

**Health Research Institute** 

# Medical cost trend: Behind the numbers 2021

Medical cost trend in the midst of the COVID-19 pandemic

June 2020





#### pwc.com/us/medicalcosttrends

## Heart of the matter

The COVID-19 pandemic has reshaped US healthcare. Virtual care has skyrocketed. People are largely avoiding in-person visits and procedures. Providers across the nation are facing a liquidity crisis as non-COVID-19 patient volumes plummeted starting in late March and only started to slowly rebound in mid-May.<sup>1</sup> Pharmaceutical companies experiencing delays in clinical trials have had to reevaluate them and take some of them virtual.<sup>2</sup>



At the same time, the pandemic has shocked the US and global economy and changed the working world. US gross domestic product (GDP) contracted at an annual rate of 5% in the first quarter and is expected to shrink by double digits in the second quarter.<sup>3</sup> Retail sales fell precipitously in March and April and started to recover in May.<sup>4</sup> Unemployment of almost 15% in April surpassed the peak unemployment of the Great Recession of 10% in October 2009, improving slightly to 13% in May.<sup>5</sup> Nearly 20 million people could lose their employersponsored health insurance.<sup>6</sup> Employees who can work from home have been doing so, circumstances that may continue for many after the recession. Nearly half of chief financial officers (CFOs) surveyed by PwC in early May said their companies are planning to make remote work a permanent option for some roles.<sup>7</sup> Employer healthcare spending could fall in calendar year 2020 compared with 2019, and then rebound in 2021. How much it falls in 2020 and rebounds in 2021 is subject to many variables, complicated by the pandemic. For 2021, PwC's Health Research Institute (HRI) has formulated three scenarios to help guide employers and health plans as they determine medical cost trend. A high-spending scenario, in which spending grows significantly higher in 2021 after being down in 2020, forecasts a 10% medical cost trend. A medium-spending scenario, in which spending grows at roughly the same rate in 2021 as it did from 2014 to 2019, projects a 6% medical cost trend. And a low-spending scenario, in which spending remains dampened in 2021, translates to a 4% medical cost trend.

will drive further demand for mental healthcare at a time when employers are eager to expand access.

#### New specialty drugs and expanding indications for approved specialty drugs increase spending. Most medications in the pipeline are specialty drugs.<sup>9</sup> Some of those drugs are curative gene therapies that could come with multimillion-dollar price tags. Existing specialty drugs also are driving spending as the conditions for which they are approved expands.

#### Beyond the direct impacts of the pandemic and the economic downturn, HRI identified two inflators that are expected to drive spending in 2021:

**COVID-19 boosts mental health utilization.** Employers have made mental health a priority over the past few years by expanding mental health benefits and working to dispel the stigma around mental health conditions.<sup>8</sup> The COVID-19 pandemic, with its attendant anxiety and social isolation, likely

#### While spending may be up in 2021 over 2020, HRI identified two bright spots for spending in 2021:

**Telehealth goes mainstream.** Telehealth has been gaining ground slowly for years. COVID-19 forced its rapid adoption by both consumers and clinicians, many of whom had never used it before. In 2021, HRI expects telehealth to settle in as a viable and desirable alternative to in-person care, saving employers and health plans on the episodic cost of care delivered virtually.

Networks narrow out of necessity. Employers are eyeing narrow provider networks; over a quarter of employers have been considering them for the past few years.<sup>10</sup> Some of those employers may move to a narrow network plan in 2021 as COVID-19 and the related economic downturn force employers to shed costs and make healthcare providers more willing in the short term to give price concessions or take on more risks in exchange for predictable cash flows, if it helps them get patients to return for care.

Uncertainty remains about the impacts of COVID-19 and the economic downturn on healthcare spending in 2021. The health of the overall population could worsen slightly as individuals delay needed care in the midst of the pandemic, pushing up future healthcare costs. The number of individuals with employer-sponsored insurance is declining, driving down provider revenues that have already taken a hit from COVID-19. Looking beyond spending, COVID-19 and the resulting economic downturn likely will transform aspects of





## Medical cost trend

The pandemic has raised many questions about employer healthcare spending in 2020 and 2021. How much will COVID-19 testing and treatment add to employer spending? How much care will be deferred, how much will come back, and will care delays result in poorer health? How will the economic downturn—employment losses, decreases in disposable household income and more—affect healthcare spending?

In interviews conducted in March, April and May, health plan actuaries from 12 national and regional payers told HRI that they remained unsure about the pandemic's impact on healthcare spending now and projected medical cost trend for 2021. Despite the uncertainty, employers and payers will need to decide what medical cost trend to use when determining next year's premiums. The unprecedented drop in healthcare utilization in 2020 that resulted from COVID-19 complicates this calculation.

Because of the drop in employer healthcare spending in the first half of 2020 and the uncertainty around spending in the second half of the year, HRI is projecting 2021 medical cost trend relative to 2020 estimated healthcare costs, normalizing for COVID-19, rather than actual 2020 costs. HRI has developed three scenarios to guide employers and health plans as they determine 2021 medical cost trend: a high, medium and low trend scenario (see Figure 1 and Appendix: Employer per capita spending scenarios). Trend could range from 4% to 10%, numbers on each end of the range that have not been seen for over a decade.

Every year, the medical cost trend varies by individual employer. In 2021, HRI also expects to see more variation geographically as some areas are affected more by COVID-19 than others.

#### 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% 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.

#### Figure 1: Medical cost trend could range from 4% to 10% in 2021



2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Source: PwC Health Research Institute medical cost trends, 2007-21

\*Note: The 6% trend shown for 2020 was projected in PwC Health Research Institute's "Medical Cost Trend: Behind the Numbers 2020" report in June 2019. This number does not reflect the impacts of COVID-19 on 2020 employer healthcare spending. Actual spending in 2020 likely will be lower than in 2019, because of the care deferred during the COVID-19 pandemic. Please refer to the Appendix and the "Macrotrends" section of this report for a deeper discussion of the impacts of COVID-19 on 2020 employer healthcare spending.





## Macrotrends

#### **COVID-19 upends employer healthcare spending**

Employers are incurring unplanned COVID-19 testing and treatment costs in 2020, and those costs likely will continue in 2021.<sup>11</sup> The CARES Act, a \$2 trillion federal aid package signed into law in March, requires employers to cover COVID-19 testing with no cost sharing for individuals enrolled in their health plans.<sup>12</sup> Testing costs could add up in 2020 and 2021, especially if employers incorporate frequent testing for COVID-19 into plans to help employees return to work. In interviews, executives with health plans and employer coalitions told HRI that in 2020, for employer large group plans, these unplanned costs are expected to be more than offset by the savings from delayed care during the pandemic (see Figure 2). Some payers are already sharing these savings with fully insured large group customers: UnitedHealthcare will give a 5% to 20% discount on premium billings in June, while Premera Blue Cross of Mountlake Terrace, Washington, will provide a one-time credit of up to 15% on August premiums.<sup>13</sup> Employers and payers expect an increase in spending in 2021 as the demand for care returns.

prepare for the potential surge of patients with COVID-19 and to prevent the spread of the disease. Many states, including Texas and New York, temporarily mandated that all nonemergent surgeries and procedures be postponed.<sup>14</sup> Patient demand for certain services—such as non-emergent surgeries, diagnostic procedures and wellness visits—disappeared overnight as stay-at-home orders and fear of catching COVID-19 kept people away from the doctor. Fifty-seven percent of individuals with employer-based insurance surveyed by HRI in early April said they were worried about getting care during the COVID-19 pandemic.<sup>15</sup>

Early estimates show significant drops in care volumes starting in mid-March. A study by the Commonwealth Fund found that visit volumes for ambulatory practices declined by 60% between early March and early April.<sup>16</sup> Ambulatory healthcare services lost 1.2 million jobs between March and April, after adding nearly 2 million jobs between January 2010 and February 2020, according to the US Bureau of Labor Statistics.<sup>17</sup> Medical device sales have also plummeted along with demand for implants, instruments and devices as

#### **Utilization plummets**

"What makes COVID-19 so fascinating is the way it affects both supply and demand," said Paul Hughes-Cromwick, co-director of sustainable health spending strategies at the Altarum Institute, a Michigan-based nonprofit health research organization focused on Medicaid and Medicare, in an interview with HRI. Supply, in the form of health services, has been constrained as many providers closed their doors for non-emergent visits and procedures starting in mid-March to

 $\triangleright$ 

 $\mathcal{O}$ 

surgeries and procedures were postponed or canceled.<sup>18</sup>

#### Figure 2: COVID-19 costs and savings for employers

#### Impact on spending compared with prior year Category 2020 2021 Non-emergent Return of some visits Delayed and forgone and procedures visits and visits and procedures delayed from 2020 procedures Telehealth in place of Rise in telehealth visits, replacing many in-person in-person visits, visits; currently being assuming lower reimbursed at the same reimbursement rate **Telehealth** rate as in-person visits in than in-person visits most cases because of a lack of prior telehealth contracts with providers Depends on how COVID-19 Costs from COVID-19 much testing is done testing that were not testing in 2021 compared with budgeted 2020 Treatment-related costs Costs from treatment COVID-19 come down as we see that were not fewer cases and get treatment budgeted better at treating them Unlikely that a vaccine will Cost of vaccinating COVID-19 be ready for broad use by most employees and vaccine

Source: PwC Health Research Institute interviews with executives at employer coalitions, healthcare coalitions and health plans between March and May 2020

the end of the year

their family members



In a recent survey by HRI, 22% of individuals with employerbased insurance reported that they had delayed some care since March 1 and that they still had not received it as of early May.<sup>19</sup> On average, those individuals said they had delayed 71% of the care they would have received since March 1 (see Figure 3).

Individuals with complex chronic conditions on employersponsored insurance were more likely to have delayed care than those in other groups, HRI found. Getting these people in for necessary care is important for their health and for employer spending. On average, people with complex chronic illnesses cost employers eight times more than healthy individuals, with an average annual cost per person of over \$11,000—a number that could balloon even higher if their illness is left unmanaged for too long.<sup>20</sup> "We could see the population risk increase for 2021 if members with chronic conditions are not able to manage their health as effectively in 2020 due to COVID-19," said Amy Yao, senior vice president and chief actuary at Blue Shield of California, in an interview with HRI.

Getting patients to return for care remains top of mind for providers that have suffered significant revenue loss and liquidity issues over the past few months.<sup>21</sup> As providers across the US resume non-emergent medical services, it remains unknown how much demand will return and when. "Some people are assuming that all you have to do is open back up and everything will be fine," said Hughes-Cromwick. "It is one thing to throw a party; you still need people to attend the party."

Of the 22% of individuals with employer-based insurance surveyed by HRI who have delayed care since March 1, 50% have rescheduled some or all of that care. Forty-six percent have not rescheduled but plan to do so.<sup>22</sup>

Doctors will play an important role in getting patients to return. When asked what would encourage them to reschedule delayed care, respondents said they were looking for communication about safety from their physicians first and then the Centers for Disease Control and Prevention (CDC) (see Figure 4).<sup>23</sup> Still, just 14% of individuals with employer-based insurance surveyed by HRI said they have received health information from their health system during the pandemic.<sup>24</sup> As a trusted source, providers have an opportunity to better communicate with their patients during the pandemic.

Figure 3: Individuals with complex chronic conditions on employer-sponsored insurance were most likely to have delayed care, delaying two-thirds of their care between March and early May

			Employer-sponsored insurance by consumer group					
	All consumers	Employer- sponsored insurance (ESI)	Complex chronic	Chronic	Mental health	Healthy family	Healthy skeptics	Healthy enthusiasts
Consumer group as a % of ESI	N/A	100%	5%	55%	3%	23%	9%	5%
Care delayed and not received since early March	25%	22%	32%	24%	23%	22%	17%	16%
Average portion of care delayed	67%	71%	67%	74%	62%	72%	66%	73%
Rescheduled	50%	50%	54%	50%	47%	62%	40%	40%
Planning to reschedule	45%	46%	43%	47%	53%	32%	50%	56%

Source: PwC Health Research Institute consumer survey, Apr 28 - May 8, 2020 and PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2015-17

Note: Six of the seven HRI consumer groups are shown in this breakdown of employer-sponsored insurance by consumer group. The frail elderly consumer group is excluded as this consumer group generally does not apply to individuals with employer-sponsored coverage.<sup>25</sup>





## Figure 4: Individuals with employer-based insurance are looking for reassurance from their doctor and the CDC before rescheduling care they have delayed

Ranked as top source of reassurance for rescheduling delayed care



#### **Prices may increase**

COVID-19 likely also will affect healthcare prices in the long and short terms. Providers are focused on stemming immediate losses and may be more open than they were pre-pandemic to price concessions and value-based arrangements, especially if it helps them drum up business to cover their fixed costs. Such arrangements could include risk sharing, in which the provider takes on some financial risk for patient outcomes, or capitation, in which the provider is paid a monthly fee to manage the total cost of care for a patient.

Once providers have been able to recover most of their volumes and are in a position to negotiate new rates with payers, employers might expect to see two COVID-19-related price increases hit healthcare spending starting in 2021. First, providers will continue to incur increased costs to prepare for future waves of COVID-19. For example, hospitals have spent an estimated \$550 million per month during the pandemic to support front-line hospital workers with childcare, housing, transportation, and medical screening and treatment for COVID-19 for those workers.<sup>26</sup> The American Hospital Association estimates that hospitals will have spent an additional \$2.4 billion between March and June 2020 on personal protective equipment (PPE) alone because of

an increased need for PPE and higher costs of PPE as the result of shortages.<sup>27</sup> Second, it may cost more to provide inperson care safely, and to fewer patients, while the threat of the coronavirus remains. For example, Loyola Medicine of Maywood, Illinois, is testing all patients for COVID-19 24 hours before undergoing an elective procedure; requiring masks for patients, visitors, employees and physicians; and following CDC standards for facility deep cleaning with increased frequency and attention to surfaces that are frequently touched—all steps that protect patients and providers while adding costs.<sup>28</sup> Social distancing guidelines along with the time needed to deep-clean between patients could also limit the number of people that can be seen each day.

#### **Economic impacts of COVID-19**

#### **COVID-19 disrupts the economy**

US GDP fell at an annual rate of 5% in the first quarter of 2020.<sup>29</sup> The impacts of COVID-19 on the second quarter are expected to be more severe. More than 20 million people lost their jobs in April, and the unemployment rate rose to nearly 15% after remaining below 5% since late 2015.<sup>30</sup> By some measures, the economy improved in May. Retail sales began to bounce back after falling fast in March and April, and





unemployment dropped to 13%.<sup>31</sup> Yet in testimony to the Senate Banking Committee in mid-June, Federal Reserve Chairman Jerome Powell warned that "until the public is confident that this disease is contained, a full recovery is unlikely."<sup>32</sup>

A recent analysis by the Brookings Institution provides a few different recovery scenarios. On one end, Brookings offers a positive scenario in which US GDP rebounds higher than pre-pandemic expectations as a result of pent-up demand. On the other end, a pessimistic view envisions the pandemic dampening US GDP permanently, leading to growth that is lower than pre-pandemic expectations.<sup>33</sup>

Much uncertainty remains about how to safely reopen the economy and return employees to work. Two-thirds of CFOs surveyed by PwC in early May said they were very confident they could provide a safe working environment.<sup>34</sup> Yet 51% of employees who have been forced to stop working or to work remotely said the fear of getting sick at the workplace would prevent them from returning.<sup>35</sup>

## **Employer-based insurance declines, number of uninsured climbs**

An HRI analysis of the relationship between unemployment and employer-sponsored health insurance during the Great Recession, from 2007 to 2010, found that for every person who became unemployed, on average 1.5 people lost employer-sponsored health coverage (see Figure 5). Applying this to the Congressional Budget Office estimate that unemployment could average 11.6% in 2020, the number of unemployed this year could increase nearly 13 million on average, leading to over 18 million people losing employer-based coverage, or roughly 10.5% of people who had such coverage before the pandemic.<sup>36</sup>

#### Figure 5: During the Great Recession, unemployment increased by 8 million and employer-sponsored health insurance dropped by over 11 million

Change in the number of unemployed individuals compared with change in the number of individuals with employer-sponsored health insurance



Source: PwC Health Research Institute analysis of CMS national health expenditure data and Bureau of Labor Statistics current population survey data<sup>37</sup>





During the Great Recession, the number of uninsured individuals rose by nearly 6 million.<sup>38</sup> Today, that number is going up again as a result of the current economic downturn, but the increase may be blunted by individuals enrolling in Medicaid, plans sold on the Affordable Care Act (ACA) individual market, association health plans or short-term, limited duration insurance.<sup>39</sup> Employers also should expect an uptick in the number of people who opt to continue their coverage via the Consolidated Omnibus Budget Reconciliation Act (COBRA), which allows temporary extension of employer-sponsored coverage paid for by the employee.<sup>40</sup> While there is the potential for some adverse risk selection to COBRA by those who are older and may incur more healthcare spending, selection of COBRA plans may be driven less by health status, as it was in the past, and more by income level – whether the individual can get cheaper coverage through Medicaid or the ACA exchange. "Subsidized coverage on the exchange is almost always cheaper than COBRA," said Michael Thompson, president and CEO of the Washington, DC-based National Alliance of Healthcare Purchaser Coalitions, in an interview with HRI.

Health insurers should consider proactive outreach to their members losing employer-sponsored coverage to help those members enroll in other plans they offer, such as managed Medicaid or exchange plans. Providers should evaluate how a decrease in patients with employer-sponsored insurance coupled with an increase in patients who are uninsured or on Medicaid will affect their revenue.

#### US healthcare spending sank with the economy

Historically, changes in healthcare spending growth have lagged behind shifts in the general economy, especially ebbs and flows in disposable personal income.<sup>41</sup> According to the CMS Office of the Actuary, as the income growth rate increases or decreases, the health spending growth rate tends to follow in the same direction, but with a lag over several years.<sup>42</sup> In the case of an economic slowdown, when growth in the overall economy slows, private health spending typically doesn't slow as rapidly and health spending becomes a larger share of the economy.<sup>43</sup> Then as the economy recovers, health spending's share tends to stabilize.<sup>44</sup> The pandemic downturn appears to be different. Both supply of and demand for health services have been constrained since state and local governments began issuing stay-at-home orders in mid-March. As a result, many providers are struggling financially. A lack of financial viability may lead some providers to consider being acquired, potentially driving deals in the second half of 2020 and into 2021.



7 PwC							
Heart of the matter	Medical cost trend	Macrotrends	Inflators	Deflators	Conclusion	Appendix	Endnotes Acknowledgments About this research

#### Factors affecting 2021 medical cost trend

# Inflator: COVID-19 boosts mental health utilization

In 2021, HRI expects increased utilization of mental health services as employees tap resources for mental health conditions, including new ones stemming from the pandemic.

Employers have invested more in mental health in recent years. They are offering disease management programs, addressing stigmas and integrating mental healthcare into primary care at worksite clinics.<sup>45</sup> The Health Care Cost Institute's 2018 study on healthcare spending by employer-sponsored plans found that spending on psychiatry services rose 43% from 2014 to 2018. Spending on mental health admissions rose 33% on a per-person basis from 2014 to 2018.<sup>46</sup>

Demand for mental health services likely will grow even faster as a result of COVID-19 and the associated economic impact. Between 2017 and 2018, one in five American adults reported having a mental illness.<sup>47</sup> In a survey by the Kaiser Family Foundation conducted in late March 2020, after the pandemic had triggered stay-at-home orders, widespread layoffs and general anxiety over the spread of the virus, 45% of adults reported that their mental health had been negatively affected.<sup>48</sup> Americans told the Kaiser Family Foundation and HRI, in a series of surveys, that they were struggling with sleep, diet, exercise and too much time spent on technology.<sup>49</sup>

Some individuals with employer-based insurance have sought help. In a recent survey conducted by HRI, 12% of consumers with employer-based insurance said they sought help for their mental health as a result of the pandemic.<sup>50</sup> An additional 18% reported plans for accessing care for mental health needs.<sup>51</sup> Individuals with employer-sponsored insurance are not as willing to get help in person during the pandemic as they were before (see Figure 6). But many are equally or more willing to seek care via telehealth, employee assistance programs, emotional support apps and online communities than they were before the pandemic.

27%

## Figure 6: Willingness to seek help for mental health virtually during the pandemic has increased while willingness to seek it in person has decreased

#### Where individuals plan to seek help during the pandemic

129	In-person visit with my primary care provider
7%	In-person visit with a mental health professional
7%	Video telehealth visit with my primary care provider
6%	Video telehealth visit with a mental health professional
5%	Employee assistance program
4%	An emotional support app
3%	Support via an online community
2%	Virtual support groups
1%	In-person support group

#### Where individuals have sought help in the past

In-person visit with my primary care provider	
In-person visit with a mental health professional	13%
Video telehealth visit with my primary care provider	6%
Video telehealth visit with a mental health professional	5%
Employee assistance program	5%
An emotional support app	3%
Support via an online community	2%
Virtual support groups	2%
In-person support group	1%

Source: PwC Health Research Institute consumer survey, April 28-May 8, 2020

Note: Consumers were asked to select all services they had used for help with mental health issues in the past five years and that they plan to use to help manage

anxiety, stress or other mental health issues resulting from the COVID-19 pandemic. If no services applied, consumers selected "I have not used/do not plan to use any of these." As such, the options presented here will not total 100%.



Many employees have more mental health options than ever. Ninety-six percent of employers surveyed by PwC offered an employee assistance program in 2020; 71% offered stress management programs.<sup>52</sup> Nine percent of individuals with employer-based insurance reported that they were offered new mental health or stress-related benefits as a result of the COVID-19 pandemic.<sup>53</sup>

Mental health has been a leader in the movement to telehealth. One review of commercial and Medicare Advantage telemedicine claims data by researchers from Harvard University and the University of Pittsburgh found that more than 50% of visits conducted between 2005 and 2017 were for mental health.<sup>54</sup> Excellus BlueCross BlueShield of Rochester, New York, estimated that 40% or roughly 16,000 of its telemedicine visits between Jan. 1 and April 3 were for behavioral health services.<sup>55</sup>

Employers may push for mental healthcare to be delivered via telehealth beyond the COVID-19 pandemic, especially if it improves access that historically has been constrained.<sup>56</sup> Seventeen percent of consumers with employer-sponsored insurance who were surveyed by HRI in early April used telehealth for mental health during the COVID-19 pandemic; 26% of all consumers with employer-sponsored insurance said they would consider using telehealth for mental health in the future.<sup>57</sup> Employers also like the potential to measure the effectiveness of the care being delivered. "With virtual care, there is an opportunity to ask consumers a standardized set of questions at the baseline visit and at preset intervals. Capturing these data will allow employers to see how those who engage in behavioral health progress over time," said Brian Marcotte, former president and CEO of the Business Group on Health, in an interview with HRI.

Some employers are expanding access to mental health support via digital platforms such as Ginger, Calm and Happify Health. Happify Health uses scientific research from positive psychology, cognitive behavioral therapy and mindfulness to improve mental and physical health through its virtual care and digital therapeutic products.<sup>58</sup> Happify Health's products incorporate Anna, a digital mental health coach powered by augmented intelligence that connects conversationally with Happify's users to deliver personalized behavioral interventions.<sup>59</sup> Happify's digital therapeutic products can be used to manage mild to moderate anxiety and depression or used with other therapies to treat and manage more severe anxiety, depression and related medical conditions.<sup>60</sup> "The primary shortage in telemedicine for mental health is not digital





technology; it is qualified professionals on the other end," said Chris Wasden, head of Happify Digital Therapeutics and a board member of the Digital Therapeutics Alliance, in an interview with HRI. "Fully digital companies like Happify can address some issues just as effectively as, and with better consistency than, a human being, without the staffing constraints."

Employers and payers are willing to spend money on mental health. An individual with a complex chronic illness and mental illness costs employers 1.5 times more per year than someone with a complex chronic illness alone and 12 times more per year than a healthy person without a chronic, complex chronic or mental illness (see Figure 7).

Boston-based Harvard Pilgrim Health Care offers a phonebased therapy program through a partnership with its behavioral healthcare vendor.<sup>61</sup> The program has shown early promise for members with cardiac conditions and anxiety. "It can be hard to distinguish between a heart attack and an anxiety attack," said Dan Rachfalski, senior vice president and chief actuary at Harvard Pilgrim Health Care, in an interview with HRI. "If someone with a heart condition is experiencing chest pain, they will go to the ER and often will be admitted for observation. If you can provide patients with the tools to manage their anxiety, some of these ER visits and inpatient stays might be avoided."

#### Implications

**Payers/employers:** Take inventory of virtual mental health offerings to ensure sufficient access to virtual care and support. Communicate these virtual options early and often to employees and members. Encourage the use of telehealth for mental health through plan design. Consider reducing or waiving cost sharing on telehealth visits for mental health, something temporarily allowed on high-deductible health plans by the CARES Act.<sup>62</sup>

**Providers:** Build out virtual mental health services and integrate them with broader primary care services to improve health outcomes and spending on individuals with a comorbid mental health condition.<sup>63</sup> Screening for depression and anxiety is more important than ever given the toll the pandemic has taken on people's mental health. Providers should consider expanding these screenings beyond annual checkups to all patient visits.

Pharmaceutical and life sciences companies: Partner with digital mental health companies to support medication adherence and enhance outcomes. Sanofi and Happify Health

have partnered to help patients with multiple sclerosis manage and improve their psychological outcomes and in turn improve treatment adherence.<sup>64</sup> Consider outcomes-based contracts with employers and payers for the diseases and related treatments targeted by partnerships with digital mental health companies.

## Figure 7: Employers spend 12 times more per year on individuals with a complex chronic illness and mental illness than they do on healthy individuals

Average annual per capita spending for individuals with employer-based insurance, 2015-17



Source: PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2015-17





#### Factors affecting 2021 medical cost trend

## Inflator: New specialty drugs and expanding indications for approved specialty drugs increase spending

Specialty drug spending likely will continue to grow in 2021, driven by new, high-priced drugs entering the market, including curative but expensive gene therapies. Expanding indications for existing FDA-approved specialty drugs will also increase spending.

Spending on specialty drugs has increased significantly in recent years and remains a concern for employers. Specialty drugs, while expensive by nature, also are typically high impact—vastly improving quality of life or even curing illnesses, some of which previously lacked a treatment or cure.<sup>65</sup> Figuring out how to pay for these innovations is a challenge for employers and the broader US health system.<sup>66</sup> Ninety-five percent of employers surveyed by PwC ranked managing specialty drug cost trend as a top five pharmacy concern.<sup>67</sup> Specialty drug spending as a share of total retail drug spending for employers grew from 21% in 2010 to 58% in 2017.<sup>68</sup>

many of which are specialty drugs, is expected to be higher. The Health Care Cost Institute's 2018 study on healthcare spending by employer-sponsored plans found that spending on administered drugs increased by \$108 per person between 2014 and 2018.<sup>70</sup> In 2018, administered drugs were the third largest source of spending in the category of professional services, making up 14% of that spending.<sup>71</sup>

Specialty drugs also make up an increasing share of the pipeline. Sixty-two percent of the drugs estimated for release in 2020 and 73% estimated for release in 2021 are specialty drugs, according to an HRI analysis of OptumRx's brand pipeline forecast from the first quarter of 2020.<sup>72</sup> Of the 234 drugs estimated for release in 2020 or 2021, 11 are gene therapies.<sup>73</sup> These therapies likely will come with a high price tag, similar to the four gene therapies on the market in the US.<sup>74</sup>

The growth rate for retail drug spending for private insurance is expected to tick up slightly in 2021, to 2.6% from 1.5% in 2020.<sup>69</sup> In interviews, health plan actuaries told HRI that the growth rate for spending on office-administered drugs, Because of the pandemic, the FDA postponed some meetings scheduled for March or April related to the review of a new drug or device.<sup>75</sup> The agency reported that as of mid-April, it had met review program goals for new prescription drug and biologic approvals.<sup>76</sup> However, in an FAQ issued in late May,



the FDA acknowledged that it may not be able to meet review goal dates indefinitely as it allocates resources to work related to COVID-19.<sup>77</sup>

One gene therapy that may be approved in late 2020 is BioMarin Pharmaceutical's Roctavian, an investigational gene therapy for hemophilia A patients.<sup>78</sup> The therapy could enable the body to produce a blood clotting factor for patients with hemophilia A who are missing this factor or have low levels of it.<sup>79</sup> Roctavian would be administered via a one-time infusion, potentially replacing regimens that can include frequent athome administration of clotting factor treatments.<sup>80</sup> Price estimates for the gene therapy range from \$2 million to \$3 million for the one-time treatment, in line with the \$2.1 million cost of AveXis' Zolgensma, a one-time gene therapy treatment for spinal muscular atrophy in children under 2 years old, which made it to the market in 2019.<sup>81</sup>

While the per-treatment cost of Zolgensma and Roctavian may be similar, the annual cost of Roctavian to the US health system may be much higher in the next few years because of the number of hemophilia A patients who could be treated (see Figure 8). In an April earnings call, Vasant Narasimhan, CEO of Novartis, which owns AveXis, said that about 100 patients are being treated with Zolgensma each quarter in the US under the current indication.<sup>82</sup> Comparatively, around 20,000 people in the US with hemophilia A could be eligible for treatment with Roctavian, plus an estimated 400 babies born with the condition each year.<sup>83</sup> "Right around the corner are a number of drugs with price tags that will blow our minds," said Michael Thompson of the National Alliance of Healthcare Purchaser Coalitions. "With many drugs now costing in the hundreds of thousands of dollars and some costing \$1 million or more, there will be more scrutiny around whether the evidence supports the price."

Expanding indications for existing specialty drugs also are driving spending. "The million-dollar therapies are certainly eye-catching," said Mike Hartjes, vice president of employer group actuarial and analytic services at Humana, in an interview with HRI. "Other specialty drugs without the milliondollar price tag often start out treating a narrow range of ailments, such as a certain type of cancer, and then get used more broadly over time. These drugs are used by far more patients and will continue to drive spending."

Take the anti-PD(1)/PDL(1) class of drugs used to treat a variety of cancers. The first of these drugs—Merck's Keytruda and Bristol-Myers Squibb's Opdivo—were initially approved by the FDA in the second half of 2014 for a type of metastatic melanoma.<sup>92</sup> As of May 6, 2020, Keytruda was FDA-approved for 22 indications; Opdivo for 13.<sup>93</sup> As the number of FDA-approved indications for this class of drugs has grown, so have annual sales (see Figure 9). Keytruda and Opdivo are projected to be among the top five selling drugs by sales dollars in the US and globally by 2024.<sup>94</sup>

## Figure 8: Two gene therapies could collectively cost the US health system up to nearly \$80 per American in 2021

Projected annual cost per American: Zolgensma vs. Roctavian



Source: PwC Health Research Institute analysis of the potential cost of Zolgensma and Roctavian to the US health system on a per capita basis. See endnotes 84-91.

\*Each scenario noted under brackets is \$3 per American per year

Note: Zolgensma launched in the US in 2019, and Roctavian is expected to receive FDA approval in the second half of 2020. This figure analyzes the projected annual cost per American of Zolgensma and Roctavian and does not take into

account cost savings seen by patients, employers and payers after the treatment is given.



## Implications

Payers/employers: Self-insured employers and payers should evaluate their abilities to cover new, high-priced therapies and consider partnering with other organizations such as financial institutions, pharmaceutical companies and even other payers with the balance sheet to weather one-time treatment costs of \$1 million or more. Under Cigna's Embarc Benefit Protection, employers or other health plans would pay a set monthly fee to Cigna to cover two gene therapies - Luxturna and Zolgensma—at no additional cost to the employer or other health plan and with no out-of-pocket spending for the patient, while also supporting the patient throughout the course of treatment.95

**Providers:** Work with payers and employers to mitigate spending growth on administered drugs, most of which are high-priced specialty drugs, by delivering those therapies in the safest, lowest cost setting. During the COVID-19 pandemic, this could mean moving treatments completely out of the inpatient setting to an outpatient clinic, physician's office or

even the patient's home. This could benefit the individuals with employer-based insurance who said that they or someone in their household regularly receives in-office or in-hospital treatments—nearly 60 percent of them said these routine treatments had been delayed because of COVID-19.96

Pharmaceutical and life sciences companies: Before the launch of a new drug, especially one with a price tag in the millions, engage with payers and employers on pricing and financing.<sup>97</sup> Make the case for the long-term cost savings. Consider alternative payment models, or a combination of models, to ease the financial burden on payers and employers: for example, a combination of a mortgage model that spreads the cost of an expensive therapy over time along with a health outcomes-based contract that offers full or partial reimbursement if patients don't respond to the therapy or reach a targeted health outcome.<sup>98</sup> Communicate the differentiating factors of new specialty drugs, especially if they are competing with other drugs that are already approved.

### Figure 9: New indications for five cancer drugs have boosted sales since 2014



Source: PwC Health Research Institute analysis of GlobalData's Drug Sales and Consensus Forecast data for US-based sales of anti-PD(1)/PDL(1)s, Drugs@FDA data for anti-PD(1)/PDL(1)s and OptumRx's first guarter 2020 brand pipeline forecast.99

Note: This analysis included sales and FDA-approved indications for Keytruda, Opdivo, Tecentriq, Imfinzi and Libtayo. The cumulative number of indications includes each unique indication by drug. If two drugs in this class are approved for the same indication, that indication is counted twice. The FDA-approved anti-PDL(1) Bavencio was excluded from this analysis because no specific US sales data were available. The number of approved indications for 2020 includes four additional indications expected to be approved by the FDA for Imfinzi, Keytruda and Opdivo in 2020, according to the OptumRx first-quarter 2020 brand pipeline forecast.





#### Factors affecting 2021 medical cost trend

## Deflator: Telehealth goes mainstream

While many questions remain as to what care will look like post-pandemic, most executives with health plans and employer coalitions interviewed by HRI agree that telehealth is here to stay. In 2021, HRI expects telehealth to put the brakes on medical cost trend as it replaces more costly in-person visits and lowers spending on downstream services and diagnostics.

Telehealth has grown slowly but steadily over the past decade. That changed in March as the federal government announced physical distancing guidelines and governors and mayors across the country asked, and in some places required, residents to stay at home to stop the spread of COVID-19.<sup>100</sup>

Health systems and physicians groups scrambled to move inperson visits to virtual as the pandemic hit the US (see Figure 10). A survey of physicians conducted by Merritt Hawkins in mid-April found that 48 percent are treating patients through telemedicine, up from 18 percent in 2018.<sup>101</sup> employers surveyed by PwC in 2019 set employee cost sharing lower for telemedicine visits than in-person visits.<sup>107</sup> Yet adoption by employees remained low: Only 15% of consumers with employer-based insurance surveyed by HRI in early April reported using a video telehealth visit before the COVID-19 pandemic.<sup>108</sup>

Still, as in-person visits have been canceled or delayed en masse, consumer adoption of telehealth appears to be shifting dramatically. HRI estimates that 9 million Americans with employer-sponsored insurance may have used telehealth for the first time during the COVID-19 pandemic, based on findings from its April consumer survey.<sup>109</sup>

Many commercial insurers and large self-insured employers have waived cost sharing on telehealth visits, and these policies also may be encouraging consumers to try it out. The CARES Act allows employers to temporarily waive cost sharing for telehealth on high-deductible health plans.<sup>110</sup> In an analysis of recent press releases issued by 25 national and regional health plans, HRI found that 21 temporarily waived cost sharing for all telehealth visits on their fully insured large group plans (see Figure 11).

Employers understand the benefits of telehealth. Ninety-five percent of employers surveyed by PwC in spring 2020 offered telemedicine through either their medical vendor or a carve-out vendor, up from 56% in 2016.<sup>102</sup> Sixty-four percent of

## Figure 10: Care went mostly virtual in March, and providers had to scale up quickly

Organization	Telehealth results
<b>Memorial Care</b> Fountain Valley, CA	Implemented videoconferencing platform for patients in March; seeing more than 1,000 patients per week.
<b>Teladoc</b> Purchase, NY	Recorded roughly 2 million visits in the first quarter, up 92% from the first quarter of 2019.
<b>Cleveland Clinic</b> Cleveland, OH	Outpatient visits conducted remotely grew from 2% of total visits in early March to 75% in mid-April.
<b>MDLive</b> Miramar, FL	Daily visits were up by about 50% week over week in March, reaching 20,000 visits per day.
Source: See endnotes 103-106.	

The federal government and some states have eased the transition to telehealth for providers financially. CMS is temporarily allowing providers to bill telehealth visits for Medicare beneficiaries at the same rate as an in-person visit.<sup>111</sup> Texas and Massachusetts issued temporary regulations requiring equal reimbursement between telehealth and in-person visits by commercial plans regulated by the state, including fully insured employer large group plans.<sup>112</sup> And some commercial payers are following suit: Aetna and Humana are reimbursing telehealth visits with in-network providers at the same rate as in-office visits.<sup>113</sup>

Looking ahead to 2021, executives with employer coalitions, healthcare coalitions and health plans told HRI that they see two opportunities for cost savings with telehealth. One is lower prices per visit compared with in-person visits. The second is savings from fewer diagnostics resulting from telehealth visits compared with in-person visits. In a 2017 analysis by Anthem comparing 4,600 telehealth visits with 55,000 in-person visits across multiple settings for the same conditions, telehealth visits resulted in fewer lab tests for pharyngitis, sinusitis, bronchitis and urinary tract infection relative to in-person visits to a primary care department, retail health clinic, urgent care center or emergency department.<sup>114</sup> Similarly, for bronchitis

#### and sinusitis, telehealth visits resulted in lower imaging rates



#### Figure 11: Most commercial insurers are temporarily waiving cost sharing on telehealth visits during the COVID-19 pandemic

Telehealth services: Coverage and cost sharing by health plan



is required—is crucial to understanding whether there are true cost savings compared to in-person visits," said Brian Renshaw, vice president and CFO of clinical solutions at Indianapolis-based Anthem, in an interview with HRI.

Some have expressed concerns that increased convenience will increase utilization and, in turn, spending. Even if telehealth increases utilization, many payers see the platform as an opportunity to get members the right care at the right time in the right place while also saving the member and the employer money. Many consumers are on board: 27% with employer-sponsored insurance said they would consider using telehealth for emergency situations, even if they have never used it before.<sup>146</sup> "Where medically appropriate, telehealth may help some patients avoid the ER," said Kassie Maroney, vice president of commercial markets actuarial at Health Care Service Corp., a health insurance company based in Chicago that operates Blue Cross Blue Shield plans in five states, in an interview with HRI. "You can pay for several telemedicine visits for the same cost as one trip to the ER."

### Implications

**Payers/employers:** With telehealth utilization likely to remain up over pre-pandemic levels, payers should review their telehealth contracts and determine whether contracting with

Covers all<br/>services and<br/>waives all costCovers some but no<br/>all services; waives<br/>cost sharing for<br/>covered services

Does not waive cost sharing for any services or is silent on cost sharing

Source: PwC Health Research Institute analysis of health plan press releases for 25 national and regional payers as of June 18, 2020. See endnotes 115-141.

relative to in-person visits.<sup>142</sup> Overall, the study estimated telehealth visits for the same conditions to be \$162 cheaper than a visit to a primary care provider and \$1,735 cheaper than a visit to an emergency department.<sup>143</sup>

"There is no going back on telehealth. And we have to figure out the proper reimbursement for it going forward," said Mary Grealy, president of the Healthcare Leadership Council, a coalition of payer, provider and pharmaceutical and life sciences executives based in Washington, DC, in an interview with HRI.

While many payers are reimbursing providers for telehealth visits at the same rate as in-person visits, this was not always the case. Before the COVID-19 pandemic, 42 states and the District of Columbia had laws addressing commercial payer telehealth reimbursement policies.<sup>144</sup> Of those, only five—Delaware, Georgia, Hawaii, Minnesota and New Mexico—required equal reimbursement for in-person and telehealth visits.<sup>145</sup>

Finding the right reimbursement rate for payers and providers is important and could be influenced by the downstream savings. "Understanding the episodic cost of telehealth visits—whether a prescription was written, an X-ray ordered, a blood draw ordered for labs, or an in-person follow-up visit a national telehealth provider, local providers or both best fits the needs of its members. Payers also should consider the creation of virtual provider networks—something that may appeal to large employers with geographically dispersed employees. Payers can also help employers increase utilization of telehealth. Doing so may help them reduce absenteeism caused by employees taking time off for in-person visits.

**Providers:** The pivot to telehealth caught many providers and telehealth providers off-guard and unprepared to scale to high volume. Providers should reevaluate telehealth solutions with the expectation that this channel for care delivery may be the new normal. Providers will need to redesign the patient experience for a post-pandemic world around a heavily virtual system that is able to address chronic conditions and more complicated patients. They will need to redeploy resources and workforce to virtual health.

**Pharmaceutical and life sciences companies:** In 2018, only 8% of R&D executives surveyed by HRI said their companies had conducted a clinical trial that included remote clinical data collection outside a medical facility.<sup>147</sup> Post-pandemic, companies should prepare for virtual clinical trials to become the norm. Virtual trials could lead to faster drug development, by allowing for faster collection of some data and more frequent gathering of information about patients.<sup>148</sup> Additionally, diagnostics companies may need to rethink how they connect with physicians and payers to ensure that appropriate tests get ordered, completed and reimbursed when patients are



Heart of the matter	Medical cost trend	Macrotrends	Inflators	Deflators	Conclusion	Appendix	Endnotes Acknowledgments About this research

#### Factors affecting 2021 medical cost trend

## Deflator: Networks narrow out of necessity

Hesitant to unload more costs on employees, employers are looking for ways to curb healthcare spending beyond traditional cost sharing. Employers increasingly are eyeing narrow network health plans, which limit the list of providers that employees or their families can see in-network, in exchange for lower premiums.<sup>149</sup> This shift could accelerate in 2021 as the economic fallout from the COVID-19 pandemic continues.

Studies of ACA marketplace plans, which have been faster to implement narrow networks, have found that limited choice creates cost savings. In a 2017 study on narrow network silvertier marketplace plan premiums in eight states, researchers from Harvard and Northwestern universities found that plans with narrow physician and hospital networks were 16% cheaper than those with broad physician and hospital networks. The researchers also found that narrowing just one type of network was associated with a 6% to 9% decrease in premiums.<sup>150</sup> network.<sup>151</sup> Employers with more than 5,000 employees were more likely to pursue the strategy: 28% reported that they offered these networks in 2020.<sup>152</sup>

In March, Walmart, which covers more than a million employees and their family members through its health plans, announced its intention to expand on its network strategies.<sup>153</sup> The company already has seen positive results with its national Centers of Excellence program, which allows employees and family members with Walmart health plans to have certain surgeries and treatments at designated facilities throughout the US at generally no cost to them.<sup>154</sup> Under a new program, Walmart said it would pilot "curated physician networks" for eight specialties in three local markets in Arkansas, Florida and Texas starting in 2020.<sup>155</sup>

Some employees are open to the idea of the narrow network. Thirty-five percent of individuals with employer-sponsored insurance surveyed by HRI said that, to prevent an increase in premiums next year, they would choose a health plan with a more limited network of doctors and hospitals than their current plan, assuming the deductible and out-of-pocket costs remained unchanged (see Figure 12). But employers may still want to offer a narrow network plan as an option rather than a full replacement. Sixty-five percent of individuals with

Amid the recession and with a focus on liquidity and the bottom line, employers likely will be looking for ways to save money while protecting employees' health. Narrow networks may help them do both. According to PwC's 2020 Touchstone survey of employers, 15% of respondents offered a narrow

## Figure 12: Thirty-five percent of individuals with employer-sponsored health insurance would choose a narrow network plan next year to avoid higher premiums

Which of the following would you be most likely to select next year if it meant you could prevent an increase in your monthly premiums?



A health plan with a **more limited network** of doctors and hospitals than my current plan but the **same deductible and/or same out-of-pocket expenses** as my current plan



A health plan with a higher deductible than my current plan but the same network of doctors and hospitals as my current plan



My current health plan with **higher premiums** 





employer-sponsored insurance surveyed by HRI said they would take an increase in their premiums or deductible and out-of-pocket costs over limiting their network of doctors and hospitals.<sup>156</sup>

As the pandemic eventually subsides and business returns closer to normal, a potential surge in deal activity could occur as struggling providers consider being acquired. HRI previously found that provider consolidation and physician employment tend to drive prices higher, at least in the short term.<sup>157</sup> Deals completed in late 2020 and in 2021 could mean higher prices starting in 2022. Narrow networks could be a defensive strategy for payers and employers to fend off higher prices from more highly consolidated providers. Creating a narrow network and taking on more risk for patient health outcomes in exchange for predictable cash flows could also be an offensive strategy for providers as they look to recover revenue lost from care deferred during the first wave of the pandemic and prepare for a potential second wave.

## Implications

**Payers/employers:** Fallout from the COVID-19 pandemic could make 2021 the year of the narrow network. Plans that have embraced narrow networks for their individual exchange businesses may be well-positioned to roll out those networks on a broader scale for commercial large group business. Employers will need analytic capabilities to understand costs to inform strategy and a clear communication strategy to show value to employees, who may be skeptical of their value.

**Providers:** Providers positioning for inclusion in narrow networks will need to demonstrate quality while managing cost. They should pursue deals that help them build primary care networks that can address patients' whole health needs, including addressing the social factors affecting their health, and triage patients to the lowest cost setting appropriate for their health issue.

Pharmaceutical and life sciences companies: As narrow provider networks become more popular, providers may be shouldering more risk on treatment and patient outcomes. This could affect prescribing patterns and, in turn, how pharmaceutical companies promote their products to providers. Pharmaceutical companies should find the most effective ways to demonstrate their drugs' value and look



for opportunities to collaborate with providers on population health management.<sup>158</sup>





## Conclusion

Many factors that were driving or dampening spending before COVID-19 will continue, either accelerated or decelerated by COVID-19



Mental health utilization was expected to rise before the pandemic and is expected to go up As the unemployment rate rises, the number of individuals with employer-sponsored insurance will decrease while

even faster as a result of the pandemic.

**Specialty drug spending** is increasing as new drugs and new indications for existing drugs get approved. After postponing some review meetings in March and April, the FDA was caught up on approvals as of mid-April. While additional delays could occur as a result of the pandemic, they are unlikely to tamp down spending in a meaningful way.

**Telehealth** was slowly gaining traction before COVID-19. Overnight, the pandemic transformed it into the preferred way to deliver and receive care when possible—a preference that should have long-lasting impacts.

More payers and providers may join forces to create narrow networks. As more **narrow network** options become available, more employers likely will adopt them. the number of people who are uninsured or on Medicaid will increase—putting the brakes on revenue across the healthcare industry and prompting payers, providers, and pharmaceutical and life sciences companies to rethink their revenue mix and cost structure.

How exactly COVID-19 will affect employer healthcare spending in 2020 and 2021 remains unknown. Whether the changes in consumer health behavior resulting from the pandemic, including decreased use of the emergency room and increased use of telehealth, are here to stay and what impact they will have on employer healthcare spending also are unknown.<sup>159</sup> But healthcare will look different after the pandemic.





# Appendix: Employer per capita spending scenarios

In interviews, health plan actuaries told HRI that before the COVID-19 pandemic, health plans expected 2021 medical cost trend to be in line with the expected 2020 medical cost trend. In light of the pandemic, HRI was told that healthcare spending in 2020 likely will be lower than the expected trend of 6% and that spending likely will rise in 2021. But exactly how low spending will wind up in 2020 and then rise in 2021 will be determined by many variables. To illustrate this, HRI developed three employer per capita spending scenarios that align with the three medical cost trend scenarios (see Figure 13). A high scenario assumes a full but slower recovery to expected (baseline) spending in the absence of COVID-19 by January followed by an increase in spending over expected spending in 2021 due to the return of care previously delayed, resulting in a 10% medical cost trend in 2021. A medium spending scenario assumes a quick and full recovery to expected spending in 2020, resulting in a 6% medical cost trend in 2021. And a low spending scenario assumes a second wave of COVID-19 that continues to dampen spending below expectations in 2020 and 2021, resulting in a 4% medical cost trend in 2021. The baseline spending in the absence of COVID-19 (in red) is used to contrast against the impact of the COVID-19 pandemic (in black) under three different scenarios (see charts in Figure 13 on the following pages). The pandemic in all cases is modeled in the same way at first with a precipitous fall in spending on healthcare starting in March 2020 as the savings from care deferred by individuals with employer-sponsored insurance outweighs the cost of treating COVID-19 for the same population. In each case, the COVID-19 impact on spending reaches its low point relative to expected spending in April, with spending at 50% of the previously expected baseline. Each scenario illustrates the impact of a possible course for the pandemic. These scenarios are not intended to be exhaustive of all potential spending scenarios.

## Assumptions used in all three spending scenarios:

- The charts presented show the trend line for medical spending per individual in employer-sponsored health insurance plans.
- Baseline spending is indexed to 100 in January 2019, growing at a 6% annual growth rate for 2019-23, compounded monthly.
  - For ease of comparison, the baseline spending is shown to grow at a constant percentage each month, averaging 6% growth for the year.
  - The baseline spending from January 2019 to January 2023 (shown as a red line in each chart) is meant to be only a rough guide of expectations for actuaries and economists before the pandemic and does not represent specific spending amounts or the growth rate for any particular insurer or employer.
- Under each scenario, under the pandemic, spending begins to fall below the baseline in March 2020: 75% of baseline spending assumed for March (shown as a black line in each chart).
- Spending bottoms out in April 2020: 50% of baseline spending assumed for April.
- Spending bounces back fairly quickly in May 2020: 70% of baseline spending assumed for May.
- Spending recovery after May 2020 varies among the scenarios. The spending recovery assumptions for each scenario are noted next to each one below.
- All three scenarios assume that eventually spending returns to the baseline growth rate. HRI acknowledges that spending may instead settle into a new growth rate at some point in the future that could be more or less than the baseline growth rate assumed in these scenarios of 6% annually.





Figure 13: Employer per capita spending will recover, but when and how much are still unknown (1 of 3)

**High scenario** 

## One wave of COVID-19 in spring 2020, recovery to the baseline by 2021 and spending above the baseline in 2021 as care deferred in 2020 is delivered



#### Assumptions

- One wave of COVID-19: Spending dips in March 2020, bottoms out in April and bounces back in May.
- Spending recovery continues at a slower rate from June to January 2021.
- Spending fully recovers to the baseline in January.
- Spending starts to rise above the baseline in February, peaking at 115% of expected spending in March 2021.
- Spending begins to come back down in April 2021, returning to the baseline in August 2021.

#### Key takeaways

- 82% of expected spending would occur in 2020.
- 104% of expected spending would occur in 2021.
- Medical cost trend for 2021 would rise to 10%.





Figure 13: Employer per capita spending will recover, but when and how much are still unknown (2 of 3)

Medium scenario

# One wave of COVID-19 in spring 2020, recovery to the baseline in 2020



	spending before COVID-19				
0 Jan. 2019		Jan. 2020	Jan. 2021	Jan. 2022	Jan. 2023

#### Assumptions

- One wave of COVID-19: Spending dips in March 2020, bottoms out in April and bounces back in May.
- Spending recovery continues at a slower rate from June to October.
- Spending fully recovers to the baseline in October.

#### Key takeaways

- 86% of expected spending would occur in 2020.
- 100% of expected spending would occur in 2021.
- Medical cost trend for 2021 would go back to the baseline of 6%.





Figure 13: Employer per capita spending will recover, but when and how much are still unknown (3 of 3)

Low scenario

# One wave of COVID-19 in spring 2020 and a second wave in late 2020/early 2021, with a full recovery to the baseline in 2021



Source: PwC Health Research Institute modeling of potential COVID-19 employer per capita healthcare spending scenarios Note: The scenarios shown above for healthcare spending were modeled on the approach taken by Louise Sheiner and Kadija Yilla of the Hutchins Center on Fiscal & Monetary Policy at the Brookings Institution to model the impacts of COVID-19 and post-pandemic recovery on GDP.<sup>160</sup>

#### **Assumptions**

- First wave of COVID-19: Spending dips in March 2020, bottoms out in April and bounces back in May.
- Spending recovery continues at a slower rate from June to October.
- Second wave of COVID-19 hits before spending fully recovers.
- Second wave: Spending dips in November and continues to fall, but at a slower rate than during the first wave, December to February 2021.
- Spending bottoms out in the second wave in February at 90% of baseline spending.
- Spending recovery begins in March 2021 with complete recovery to the baseline by May 2021

#### Key takeaways

- 83% of expected spending would occur in 2020.
- 98% of expected spending would occur in 2021.
- Medical cost trend for 2021 would fall to 4%.

recovery to the baseline by May 2021.



## Endnotes

- 1 PwC Health Research Institute, "Addressing the Liquidity Crisis While Caring for the Nation's Pandemic Patients," May 2020, <u>https://www.pwc.com/us/en/</u> <u>industries/health-industries/library/covid-hospital-liquidity-crisis.html</u>; and the Commonwealth Fund, "The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges," May 19, 2020, <u>https://www.commonwealthfund.</u> org/publications/2020/apr/impact-covid-19-outpatient-visits.
- PwC Health Research Institute, "COVID-19: Clinical Trial Delays Likely," March 20, 2020, https://www.pwc.com/us/en/industries/health-industries/library/ clinial-trials-delayed-3-20-20.html; PwC Health Research Institute, "COVID-19: Providers, Clinical Trial Investigators Gain Clarity around Remote Monitoring," March 27, 2020, https://www.pwc.com/us/en/industries/health-industries/ library/remote-monitoring-devices-sarscov2.html; PwC Health Research Institute, "Plotting a Path for Cancer Clinical Trials amid COVID-19," April 30, 2020, https://www.pwc.com/us/en/industries/health-industries/library/ oncologists-virtual-visits.html; and PwC Health Research Institute, "COVID-19 Q&A: Impacts of the Pandemic on R&D," April 23, 2020, https://www.pwc.com/ us/en/industries/health-industries/library/pandemic-impacts-on-r-and-d.html.
- 3 Bureau of Economic Analysis, "Gross Domestic Product, 1st Quarter 2020 (Second Estimate)," May 28, 2020, <u>https://www.bea.gov/news/2020/gross-domestic-product-1st-quarter-2020-second-estimate-corporate-profits-1st-quarter</u>; and Congressional Budget Office, "CBO's Current Projections of Output, Employment, and Interest Rates and a Preliminary Look at Federal Deficits for 2020 and 2021," April 24, 2020, <u>https://www.cbo.gov/publication/56335</u>.
- 4 US Census Bureau, "Time Series Data: Monthly Retail Sales & Season Factors 1992-Present (Adjusted)," accessed June 17, 2020, <u>https://www.census.gov/</u> <u>retail/marts/www/timeseries.html</u>. Note: "Retail and Food Services, total" was selected from this landing page.

- 11 PwC Health Research Institute, "Payers, Employers, Providers, Consumers and States Question the Cost of COVID-19 Testing," June 11, 2020, <u>https://www.pwc.com/us/en/industries/health-industries/library/covid-testing-costs.html</u>.
- 12 Coronavirus Aid, Relief and Economic Security Act, HR 748, 116th Congress, signed into law March 27, 2020, <u>https://www.congress.gov/bill/116th-congress/house-bill/748/text</u>.
- 13 UnitedHealthcare, "UnitedHealth Group Provides Over \$1.5 Billion of Additional Support in Response to COVID-19 Challenges," May 7, 2020, <u>https://</u> <u>newsroom.uhc.com/news-releases/customer-assistance-COVID-19.html</u>; and Premera Blue Cross, "Premera Blue Cross Response to COVID-19," May 26, 2020, https://www.premera.com/wa/employer/coronavirus-faq/.
- 14 Ambulatory Surgery Center Association, "State Guidance on Elective Surgeries," April 20, 2020, <u>https://www.ascassociation.org/asca/</u> resourcecenter/latestnewsresourcecenter/covid-19/covid-19-state.
- 15 PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020.
- 16 Ateev Mehrotra et al., "The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges," the Commonwealth Fund, May 19, 2020, <u>https://www.commonwealthfund.org/publications/2020/apr/impact-covid-19-</u> outpatient-visits.
- 17 Bureau of Labor Statistics, "Databases, Tables & Calculators by Subject: Employment, Hours and Earnings from the Current Employment Statistics Survey (National)," accessed May 22, 2020, <u>https://www.bls.gov/webapps/</u> <u>legacy/cesbtab1.htm</u>. Note: Seasonally adjusted data for ambulatory healthcare services were pulled from the website referenced in this footnote on May 22, 2020.
- 5 Bureau of Labor Statistics, "Databases, Tables & Calculators by Subject: Labor Force Statistics from the Current Population Survey," accessed May 18, 2020, https://data.bls.gov/timeseries/LNS14000000. Note: In "The Employment Situation – May 2020," the Bureau of Labor Statistics acknowledged that it made a classification error. Without the error, the unemployment rates in April and May would have been five and three percentage points, respectively, higher than what the BLS reported. HRI is reporting the official, recorded unemployment numbers in the report, acknowledging that actual unemployment numbers for both April and May likely were higher than officially recorded. Bureau of Labor Statistics, "The Employment Situation - May 2020," June 5, 2020, https://www.bls.gov/news.release/pdf/empsit.pdf; and Bureau of Labor Statistics, "Frequently Asked Questions: The Impact of the Coronavirus (COVID-19) Pandemic on the Employment Situation for April 2020," May 8, 2020, https://www.bls.gov/cps/employment-situation-covid19-faq-april-2020. pdf.
- 6 PwC Health Research Institute analysis of Congressional Budget Office, "Interim Economic Projections for 2020 and 2021," May 2020, https:// www.cbo.gov/publication/56368; Bureau of Labor Statistics, "Databases, Tables & Calculators by Subject: Labor Force Statistics from the Current Population Survey," accessed May 22, 2020, https://data.bls.gov/timeseries/ LNS14000000; Bureau of Labor Statistics, "The Employment Situation – April 2020," May 8, 2020, https://www.bls.gov/news.release/pdf/empsit.pdf; and NHE Projections 2019-2028 – Tables, Table 17: "Health Insurance Enrollment and Enrollment Growth Rates, Calendar Years, 2012-2028," CMS, https:// www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.
- 7 PwC COVID-19 CFO Pulse Survey of 288 US CFOs, May 4-6, 2020, <u>https://</u> www.pwc.com/us/en/library/covid-19/pwc-covid-19-cfo-pulse-survey.html.
- 8 PwC Health Research Institute, Medical Cost Trend: Behind the Numbers 2020, June 2019.
- 9 PwC Health Research Institute analysis of OptumRx first quarter 2020 brand pipeline forecast. Optum, "RxOutlook: 1st Quarter 2020," <u>https://professionals.</u> optumrx.com/publications/library/rxoutlook-q1-2020.html.
- 10 PwC Health and Well-being Touchstone surveys, 2018-20.

- 18 Nick Paul Taylor, "J&J Blames Pandemic for Medical Device Sales Slump," Medtech Dive, April 14, 2020, <u>https://www.medtechdive.com/news/jj-blames-coronavirus-pandemic-for-medical-device-sales-slump/575988/</u>; and Conor Hale, "Medtronic Details COVID-19 Impacts, with 60% Drop in U.S. Sales," FierceBiotech, April 23, 2020, <u>https://www.fiercebiotech.com/medtech/</u> medtronic-details-covid-19-impacts-60-drop-u-s-sales.
- 19 PwC Health Research Institute consumer survey, April 28–May 8, 2020.
- 20 PwC Health Research Institute analysis of Medical Expenditure Panel Survey data for individuals with employer-based insurance, 2015–17.
- 21 PwC Health Research Institute, "Addressing the Liquidity Crisis While Caring for the Nation's Pandemic Patients," May 2020, <u>https://www.pwc.com/us/en/</u> industries/health-industries/library/covid-hospital-liquidity-crisis.html.
- 22 PwC Health Research Institute consumer survey, April 28–May 8, 2020.
- 23 Ibid.
- 24 PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020.
- 25 Frail elderly consumers are over age 75, living at home, facing health issues related to falls or dementia and suffering generally poor health. For more details on the seven PwC consumer groups, including the six listed in Figure 3, see: PwC Health Research Institute, Primary Care in the New Health Economy: Time for a Makeover, November 2015, https://www.pwc.com/us/futureofprimarycare.
- 26 American Hospital Association, "Hospitals and Health Systems Face Unprecedented Financial Pressures Due to COVID-19," May 2020, <u>https://www.aha.org/guidesreports/2020-05-05-hospitals-and-health-systems-face-unprecedented-financial-pressures-due.</u>
- 27 Ibid.
- 28 Loyola University Medical Center, "Loyola Medicine to Resume Medical Services and Elective Surgeries," May 6, 2020, <u>https://www.loyolamedicine.org/</u> <u>news/resume-services</u>.
- 29 Bureau of Economic Analysis, "Gross Domestic Product, 1st Quarter 2020 (Second Estimate)," May 28, 2020, <u>https://www.bea.gov/news/2020/gross-domestic-product-1st-quarter-2020-second-estimate-corporate-profits-1st-quarter.</u>
- 30 US Bureau of Labor Statistics, "The Employment Situation April 2020," May
  8, 2020, <u>https://www.bls.gov/news.release/archives/empsit\_05082020.htm</u>; and





US Bureau of Labor Statistics, "Databases, Tables & Calculators by Subject: Labor Force Statistics from the Current Population Survey," accessed May 18, 2020, https://data.bls.gov/timeseries/LNS1400000.

- US Census Bureau, "Time Series Data: Monthly Retail Sales & Season Factors 31 1992-Present (Adjusted)," accessed June 17, 2020, https://www.census.gov/ retail/marts/www/timeseries.html, note: "Retail and Food Services, total" was selected from this landing page; and Bureau of Labor Statistics, "Databases, Tables & Calculators by Subject: Labor Force Statistics from the Current Population Survey," accessed May 18, 2020, https://data.bls.gov/timeseries/ LNS14000000.
- Senate Banking, Housing and Urban Affairs Committee, Testimony of Jerome 32 Powell, Federal Reserve chairman, on June 16, 2020, https://www.c-span.org/ video/?473039-1/federal-reserve-chair-jerome-powell-testifies-economy. Note: Mr. Powell's testimony begins at 13:30 of the video.
- Louise Sheiner and Kadija Yilla, "The ABCs of the Post-COVID Economic 33 Recovery," Hutchins Center on Fiscal & Monetary Policy, Brookings Institution, May 4, 2020, https://www.brookings.edu/blog/up-front/2020/05/04/theabcs-of-the-post-covid-economic-recovery/?utm\_campaign=Brookings%20 Brief&utm\_source=hs\_email&utm\_medium=email&utm\_content=87402482.
- PwC COVID-19 CFO Pulse Survey of 288 US CFOs, May 4–6, 2020, https:// 34 www.pwc.com/us/en/library/covid-19/pwc-covid-19-cfo-pulse-survey.html.
- PwC COVID-19 US employee Pulse Survey, May 4–8, 2020; and PwC, "Reboot: 35 Getting Back to the Workplace," May 2020, https://www.pwc.com/us/en/ library/covid-19/pdf/reboot-getting-back-to-workplace.pdf.
- PwC Health Research Institute analysis of Congressional Budget Office, 36 "Interim Economic Projections for 2020 and 2021," May 2020, https:// www.cbo.gov/publication/56368; Bureau of Labor Statistics, "Databases, Tables & Calculators by Subject: Labor Force Statistics from the Current Population Survey," accessed May 22, 2020, https://data.bls.gov/timeseries/ LNS14000000; Bureau of Labor Statistics, "The Employment Situation - April 2020," May 8, 2020, https://www.bls.gov/news.release/archives/ empsit\_05082020.pdf; and CMS NHE Tables, Table 22: "Health Insurance Enrollment and Uninsured; Number of Enrollees and Annual Percent Change, Calendar Years 1987–2018," https://www.cms.gov/Research-Statistics-Dataand-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/ NationalHealthAccountsHistorical. CMS NHE Tables, Table 22: "Health Insurance Enrollment and Uninsured; 37 Number of Enrollees and Annual Percent Change, Calendar Years 1987-2018," https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trendsand-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical; and Bureau of Labor Statistics Current Population Survey, "Employment Status of the Civilian Noninstitutional Population, 1940s to Date," https://www.bls. gov/cps/tables.htm#empstat. Note: Given the lagged relationship between increases in unemployment and decreases in the number of individuals with employer-sponsored insurance seen from 2007 to 2010, HRI estimates the loss of employer-sponsored coverage for 18 million people resulting from the pandemic-related economic downturn to occur between 2020 and 2022.

- PwC Health Research Institute, Medical Cost Trend: Behind the Numbers 2020, 45 June 2019.
- Health Care Cost Institute, 2018 Health Care Cost and Utilization Report, 46 February 2020, https://healthcostinstitute.org/images/pdfs/HCCI\_2018\_Health\_ Care\_Cost\_and\_Utilization\_Report.pdf.
- Kaiser Family Foundation, "Adults Reporting Mental Illness in the Past Year: 47 Timeframe 2017-2018," accessed on May 13, 2020, https://www.kff.org/other/ state-indicator/adults-reporting-any-mental-illness-in-the-past-year/?currentTi meframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:% 22asc%22%7D.
- Kaiser Family Foundation, "KFF Health Tracking Poll Early April 2020: The 48 Impact of Coronavirus on Life in America," April 2, 2020, https://www.kff.org/ coronavirus-covid-19/report/kff-health-tracking-poll-early-april-2020/.
- Kaiser Family Foundation, "KFF health Tracking Poll Late April 2020: 49 Coronavirus, Social Distancing, and Contact Tracing," April 24, 2020, https:// www.kff.org/coronavirus-covid-19/issue-brief/kff-health-tracking-poll-lateapril-2020/; and PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020.
- PwC Health Research Institute consumer survey, April 28–May 8, 2020. 50
- 51 Ibid.
- PwC 2020 Health and Well-being Touchstone Survey. 52
- PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020. 53
- Michael L. Barnett, Kristin N. Ray and Jeff Souza, "Trends in Telemedicine 54 Use in a Large Commercially Insured Population, 2005-2017," JAMA 320, no. 20 (Nov. 27, 2018): 2147-49, https://jamanetwork.com/journals/jama/ fullarticle/2716547.
- Excellus BlueCross BlueShield, "Telemedicine Soars in Wake 55 of Pandemic," April 13, 2020, https://news.excellusbcbs.com/ news-room/releases/-/asset\_publisher/26WPXjKp2c3P/content/ excellus-bluecross-blueshield-waives-covid-19-cost-sharing?\_

- John Holahan and Vicki Chen, "Changes in Health Insurance Coverage 38 in the Great Recession, 2007-2010," Kaiser Commission on Medicaid and the Uninsured, December 2011, https://www.kff.org/wp-content/ uploads/2013/01/8264.pdf.
- Rachel Garfield, Gary Claxton, Anthony Damico and Larry Levitt, "Eligibility for 39 ACA Health Coverage following Job Loss," Kaiser Family Foundation, May 13, 2020, https://www.kff.org/coronavirus-covid-19/issue-brief/eligibility-for-acahealth-coverage-following-job-loss/.
- US Department of Labor, "Continuation of Health Coverage (COBRA)," 40 accessed on May 21, 2020, https://www.dol.gov/general/topic/health-plans/ cobra.
- PwC Health Research Institute, Medical Cost Trend: Behind the Numbers 2019, 41 June 2018.
- Centers for Medicare & Medicaid Services, "Projections of National Health 42 Expenditures and Health Insurance Enrollment: Methodology and Model Specification," March 24, 2020, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/ Downloads/ProjectionsMethodology.pdf.

- com\_liferay\_asset\_publisher\_web\_portlet\_AssetPublisherPortlet\_ INSTANCE\_26WPXjKp2c3P\_redirect=https%3A%2F%2Fnews.excellusbcbs. com%2Fnews-room%2Freleases%3Fp\_p\_id%3Dcom\_liferay\_asset\_publisher\_ web\_portlet\_AssetPublisherPortlet\_INSTANCE\_26WPXjKp2c3P%26p\_p\_ lifecycle%3D0%26p\_p\_state%3Dnormal%26p\_p\_mode%3Dview%26\_ com\_liferay\_asset\_publisher\_web\_portlet\_AssetPublisherPortlet\_ INSTANCE\_26WPXjKp2c3P\_cur%3D0%26p\_r\_p\_resetCur%3Dfalse%26\_ com\_liferay\_asset\_publisher\_web\_portlet\_AssetPublisherPortlet\_ INSTANCE\_26WPXjKp2c3P\_assetEntryId%3D246128166.
- PwC Health Research Institute, Medical Cost Trend: Behind the Numbers 2020, 56 June 2019.
- PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020. 57
- PwC Health Research Institute interview with Chris Wasden, head of Happify 58 Digital Therapeutics and board member of the Digital Therapeutic Alliance, on April 22, 2020.
- Ibid. 59
- Ibid. 60
- PwC Health Research Institute interview with Dan Rachfalski, senior vice 61 president and chief actuary at Harvard Pilgrim Health Care, and Steven Rolfsmeier, actuarial director at Harvard Pilgrim Health Care, on April 17, 2020.
- Coronavirus Aid, Relief and Economic Security Act, HR 748, 116th Congress, 62 signed into law March 27, 2020, https://www.congress.gov/bill/116th-congress/ house-bill/748/text.
- PwC Health Research Institute, ROI for Primary Care: Building the Healthcare 63 Dream Team, October 2016, https://www.pwc.com/us/primarycareworkforce.
- Sanofi, "Sanofi and Happify Health Solidify Collaboration around Prescription 64 DTx Designed to Address Mental Health in People with MS," September 17, 2019, https://www.sanofi.com/en/media-room/articles/2019/happifycollaboration.
- PwC Health Research Institute, Creating a Stable Drug Pricing Strategy in an 65 Unstable Global Market, May 2019, https://www.pwc.com/us/en/industries/ health-industries/health-research-institute/creating-a-stable-drug-pricingstrategy.html.

43 Ibid.

66 Ibid.

lbid. 44

#### PwC 2020 Health and Well-being Touchstone Survey. 67



- 68 PwC Health Research Institute analysis of employer drug spending data from Medical Expenditure Panel Survey, 2010–17. HRI classified specialty drugs as any prescription drugs with monthly payments over \$600 in the Medical Expenditure Panel Survey data. In its definition of retail drug spending, HRI included drugs furnished to participants on an outpatient basis, including retail pharmacies, mail-order pharmacies and pharmacies within outpatient facilities. This definition does not include drugs administered by a clinician and billed under the medical benefit, such as infused oncology drugs. Note: HRI updated its classification of retail drug spending slightly from the definition used in the Medical Cost Trend: Behind the Numbers 2020 report.
- 69 PwC Health Research Institute analysis of CMS national health expenditure data for private health insurance, historical data 2012-18 and projected data 2019–28. Sean P. Keehan et al., "National Health Expenditure Projections, 2019–28: Expected Rebound in Prices Drives Rising Spending Growth," Health Affairs 39, no. 4 (April 2020): 704–14, <u>https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2020.00094</u>. Note: Private health insurance spending is used by CMS to measure health spending growth for the private health insurance market, about 90% of which consists of employer health spending.
- 70 Health Care Cost Institute, 2018 Health Care Cost and Utilization Report, February 2020, <u>https://healthcostinstitute.org/images/pdfs/HCCI\_2018\_Health\_</u> <u>Care\_Cost\_and\_Utilization\_Report.pdf</u>.
- 71 Ibid.
- 72 PwC Health Research Institute analysis of OptumRx first quarter 2020 brand pipeline forecast. Optum, "RxOutlook: 1st Quarter 2020," <u>https://professionals.</u> <u>optumrx.com/publications/library/rxoutlook-q1-2020.html</u>.
- 73 Ibid.
- 74 PwC Health Research Institute, Beyond the Hype: Gene Therapies Require Advanced Capabilities to Succeed After Approval, September 2019, <u>https://www.pwc.com/us/genetherapies</u>; and PwC Health Research Institute analysis of GlobalData Drugs Database data on May 16, 2020.
- 75 PwC Health Research Institute, "COVID-19: Pharma and Life Sciences Face Potential Further Delays as FDA Postpones Review Meetings," April 10, 2020, https://www.pwc.com/us/en/industries/health-industries/library/fda-postponesreviews-coronavirus.html.

- 82 Novartis, "2020 Q1 Results Presentation & Transcript," Vasant Narasimhan, CEO of Novartis, April 28, 2020, accessed June 3, 2020, <u>https://www.novartis.</u> <u>com/investors/financial-data/quarterly-results/2020-q1-transcript#ui-id-1=2</u>. Note: Mr. Narasimhan's statement on the number of patients being treated quarterly in the US with Zolgensma begins at 58:00 of the call.
- 83 US Centers for Disease Control and Prevention, "Community Counts HTC Population Profile – Patient Characteristics," accessed May 26, 2020, <u>https://</u> <u>communitycountsdataviz.cdc.gov/blooddisorders/#!/</u>. Note: HRI filtered down for all patients diagnosed with hemophilia A. As of May 2, 2020, 20,482 patients were enrolled in the HTC (Hemophilia Treatment Center) population profile. US Centers for Disease Control and Prevention, "Data & Statistics on Hemophilia," May 6, 2020, <u>https://www.cdc.gov/ncbddd/hemophilia/data.html</u>.
- 84 US Centers for Disease Control and Prevention, "Data & Statistics on Hemophilia," May 6, 2020, <u>https://www.cdc.gov/ncbddd/hemophilia/data.html</u>.
- 85 US Census Bureau, "Monthly Population Estimates for the United States: April 1, 2010 to December 1, 2020," data from December 30, 2019, <u>https://www.</u> <u>census.gov/data/datasets/time-series/demo/popest/2010s-national-total.</u> <u>html#par\_textimage\_401631162</u>.
- 86 US Centers for Disease Control and Prevention, "Community Counts HTC Population Profile – Patient Characteristics," accessed May 26, 2020, <u>https://</u> <u>communitycountsdataviz.cdc.gov/blooddisorders/#!/</u>. Note: HRI filtered down for all patients diagnosed with hemophilia A. As of May 2, 2020, 20,482 patients were enrolled in the HTC (Hemophilia Treatment Center) population profile.
- 87 Hal Foster, "Valrox, Potential Hemophilia A Gene Therapy, May Cost Up to \$3 Million, BioMarin Says," Hemophilia News Today, January 20, 2020, <u>https://</u> <u>hemophilianewstoday.com/2020/01/20/biomarin-weighing-2-million-to-3-</u> <u>million-price-for-valrox-hemophilia-a-gene-therapy/</u>.
- 88 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-innovativezolgensma-gene-therapy-access-programs-us-payers-and-families.
- 76 US Food and Drug Administration, "Coronavirus (COVID-19) Update: FDA Continues User-Fee Related Reviews through COVID-19," April 16, 2020, <u>https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-continues-user-fee-related-reviews-through-covid-19</u>.
- 77 US Food And Drug Administration, "Effects of the COVID-19 Public Health Emergency on Formal Meetings and User Fee Applications – Questions and Answers," May 2020, <u>https://www.fda.gov/regulatory-information/searchfda-guidance-documents/effects-covid-19-public-health-emergency-formalmeetings-and-user-fee-applications-questions-and.</u>
- 78 PwC Health Research Institute analysis of OptumRx first quarter 2020 brand pipeline forecast. Optum, "RxOutlook: 1st Quarter 2020," https:// professionals.optumrx.com/publications/library/rxoutlook-q1-2020.html; and Biomarin, "Biomarin Pharmaceutical Inc (BMRN) Q1 2020 Earnings Call Transcript," Jeff Ajer, executive vice president and chief commercial officer, April 29, 2020, accessed June 15, 2020, https://www.fool.com/earnings/calltranscripts/2020/04/30/biomarin-pharmaceutical-inc-bmrn-q1-2020-earnings. aspx. Note: The earnings call was transcribed by The Motley Fool, as the official earnings call has been archived by the company.
- 79 Biomarin, "Valoctocogene Roxaparvovec (BMN 270) for Hemophilia A," accessed May 16, 2020, https://www.biomarin.com/products/pipeline/bmn-270/.
- 80 Ibid.; and US Centers for Disease Control and Prevention, "Treatment of Hemophilia," January 13, 2020, <u>https://www.cdc.gov/ncbddd/hemophilia/</u> <u>treatment.html</u>.
- 81 Jared S. Hopkins, "BioMarin Explores Pricing Experimental Gene Therapy at \$2 Million to \$3 Million," Wall Street Journal, January 16, 2020, <u>https://www.wsj.com/articles/biomarin-explores-pricing-experimental-gene-therapy-at-2-million-to-3-million-11579190318</u>; and Novartis, "AveXis Announces Innovative Zolgensma® Gene Therapy Access Programs for US Payers and Families," May 24, 2019, <u>https://www.novartis.com/news/media-releases/avexis-announces-innovative-zolgensma-gene-therapy-access-programs-us-payers-and-families</u>.

- 89 Angus Liu, "JPM: Watch out, Roche. BioMarin's Gene Therapy Might Bleed Off the Hemophilia A Market," FiercePharma, Jan. 14, 2020, <u>https://www.</u> <u>fiercepharma.com/marketing/watch-out-roche-biomarin-s-gene-therapy-might-bleed-out-hemophilia-a-market</u>.
- 90 Novartis, "2020 Q1 Results Presentation & Transcript," Vasant Narasimhan, CEO of Novartis, April 28, 2020, accessed June 3, 2020, <u>https://www.novartis. com/investors/financial-data/quarterly-results/2020-q1-transcript#ui-id-1=2</u>. Note: Mr. Narasimhan's statement on the number of patients being treated quarterly in the US with Zolgensma begins at 58:00 of the call.
- Zolgensma launched in the US in 2019, and Roctavian is expected to receive 91 FDA approval in the second half of 2020. Zolgensma cost per American per year is assumed to remain consistent, based on 400 patients being treated each year at an average cost of \$2.125 million. Roctavian scenarios are based on the following assumptions: The total number of individuals who can be treated in one year is limited by BioMarin's production capacity of 10,000 treatments annually (as reported by Chairman and CEO Jean-Jacques Bienaime at the J.P. Morgan Healthcare Conference in January 2020; see Angus Liu, "JPM: Watch out, Roche. BioMarin's Gene Therapy Might Bleed Off the Hemophilia A Market," FiercePharma, January 14, 2020, https://www. fiercepharma.com/marketing/watch-out-roche-biomarin-s-gene-therapy-mightbleed-out-hemophilia-a-market); average one-time treatment cost would be \$2.5 million (based on a likely range of \$2 million to \$3 million, according to Mr. Bienaime, as reported by FiercePharma); patients eligible for treatment would be at the current level of 20,000 and an assumed 400 additional patients born each year with hemophilia A. The high analysis assumes all 20,000 individuals eligible for treatment currently are treated in the first 2.5 years after FDA approval. The medium scenario assumes all 20,000 eligible individuals are treated in the first 5 years after approval. The high scenario assumes all 20,000 eligible individuals are treated in the first 10 years after approval. In all cases, it is assumed that after the 20,000 currently eligible patients are treated, 400 individuals annually—the number born each year with hemophilia A—will be treated.
- 92 PwC Health Research Institute analysis of Drugs@FDA data as of May 6, 2020.
- 93 Ibid.





- 94 EvaluatePharma, World Preview 2019, Outlook to 2024, June 2019, <u>https://www.evaluate.com/thought-leadership/pharma/evaluatepharma-world-preview-2019-outlook-2024</u>.
- 95 Express Scripts, "Embarc Benefit Protection<sup>SM</sup> Affordability and Access That Can Literally Save Lives," accessed May 16, 2020, <u>https://www.express-</u> <u>scripts.com/corporate/embarc-benefit-protection</u>.
- 96 PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020.
- 97 PwC Health Research Institute, Beyond the Hype: Gene Therapies Require Advanced Capabilities to Succeed After Approval, September 2019, <u>https://www.pwc.com/us/genetherapies</u>.
- 98 PwC Health Research Institute, Creating a Stable Drug Pricing Strategy in an Unstable Global Market, May 2019, <u>https://www.pwc.com/us/en/industries/</u> <u>health-industries/health-research-institute/creating-a-stable-drug-pricing-</u> <u>strategy.html</u>.
- 99 PwC Health Research Institute analysis of GlobalData Drugs Database data on May 6, 2020; PwC Health Research Institute analysis of the FDA-approved indications for Keytruda, Opdivo, Tecentriq, Imfinzi and Libtayo as of May 6, 2020; US Food and Drug Administration, "Drugs@FDA: FDA-Approved Drugs," accessed May 6, 2020, <u>https://www.accessdata.fda.gov/scripts/cder/daf/index.</u> <u>cfm</u>; and PwC Health Research Institute analysis of OptumRx first quarter 2020 brand pipeline forecast; and Optum, "RxOutlook: 1st Quarter 2020," <u>https://</u> professionals.optumrx.com/publications/library/rxoutlook-q1-2020.html.
- 100 The White House and US Centers for Disease Control, "The President's Coronavirus Guidelines for America: 30 Days to Slow the Spread," March 16, 2020, <u>https://www.whitehouse.gov/wp-content/uploads/2020/03/03.16.20\_</u> coronavirus-guidance\_8.5x11\_315PM.pdf.
- 101 Merritt Hawkins, "Survey: Physician Practice Patterns Changing as a Result of COVID-19," April 2020, https://www.merritthawkins.com/news-and-insights/ media-room/press/-Physician-Practice-Patterns-Changing-as-a-Result-of-COVID-19/.

Telehealth Services to Help Reduce Coronavirus Risk," March 24, 2020, https://press.humana.com/press-release/humana-expands-access-telehealthservices-help-reduce-coronavirus-risk.

- 114 Aliza S. Gordon, Wallace C. Adamson, and Andrea R. DeVries, "Virtual Visits for Acute, Nonurgent Care: A Claims Analysis of Episode-Level Utilization," Journal of Medical Internet Research 19, no. 2 (February 17, 2017), <u>https://www.jmir.</u> <u>org/2017/2/e35/</u>.
- 115 Aetna, "What You Need to Know About the Coronavirus (COVID-19)," last updated on June 18, 2020, <u>https://www.aetna.com/individuals-families/</u> member-rights-resources/need-to-know-coronavirus.html#acc\_link\_content\_ section\_responsivegrid\_copy\_responsivegrid\_accordion\_1336905482\_1.
- 116 Anthem, "Individual & Family and Employer Group Plans Coronavirus (COVID-19) Information," accessed on June 18, 2020, <u>https://www.anthem.</u> <u>com/ca/coronavirus/individual-and-family.html</u>.
- 117 Allways Health Partners, "COVID-19 Commercial FAQ," accessed on June 18, 2020, 2020, https://info.allwayshealthpartners.org/covid19-faq#testing-treatment.
- 118 Allways Health Partners, "COVID-19 Policy for Participating Providers, during the State of Emergency," accessed on June 18, 2020, <u>http://resources.</u> <u>allwayshealthpartners.org/Provider/PPG/Covid-19PaymentPolicy.pdf</u>.
- 119 Blue Cross Blue Shield Association, "Media Statement: Blue Cross and Blue Shield Companies Announce Coverage of Telehealth Services for Members," March 19, 2020, <u>https://www.bcbs.com/press-releases/media-statement-bluecross-and-blue-shield-companies-announce-coverage-of-telehealth-servicesfor-members</u>.
- 120 Blue Cross Blue Shield of Michigan, "How Blue Cross Blue Shield of Michigan Is Responding to the Coronavirus (COVID-19)," accessed on June 18, 2020, <u>https://www.bcbsm.com/content/public/en/index/common/</u> important-information/covid-19.html?utm\_source=VanityURL&utm\_ medium=Redirect&utm\_campaign=GA\_102142&utm\_term=Covid19.
- 102 PwC Health and Well-being Touchstone surveys, 2016 and 2020.
- 103 Bijan Khosravi, "Post-Coronavirus, How Telemedicine Could Upend the Healthcare System," Forbes.com, March 29, 2020, <u>https://www.forbes.com/</u> <u>sites/bijankhosravi/2020/03/29/post-coronavirus-how-telemedicine-could-</u> <u>upend-the-healthcare-system/#34ebd3ead03f</u>.
- 104 Teladoc, "Teladoc Health Reports First-Quarter 2020 Results," April 29, 2020, https://s21.q4cdn.com/672268105/files/doc\_financials/2020/q1/Teladoc-Health-1Q20-Earnings-Web.pdf.
- 105 Cleveland Clinic, Cleveland Clinic COVID-19 Response: Digital Health Playbook, April 13, 2020, <u>https://my.clevelandclinic.org/-/scassets/files/org/</u> landing/preparing-for-coronavirus/covid-response-digital-health-playbook. ashx?la=en.
- 106 MDLive, "MDLive Reports Visits and User Registrations Increase to All-Time Highs with Virtual Healthcare as First-Line Defense In Fight against Pandemic," April 9, 2020, <u>https://www.mdlive.com/mdlive-reports-visits-and-user-</u> registrations-increase-to-all-time-highs-with-virtual-healthcare-as-first-linedefense-in-fight-against-pandemic/.
- 107 PwC 2019 Health and Well-being Touchstone Survey.
- 108 PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020.
- 109 Ibid.
- 110 Coronavirus Aid, Relief and Economic Security Act, HR 748, 116th Congress, signed into law March 27, 2020, https://www.congress.gov/bill/116th-congress/house-bill/748/text.
- 111 Centers for Medicare and Medicaid Services, "Medicare Telemedicine Health Care Provider Fact Sheet," March 17, 2020, <u>https://www.cms.gov/newsroom/</u> <u>fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet</u>.
- 112 Texas Department of Insurance, "Subchapter A. COVID-19 Emergency Rules, 28 TAC §35.1," March 17, 2020, <u>https://www.tdi.texas.gov/rules/2020/</u> <u>documents/20206287.pdf</u>; and Office of the Governor, Commonwealth of Massachusetts, "Order Expanding Access to Telehealth Services and to Protect Health Care Providers," March 15, 2020, <u>https://www.mass.gov/doc/march-15-</u> <u>2020-telehealth-order/download</u>.
- 113 Aetna, "COVID-19: Telemedicine FAQs," May 8, 2020, <u>https://www.aetna.com/</u> <u>health-care-professionals/provider-education-manuals/covid-faq/telemedicine.</u>

- 121 Blue Shield of California, "Your Coverage for Coronavirus," accessed on June 18, 2020, https://www.blueshieldca.com/coronavirus/your-coverage.
- 122 CareFirst, "Member Updates & Information," accessed on June 18, 2020, https://individual.carefirst.com/individuals-families/about-us/coronavirusmembers-benefit-updates.page.
- 123 Centene, "Centene to Waive Primary Care, Behavioral Health, and Telehealth Costs for Medicare Advantage Members for Remainder of 2020," May 20, 2020, <u>https://centene.gcs-web.com/news-releases/news-release-details/</u> centene-waive-primary-care-behavioral-health-and-telehealth.
- 124 Cigna, "Cigna Waives Customer Cost-Sharing for COVID-19 Treatment and Deploys Clinical Teams to Increase Virtual Care Capacity," March 30, 2020, <u>https://www.cigna.com/newsroom/news-releases/2020/cigna-waives-</u> customer-cost-sharing-for-covid-19-treatment-and-deploys-clinical-teams-toincrease-virtual-care-capacity.
- 125 EmblemHealth, "Coronavirus (COVID-19) Frequently Asked Questions," accessed on June 18, 2020, <u>https://www.emblemhealth.com/covid19/</u> coronavirus-faq.
- 126 Excellus BlueCross BlueShield, "Telemedicine Soars in Wake of Pandemic," accessed on June 18, 2020, <u>https://news.excellusbcbs.com/news-room/</u> releases.
- 127 Fallon Health, "Information about coronavirus (COVID-19)," updated June 10, 2020, <u>http://www.fchp.org/en/coronavirus.aspx</u>.
- 128 Florida Blue, "Florida Blue Provides \$100 Million in Health Care Cost Relief to Members of Its Individual, Fully Insured Employer Group and Medicare Advantage Plans," May 14, 2020, <u>https://www.floridablue.com/newsroom/</u> <u>florida-blue-provides-100-million-health-care-cost-relief-members-its-</u> <u>individual-fully</u>.
- 129 Geisinger, "Geisinger Expands Telehealth Services amid COVID-19 Pandemic," April 10, 2020, <u>https://www.geisinger.org/about-geisinger/news-and-media/news-releases/2020/04/10/20/47/geisinger-expands-telehealth-services-amid-covid-19-pandemic</u>.
- 130 Harvard Pilgrim Health Care, "FAQs on Coronavirus Related Test Coverage, Telemedicine, Etc.," accessed on June 18, 2020, <u>https://www.harvardpilgrim.</u> <u>org/public/news-detail?nt=HPH\_News\_C&nid=1471929138048#COVID19%20</u> 11.

html#acc\_link\_content\_section\_responsivegrid\_copy\_responsivegrid\_

#### accordion\_1106356260\_1; and Humana, "Humana Expands Access to



- 131 Health Care Service Corporation, "Stay Informed on COVID-19," accessed on June 18, 2020, <u>http://www.hcsc.com/newsroom/category/company-news/covid-19-information</u>.
- 132 Highmark, "Highmark Extends Coverage of COVID-19 Treatment and Telemedicine," May 20, 2020, <u>https://www.highmark.com/newsroom/press-</u> releases.html#!release/highmark-extends-coverage-of-covid-19-treatment-andtelemedicine.
- 133 Humana, "Humana Announces Health Care Provider Initiative to Help Ease Financial and Administrative Stress During Coronavirus Pandemic," April 2, 2020, <u>https://press.humana.com/press-release/current-releases/humanaannounces-health-care-provider-initiative-help-ease-financial-</u>.
- 134 Independence Blue Cross, "Have a Question about COVID-19? We're Here to Help," last updated on May 27, 2020, <u>https://news.ibx.com/coronavirus-faq/</u>.
- 135 Medical Mutual, "Important Information for Our Members about COVID-19," last updated on June 16, 2020, <u>https://www.medmutual.com/Campaign-Pages/</u> <u>Coronavirus.aspx</u>.
- 136 PacificSource, "Members | Group and Individual Plan FAQ," accessed on June 18, 2020, <u>http://blog.pacificsource.com/home/covid-19-updates/individual-</u> and-employer-group-member-faq/.
- 137 Premera Blue Cross, "Coronavirus & Your Health Care," accessed on June 18, 2020, <u>https://www.premera.com/visitor/outbreaks</u>.
- 138 BlueCross BlueShield Federal Employee Program, "Telehealth Services," accessed on June 18, 2020, <u>https://www.fepblue.org/en/get-care/telehealth</u>.
- 139 UnitedHealthcare, "UnitedHealth Group's COVID-19 response," May 26, 2020, https://newsroom.uhc.com/news-releases/UHG-COVID-19-Response.html.
- 140 UPMC Health Plan, "UPMC Health Plan Is Here for You," accessed on June 18, 2020, <u>https://www.upmchealthplan.com/covid-19/</u>.
- 141 Wellmark, "Virtual Doctors and Your Mental Health," last updated on May 28, 2020, <u>https://www.wellmark.com/blue/plan-smart/virtual-doctors-and-your-mental-health</u>.

147 PwC Health Research Institute, Clinical Trials in the New Health Economy: Digital Tools and Data Driving Awareness, Engagement and Retention, April 2018, <u>https://www.pwc.com/us/en/industries/health-industries/health-research-institute/clinical-trials-in-new-health-economy.html</u>.

#### 148 Ibid.

- 149 Paige Minemyer, "New Study Aims to Convince Skeptical Employers to Embrace Narrow Networks," FierceHealthcare, January 30, 2019, <u>https://www.fiercehealthcare.com/payer/study-narrow-networks-effective-at-keeping-healthcare-costs-low</u>.
- 150 Leemore S. Dafny, Igal Hendel, Victoria Marone, and Christopher Ody, "Narrow Networks on the Health Insurance Marketplaces: Prevalence, Pricing, and the Cost of Network Breadth," Health Affairs 36, no. 9 (September 2017), <u>https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2016.1669</u>.
- 151 PwC 2020 Health and Well-being Touchstone Survey.
- 152 Ibid.
- 153 Walmart, "New Associate Benefits Aim to Simplify Health Care and Focus on Appropriate Care," October 3, 2019, <u>https://corporate.walmart.com/</u> <u>newsroom/2019/10/03/new-associate-benefits-aim-to-simplify-health-care-</u> <u>and-focus-on-appropriate-care</u>.
- 154 Walmart, "Centers of Excellence FAQs," accessed May 26, 2020, <u>https://one.</u> walmart.com/content/dam/themepage/pdfs/centers-of-excellence-faq-2019. pdf.
- 155 Healthcare Financial Management Association, "Walmart's plans to test narrow networks selected on quality could set stage for a shift in employer-sponsored insurance," March 1, 2020, <u>https://www.hfma.org/topics/hfm/2020/march/what-walmart-s-move-into--curated-networks--will-mean-for-health.html</u>.
- 156 PwC Health Research Institute consumer survey, April 28–May 8, 2020.
- 157 PwC Health Research Institute, Medical Cost Trend: Behind the Numbers 2019, June 2018.
- 142 Aliza S. Gordon, Wallace C. Adamson, and Andrea R. DeVries, "Virtual Visits for Acute, Nonurgent Care: A Claims Analysis of Episode-Level Utilization," Journal of Medical Internet Research 19, no. 2 (February 17, 2017), <u>https://www.jmir.</u> org/2017/2/e35/.

143 Ibid.

144 Center for Connected Health Policy, State Telehealth Laws & Reimbursement Policies, spring 2020, <u>https://www.cchpca.org/sites/default/files/2020-05/</u> CCHP\_%2050\_STATE\_REPORT\_SPRING\_2020\_FINAL.pdf.

145 Ibid.

146 PwC Health Research Institute COVID-19 consumer survey, April 2–17, 2020.

- 158 PwC Health Research Institute, Launching into Value: Pharma's Quest to Align Drug Prices with Outcomes, September 2017, <u>https://www.pwc.com/us/en/</u> industries/health-industries/library/value-based-drug-pricing.html.
- 159 PwC Health Research Institute, "The COVID-19 Pandemic Is Influencing Consumer Health Behavior. Are the Changes Here to Stay?" April 2020, <u>https://www.pwc.com/us/en/library/covid-19/covid-19-consumer-behavior.html</u>.
- 160 Louise Sheiner and Kadija Yilla, Hutchins Center on Fiscal & Monetary Policy, Brookings Institution, "The ABCs of the Post-COVID Economic Recovery," May 4, 2020, <u>https://www.brookings.edu/blog/up-front/2020/05/04/the-abcs-of-</u> the-post-covid-economic-recovery/?utm\_campaign=Brookings%20Brief&utm\_ source=hs\_email&utm\_medium=email&utm\_content=87402482.





## Acknowledgments

#### **Opoku Archampong**

Senior Actuarial Director Geisinger Health Plan

#### **Dave Berry**

Vice President, Actuarial Services Highmark Inc.

#### Peter Berry

Chief Actuary and Senior Vice President of Actuarial/ Underwriting CareFirst BlueCross BlueShield

#### Mike Beuoy

Vice President of Pricing Blue Shield of California

#### **Ceci Connolly**

President and CEO Alliance of Community Health Plans

#### Josh Gregg

Staff Vice President, Actuarial Cost of Care and Analysis Anthem

#### Mike Hartjes

Vice President, Employer Group Actuarial and **Analytic Services** Humana

#### Paul Hughes-Cromwick

Co-Director, Sustainable Health Spending Strategies Altarum Institute

#### Sean Keehan

Economist in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

#### Tom Klammer

#### Kassie Maroney

Vice President, Commercial Markets Actuarial Health Care Service Corp.

#### George Miller

Institute Fellow Altarum Institute

#### **Phil Miller**

Vice President of Communications Merritt Hawkins/AMN Leadership Solutions

#### Kate Nguyen-Wong

**Director of Cost of Healthcare** Trend and Forecasting Blue Shield of California

#### Dean Oser

**Actuarial Manager** Geisinger Health Plan

#### Steven Rolfsmeier

**Actuarial Director** Harvard Pilgrim Health Care

#### **Bill Sarniak**

Vice President, **Actuarial Services** Highmark Inc.

#### Travis B. Singleton

**Executive Vice President** Merritt Hawkins/AMN Leadership Solutions

#### Andrea Sisko

Economist in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

### Sheila Smith

Economist in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

#### **Gigi Cuckler**

Economist in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

#### **Mick Diede**

Chief Actuary Kaiser Foundation Health Plan

#### **Jacqueline Fiore**

Economist in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

#### **Paul Fronstin**

Director of Health Research & **Education Program Employee Benefit Research Institute** 

#### **Tom Getzen**

Emeritus Professor at Temple University Founder of the International Health Economics Association

#### Mary R. Grealy

President

Vice President and CFO, **Employer Group and** Military Segment Humana

#### **Rhonda Lessard**

Vice President, Medical **Economics** Aetna

#### Joe Lastinger

President Health Plan Alliance

#### Sarah MacDerment **Actuarial Director** Geisinger Health Plan

#### Andrew Madison

Actuary in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

#### **Gregory Malone**

**Actuarial Managing Director** Cigna

#### **Brian Marcotte**

**Immediate Past** President and CEO

#### John Poisal

Deputy Director of the National Health Statistics Group in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

#### Dan Rachfalski

Senior Vice President and Chief Actuary Harvard Pilgrim Health Care

#### Kathryn Rennie

Actuary in the Office of the Actuary Centers for Medicare & **Medicaid Services** 

#### **Brian Renshaw**

Vice President and CFO - Clinical Solutions Anthem

#### Corwin Rhyan

Senior Analyst Altarum Institute

#### **Everard Riley**

Associate Actuary Geisinger Health Plan

#### Jennifer Thelen

Director and Actuary, **Group Actuarial Pricing** Health Care Service Corp.

#### Michael Thompson

President and CEO National Alliance of Healthcare **Purchaser Coalitions** 

#### Ani Turner

Co-Director, Sustainable Health Spending Strategies Altarum Institute

#### **Chris Wasden**

Head of Happify Digital Therapeutics Happify Health

#### Amy Yao

Senior Vice President and Chief Actuary Blue Shield of California

#### Healthcare Leadership Council



Heart of the matter	Medical cost trend	Macrotrends	Inflators	Deflators	Conclusion	Appendix	Endnotes Acknowledgments About this research
---------------------	-----------------------	-------------	-----------	-----------	------------	----------	--

## 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 this year's health plan 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 2020. HRI conducted 23 interviews from February through May 2020 with health industry executives, health benefits experts and health plan actuaries whose companies cover more than 90 million employersponsored large group members about their estimates for 2021 and the factors driving those trends.

Included are findings from PwC's 2020 Health and Well-being Touchstone Survey of 440 employers from 35 industries, and two national consumer surveys conducted by HRI: one of 10,000 US consumers on the effects of the COVID-19 pandemic on health behavior, fielded between April 2 and 17, 2020, and a second survey of 2,500 US consumers on health behaviors and health spending decisions, fielded between April 28 and May 8, 2020. HRI also examined government data sources, journal articles and conference proceedings in determining the 2021 growth rate.

#### **PwC Health Research Institute**

Kelly Barnes

Partner, Global and US Health Industries Leader kelly.a.barnes@pwc.com

Benjamin Isgur

Health Research Institute Leader benjamin.isgur@pwc.com

#### Sarah Haflett

Director sarah.e.haflett@pwc.com

#### Trine Tsouderos

Director trine.k.tsouderos@pwc.com

#### Erin McCallister

Senior Manager erin.mccallister@pwc.com

#### Ingrid Stiver

Senior Manager ingrid.stiver@pwc.com

Crystal Yednak Senior Manager crystal.yednak@pwc.com

#### Jonathan Mezzadri

Research Analyst jonathan.mezzadri@pwc.com

Timur Selimovic Research Analyst timur.selimovic@pwc.com

"Behind the Numbers 2021" is HRI's 15th 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 157 countries with more than 276,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at pwc.com.

#### **About PwC's Health Research Institute**

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

#### **HRI Report Advisory Team**

Thom Bales Principal

Jeff Gitlin Principal

Barbara Gniewek Principal

Rick Judy Principal

Jinn Lin Principal

Eric Michael Managing Director

#### **Other contributors**

Lisa Acevedo Cara Clements Cedric Cummings Peter Davidson Igor Enin Julian Levin Jamie Mumford Roz Murphy Jim Prutow Principal

Dr. Scott Ransom Principal

Heidi Scheppmann Managing Director

Mark St. George Principal

Paul Veronneau Principal

Hindy Shaman Jon Schaper Derek Skoog Chris Tepler Nicole Ulrick Marina Waltz Elizabeth Weinstein Rob Wilson









#### To have deeper conversations about how this subject may affect your business, please contact:

#### **Kelly Barnes**

#### **Barbara Gniewek**

Partner, Global and US Health Industries Leader kelly.a.barnes@pwc.com

Principal barbara.p.gniewek@pwc.com

#### **Rick Judy**

Principal richard.m.judy@pwc.com

#### **Benjamin Isgur**

Health Research Institute Leader benjamin.isgur@pwc.com





© 2020 PwC. All rights reserved. PwC refers to the US member firm or one of its subsidiaries or affiliates, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. This content is for general information purposes only, and should not be used as a substitute for consultation with

professional advisors. Please see www.pwc.com for further details. 744733-2020 RM MW CT.