portals, digital therapeutics and connected devices are clinically validated by the FDA and target specific health outcomes—for example, the Sweden-based Natural Cycles' app that is FDA-approved to prevent pregnancy.¹²⁴ American consumers are willing to use them—more than 50 percent of consumers surveyed by HRI said they would try an FDA-approved app or online tool for treatment of a medical condition.¹²⁵ Seamless health data collection and sharing can help patients make positive lifestyle changes while helping payers, employers and providers intervene at the appropriate point to prevent poor health outcomes and increased costs.¹²⁶

Proposals in Washington, DC

Drug pricing

To combat rising drug prices and bring more transparency to a drug pricing system under scrutiny by legislators, regulators, consumers and the media, policymakers have proposed several plans summarized below (see Figure 16). All of these proposals would have rippling effects on pharmaceutical and life sciences companies as well as PBMs, payers, providers and employers. Nothing directly impacting the employer-based insurance market has gone into effect yet.

Figure 16: Proposed drug pricing reforms at the federal level

	Description
Rebate reform	<p>The US Department of Health and Human Services (HHS) released a proposal to make significant changes to safe harbors that protect rebates from the anti-kickback statute. Drug wholesale acquisition costs (also known as list prices) are expected to come down.</p> <p>HRI analysis: This is one of the most disruptive reforms that could impact the healthcare system for years to come. If the proposal becomes law as written, it would make net prices in Medicare and Medicaid transparent for the first time. While the proposal is specifically for Medicare and Medicaid, some have suggested applying it to the commercial market as well to avoid differences in pricing structures.</p>
Importing drugs	<p>Drug importation from neighboring countries would require approval from HHS.</p> <p>HRI analysis: This has not been done to date, but Vermont and Florida are two states leading the charge with this initiative. HHS Secretary Alex Azar has suggested that drug importation from Canada could potentially be allowed for single-source products that lack competition and experience extreme price hikes.</p>
International pricing	<p>International pricing index for physician-administered drugs in Medicare Part B.</p> <p>HRI analysis: There is concern from pharmaceutical companies that hundreds of millions of dollars of revenue would be lost. Some pharmaceutical companies could delay or forgo launching drugs in certain lower-cost international markets to avoid a lower reference price in the US. Some may also try to move products into self-administered applications to take them out of the physician-administered realm and hedge the risks associated with the proposed Part B policy.</p>
Patent reform	<p>Encourage faster entry of generic and biosimilar drugs.</p> <p>HRI analysis: More competition, especially from biosimilars, could mean lower prices for both the generics and biosimilars as well as their brand and biologic counterparts.</p>

Source: PwC Health Research Institute, "Creating a stable drug pricing strategy in an unstable global market," May 2019

Universal healthcare

It is no surprise that there are a number of universal healthcare proposals on the table, with 48 percent of consumers supporting a national health insurance program for all Americans that would keep physician and hospital practices private, and 57 percent of consumers supporting expanding Medicaid eligibility to any US resident.¹²⁷ While it is highly unlikely that any of these proposals will turn into healthcare law anytime soon, universal healthcare is gaining traction and is something to watch as we approach the 2020 presidential election (see Figure 17).

Figure 17: Summary of universal healthcare proposals at the federal level

	Medicare for All Act of 2019 (House version)	Medicare for All Act of 2019 (Senate version)	Medicare for America Act of 2019	Medicare at 50 Act
Impact on employees and employers	Within two years, it covers every resident of the US and also allows the HHS Secretary to make decisions to cover nonresidents, but the bill does not require that HHS do so.	Within four years, all legal residents are covered under Medicare.	Starting in 2023, large employers can continue to provide insurance, if it is gold-level coverage with benefits comparable to Medicare for America. Or, they enroll their employees in Medicare for America and contribute 8 percent of annual payroll to the Medicare Trust Fund. Employees can choose to enroll in Medicare for America, even if their employer offers qualifying coverage.	This bill would impact employees who are eligible for Medicare Part A or B, and between the ages of 50 and 64. This bill expands the population eligible for Medicare services.
Medical services not covered, or not mentioned in legislation (See note below figure)	Other forms of transportation; HHS would determine how it would be covered for low-income or disabled beneficiaries. (Note: emergency transportation is included in this bill)	Nothing explicitly excluded from coverage, of the coverage details noted below the figure.	Nothing explicitly excluded from coverage, of the coverage details noted below the figure.	This bill extends all benefits under Medicare to the expanded population, including Part A, Part B and Part D. It also includes the ability to enroll in Medicare Advantage plans that provide prescription drug coverage.
Prescription drugs	Covered. Specifically includes biologics, medical devices and both outpatient and inpatient prescription drugs.	Covered.	Covered. Bans the use of step therapy and prior authorization for any type of insurance, public or private. It directs the HHS Secretary to negotiate prices with manufacturers for beneficiaries.	The bill expands HHS' ability to negotiate prescription drug prices. Drug coverage policies would mirror Medicare coverage.
What would employers pay?	Employer contribution mechanisms are not identified.	Per statements from bill sponsor US Sen. Bernie Sanders, the plan is paid for through tax increases. Exact mechanism not laid out.	Employers can either make a firmwide contribution to the Medicare Trust Fund in lieu of offering insurance to employees (8 percent of payroll), or, if they offer a plan and an employee opts to enroll in Medicare for America instead, the employer has to make a contribution equal to what it would have otherwise made toward a qualified health plan.	Employer contribution mechanisms are not identified.

Source: PwC Health Research Institute analysis of federal healthcare proposals¹²⁸

Note: Unless otherwise mentioned, the following medical services are included in each of the proposals above: inpatient hospital care, outpatient hospital care, inpatient prescription drugs, ambulatory services, preventive care, mental health and substance abuse treatment, lab and diagnostic services, pediatric care, dental, vision, rehabilitative and habilitative care, emergency care, long-term care, maternal health and newborn care, contraception and emergency services.

What this means for your business

Employers

- **Become a transparency steward.** Understand the needs of your specific employee population to buy the best benefits at the best price with the best outcomes. Be clear what those benefits cost the employee and the employer. Sixty-three percent of consumers with employer-based insurance said that their employer disclosed both the employee-paid premium and employer-paid premium.¹²⁹ Of those who were aware of the employer-paid premium and had more than one plan option, 74 percent said it helped them make more of an informed decision.¹³⁰
- **Take the driver's seat to beat the market.** Understand your role as the purchaser of healthcare for employees and join the ranks of employer activists, pursuing new solutions to lower costs, improve access and enhance quality. Employees rely on employers to help them navigate the healthcare market and guide them in their purchasing decisions. “For employers to change the way they manage healthcare costs, they first must understand that they are purchasers of healthcare with a responsibility to beat the market in terms of cost and quality of care available to their employees,” said Ashok Subramanian, co-founder and CEO of Centivo, in an interview with HRI. Employers should approach the purchase of healthcare for their employees like their purchase of other inputs for their business—understand the market and shop for the right mix of quality and price.
- **Design a care menu, then manage it.** This applies to both the health plan and add-on benefits outside of the health plan, with clear communication around the cost, action to be taken by the employee and expected outcomes if action is taken. “Over the years, employers have increased the number of 401(k) plan investment options available to employees. Yet, this has not moved the needle in terms of participation in 401(k) plans,” said Ken Malcolmson, former health plan executive and current president and CEO of the North Dallas Chamber of Commerce, in an interview with HRI. “Similarly, employers have given employees an increasing number of care options with no guidance on how to decide which are the best in terms of cost or quality. This has yet to reduce healthcare spending.”

Payers

- **Find the right price.** Many employers are pressuring their health plans and PBMs to help them address the high price they are paying for healthcare. “Everyone is raising their prices, and employers are the ones who end up paying,” said Cheryl Larson, CEO of the Midwest Business Group on Health, in an interview with HRI. “Employers are ready to abandon what they have been doing, and look at alternatives to address this issue.” Payers should continue to partner with employers, providers, PBMs and pharmaceutical companies to find the right price, balancing cost, quality and access. They should benchmark the prices paid commercially against a common reference point such as Medicare.¹³¹ With this information, they should pursue value-based arrangements with high-performing and lower-cost providers, in addition to negotiating better contracted rates on existing fee-for-service arrangements.

- **Rethink your role to prove value.** Payers increasingly are at risk of being pushed into a more transactional role as more employers go directly to the providers and even pharmaceutical companies to address prices. Employers increasingly have carved out certain services and functions from their payer contracts and given them to vendors and providers specializing in those services. As employers look to bring together services across vendors and reconcile duplicative services, opportunity exists for payers to become integrators and even manage the performance of the services, even if the services are not offered directly by them. And for payers that have pursued vertical integration, now is the time to tap into the suite of product offerings to deliver savings to employers and consumers.

Providers

- **Build a value line.** A value line strategy is necessary as employers and consumers look for high-quality care for a low cost.¹³² When building a value line, don't focus on price alone—focus on the right price for the value of the care delivered. Providers armed with a value line strategy, especially those willing to take on risk for outcomes, are more likely to be included in health plans' high-performance networks and are better positioned to directly contract with employers. Traditionally high-cost providers like academic medical centers should partner strategically with community hospitals and clinics to extend care through these lower-cost partners, creating their own value line.¹³³
- **Understand how to manage risk.** It is crucial providers learn how to quantify and manage risk in order to successfully deliver value.¹³⁴ To do so without losing money, providers should understand what risk they can take on to guarantee a health outcome and the cost structure needed to make them profitable in doing so. Providers should understand and manage both the risk inherent in their ability to deliver care and the risk of the population they are managing—from health status to the social determinants impacting their health—to help them design appropriate clinical interventions as well as nonclinical support services, such as addressing lack of access to healthy food or providing transportation support.¹³⁵
- **Redesign the care delivery model.** Providers should align the services they offer and the team that delivers them with the value line they have created and the patient pool they are managing. Focus on having the right channels of care—from primary care to nutrition support to physical therapy—for the population being served. This could mean implementing a primary care model to manage both the utilization and price of healthcare through the care coordination and gateway role that primary care can serve.¹³⁶ But this also means not allowing the primary care model to become a barrier to care. Getting the patient's health issue in front of the right provider in a timely manner is key—for example, directing a patient to a mental health professional for anxiety issues or to a rehab specialist for back pain issues quickly, rather than having patients wait to visit their primary care provider for a referral then wait to visit the mental health professional or rehab specialist.

Pharmaceutical and life sciences companies

- **Tell your value story using data.** Try not to rely on the too frequently used research and development argument to justify the drug's cost. Instead show the financial savings of the drug compared to other, potentially more invasive medical treatments. Biopharmaceutical companies are producing novel and previously unimaginable treatments and cures for diseases. Yet their initial price tags can strain budgets and create barriers to medication access.¹³⁷ Biopharmaceutical companies should use the data available to them—outcomes data, market volume data, specialty pharmacy data, market research data, customer data, qualitative physician survey data and advertising data—to curate a story that demonstrates the value of the product and helps justify its price.¹³⁸
- **Lead the way with alternative financing for specialty drugs.** Employers and payers are both concerned about the increasing cost of specialty drugs. Both believe paying for expensive but potentially life-altering drugs is the right thing to do. Both also worry about how to pay for them. Pharmaceutical and life science companies should go beyond the basic outcomes-based arrangements currently in place and consider exploring and expanding alternative financing arrangements, such as subscription models for unlimited access to a product for a set period of time or a mortgage model to finance expensive specialty drugs over time.¹³⁹

Endnotes

- 1 PwC Health Research Institute analysis of medical cost trend compared to 2020 consumer price index reported through “Congressional Budget Office Budget and Economic Outlook: 2019 to 2029,” January 2019, <https://www.cbo.gov/system/files/2019-03/54918-Outlook-3.pdf>.
- 2 PwC Health Research Institute analysis of CMS national health expenditure data for private health insurance, projected data 2020-27; Andrea M. Sisko, Sean P. Keehan, John A. Poisal, Gigi A. Cuckler, Sheila D. Smith, et al., “National Health Expenditure Projections, 2018-27: Economic and demographic trends drive spending and enrollment growth,” Health Affairs, Feb. 20, 2019, <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2018.05499>. Note: Private health insurance spending is used by CMS to measure health spending growth for the private health insurance market, about 90 percent of which consists of employer health spending.
- 3 CDC’s National Center for Chronic Disease Prevention and Health Promotion, “Chronic diseases in America,” accessed May 27, 2019, <https://www.cdc.gov/chronicdisease/pdf/infographics/chronic-disease-H.pdf>.
- 4 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2013-15.
- 5 PwC 2018 Health and Well-being Touchstone Survey.
- 6 PwC Health and Well-being Touchstone surveys, 2014 and 2019.
- 7 PwC Health Research Institute consumer survey, May 2018.
- 8 Health Transformation Alliance, “We’re the HTA,” and “Our members,” accessed June 6, 2019, <http://htahealth.com/>; Haven, “Amazon, Berkshire Hathaway, JPMorgan Chase health care venture launches website and announces its name: Haven,” March 6, 2019, <https://havenhealthcare.com/media/abj-new-venture-haven>.
- 9 PwC Health Research Institute consumer survey, spring 2019.
- 10 PwC Health Research Institute consumer survey, spring 2019.
- 11 PwC Health Research Institute revised its estimates for 2018 and 2019 down 0.3 percentage points each from 6 percent reported for both years in the “Medical cost trend: Behind the numbers 2019” report. This revision was based on health plan interviews conducted by HRI that indicated medical cost trend was lower in 2018 and is expected to remain flat in 2019, as previously published.
- 12 Health Care Cost Institute, “2017 Health care cost and utilization report,” February 2019, <https://www.healthcostinstitute.org/research/annual-reports/entry/2017-health-care-cost-and-utilization-report>.
- 13 PwC Health Research Institute, “Medical cost trend: Behind the numbers 2019,” June 2018.
- 14 Andrea M. Sisko, Sean P. Keehan, John A. Poisal, Gigi A. Cuckler, Sheila D. Smith, et al., “National Health Expenditure Projections, 2018-27: Economic and demographic trends drive spending and enrollment growth.” Note: CMS uses a different measure of price growth than PwC Health Research Institute uses in its employer benefit cost index.
- 15 The utilization trend in Figure 2 is estimated as a “residual,” what is left after price is removed from growth in benefit costs. As such it includes other elements that affect spending such as measurement errors in the CPI price component, declining numbers of workers with health benefits and less comprehensive health insurance.
- 16 RAND Corporation, “Prices paid to hospitals by private health plans are high relative to Medicare and vary widely,” May 2019, https://www.rand.org/pubs/research_reports/RR3033.html. Note: The RAND analysis included facility claims only and does not include physician claims or prescription drug claims.
- 17 PwC Health Research Institute, “Top health industry issues of 2019: The New Health Economy comes of age,” December 2018, <https://www.pwc.com/us/en/industries/health-industries/top-health-industry-issues.html>.
- 18 PwC Health Research Institute consumer survey, spring 2019; Internal Revenue Service, Rev. Proc. 2018-30, <https://www.irs.gov/pub/irs-drop/rp-18-30.pdf>. Note: For 2019, the Internal Revenue Service defines a qualifying high deductible health plan as a plan with a deductible for self-only coverage of at least \$1,350 or of at least \$2,700 for family coverage with annual out-of-pocket expenses not exceeding \$6,750 for self-only coverage or \$13,500 for family coverage.
- 19 Gary Claxton, Larry Levitt, Matthew Rae, and Bradley Sawyer, “Increases in cost-sharing payments continue to outpace wage growth,” Peterson-Kaiser Health System Tracker, Jun. 15, 2018, <https://www.healthsystemtracker.org/brief/increases-in-cost-sharing-payments-have-far-outpaced-wage-growth/#item-start>; PwC Health Research Institute analysis of Bureau of Labor Statistics data, 2006-16.
- 20 Internal Revenue Service, Publication 969 (2018), https://www.irs.gov/publications/p969#en_US_2018_publink1000204030.

- 21 PwC Health Research Institute consumer survey, spring 2019.
- 22 Note that consumers provided both ranges of deductibles and ranges of savings for an emergency expense. Using these ranges, HRI analyzed the savings level compared to the deductible level by looking at the top of the deductible ranges and comparing them to the top of the savings ranges. In those cases where the top of the savings range was less than the top of the deductible range, they were considered to have less than the annual deductible saved.
- 23 PwC 2019 Health and Well-being Touchstone Survey.
- 24 PwC Health Research Institute analysis of CMS national health expenditure data for private health insurance, projected data 2020-27.
- 25 Andrea M. Sisko, Sean P. Keehan, John A. Poisal, Gigi A. Cuckler, Sheila D. Smith, et al., “National Health Expenditure Projections, 2018-27: Economic and demographic trends drive spending and enrollment growth.”
- 26 PwC Health Research Institute, “Is new generic competition enough to lower drug costs?” June 2018, <https://www.pwc.com/us/en/health-industries/health-research-institute/pdf/pwc-health-research-institute-generic-drug-pricing-aug-2018.pdf>.
- 27 PwC Health Research Institute, “Is new generic competition enough to lower drug costs?”
- 28 PwC Health Research Institute analysis of Health Care Cost Institute 2017 data, <https://www.healthcostinstitute.org/research/annual-reports/entry/2017-health-care-cost-and-utilization-report>.
- 29 PwC Health Research Institute, “Is new generic competition enough to lower drug costs?”
- 30 Avik Roy, “Biologic medicines: The biggest driver of rising drug prices,” Forbes, Mar. 8, 2019, <https://www.forbes.com/sites/theapothecary/2019/03/08/biologic-medicines-the-biggest-driver-of-rising-drug-prices/#4583af7218b0>.
- 31 U.S. Food & Drug Administration, “What are ‘biologics,’ Questions and answers,” Feb. 6, 2018, <https://www.fda.gov/about-fda/about-center-biologics-evaluation-and-research-cber/what-are-biologics-questions-and-answers>.
- 32 U.S. Food & Drug Administration, “Biosimilar product information,” accessed June 13, 2019, <https://www.fda.gov/drugs/developmentapprovalprocess/howdrugsaredevelopedandapproved/approvalapplications/therapeuticbiologicapplications/biosimilars/ucm580432.htm>; Biosimilars Review & Report, “Biosimilar Approval Status,” accessed June 13, 2019, <https://biosimilarsrr.com/us-biosimilar-filings/>.
- 33 PwC Health Research Institute analysis of European Medicines Agency biosimilar authorizations, accessed June 7, 2019, https://www.ema.europa.eu/en/medicines/field_ema_web_categories%253Aname_field/Human/ema_group_types/ema_medicine/field_ema_med_status/authorised-36/ema_medicine_types/field_ema_med_biosimilar/search_api_aggregation_ema_medicine_types/field_ema_med_biosimilar/ema_group_types/ema_medicine/field_ema_med_status/authorised-36.
- 34 PwC Health Research Institute, “Is new generic competition enough to lower drug costs?”
- 35 PwC Health Research Institute clinician survey, 2018.
- 36 House Committee on Energy & Commerce, Testimony of Anthony Barrueta, senior vice president of government relations for Kaiser Permanente, on March 13, 2019, accessed April 24, 2019, <https://www.youtube.com/watch?v=YdJ4eE-MGSA>. Note: Mr. Barrueta’s testimony begins at 45:40 of the video.
- 37 PwC Health Research Institute analysis of OptumRx first quarter 2019 brand pipeline forecast, https://cdn-aem.optum.com/content/dam/optum3/professional-optumrx/news/outlook/2019Q1_OptumRxBrandPipeline.pdf.
- 38 CVS Health, “The evolution of specialty management,” Jan. 10, 2017, <https://payorsolutions.cvshealth.com/sites/default/files/cvs-health-payor-solutions-insights-feature-the-evolution-of-specialty-management-january-2017.pdf>.
- 39 Note: PwC Health Research Institute classified specialty drugs as any payment over \$600 in the Medical Expenditure Panel Survey data.
- 40 Spark Therapeutics, 8-K Filing to the US Securities and Exchange Commission, Jan. 3, 2018, <https://www.sec.gov/Archives/edgar/data/1609351/000119312518001117/d519914d8k.htm>.
- 41 Novartis, “AveXis announces innovative Zolgensma® gene therapy access programs for US payers and families,” May 24, 2019, <https://www.novartis.com/news/media-releases/avexis-announces-innovative-zolgensma-gene-therapy-access-programs-us-payers-and-families>.
- 42 PwC Health Research Institute, “Launching into value: Pharma’s quest to align drug prices with outcomes,” September 2017, <https://www.pwc.com/us/en/health-industries/health-research-institute/publications/assets/value-based-drug-pricing.pdf>.
- 43 Spark Therapeutics, “Spark Therapeutics announces first-of-their-kind programs to improve patient access to Luxturna™ (voretigene neparvovec-rzyl), a one-time gene therapy treatment,” Jan. 3, 2018, <http://ir.sparktx.com/news-releases/news-release-details/spark-therapeutics-announces-first-their-kind-programs-improve>.

- 44 Novartis, “AveXis announces innovative Zolgensma® gene therapy access programs for US payers and families.”
- 45 PwC Health Research Institute, “CMS considers foreign drug prices to hold down Medicare Part B spending,” January 2019, https://www.pwc.com/us/en/health-industries/health-research-institute/assets/pdf/CMS-considers-foreign-drug-prices-Medicare-Part-B_PwC_HRI_2019.pdf; PwC Health Research Institute, “HHS proposes major shift to protections for Part D and Medicaid MCO drug rebates,” Feb. 8, 2019, <https://www.pwc.com/us/en/industries/health-industries/library/hhs-protections-part-d-and-medicaid-mco-drug-rebates-2-8-19.html>.
- 46 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2015; Note: Consumers with chronic disease have problems affecting a single body system such as hypertension and require uncomplicated disease management. Consumers with complex chronic disease live with one or more chronic diseases affecting multiple body systems and requiring complicated disease management. For additional details, see: PwC Health Research Institute, “Preparing future primary care physicians for the New Health Economy,” March 2017, <https://www.pwc.com/us/en/health-industries/health-research-institute/publications/pdf/pwc-hri-primary-care-medical-education-new-health-economy.pdf>.
- 47 Centers for Disease Control and Prevention, “The health effects of overweight and obesity,” accessed June 7, 2019, <https://www.cdc.gov/healthyweight/effects/index.html>.
- 48 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2005 and 2014-16.
- 49 Note: PwC followed the Medical Expenditure Panel Survey definitions at https://meps.ahrq.gov/data_files/publications/st364/stat364.pdf, defining underweight as a body mass index (BMI) of less than 18, normal weight as BMI of 18 or more and less than 25, overweight as a BMI of 25 or more and less than 30, obese as a BMI of 30 or more and less than 40 and extremely obese as a BMI of 40 or more.
- 50 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2005 and 2015.
- 51 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2005 and 2013-2015.
- 52 National Institute of Diabetes and Digestive and Kidney Diseases, “Risk factors for Type 2 diabetes,” November 2016, <https://www.niddk.nih.gov/health-information/diabetes/overview/risk-factors-type-2-diabetes>; American Diabetes Association, “The cost of diabetes,” last edited Jan. 30, 2019, <http://www.diabetes.org/advocacy/news-events/cost-of-diabetes.html>.
- 53 PwC Health and Well-being Touchstone surveys, 2013 and 2019.
- 54 PwC Health Research Institute consumer survey, spring 2019.
- 55 American College of Lifestyle Medicine, “Physician competencies for prescribing lifestyle medicine,” accessed May 9, 2019, https://lifestylemedicine.org/ACLM/Lifestyle_Medicine/_What_is_LM__JAMA_Competerencies_/ACLM/About/What_is_Lifestyle_Medicine_/Core_Competerencies.aspx?hkey=26f3eb6b-8294-4a63-83de-35d429c3bb88.
- 56 PwC Health Research Institute interview with Dr. Salvatore Lacagnina, system medical director of wellness & employee health at Lee Memorial Health System and Scott Kashman, chief acute care officer at Lee Memorial Health System, on May 2, 2019.
- 57 Steve Melek, Daniel Perlman, Stoddard Davenport, Katie Matthews, Michael Mager, “Impact of Mental Health Parity and Addiction Equity Act,” Milliman White Paper, November 2017, <http://www.milliman.com/uploadedFiles/insight/2017/impact-mental-health-parity-act.pdf>.
- 58 Steve Melek, Daniel Perlman, Stoddard Davenport, Katie Matthews, Michael Mager, “Impact of Mental Health Parity and Addiction Equity Act.”
- 59 Make It OK, “What to Say,” accessed May 27, 2019, <https://makeitok.org/what-to-say/>; National Alliance on Mental Illness, “NAMI Programs”, accessed May 27, 2019, <https://www.nami.org/Find-Support/NAMI-Programs>.
- 60 PwC Health Research Institute consumer survey, spring 2019.
- 61 PwC Health Research Institute consumer survey, spring 2019.
- 62 PwC Health Research Institute consumer survey, spring 2019.
- 63 PwC Health Research Institute consumer survey, spring 2019.
- 64 PwC Health Research Institute interview with Virginia Peddicord, employee population health director at Merck, on April 5, 2019.
- 65 PwC Health Research Institute interview with Dr. Diana Han, chief medical officer and global medical director of GE Appliances, on May 9, 2019.

- 66 PwC Health Research Institute interview with Anne Marie Tsolinas, senior manager of health and wellness at Genentech, and Emily Fisher Moore, health and wellness principal program manager at Genentech, on May 3, 2019.
- 67 PwC Health Research Institute consumer survey, spring 2019.
- 68 PwC Health Research Institute interview with Gregg Nevola, vice president of HR and chief rewards officer at Northwell Health, on March 21, 2019.
- 69 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2015.
- 70 PwC Health Research Institute provider executive survey, 2018.
- 71 Paladina Health, "Onsite clinics 2.0," February 2016, <https://www.paladinahealth.com/form/download-onsite-clinics-20-white-paper>.
- 72 National Association of Worksite Health Centers, "Onsite clinics are a key component to a successful health benefits strategy," Jan. 6, 2015, <https://www.nawhc.org/NAWHC-NOW/6977556>.
- 73 Kaiser Permanente, "The Permanente Richmond Field Hospital—proud reminder of health care's role in World War II," April 17, 2017, <https://about.kaiserpermanente.org/our-story/our-history/the-permanente-richmond-field-hospital-proud-reminder-of-health->
- 74 PwC Health and Well-being Touchstone surveys, 2014 and 2019.
- 75 Erin Dietsche, "Report: Amazon intends to open primary care clinics for Seattle workers," MedCityNews, Aug. 10, 2018, <https://medcitynews.com/2018/08/report-amazon-clinics-seattle/>; Erin Dietsche, "Should Apple's medical clinics make hospitals quiver in their boots?" MedCityNews, Dec. 6, 2018, <https://medcitynews.com/2018/12/apple-medical-clinics-hospitals/>; Christina Farr, "Elon Musk says Tesla now has a health clinic for employees that provides 'first-class' service," CNBC, Oct. 24, 2018, <https://www.cnbc.com/2018/10/24/musk-says-tesla-has-a-first-class-health-clinic-for-employees.html>.
- 76 PwC Health Research Institute interview with John Jackson, vice president of enterprise services at One Medical, Dr. Raj Behal, chief quality officer at One Medical, and Kristina Skinner, director of communications at One Medical, on April 23, 2019.
- 77 PwC's Disruptive Innovators in Employee Benefits webcast on April 9, 2019; PwC Health Research Institute interview with Colleen Dame, benefits and wellness manager at Devon Energy, on May 15, 2019.
- 78 PwC Health Research Institute interview with Anne Marie Tsolinas, senior manager of health and wellness at Genentech, and Emily Fisher Moore, health and wellness principal program manager at Genentech, on May 3, 2019.
- 79 National Institutes of Health, "Your guide to lowering your cholesterol with TLC," December 2005, https://www.nhlbi.nih.gov/files/docs/public/heart/chole_tlc.pdf.
- 80 Lucette Lagnado, "Walk-in doctor visits at work? Welcome to the office health center," The Wall Street Journal, Jan. 8, 2018, <https://www.wsj.com/articles/walk-in-doctor-visits-at-work-welcome-to-the-office-health-center-1515420543>.
- 81 PwC 2019 Health and Well-being Touchstone Survey.
- 82 PwC Health Research Institute, "Medical cost trend: Behind the numbers 2019."
- 83 Shelby Livingston, "Anthem's new outpatient imaging policy likely to hit hospitals' bottom line," Modern Healthcare, Aug. 26, 2017, <https://www.modernhealthcare.com/article/20170826/NEWS/170829906/anthem-s-new-outpatient-imaging-policy-likely-to-hit-hospitals-bottom-line>.
- 84 Blue Cross Blue Shield of Massachusetts, "2019 Product and benefit updates: Small employers," 2018, https://www.bluecrossma.com/common/en_US/pdfs/New_SOBJ/55-1891_2019_SG_Product_Benefit_Updates.pdf.
- 85 Phil Galewitz, "Walmart charts new course by steering workers to high-quality imaging centers," Kaiser Health News, May 15, 2019, <https://khn.org/news/walmart-charts-new-course-by-steering-workers-to-high-quality-imaging-centers/>.
- 86 Jamie Cleverley, "Identifying the gap between hospital and free-standing prices," Healthcare Financial Management Association Journal of Strategic Financial Planning, Feb. 20, 2017, <https://www.hfma.org/Content.aspx?id=52656&pagesid=1>.
- 87 Bruce Japsen, "Buying binge for UnitedHealth's Optum is only just beginning," Forbes, April 18, 2018, <https://www.forbes.com/sites/brucejapsen/2018/04/18/the-buying-binge-of-unitedhealths-optum-is-only-just-beginning/#2c38ebf3192d>.
- 88 Bruce Japsen, "Big Blue Cross plans to open primary care clinics in Texas and beyond," Forbes, April 8, 2019, <https://www.forbes.com/sites/brucejapsen/2019/04/08/big-blue-cross-plans-to-open-primary-care-clinics-in-texas-and-beyond/#4032da7a6292>.

- 89 Health Care Cost Institute, “2017 Health Care Cost and Utilization report.”
- 90 Optum, “Home infusion therapy: Better outcomes, How site of care optimization is changing infusion therapy,” accessed May 2019, <https://www.optum.com/resources/library/home-infusion.html>.
- 91 Troy Brennan, M.D., “Safer options for infusion treatments: Largest retrospective chart study shows benefit of Remicade infusions at home or ambulatory center,” November 2018, <https://payorsolutions.cvshealth.com/insights/safer-options-for-infusion-treatments>.
- 92 CVS Health Corporation, 8-K Filing to the US Securities and Exchange Commission, <https://www.sec.gov/Archives/edgar/data/64803/000119312518330650/d658002d8k.htm>; Coram, “CVS specialty infusion services,” <https://www.coramhc.com/>.
- 93 PwC Health Research Institute interview with Bill Cashion, senior vice president and chief actuary at Highmark Health, Bill Sarniak, chief actuary at Highmark Inc., and Dave Berry, vice president of actuarial services at Highmark Health, on April 17, 2019.
- 94 Optum, “Home infusion therapy: Better outcomes—How site of care optimization is changing infusion therapy.”
- 95 JM Polinski, MK Kowal, et al., “Home infusion: Safe, clinically effective, patient preferred, and cost saving,” Healthcare, March 5 2017, <https://www.ncbi.nlm.nih.gov/pubmed/28668202>.
- 96 PwC Health and Well-being Touchstone surveys, 2016 and 2019.
- 97 PwC 2019 Health and Well-being Touchstone Survey.
- 98 PwC Health Research Institute consumer survey, spring 2019.
- 99 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance with other bone disease and musculoskeletal deformities, 2015.
- 100 Hinge Health, accessed April 23, 2019, <https://www.hingehealth.com/>.
- 101 P. Smittenaar, J.C. Erhart-Hledik, R. Kinsella, S. Hunter, et al., “Translating comprehensive conservative care for chronic knee pain into a digital care pathway: 12-week and 6-month outcomes for the Hinge Health program,” JMIR Rehabilitation and Assistive Technologies, January 2017, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5460069/>.
- 102 Rachel Z. Arndt, “Physical therapy and rehab go virtual,” Modern Healthcare, June 23, 2018, <https://www.modernhealthcare.com/article/20180623/TRANSFORMATION03/180629996/physical-therapy-and-rehab-go-virtual>.
- 103 PwC Health Research Institute consumer survey, May 2018.
- 104 PwC Health Research Institute consumer, spring 2019.
- 105 PwC Health Research Institute, “Medical cost trend: Behind the numbers 2019.”
- 106 Centers for Medicare and Medicaid Services, “Accountable Care Organizations (ACOs): General Information,” accessed May 10, 2019, <https://innovation.cms.gov/initiatives/aco/>.
- 107 PwC Health Research Institute interview with Anne Marie Tsolinas, senior manager of health and wellness at Genentech, and Emily Fisher Moore, health and wellness principal program manager at Genentech, on May 3, 2019.
- 108 PwC Health Research Institute interview with Brent Nicholson, COO, and Christoph Dankert, vice president of products at Carrum Health, on May 30, 2019.
- 109 PwC Health Research Institute interview with Ashok Subramanian, co-founder and CEO at Centivo, on May 2, 2019.
- 110 PwC Health Research Institute consumer survey, spring 2019.
- 111 PwC Health Research Institute interview with Virginia Peddicord, Employee Population Health Director at Merck, on April 5, 2019.
- 112 PwC Health Research Institute consumer survey, spring 2019.
- 113 PwC Health Research Institute interview with Virginia Peddicord, Employee Population Health Director at Merck, on April 5, 2019.
- 114 Mike Seemuth, “Meet the building-wellness startup partly backed by Bill Gates and valued at \$800M,” The Real Deal, April 28, 2019, <https://therealdeal.com/2019/04/28/meet-the-building-wellness-startup-valued-at-800m-that-bill-gates-is-invested-in/>.
- 115 Delos, “Company,” accessed May 7, 2019, <https://delos.com/company/about>.
- 116 PwC Health Research Institute interview with Virginia Peddicord, Employee Population Health Director at Merck, on April 5, 2019.

- 117 Verizon, “What is 5G,” accessed May 6, 2019, <https://www.verizon.com/about/our-company/5g/what-5g#pHowFast5G>.
- 118 Darrell M. West, “How 5G technology enables the health internet of things,” Center for Technology Innovation at Brookings, July 2016, https://www.brookings.edu/wp-content/uploads/2016/07/5G-Health-Internet-of-Things_West.pdf.
- 119 Ericsson, “Access to remote healthcare specialists,” accessed May 6, 2019, <https://www.ericsson.com/en/cases/2017/kings-college/kings-healthcare>.
- 120 The White House, “The Precision Medicine Initiative,” accessed May 27, 2019, <https://obamawhitehouse.archives.gov/precision-medicine>.
- 121 University of Utah, “More examples of precision medicine in action,” accessed May 27, 2019, <https://learn.genetics.utah.edu/content/precision/action/>.
- 122 PwC Health Research Institute interviews with Caroline Savello, vice president of commercial at Color, on April 19, 2019, and Karen Knudsen, executive vice president of oncology services at Jefferson Health, on April 23, 2019.
- 123 PwC Health Research Institute, “Top health industry issues of 2019: The New Health Economy comes of age.”
- 124 Digital Therapeutics Alliance, “What are digital therapeutics?” accessed Sept. 24, 2018, <https://www.dtxalliance.org/>; Press release, “US Food And Drug Administration (FDA) clears Natural Cycles as the first digital method of birth control in the United States,” Aug. 13, 2018, <https://www.prnewswire.com/news-releases/us-food-and-drug-administration-fda-clears-natural-cycles-as-the-first-digital-method-of-birth-control-in-the-united-states-300695804.html>.
- 125 PwC Health Research Institute consumer survey, September 2018.
- 126 PwC Health Research Institute, “Top health industry issues of 2019: The New Health Economy comes of age.”
- 127 PwC Health Research Institute consumer survey, winter 2018.
- 128 PwC Health Research Institute analysis of Medicare for All Act of 2019, HR 1384, 116th Congress, introduced in House Feb. 27, 2019, <https://www.congress.gov/bill/116th-congress/house-bill/1384?q=%7B%22search%22%3A%5B%22Medicare+for+All%22%5D%7D&s=1&r=1>; PwC Health Research Institute analysis of Medicare for All Act of 2019, S 1129, 116th Congress, introduced in Senate April 10, 2019, <https://www.congress.gov/bill/116th-congress/senate-bill/1129?q=%7B%22search%22%3A%5B%22Medicare+for+All%22%5D%7D&s=1&r=2>; PwC Health Research Institute analysis of Medicare for America Act of 2019, HR 2452, 116th Congress, introduced in House May 1, 2019, <https://www.congress.gov/bill/116th-congress/house-bill/2452?q=%7B%22search%22%3A%5B%22Medicare+for+All%22%5D%7D&s=1&r=4>; PwC Health Research Institute analysis of Medicare at 50 Act, S 470, 116th Congress, introduced in Senate Feb. 13, 2019, <https://www.congress.gov/bill/116th-congress/senate-bill/470>.
- 129 PwC Health Research Institute consumer survey, spring 2019
- 130 PwC Health Research Institute consumer survey, spring 2019.
- 131 RAND Corporation, “Prices paid to hospitals by private health plans are high relative to Medicare and vary widely.”
- 132 PwC Health Research Institute, “Top health industry issues of 2019: The New Health Economy comes of age.”
- 133 PwC Health Research Institute, “America’s future academic medical centers: Forging new identities in the New Health Economy,” April 2019, <https://www.pwc.com/us/en/industries/health-industries/health-research-institute/americas-future-academic-medical-centers.html>.
- 134 PwC Health Research Institute, “Population health: Scaling up,” May 2016, <https://www.pwc.com/us/en/industries/health-industries/library/population-health.html>.
- 135 PwC Health Research Institute, “Provider systems of the future: What happens when the hospital is no longer the center of the health universe?” October 2018, <https://www.pwc.com/us/en/health-industries/health-research-institute/assets/pdf/provider-systems-future-report.pdf>.
- 136 PwC Health Research Institute, “ROI for primary care: Building the dream team,” October 2016, <https://www.pwc.com/us/en/industries/health-industries/library/primary-care-part-two.html>; US Department of Health and Human Services AHRQ Patient Centered Medical Home Resource Center, “Defining the PCMH,” accessed May 24, 2019, <https://pcmh.ahrq.gov/page/defining-pcmh>.
- 137 PwC Health Research Institute, “Creating a stable drug pricing strategy in an unstable global market.”
- 138 PwC Health Research Institute, “Creating a stable drug pricing strategy in an unstable global market.”
- 139 PwC Health Research Institute, “Creating a stable drug pricing strategy in an unstable global market.”

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About this research

Each year, PwC's Health Research Institute (HRI) projects the growth of private medical costs in the coming year and identifies the leading trend drivers. Health insurance companies use medical cost trend to help set premiums by estimating what the same health plan this year will cost next year.

In turn, employers use the information to make adjustments in benefit plan design to help offset cost increases. The report identifies and explains what it refers to as “inflators” and “deflators” to describe why and how the healthcare spending growth rate is affected.

This forward-looking report is based on the best available information through June 2019. HRI conducted 55 interviews from February through June 2019 with health industry executives, health benefits experts and health plan actuaries whose companies cover more than 95 million employer-sponsored large group members about their estimates for 2020 and the factors driving those trends.

Also included are findings from PwC's 2019 Health and Well-being Touchstone Survey of more than 550 employers from 37 industries as well as PwC HRI's national consumer survey of 2,500 US adults. HRI also examined government data sources, journal articles and conference proceedings in determining the 2020 growth rate.

Behind the Numbers 2020 is HRI's 14th report in this series.

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 158 countries with more than 250,000 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 www.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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