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McKinsey on Healthcare: Weathering the storm

A selection of recent articles

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Foreword

The COVID-19 pandemic has opened the door to a reordering of the US healthcare industry. Nearly half of its profit pool is at risk. Healthcare workers labored tirelessly at the frontlines of a public health emergency that has led to tremendous suffering and loss of life. Now, a weary industry must re-energize itself to address accelerating affordability challenges, find solutions to acute staff shortages, and improve access to care.

As painful as the pandemic has been for all of us, there are silver linings. The pandemic inspired innovation, including care-model transformation, virtual health, and alternative sites of care, as well as spurring a flood of private investment. The improvement in healthcare that could be made possible by scaling these kinds of innovations is staggering. More than $1 trillion of value could be created across four areas: care-delivery transformation (principally through a step-change shift to alternate sites of care and value-based care adoption), administrative simplification, technology enablement, and clinical productivity enhancement.

Healthcare leaders must scale up these innovations at a much higher rate than they currently do. Doing so will require redesigning organizations for speed, accelerating productivity improvements, reshaping portfolios and building new businesses, and reallocating constrained resources.

Redesign for speed

As society transitions toward managing COVID-19 as an endemic disease, healthcare leaders could take this moment to identify which changes from the last two years are working and which have outlived their usefulness. Of particular importance is for executives to be even bolder to sustain the gains made during the pandemic and further increase the speed of decision making and execution. Fast and nimble organizations outperform others by a wide margin in profitability, operational resilience, organizational health, and growth. These advantages can be even more significant in difficult times such as these, when decisions may have more important consequences. Increasing speed and agility will be essential during the next few years.

Double down on productivity

Healthcare executives are constantly pursuing increased efficiency. For most organizations, however, the kind of incremental improvements we usually see are insufficient in these turbulent times. To survive the coming storm, leaders should raise their aspirations to increase productivity, including much greater adoption of automation, analytics, and transformative process redesign. Of course, actions should be prioritized to improve not only cost but also quality of care, access to care, and patient experience.

And there's plenty of room for savings. For example, of the nearly $4 trillion spent on healthcare annually in the United States, administrative spending is approximately one-quarter of the total. By identifying simplification opportunities, we found about 30 interventions organizations could make without industry-wide changes that could deliver up to $175 billion in annual savings.

Reshape portfolios and build businesses

Healthcare leaders should consider investing in growth through programmatic M&A and partnerships, effective integrations, and rapid business building. In particular, they should focus on diversification and innovative business models aligned with the opportunity to save $1 trillion across

the healthcare industry. For example, payers are investing in data-driven care delivery start-ups. Hospital systems are buying provider groups, commercializing services, and seeking out partnerships or joint ventures with post-acute and ambulatory-care providers. Developing a strong business-building capability organically will be key to growth if attractive acquisition targets or potential partners can't be found or don't make financial sense.

Reallocate constrained resources

Our research shows companies that actively reallocate resources outperform those that don't. In challenging times, such reallocation is more important than ever. Many organizations struggle to reallocate at the necessary pace. Successful reallocators follow a tested portfolio of processes that aim to seed high-growth areas with the resources necessary to succeed, while avoiding retrenchment in the core business or over-reliance on deploying maintenance capital. Especially in the current environment where investment returns cannot be counted on to supplement operating results, it will be critical to maintain clarity on the objectives for capital allocation, take a dynamic approach to budgeting, and ensure that the best talent focuses on the most important growth areas.

In this year's edition of the McKinsey on Healthcare compendium, we look in detail at how to take advantage of the $1 trillion opportunity, including through transforming delivery of care, improving clinical productivity, applying technology, and simplifying administrative procedures. We also discuss the impact of inflation and the pandemic on healthcare, as well as the future of the postpandemic healthcare workforce.

The pandemic and the forces it unleashed will compel an industry reckoning. The most successful healthcare players will take advantage of the $1 trillion of improvement available by redesigning their organizations to accelerate productivity improvements, reshaping their portfolios, innovating new business models to transform care, and reallocating constrained resources. The key is doing so faster and more effectively than their peers.

Sincerely,

Shubham Singhal and Drew Ungerman

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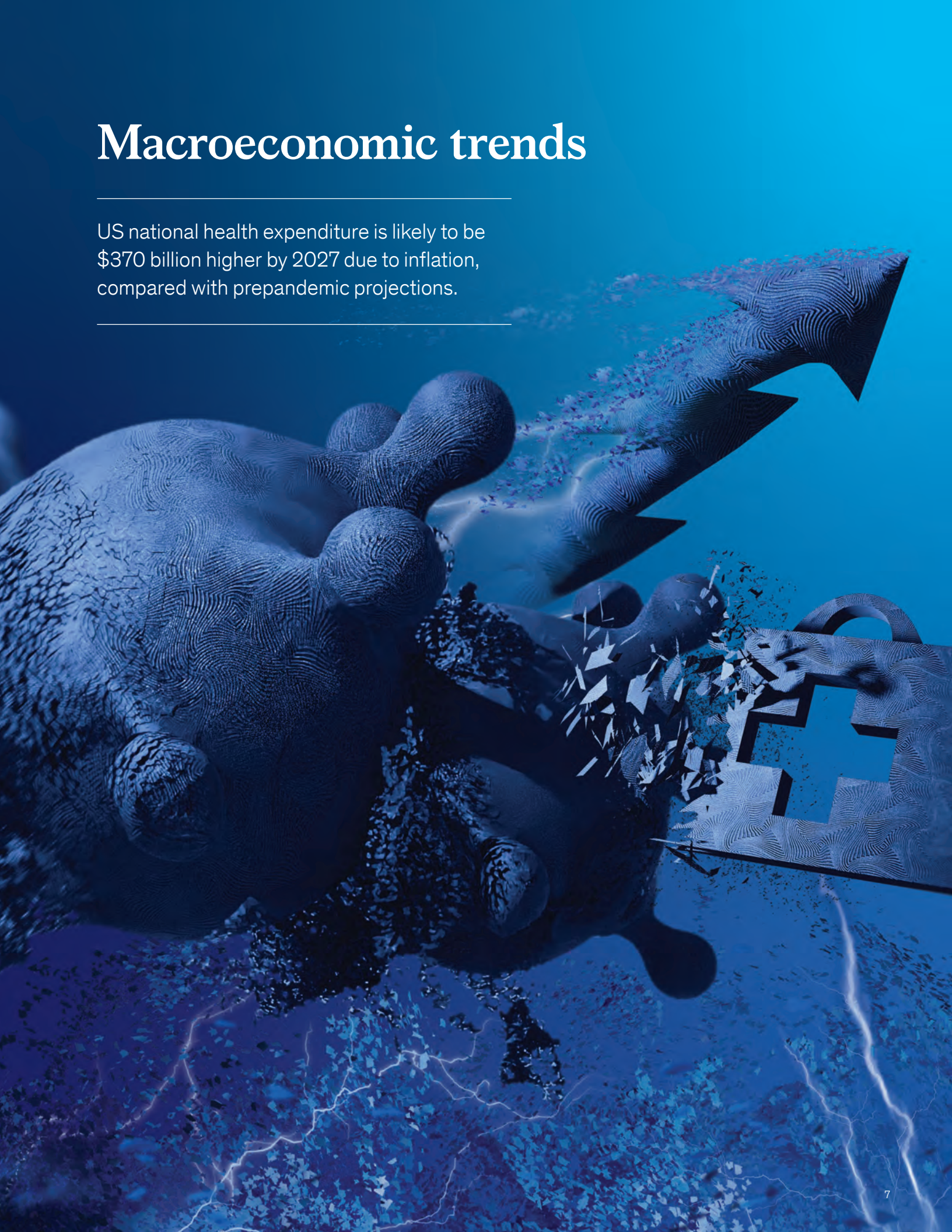
Macroeconomic trends

US national health expenditure is likely to be $370 billion higher by 2027 due to inflation, compared with prepandemic projections.



The gathering storm: The uncertain future of US healthcare

Addie Fleron and Shubham Singhal

September 16, 2022

Forces are acting to challenge affordability and access in healthcare and threatening the industry's economic outlook. At-scale innovation is key to filling the gaps.

The once-in-a-century pandemic thrust the healthcare industry into the teeth of the storm. The combination of accelerating affordability challenges, access issues exacerbated by clinical staff shortages and COVID-19, and limited population-wide progress on outcomes is ominous. This gathering storm has the potential to reorder the healthcare industry and put nearly half of the profit pools at risk.

Those who thrive will tap into the $1 trillion of improvement available by redesigning their organizations for speed to accelerate productivity improvements, reshaping their portfolio, innovating new business models to refashion care, and reallocating constrained resources. The healthcare industry has lagged behind other industries in applying these practices; players that are able to do so in this crisis could set themselves up for success in the coming years.

This is the first in a five-article series, where we address the following questions: what are the major storm clouds on the horizon, and how does the potential impact compare with past periods of upheaval; how does rising inflation—both broadly, and specifically, as the industry confronts a clinical staff shortage—affect access, costs, and growth; what impact might an endemic COVID-19 have on the expected trajectory of healthcare costs; and what should stakeholders do about it?

The turbulence that lies ahead

The arrival of the COVID-19 pandemic marked the end of a decade of relative calm in US healthcare. From 2010 to 2019, real spending on healthcare rose only 0.3 percentage points above growth in real GDP. This compares with a 3.0 percentage-point differential in the decade before the enactment of the Affordable Care Act. Historically, periods of acceleration in healthcare costs well above the growth of the economy have resulted in fiscal interventions by the government (Exhibit 1). Moreover, economic recessions in these periods have led to broader healthcare reforms (Exhibit 2). As inflation persists at the highest levels since the 1970s, the economy has experienced two successive quarters of negative GDP growth and heightened risk of a recession. As a result, the potential for discontinuous change in healthcare has increased.

Our analysis finds that national health expenditure could grow at a rate of 7.1 percent over the next five years from 2022 to 2027, compared with an expected economic growth rate of 4.7 percent. In aggregate, this would equate to healthcare expenditure growth in excess of economic growth of 2.4 percentage points. Health expenditure growth could

The potential for discontinuous change in healthcare has increased.

exceed economic growth by up to 5.9 percentage points in 2023, creating enormous affordability pressure. The potential for healthcare expenditure growth to exceed economic growth so significantly in the shorter term is driven by a combination of current high inflation, a persistent clinical staff shortage, and lower economic growth in 2023 (Exhibit 3).

Forces fueling the storm

The combination of significantly higher healthcare costs than expected and the challenges facing end payers—employers, consumers, and government—in paying for this increase will force a reckoning in the industry.

Annual incremental healthcare costs of $590 billion

By 2027, US healthcare costs could be $590 billion higher than the projected $5.8 trillion expected in the estimates made pre-COVID-19 (in 2019). Heightened inflation accounts for $370 billion of this difference,[1] of which 40 percent is driven by elevated clinical labor inflation rates linked to a shortage of clinical staff.

The United States is projected to face a shortage of more than 200,000 registered nurses and more than 50,000 physicians in the next three years.[2] In addition to fueling persistent inflation, this clinical staff shortage is likely to create challenges in healthcare access and potentially exacerbate health inequities. Growth and margins for providers are already strained due to this dynamic, and the impact is likely to worsen. Testing, vaccination, and treatment of endemic COVID-19 and the associated increased burden of behavioral-health and other chronic conditions could add another $220 billion in annual costs over the next five years.[3]

Affordability challenges faced by end payers

End payers, already struggling to afford healthcare, have limited ability to absorb this potential acceleration in costs.

Exhibit 1

Periods of elevated national health expenditure have been associated with fiscal constraints.

Growth in national health expenditure (NHE) above GDP, % (not exhaustive)

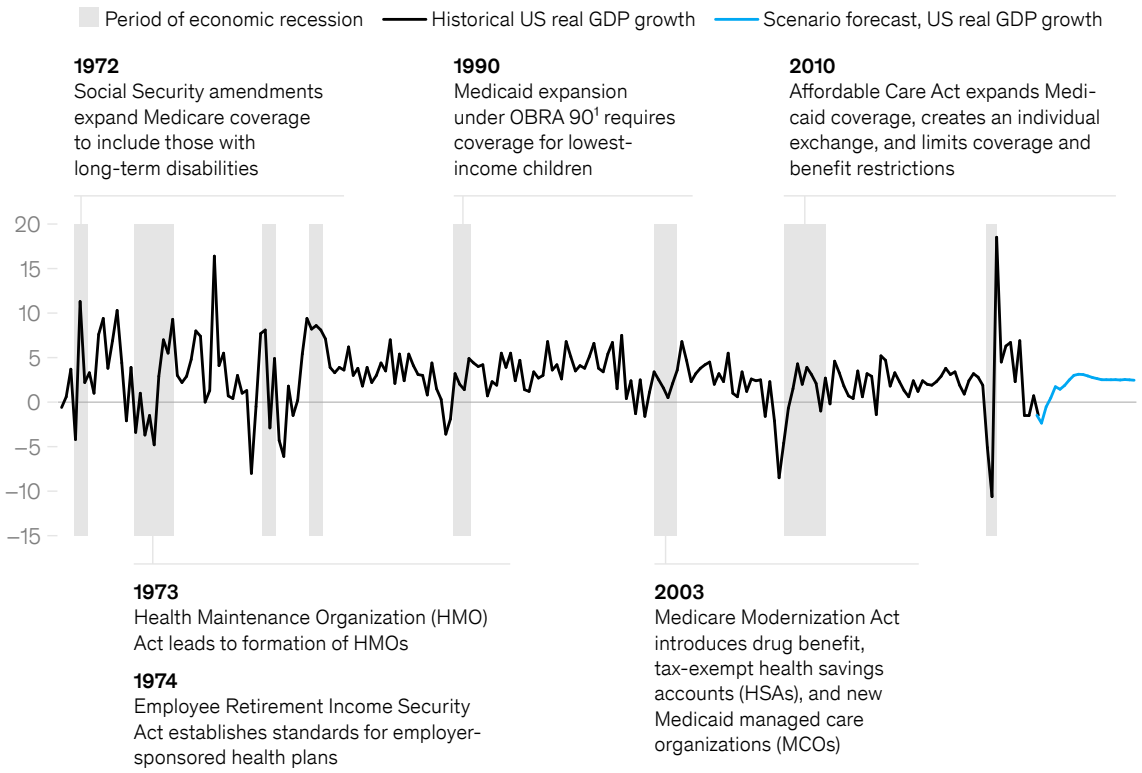
	7.6 1970	7.9 1982	6.0 1990	6.5 2002	5.5 2009
Fiscal intervention	1971 President Nixon's executive order forced freeze of healthcare prices and wages	1983 Introduction of Medicare diagnosis-related group payment system	1997 Balanced Budget Act enacted, introducing sustainable growth rate	2005 Medicaid modifications included in Deficit Reduction Act	2010 Medicare productivity cuts in Affordable Care Act 2011 Medicare sequestration included in Budget Control Act
NHE growth in following years	Growth in NHE fell below GDP growth by 1973; returned to elevated levels in 1974–77	Growth in NHE fell below GDP growth by 1984; began to rise again in 1985	Growth in NHE fell below GDP growth by 1994 during the 1990s managed-care era, and the second-longest period of low growth from 1994–2000 was sustained by Balanced Budget Act	Growth in NHE returned to near level of GDP growth by 2004 and stayed low through 2006	Growth in NHE fell below GDP growth by 2011, the longest period of sustained low growth from 2011–19

Source: National Health Expenditure Data, US Centers for Medicare & Medicaid Services; World Bank Group

Exhibit 2

Regulatory changes have frequently followed economic recessions.

US GDP growth (real) from previous quarter, annualized % change (not exhaustive)



[1]Omnibus Budget Reconciliation Act of 1990.
Source: National Bureau of Economic Research; US Bureau of Economic Analysis; US Bureau of Labor Statistics; McKinsey Global Institute

Employers have continued to shift the cost of healthcare to employees. For example, 18 percent of employees were enrolled in high-deductible health plans in 2013.[4] In 2021, 40 percent of employees were enrolled in these health plans.[5] In addition, in 2019, the average family contribution to coverage was 32 percent for employees at companies with more than 500 workers and 53 percent at those with less than 499 workers.[6] In our recent survey, 95 percent of employers stated that they would adjust benefits if cost increases were 4 percent or higher, with the most common changes being increasing employee cost sharing, shifting to high-deductible health plans, and optimizing the provider network.[7]

Consumers already face significant exposure to healthcare costs, as noted above, with the rising level of cost sharing in employer-sponsored insurance. In 2021, the average family faced an estimated annual exposure before coverage of $8,000 to $12,000.[8] With $20,000 in average household savings in 2021, consumers' ability to absorb this exposure is limited.[9] Furthermore, 22 percent of consumers report having more than $1,000 of medical debt, 34 percent of those

End payers, already struggling to afford healthcare, have limited ability to absorb this potential acceleration in costs.

who chose to defer care stated it was due to lack of affordability, and 45 percent of consumers state that a $10 increase in the cost of a physician visit would lead them to avoid it.[10] Moreover, while US workers are seeing nominal wage increases, inflation has eroded the gains, resulting in negative real earnings growth.[11] Consumers' satisfaction with employer-sponsored healthcare coverage is lower than their satisfaction with Medicare, Medicaid, or individual health insurance exchanges coverage.[12]

The government may also not be prepared to fund the increase in healthcare costs. The 2022 Medicare Trustees report projects that the hospital insurance trust fund balance will turn negative in 2028, limiting the federal government's room to maneuver as it relates to costs.[13] Recent implementation of 2 percent Medicare sequestration cuts illustrate this issue. If the Medicare trust fund needs to pay for additional healthcare spending, this timeline for trust fund insolvency could accelerate. In addition, federal debt stands at 123 percent of GDP.[14] As the Federal Reserve raises interest rates and shrinks its balance sheet, interest payments on federal debt are expected to double as a proportion of the US budget between 2022 to 2027.[15]

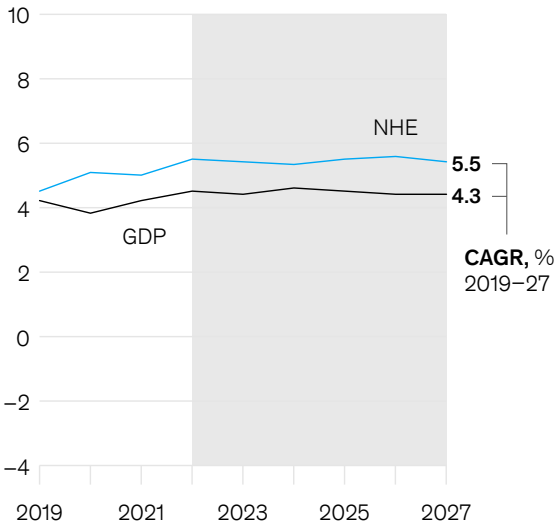
Implications of the storm on the healthcare industry

It is not clear that end payers—employers, consumers, and government funders—will be able to bear this increase, leaving industry players to address the additional spending or face significant EBITDA risk. The forces noted above could put $450 billion of EBITDA[16]—more than half of the total projected 2027 profit pool—at risk. However, there is a $1 trillion improvement opportunity

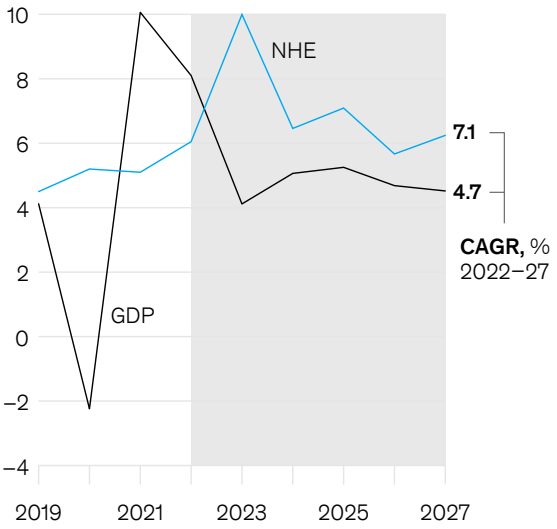
Exhibit 3

National health expenditure growth with incremental effects could significantly outpace GDP growth over the next two to three years.

Projections of NHE and GDP growth, pre-COVID-19, % (nominal) 2019–27



Projections of NHE and GDP growth, with additional impacts, % (nominal) 2019–27



NHE growth in excess of GDP growth, percentage points

2022	2023	2024	2025	2026	2027
1.2	1.2	0.9	1.2	1.4	1.2

2022	2023	2024	2025	2026	2027
–2.1	5.9	1.4	1.8	1.0	1.7

Note: For pre-COVID-19 projection, nominal NHE growth and nominal GDP growth based on March 2020 NHE release; nominal NHE growth, with additional impacts, is based on March 2020 NHE release for 2019–21 and March 2020 NHE release, plus additional modeled impacts for 2022–27; nominal GDP growth is actuals through 2021 and projections from 2022–27 based on McKinsey analysis in partnership with Oxford Economics, scenario 3B.
Source: *National health expenditure projections 2019–28*, US Centers for Medicare & Medicaid Services, Mar 24, 2020; McKinsey analysis

available in healthcare. It provides the best avenue to improve healthcare for all stakeholders and alleviate the potential margin pressure on the industry. Four areas make up this opportunity:

— *Care delivery transformation.* The future of care delivery in the United States is evolving. It is becoming patient-centric, virtual, ambulatory, and available at home. It is also becoming value-based and risk bearing; driven by data and analytics; more transparent and interoperable; enabled by new medical technologies; funded by private investors; and integrated yet fragmented. This radical transformation of the industry introduces potential savings of $420 billion to $550 billion. To capture this value, the transformation must happen much more quickly than the current course and trajectory suggests. For example, achieving these savings would require, among other efforts, shifting 20 to 25 percent of hospital-based volume to alternative sites of clinically appropriate care.[17] Based on our research, it would also mean increasing the population in total cost of care, value-based arrangements from about 6 percent today to nearly 40 percent. We know from case examples that risk-bearing, value-based arrangements can materially improve cost of care as well as patient experience, but few, if any, of the effective models have been able to scale.[18]

— *Clinical productivity.* Over the past one to two decades, labor productivity in the US healthcare industry has declined; between 2001 and 2016, the industry contributed 9 percent of US economic growth but 29 percent of job growth. Previous McKinsey analysis has shown that if the healthcare delivery industry could rely more heavily on labor productivity gains than workforce expansion to meet demand growth, there is a potential savings opportunity of $160 billion to $310 billion. Importantly, many changes could be made within the existing workforce—and also help address the growing clinical staff shortage. There is significant unused capacity in physician schedules today; minor changes such as periodically "pruning" clinically inappropriate preference rules and broadening automatic reminder systems to reduce patient no-shows could contribute material gains. These types of changes could also lead to better access and quality of care, improved inpatient bed and operating-room capacity, and affordability improvements for consumers. Technology-enabled changes to clinical practice (noted below) would provide additional gains.[19]

— *Technology enablement.* Healthcare has lagged behind other industries in the application of new technologies, in part due to consumer reticence, the reluctance of highly trained clinicians, entrenched stakeholder interests, a complex regulatory framework, and the fragmented nature of the market. But we also know that progress in healthcare can be exponential when the right conditions for success exist. For example, in April 2020, during the COVID-19 pandemic, overall telehealth use for office visits and outpatient care was 78 times higher than it was in February of the same year.[20] Three critical technology-backed use cases offer a $250 billion to $350 billion savings opportunity: variability and waste reduction (for example, elimination of common low-value procedures), effective care delivery (for example, using connected devices and virtual care to promote disease management and avoid exacerbations), and more effective deployment of advanced AI, including in nonclinical functions. This opportunity is net of the cost required to develop and implement some of these transformative technologies.[21] (In our previous research, we identified nine technologies that could reshape healthcare, which can be organized into five key use cases.)

— *Administrative simplification.* Nearly a quarter of US national health expenditure goes toward administrative costs. Our analysis has shown that this could be reduced to about 18 percent through known interventions that can be applied either by individual organizations or by agreement and collaboration between organizations but without requiring industry-wide change. Examples include removing manual work for nursing managers through automated staffing and scheduling

tools; building strategic payer–provider platforms to reduce demand by sharing information such as available in-network specialists; and automating repetitive work in human resources and finance. These known interventions all have a positive return on investment and could be deployed using current technology with nominal expense. The resulting system-wide savings would be $270 billion to $320 billion, and could also lead to materially improved employee, provider, and consumer experience.[22]

The headwinds for healthcare are significant and the risks for the industry are sizeable. But the size of the opportunity outstrips those challenges. Innovative models exist and, if scaled up, could deliver the $1 trillion improvement. The challenge for the industry is to scale up these innovative models at speed. Another article in this series, "The gathering storm: An opportunity to reorder the healthcare industry" (p. 129) outlines the approach industry leaders could adopt to capture these improvements.

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The authors wish to thank Daniel Brown for his contributions to this article.

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[1] Estimate is based on potential increases in spend associated with excess inflation above historical trend. Nonlabor inflation rate based on forecasted changes in private services consumption deflator; nonclinical labor inflation rate is based on wage index forecasts that model the historical relationship between wage growth and CPI growth; clinical labor inflation rate is based on expert experience. Modeled economic indicators based on McKinsey analysis in partnership with Oxford Economics.

[2] Gretchen Berlin, Meredith Lapointe, Mhoire Murphy, and Joanna Wexler, "Assessing the lingering impact of COVID-19 on the nursing workforce," McKinsey, May 11, 2002; *The complexities of physical supply and demand: Projections from 2019 to 2034*, Association of American Medical Colleges, prepared by IHS Markit Ltd., June 2021.

[3] Range is $137 billion to $379 billion, based on scenario analysis from McKinsey's COVID-19 Epidemiological Scenario Planning Tool (v13.3). The analysis includes a range of 110 million to 220 million annual cases, of which 10 to 15 percent require outpatient treatment; 4,100 to 6,100 per day require a non-intensive care unit (ICU) hospital admission; and 400 to 900 per day require an ICU admission. Cost of treatment from Blue Cross Blue Shield and Fair Health; all figures scaled to nominal 2027 estimates. Long COVID treatment costs are based on an estimate that at least 3 percent of cases result in long COVID (UK Office for National Statistics) for three to 12 months; published estimates of long COVID-19 symptoms (UpToDate); and standard treatment costs for those symptoms (Medical Expenditure Panel Survey). The upper-bound estimates of long COVID incidence assume about 20 million US long COVID cases per year, based on data on current rates of long COVID from the US Census Bureau's July–August 2022 Household Pulse Survey. There is significant uncertainty in ascertaining prevalence and resulting cost impact of long COVID, and data continue to become available on a frequent basis as more research is conducted. Our aggregate analysis, using these enumerated data sources, employs a point estimate of $19 billion as a conservative estimate. For both ongoing COVID-19 treatment and long COVID, higher incidence rates would result in an estimate at the higher end of the range. Testing and vaccine estimates are based on 2021 costs per test and per vaccine and data from US Department of Health and Human Services and the US Centers for Disease Control and Prevention as to annual demand for testing and boosters. For this factor, higher utilization of testing (times per person per year) would result in an estimate at the higher end of the range. All figures are scaled to nominal 2027 estimates.

[4] Mercer 2021 Survey of Employer-Sponsored Health Plans. Value reflects enrollment in consumer-driven health plans, which primarily consist of health savings account–eligible high-deductible health plans.

[5] Ibid.

[6] US Census Bureau, American Community Survey Data, 2019; Board of Governors of the Federal Reserve System, Survey of Consumer Finances, 2019.

[7] 2022 McKinsey Healthcare Stakeholder survey, July 1, 2022.

[8] Mercer 2021 Survey of Employer-Sponsored Health Plans.

[9] Estimate based on US Census Bureau household data and Brookings Institution household finance data; this estimate is subject to fluctuation, including during depressed spending periods due to the COVID-19 pandemic.

[10] McKinsey Consumer Health Insights Survey, February 2022.

[11] Wage and inflation indicators from Federal Reserve Bank of St. Louis.

[12] 2022 McKinsey Healthcare Stakeholder survey, July 1, 2022.

[13] *2022 Medicare Trustees report*, Centers for Medicare & Medicaid Services (CMS), November 30, 2020.

[14] Total public debt as percent of gross domestic product, Federal Reserve Bank of St. Louis, accessed September 6, 2022.

[15] Congressional Budget Office, accessed September 6, 2022.

[16] Risk to profit pools of $450 billion is less than the total potential impact of $590 billion because profit pools represent the private sector only. The additional $140 billion would be borne by Medicare and Medicaid fee-for-service costs (federal and state government funding).

[17] Estimate based on a McKinsey physician survey, claims analysis, and CMS National Health Expenditure data.

[18] Shubham Singhal, Mathangi Radha, and Nithya Vinjamoori, "The next frontier of care delivery in healthcare," McKinsey, March 24, 2022.

[19] Nikhil Sahni; Pooja Kumar, MD; Edward Levine; and Shubham Singhal, "The productivity imperative for healthcare delivery in the United States," McKinsey, February 27, 2019.

[20] Oleg Bestsennyy, Greg Gilbert, Alex Harris, and Jennifer Rost, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?" McKinsey, July 9, 2021.

[21] Shubham Singhal and Stephanie Carlton, "The era of exponential improvement in healthcare?," McKinsey, May 14, 2019.

[22] Nikhil R. Sahni, Prakriti Mishra, Brandon Carrus, and David M. Cutler, "Administrative simplification: How to save a quarter-trillion dollars in US healthcare," McKinsey, October 20, 2021.

The gathering storm: The transformative impact of inflation on the healthcare sector

Addie Fleron, Aneesh Krishna, and Shubham Singhal

September 19, 2022

Inflation is at record highs and is now blowing through healthcare.

The once-in-a-century pandemic thrust the healthcare industry into the teeth of the storm. The combination of accelerating affordability challenges, access issues exacerbated by clinical-staff shortages and COVID-19, and limited population-wide progress on outcomes is ominous. This gathering storm has the potential to reorder the healthcare industry and put nearly half of the profit pools at risk. Those who thrive will tap into the $1 trillion of improvement available by redesigning their organizations for speed-accelerating productivity improvements, reshaping their portfolio, innovating new business models to refashion care, and reallocating constrained resources. The healthcare industry has lagged behind other industries in applying these practices; players who are able to do so in this crisis could set themselves up for success in the coming years. This article is the second in our five-article series addressing the gathering storm.

Consumer prices have rarely risen faster than healthcare inflation, but that's the situation today. The impact of inflation on the broader economy has driven up input costs in healthcare significantly. Moreover, the likelihood of continued labor shortages in healthcare—even as demand for services continues to rise—means that higher inflation could persist. Our latest analysis estimates that the annual US national health expenditure is likely to be $370 billion higher by 2027 due to the impact of inflation compared with prepandemic projections.[1]

Pressure on healthcare input costs

Healthcare supply input costs spiked in late 2020 and 2021 during the COVID-19 crisis. Labor costs per adjusted hospital discharge grew 25 percent between 2019 and 2022, closely followed by pharmaceuticals at 21 percent, supplies at 18 percent, and services at 16 percent.[2] While these costs have moderated in 2022, they continue to be above the norm; in particular, growth in labor cost remains high.

Clinical labor

The worsening clinical labor shortage is a significant contributor to our projected increase in healthcare costs over the next five years. By 2025, we expect a gap of 200,000 to 450,000 registered nurses and 50,000 to 80,000 doctors (10 to 20 percent and 6 to 10 percent of the workforce, respectively).[3] These shortages underpin our estimate that healthcare labor cost growth will outpace inflation. We expect clinical labor cost growth of 6 to 10 percent over the next two years, about three to seven percentage points above the prevailing rate of inflation, before a correction to about 0.7 percentage points over the prevailing inflation rate through 2027.[4]

A combination of increasing demand and decreasing supply will drive this shortage. Increased utilization and nursing needs in ambulatory, hospital-based outpatient departments, home care, skilled nursing facilities, and hospice settings could lead to a 7 to 10 percent annual increase in demand for registered nurses between 2021 and 2025. At the same time, higher than normal attrition—7 percent per year in 2021 and 2022 before the rate returns to an estimated 1 to 4 percent in 2023—and retirements will exceed the number of new licensures, decreasing the total number of registered nurses working in direct patient care just as the number of required roles grows. We expect the attrition rate to normalize after 2022 if economic conditions worsen (nurses often keep their jobs or return to work to provide a second household income in tough times). But this factor will not reverse the overall trend. From a cost perspective, any base-pay increases will likely become the baseline; from a practices perspective, many nurses, especially in hospital settings, have sought to move away from direct patient care. Our surveys indicate that reasons include a perceived lack of support, safety, and flexibility.[5]

The clinical labor shortage could create $170 billion in incremental costs in 2027, primarily from wage growth as resources become scarce (Exhibit 1). In addition, labor shortages could stymie growth of individual health systems and lead to access risks from site-of-care closures and increased wait times. And we know that when access to care contracts, disadvantaged communities are often disproportionately impacted, a blow to health equity efforts.[6]

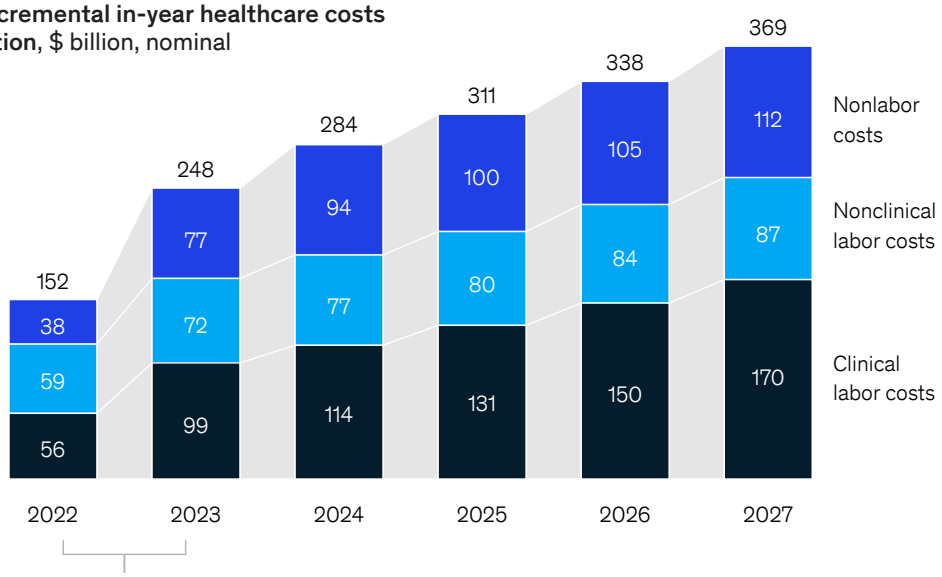
Nonclinical labor

As clinical labor shortages worsen, nonclinical labor (for example, personal care aides), especially in provider settings, may be hard hit. For example, additional tasks may fall to this workforce in settings where there are not enough registered nurses. This, in turn, could lead to retention difficulties in this segment.

Exhibit 1

The largest portion of potential extra healthcare costs are introduced to the system in 2022–23.

Potential incremental in-year healthcare costs due to inflation, $ billion, nominal



*Inflation and clinical labor wage growth are significantly above baseline trends in **2022 and 2023** before returning to a lower rate of growth on this elevated baseline*

Source: McKinsey analysis in partnership with Oxford Economics; expert input

From a cost perspective, we expect increased inflation in the overall economy to mostly account for incremental wage growth in the nonclinical workforce. Based on analysis of the historical relationship between wage growth and inflation, as well as projections for US inflation over the next several years, we believe that nonclinical wage growth could be up to 3.1 percentage points higher than baseline expectations in 2022, 0.5 percentage points higher in 2023, and 0.1 percentage points higher in 2024.[7] While we expect that the trend itself will return to baseline expectations by around 2025, increases from preceding years would already be baked into labor costs. Altogether, this could result in an incremental $90 billion of cost in 2027 in the healthcare system.

Nonlabor costs

The acceleration in nonlabor costs, including supplies, hit the healthcare system hard in the early stages of the COVID-19 pandemic, especially in personal protective equipment. Global bottlenecks have also created supply chain difficulties and increased costs across the economy. We expect that continued supply chain issues will push nonlabor costs above the trend we would have projected in 2019. Using consumption deflators as a proxy for how costs could rise across the system, we expect additional nonlabor costs to increase by up to $110 billion in 2027. These costs would likely become permanent.

When and how might employers, government payers, and consumers experience healthcare inflation?

At present, the increase in healthcare input costs is being felt primarily by providers. This is largely driven by a lag in contracting and renewal cycles.[8] It can take several years for the impact of inflation to filter down to reimbursement rates, particularly for payers in government lines of business.

In commercial (employer-sponsored) lines of business, providers' ability to pass on increased costs is governed by contracting life cycles (the average contract locks in specific rates and inflation escalators for about three years) and by the outcome of negotiations. Given this contracting life cycle, we expect that it will take one to three years for incremental costs associated with the commercial population to flow from providers to payers. Payers' ability to pass these costs onto employers will be linked to bid cycles, with the first major impact likely occurring in the 2024 pricing cycle (to be negotiated in 2023). Employers, in turn, will then face the choice of bearing these increased costs or, as is more likely, passing more costs onto employees.

A survey of more than 300 employers revealed an average growth in cost of health benefits of 6 to 7 percent in the past three years; it also revealed that rate increases greater than 4 to 5 percent are unsustainable. Further, 95 percent of the employers surveyed reported that they would consider reducing benefits if costs increased 4 percent or more.[9] The top two cost-control actions that employers said they might pursue were increasing the employee share of premium costs and a shift to high-deductible health plans.

Government payers (Medicare and Medicaid fee-for-service) would likely start to see increased costs in two to three years, given standardized methodologies for using historical inflation rates to set next year's prices. For government payers to raise rates sooner, the Centers for Medicare & Medicaid Services (CMS) or state Medicaid agencies would need to be willing to use current experience to override historical rate-setting methodologies.

CMS recently finalized inpatient prospective payment system (IPPS) increases of 4.3 percent in fiscal year 2023 compared with the originally proposed 3.2 percent.[10] This adjustment could indicate that the flow-through costs to government payers could happen slightly earlier than historical experience would indicate, but we still do

not expect that it would entirely alleviate the cost pressures discussed in this article. For example, we estimate that clinical labor wages will increase 10 percent this year, nearly six percentage points higher than the IPPS rate increase. Private payers in government lines of business (Medicaid managed care and Medicare Advantage) would likely not see additional government revenue until 2026–27, given how prices in those lines of business are set.

Also, premiums may be on the rise on insurance exchanges. A recent analysis[11] of 72 marketplace insurers' early rate filings in 13 states and the District of Columbia found that these insurers were seeking higher premium increases (median increase is 10 percent) than in recent years, largely due to rising prices paid to hospitals, doctors, and pharmaceutical companies and increased use of services by enrollees. Compared with recent years, relatively few insurers are seeking to lower premiums; only four out of 72 insurers filed negative premium changes, while the remaining 68 insurers requested premium increases. Some plans are seeking increases of more than 25 percent.

We modeled three extremes of impact to better understand what might happen to industry profit pools (Exhibit 2). First, what happens if spending increases, but there is no new revenue from any source? Second, what happens if spending increases, and the increases are passed on to payers in the form of unit price increases, but payers are unable to pass these increases to end customers such as employers or state governments? And lastly, what happens if payers are able to pass the increases to end consumers of healthcare?

Our analysis shows that if players do not take any mitigating action, industry profit pools will erode in all three scenarios, due to the lag in contracting cycles described above and the inability of most players to

Exhibit 2

How impacts of inflation are felt in the healthcare industry will depend on the amount of new revenue available.

EBITDA erosion in 2027 by scenario, $ billion

- <10% erosion
- 10–50% erosion
- >50% erosion

EBITDA impact if no new revenue enters the system
Providers are unable to pass on costs to payers and bear most of the impact

EBITDA impact if unit prices increase
Provider reimbursement rates increase in line with standard market timelines for rate increases, at the inflated rates; premiums do not increase

EBITDA impact if unit prices and premiums increase
Provider reimbursement rates increase in line with standard market timelines for rate increases, at the inflated rates; premiums increase commensurately

All scenarios assume that outside of rate contracting, no mitigating action is taken by actors within the system to capture the $1 trillion+ of improvement opportunity

NHE impact	Minimal	Moderate	High
Provider	●	●	●
Payer	●	●	●
Pharmacy services	●	●	●
Manufacturing	●	●	●
Services and technology	●	●	●

Impacts in 2027; short-term erosion especially in 2022–23 may be higher due to lag in when costs are passed through

pass on increased administrative costs. The magnitude of the impact varies, and even within each example the impact on any one company could differ greatly compared with other firms.

Healthcare leaders expect inflation to hurt growth

We surveyed several healthcare leaders, many of whom say they are resigned to a sharp decline in operating margins.[12] Payer and provider executives reported that they expect a drop in margins of between 25 and 75 percent, or one to three percentage points. Many payer and provider organizations have operating margins in the range of 2 to 4 percent, implying that earnings could be wiped out.[13] This situation could necessitate drastic responses. Executives at tech-enabled organizations, however, have more positive views, as they are expecting that payers and providers will rely more heavily on technology to promote efficiencies. These executives said they expected a drop of about 15 to 50 percent, or one to five percentage points, in operating margins.

Some of the actions these executives take could include layoffs. For example, more than a quarter of executives surveyed believe that they may have to let go of at least 10 percent of their workforce in the next six to 18 months. At the same time, attracting clinical talent was the number-one priority for providers, indicating that layoffs would likely affect nonclinical employees. Further, to address the gaps in clinical labor, providers are considering several actions, the top two being use of technology to reduce labor burden (66 percent of surveyed executives) and skill-mix optimization to enable clinicians to practice at top of license (64 percent).

Rate increases are unlikely to offer a way out. While they may seem like the easiest path, payers recognize that price increases beyond historical levels are unsustainable; therefore, other actions will be needed. The actual financers of healthcare—employers, government, and consumers—can't afford more than historical levels of increase, if that.

Also, capital has become more expensive. Over the past 12 months, healthcare market valuations have trended lower as well; the S&P 500 has dropped by about 15 percent, while S&P Healthcare fell by 10 percent.[14] And capital availability has tightened. Over the past 12 months, the federal funds rate has increased by 225 basis points, to 2.50 percent.

The moment is now to address productivity

A $370 billion risk to industry profit pools by 2027 seems insurmountable—without mitigating actions, it could both make healthcare even less affordable and threaten sustainable industry margins (for example, $370 billion is nearly half of the projected industry EBITDA in 2027[15]). But we already know that more than a trillion dollars of value is available in the healthcare system that has not yet been accessed. This is the perfect storm that could spur the industry to address productivity gains. For example, the combination of cost pressures and a labor shortage provides an incentive to use technology-enabled levers to increase productivity, as any move to do so would free up capacity to meet demand and improve access while also reducing costs.

Healthcare executives will need a disciplined approach and fast action if they want to come out stronger from this period. Well-known tactical actions exist that can spur the required improvements, just as a set of well-understood organizational measures can help companies thrive during a period of uncertainty. The real question for the healthcare industry is whether incumbent stakeholders will be able to quickly set high aspirations in these areas, align the organization around them, and execute with the requisite speed. Those that do not only will weather the storm but may well come out ahead.

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[1] Estimate is based on potential increases in spending associated with excess inflation above historical trend. Nonlabor inflation rate based on forecasted changes in private-services consumption deflator; nonclinical labor inflation rate is based on wage index forecasts that model the historical relationship between wage growth and Consumer Price Index growth; clinical labor inflation rate is based on expert experience. Modeled economic indicators based on McKinsey analysis in partnership with Oxford Economics.
[2] Erik Swanson, *National hospital flash reports: January 2019–June 2022*, Kaufman, Hall & Associates, 2019–22.
[3] *The complexities of physician supply and demand: Projections from 2019 to 2034*, AAMC, June 2021; Gretchen Berlin, Meredith Lapointe, Mhoire Murphy, and Joanna Wexler, "Assessing the lingering impact of COVID-19 on the nursing workforce," McKinsey, May 11, 2022.
[4] The prevailing labor inflation rate pre-COVID-19 was expected to be 2.8 percent each year 2022–27, and in this revised scenario is estimated at 10 percent in 2022; 6 percent in 2023; and 3.5 percent after that, based on expert input. Modeled economic indicators for pre-COVID-19 estimates are based on McKinsey analysis in partnership with Oxford Economics.
[5] Gretchen Berlin, RN; Meredith Lapointe; and Mhoire Murphy, "Surveyed nurses consider leaving direct patient care at elevated rates," McKinsey, February 17, 2022.
[6] For example, see Elizabeth J. Brown et al., "Racial disparities in geographic access to primary care in Philadelphia," *Health Affairs*, 2016, Volume 35, Number 8.
[7] Baseline expectation was 2.8 percent per year.
[8] Aneesh Krishna and Shubham Singhal, "Consumer prices are rising fast, and healthcare isn't far behind," McKinsey, February 11, 2022.
[9] McKinsey Executive Survey, July 1, 2022.
[10] "FY 2023 hospital inpatient prospective payment system (IPPS) and long-term care hospital prospective payment system (LTCH PPS) final rule—CMS-1771-F," Centers for Medicare & Medicaid Services, August 1, 2022.
[11] "Consumer prices are rising fast, and healthcare isn't far behind," February 11, 2022.
[12] McKinsey Executive Survey, July 1, 2022.
[13] "FY 2023 hospital inpatient prospective payment system (IPPS)," August 1, 2022.
[14] As of August 26, 2022.
[15] Neha Patel and Shubham Singhal, "The future of US healthcare: What's next for the industry post-COVID-19?" McKinsey, July 19, 2022.

The gathering storm: The affordability challenge of endemic COVID-19

Addie Fleron, Pooja Kumar, Shubham Singhal, and Matt Wilson

September 21, 2022

Even as the acute threat to lives from the COVID-19 pandemic recedes, the ongoing challenges for the healthcare industry will persist.

The once-in-a-century pandemic thrust the healthcare industry into the teeth of the storm. The combination of accelerating affordability challenges, access issues exacerbated by clinical staff shortages and COVID-19, and limited population-wide progress on outcomes is ominous. This gathering storm has the potential to reorder the healthcare industry and put nearly half of the profit pools at risk. Those who thrive will tap into the $1 trillion of known improvement opportunities by redesigning their organizations for speed accelerating productivity improvements, reshaping their portfolio, innovating new business models to refashion care, and reallocating constrained resources. The healthcare industry has lagged behind other industries in applying these practices; players that are able to do so in this crisis could set themselves up for success in the coming years. This article is the third in our series of five articles addressing the gathering storm.

It is well understood that COVID-19 is here to stay as an endemic disease due to the combination of rapidly waning immunity after infection or vaccination and the mutating nature of the SARS-CoV-2 virus. As societies move past the public-health measures of the acute pandemic phase, the prevalence of disease has the potential to remain high—potentially more than 100 million annual cases in the United States. Given the lack of cross-immunity with other diseases, this caseload represents a step-change increase in morbidity with which our health system must grapple.

The scenario that we discuss in this article is one in which endemic COVID-19, without a major change in trajectory, could add approximately $220 billion to our total health system costs by 2027. This estimate is based on conservative assumptions on what share of current costs are likely to remain in the coming years of endemic COVID-19. This cost impact is exacerbated by the demographics and health status of the US population. A relatively high disease prevalence in a population with advanced age and with underlying health conditions that increase risk (for example, diabetes) could result in a steady stream of hospitalizations and infection spikes with each successive wave, and bring with it a range of other costs that society must bear. This scenario does not include any financial estimates from broader economic costs beyond healthcare expenses such as those driven by increased absenteeism, both for direct cases and for caregivers, and other economic disruption.

The ongoing costs of treating COVID-19 can be divided into four main categories: the cost of treating acute COVID-19 (including hospitalization, physician visits, and medication); ongoing testing and vaccination; the burden of long COVID; and increased morbidity from other conditions that COVID-19 is likely to impact, notably growth in chronic disease burden and

in behavioral health. The evidence and outlook for the progression of COVID-19 symptomatic illness and exacerbations will continue to evolve and is inherently uncertain. We have analyzed these potential ongoing costs based on the best available evidence (Exhibit).

Acute COVID-19 treatment

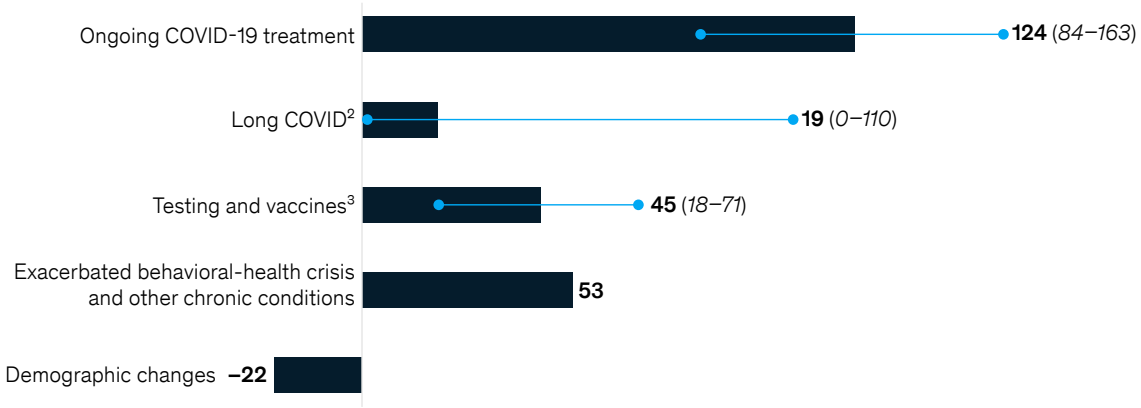
Within acute COVID-19 treatment, hospitalizations are likely to be the biggest driver of treatment cost going forward. According to our modeling, 80 percent of the cost of ongoing treatment will come from patients who require hospitalization. Although virulence of future strains may vary, it is likely that as long as COVID-19 remains a part of our near-term future, the elderly and those with comorbidities will continue to experience some level of ongoing need for inpatient care. Around 1.0 to 1.5 percent of symptomatic COVID-19 patients may require hospitalization, suggesting sustained rates of more than 4,000 daily admissions nationally.[1] Further, 10 to 15 percent of admitted patients are likely to require intensive care,[2] leading to human suffering as well as additional burden on the healthcare system. The remaining costs of acute COVID-19 will come from physician visits, antiviral medications, and other factors.[3]

In total, caring for acute COVID-19 could translate to an ongoing cost impact of more than $120 billion per year. Moreover, our healthcare facilities and caregivers will experience continued demand, particularly as we will likely see seasonal or irregular peaks of the disease that will stress our nation's healthcare workforce in some geographies. Two and a half years into the pandemic, we are still seeing higher rates of absenteeism during peaks as clinical workers become sick, or have alternative options such as locums work. Furthermore, several geographies are reporting a consistent lack of certain subspecialized classes of labor, for example, lab technicians and certain types of

Exhibit

Across factors, the total additional costs of treating COVID-19 could be over $200 billion.

Impact on cost of care from COVID-19-related factors and exacerbations of other conditions, 2027,[1] $ billion



[1]Total range of $137 billion–$379 billion is based on scenario analysis using McKinsey's COVID-19 Epidemiological Scenario Planning Tool (v13.3), which includes a range of 110 million–220 million annual cases, of which 10–15% require outpatient treatment; 4,100–6,100 people per day require non-ICU hospital admission; and 400–900 per day require ICU admission. Cost of treatment estimates are from Blue Cross Blue Shield and FAIR Health. All figures are scaled to nominal 2027 estimates.
[2]Long COVID treatment costs are based on an estimate that at least 3–12% of cases result in long COVID (UK Office for National Statistics) for 3–12 months, published estimates of long COVID symptoms (UpToDate), and standard treatment costs for those symptoms (MEPS). The upper estimates of long COVID incidence assume approximately 20 million US long COVID cases per year, based on data on current rates of long COVID from the US Census Bureau's July–August 2022 Household Pulse Survey. There is significant uncertainty in ascertaining prevalence and resulting cost impact of long COVID, and data continue to become available on a frequent basis as more research is conducted. Our aggregate analysis, based on these enumerated data sources, uses a point estimate of $19 billion as a conservative estimate based on available data. For both ongoing COVID-19 treatment and long COVID, higher incidence rates would result in an estimate at the higher end of the range.
[3]Testing and vaccine estimates are based on 2021 costs per test and per vaccine and on data from HHS and the CDC as to annual demand for testing and boosters. For this factor, higher utilization of testing (times per person, per year) would result in an estimate at the higher end of the range. All figures are scaled to nominal 2027 estimates.

Within acute COVID-19 treatment, hospitalizations are likely to be the biggest driver of treatment cost going forward.

frontline staff, who have alternatives outside healthcare in today's labor market.

Testing and vaccination

COVID-19 testing and vaccination have become a part of our lives, and we anticipate that demand for both will continue.

This year, we're on track to administer 390 million PCR tests in the United States.[4] Annualizing the lowest week of demand from this year would translate to a need for 150 million tests. We also expect to see continued demand for rapid at-home COVID-19 tests. Triangulating the potential number of viral episodes and rates of influenza-like diseases, we could need 800 million or more rapid tests per year.[5]

On the vaccine front, immunity from infection appears to wane after a few months, although protection against severe disease seems to last longer.[6] Moreover, new variants have shown their ability to evade immunity from prior infection and vaccines based on older strains. We still don't know whether, longer term, we will need annual boosters and, if we do, what they may look like (for example, one shot, two shots, bivalent/multivalent, or combined with flu vaccine). However, many experts, including current US Food and Drug Administration leaders, expect that annual COVID-19 vaccination will be recommended,[7] so we can estimate a trend toward the 170 million doses of flu vaccine that Americans get annually. What does this all add up to? Ongoing testing and vaccination could cost $45 billion per year across pharmaceutical and administration spend.

Long COVID

It's safe to say that there is a lot we don't know about long COVID, but what we do know is starting to paint a picture for what this disease may mean for our healthcare system and for patients.

Fundamentally, COVID-19 is a multiorgan disease, so it's no surprise that long COVID has been linked to over 200 symptoms, ranging from fatigue to chronic kidney disease.[8] Estimates of the prevalence of long COVID currently range from 5 to 50 percent.[9] One recent large-scale study from the UK Office of National Statistics estimated the prevalence of long COVID symptoms in 3 to 12 percent of those who had tested positive.[10] The US Census Bureau National Pulse Survey data released recently estimate 7.6 percent of the adult population, or 20 million individuals, suffer from long COVID in the United States. The duration of long COVID is under much discussion, with current studies demonstrating a broad duration range from three to 12 months or longer.[11]

As noted in the exhibit, the estimates of long COVID–related costs per year, based on diverse data sources, range widely from zero to more than $100 billion. Without a clear consensus, we note a conservative estimate to quantify long COVID's potential effects adding some $20 billion per year of healthcare spend. This estimate does not take into account the associated impacts on the healthcare workforce, including the burden on healthcare workers who are themselves impacted or have family members who require ongoing care and support.

Other impacts of COVID-19

The impacts discussed above are all related to the costs of treating or preventing COVID-19 or long COVID. COVID-19 has also led to increased morbidity in other conditions due to missed screenings and changes in healthcare-

seeking behavior as well as behavioral health. How significant could these effects be?

Behavioral-health needs have skyrocketed in the age of COVID-19. Prior to the pandemic, spending on behavioral health was growing at about 2.5 percent per year. In 2020–21, this spend jumped to 8.4 percent growth. Many reasons are cited for this increase, including social isolation during lockdowns, loss of loved ones, uncertainty arising from infection of individuals or their family members, and loss of jobs and economic uncertainty. While that level of growth in need may not persist, we are nowhere near the baseline growth rate we saw prepandemic. Changes catalyzed by COVID-19 in how behavioral health is accessed, including increased awareness, reduced stigma, widespread adoption of tele-behavioral health, enhanced insurance coverage, and expanded employer support, will continue to drive growth.

We are seeing the stresses that these impacts place on our healthcare ecosystem firsthand, with many providers struggling to maintain adequate staffing for their programs and facilities, individuals and families facing long wait times for care, and emergency departments seeing increases in "boarding" (stays of more than 24 hours) for patients experiencing psychiatric crises due to shortages in available hospital- or community-based treatment options. With the July 2022 introduction of the new 988 Suicide and Crisis Lifeline, the US behavioral-health system is making progress toward alleviating some of this pressure by improving access to care for individuals in crisis, though more remains to be done.

Chronic conditions are also getting worse, often driven by a COVID-19 infection or deferred care. Our research shows that we can expect the cost of care for chronic conditions to increase by 1 percent over baseline by 2027. This is a long-term impact of behavior that began early in the pandemic period, where significant numbers of patients canceled or deferred needed care. These cost increases come from exacerbations: for example, in the case of deferred care, the average cost of treating a patient with chronic obstructive pulmonary disease can increase between 7 and 11 percent due to the increase in symptom severity, and delays in detecting or treating cancer can lead to stage progression.[12]

These effects could increase the cost of care by $57 billion by 2027.

Separately, reduction in care needs associated with COVID-19 mortality, that is, for example, what healthcare spending in 2027 would have been for those who have died from COVID-19, accounts for some $20 billion of avoided costs. These costs, due to demographic changes, are netted out in our calculation.

The impact across all of COVID-19's various effects could increase the cost of care by approximately $220 billion, a 5 percent increase over our baseline healthcare spend as a nation. A wide range around this number exists, as we are still learning about this virus as it evolves.

The healthcare system has some levers to mitigate these costs, however. Known public-health measures, including those minimally disruptive to economic, social, or education activities, can mitigate these costs but would require reaching societal consensus to adopt them, which has been elusive to date.

In order for the healthcare system to navigate these impacts, three overarching questions should be addressed.

Can we further prevent direct COVID-19-related costs? The simplest way to reduce or manage these costs is to avoid them. Measures that can reduce caseload and protect against severe disease, such as ensuring high vaccination rates, reducing transmission, or providing rapid treatment, can help to influence these costs. In a world where COVID-19 is endemic, an understanding of the long-term costs of endemicity may change the "calculus" for how we invest today to prevent cases and severe disease. Predictive analytics that recommend boosters to those patients that would most benefit from them, testing, pharmaceutical interventions, and home-care supports for vulnerable individuals—as opposed to blunt messaging for whole populations—can make a difference. Similarly, ongoing efforts to contain

the costs of testing, vaccination, and treatment can help to reduce one of the largest categories of ongoing COVID-19 spend.

Can we build resiliency into the health system to navigate surges and the sustained burden of COVID-19 and mitigate the costs? Some of the most dramatic impacts (on both health and cost) have come from systems that were overwhelmed by surges. Health systems and payers need to plan for these peaks as an ongoing phenomenon, integrating them into their workforce plans and staffing models. As the bulk of costs are driven by hospitalizations, continued innovation and use of treatments that can keep people out of the hospital and out of the ICU will become increasingly important.

Can we mitigate second-order effects of living with COVID-19, such as long COVID, chronic care, and behavioral health? Considerable heterogeneity across these effects exists. Perhaps the biggest uncertainty is long COVID and what impact it will have long term. Investments in characterizing the disease and developing treatment protocols and new medications, such as seen with the recent investments in the Long COVID Research Initiative, are essential to minimizing the burden of this emerging phenomenon.[13]

The industry should be prepared for COVID-19 to remain a reality for many years to come, with impacts on our patients, our workforces, and how we plan and operate. We can take actions now to start addressing each of these impacts.

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The gathering storm: The threat to employee healthcare benefits

Aditya Gupta, Akshay Kapur, Monisha Machado-Pereira, and Shubham Singhal

October 20, 2022

US inflationary pressures could significantly raise annual employer healthcare costs and impact vulnerable household finances.

The once-in-a-century pandemic thrust the healthcare industry into the teeth of the storm. The combination of accelerating affordability challenges, access issues exacerbated by clinical staff shortages and COVID-19, and limited population-wide progress on outcomes is ominous. This gathering storm has the potential to reorder the healthcare industry and put nearly half of the profit pools at risk.

Those who thrive will tap into the $1 trillion of known improvement opportunities by redesigning their organizations for speed-accelerating productivity improvements, reshaping their portfolio, innovating new business models to refashion care, and reallocating constrained resources. The healthcare industry has lagged behind other industries in applying these practices; players who are able to do so in this crisis could set themselves up for success in the coming years.

Inflation is putting substantial pressure on US healthcare costs—they could be $370 billion higher in 2027 relative to pre-COVID-19 projections.[1] And costs associated with endemic COVID-19 could add to this estimate, which only takes account of inflation. Providers are already experiencing the effects of inflation, but its impact on most employers and consumers is likely to be felt more significantly in the 2024 to 2026 insurance-contract renewal cycle. Employers across industries face profitability headwinds due to elevated healthcare costs. In addition, if cost pressures are unmanaged, the most vulnerable employees could end up spending 70 to 75 percent of their discretionary income on medical expenses.

This article is part of our five-article series on the gathering storm in US health, shares our perspective on the magnitude of healthcare cost increases confronting both employers and employees. It also outlines a range of actions that employers could take to contain costs and promote long-term affordability, while maintaining access and quality of care.

How payers might respond to rising costs

Healthcare payers are likely to face inflation-induced increases in medical costs and selling expenses as well as general and administrative costs. We estimate that providers could pass on more than 6 percent incremental medical cost increases to payers in the upcoming contractual cycles (Exhibit 1).[2] These cost increases would flow through to employers as underlying provider network contracts are renegotiated. Some of this is already happening, but the full impact may not be felt until 2025, given provider contracting cycles. If these costs are passed on to customers in entirety, employers could see a 9 to 10 percent healthcare cost rise.[3] That would be greater than twice the 4 to 5 percent increase that the average employer experienced in 2022.[4] The healthcare cost increase could be even higher (about 1.4 to 1.8 times) for employers who offer high-deductible health plans (HDHP) as a result of deductible leveraging.[5] These plans represent about one-third of total commercial group enrollment.[6]

The ability of payers to pass on rate increases from providers to employers is linked to bid cycles. The first round of impact would likely occur in the 2023 provider contracting cycle for self-insured employers, and the 2024 pricing cycle for fully-insured employers. Employers, in turn, would then face the choice of bearing these increased costs or, as is more likely, buying down coverage or passing more costs onto employees.

The latest Consumer Price Index (CPI) report shows that the medical care index rose 0.7 percent in August after rising 0.4 percent in July, as major medical care component indexes continued to increase across hospital services, prescription drugs, and physician services.[7] Continued inflation in the sector could further increase the healthcare cost pressure.

Employers face reduced profitability

Higher benefits' expenses could add to employer labor-related costs on top of wage inflation. As a result, Fortune 1000 companies could face profitability headwinds due to elevated healthcare costs (9 to 11 percent of overall industry earnings by 2025).[8] Employers in labor-intensive industries such as retail, manufacturing, and food services could be disproportionally affected and experience 16 to 19 percent EBITDA erosion by 2025 (Exhibit 2).

As reported in the "2022 McKinsey Healthcare Stakeholder survey," over 70 percent of employers stated that premium increases above 4 percent would be unsustainable. As a result, the respondents said they would consider actions to control costs, including increasing employee contributions (Exhibit 3). However, such moves could exacerbate current talent attraction and retention pressures.

Vulnerable populations are confronted by rising medical expenses

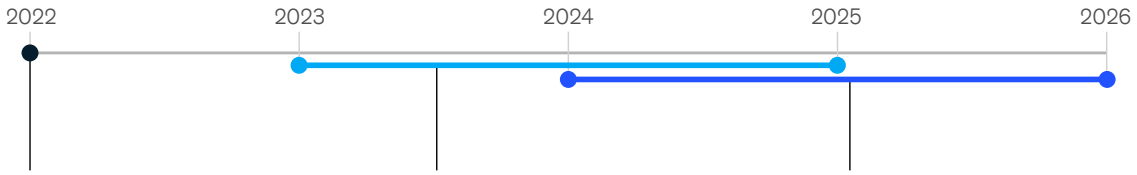
As noted above, employers indicate a willingness to continue shifting healthcare costs to employees. They would do so by increasing the employee share of premium costs, moving to HDHPs, and raising the employee share of out-of-pocket costs as top actions, among others (Exhibit 3).

The impact would fall disproportionately on vulnerable populations, specifically families under 200 percent of the federal poverty line.

Exhibit 1

Employers could face health cost increases of 9–10 percent through 2026 because of inflationary pressure passed through from providers.

Inflationary cost pass-through from providers to employers



~$100 billion

Potential incremental annual provider costs from 2022 inflation[1]

~$80 billion in incremental clinical wage costs, and ~$20 billion in incremental non-labor spending driven by heightened inflationary environment in 2022

~6%

Incremental unit cost increase passed to non-government payers over 3-year contract renewal cycle

~$70 billion of the $100 billion incremental provider cost passed to non-government payers,[2] equivalent to a 6% increase of non-government payer total medical costs

9–10%

Total rate increase passed on to employers at the next renewal during 2024–26 benefit years

Total annual rate increase to employers is equivalent to the ~6% inflationary unit cost increase on top of 3–4% annual baseline trend

[1] Based on macroeconomic forecasts from McKinsey Global Institute applied to historical provider cost pools.
[2] Based on historical provider revenue base from non-government payers and historical payer cost pools across payer lines of business.

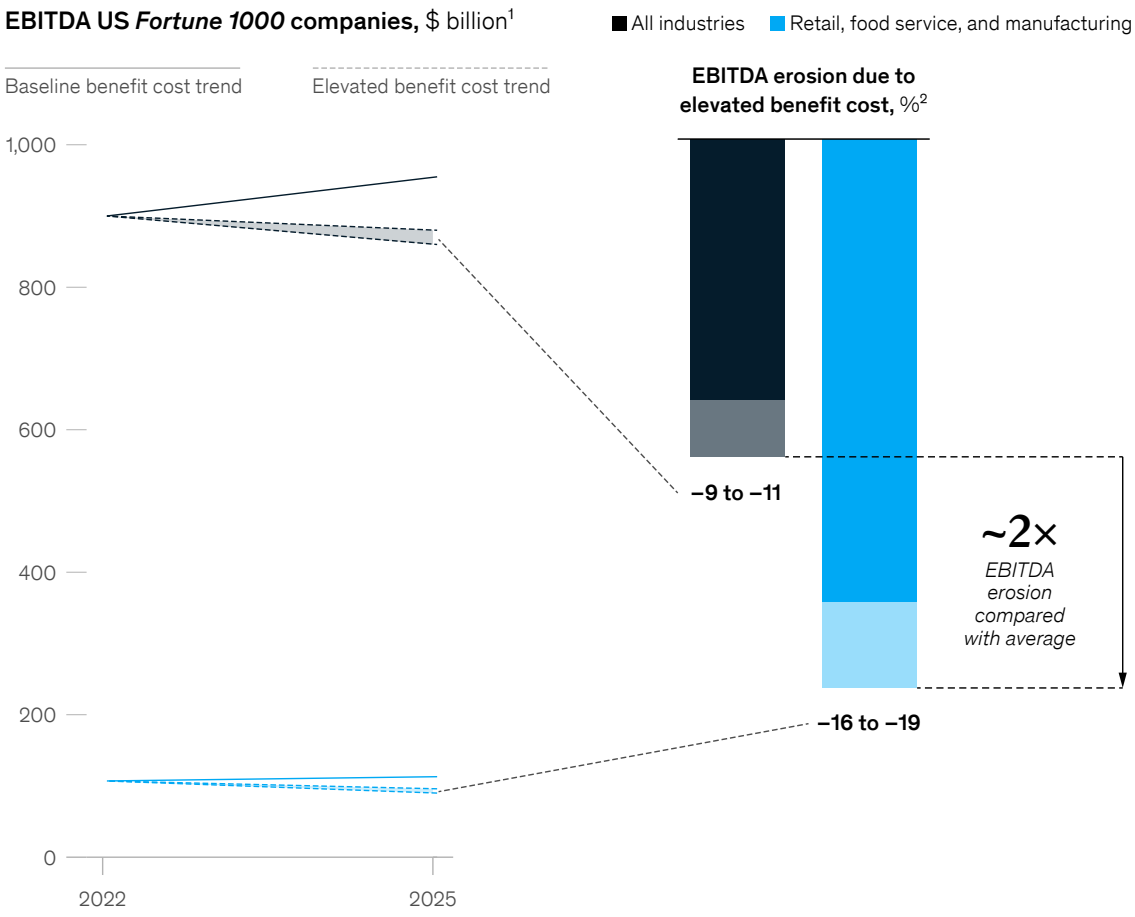
These families currently spend 62 percent of discretionary income on medical expenses, including premium contributions and out-of-pocket expenses. A 9 to 10 percent healthcare cost increase for employees would raise their healthcare expenses to 68 percent of discretionary income. If employers shift some of their increased cost burden to employees by further raising the employee share of premium contribution, say from 18 percent to 20 percent, this population could see nearly 75 percent of discretionary income consumed by healthcare expenses (Exhibit 4).[9]

HDHPs would likely see average premium increases as high as 18 percent at the next contract renewal. As small businesses typically have a higher percentage of employees in HDHPs, they would bear the brunt of these cost increases, and a large proportion would see healthcare costs rise substantially. In fact, the proposed rate increase requested in 2023 for small-group Affordable Care Act (ACA) plans across the country was as high as 46 percent.[10]

Apart from these potential healthcare cost increases, our 2022 McKinsey & Company US Consumer Pulse Survey suggests that two-thirds of consumers are already concerned about inflation in general, while three-fourths indicate that they are purchasing less or delaying purchases across categories. In such an

Exhibit 2

Industries with a high employee base and low margin may experience approximately 2X higher EBITDA erosion from elevated benefit costs by 2025.



[1] Assumes 2% annual EBITDA growth with baseline benefit cost trend, 3–4% baseline benefit cost trend and 5.5%/9.5%/9.5% elevated benefit cost increase over 2023–25.
[2] Erosion numbers represent 2025 baseline vs elevated cost range.
Source: McKinsey analysis of *Fortune 1000* companies, Truven data

environment, employees facing unaffordable premiums and out-of-pocket burdens may decide to self-select out of group coverage in favor of individual policies, Medicaid (if eligible), or no coverage (uninsured).

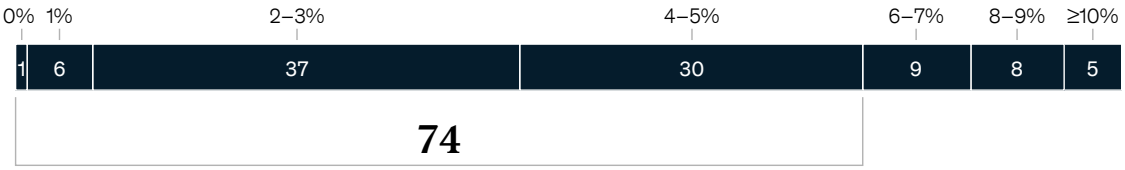
Now is the time to transform employer benefits

Cost pressure from inflation is uncertain—it may be fleeting or persist over the next five years. Either way, there is over a trillion dollars

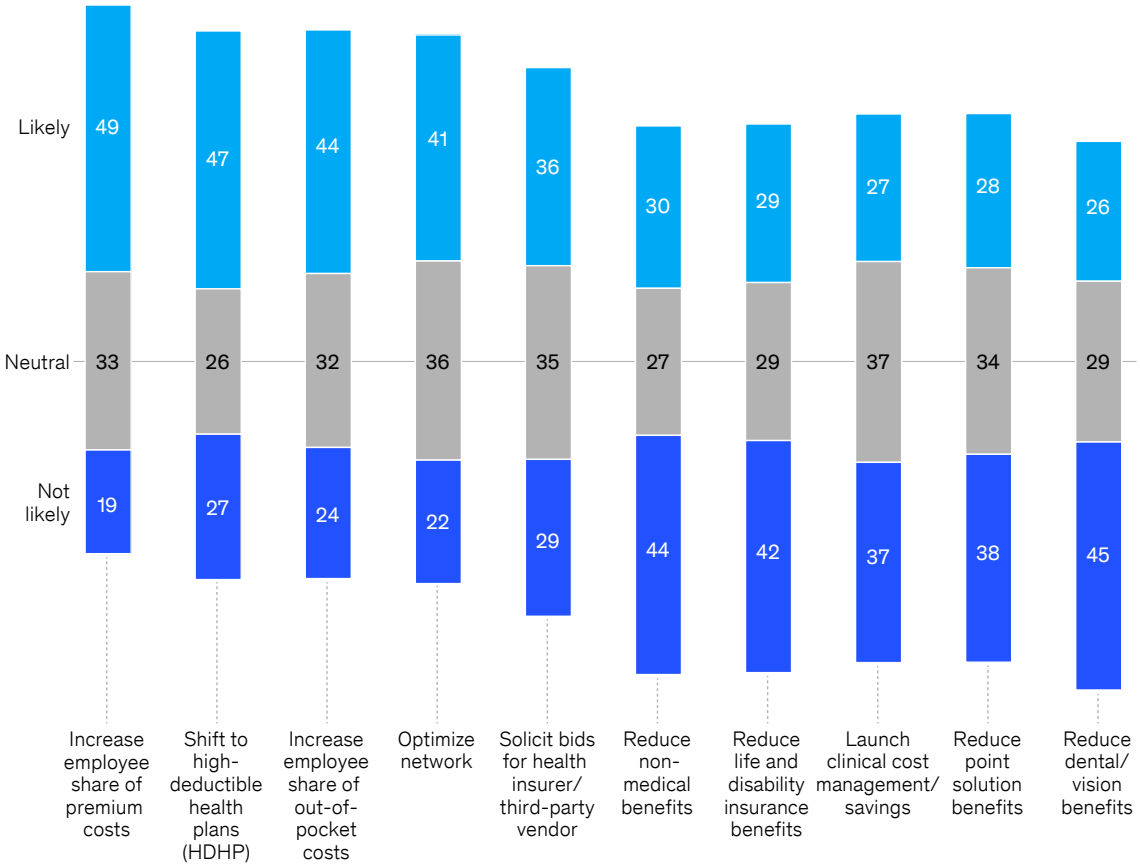
Exhibit 3

Over 70 percent of employers stated that premium increases above 4 percent would be unsustainable; many would consider increasing employees share of costs.

Sustainable annual increase for health benefits over the next 6–18 months,[1,2] % of respondents



Likelihood managers will consider each type of benefit optimization strategy to minimize costs,[3] %

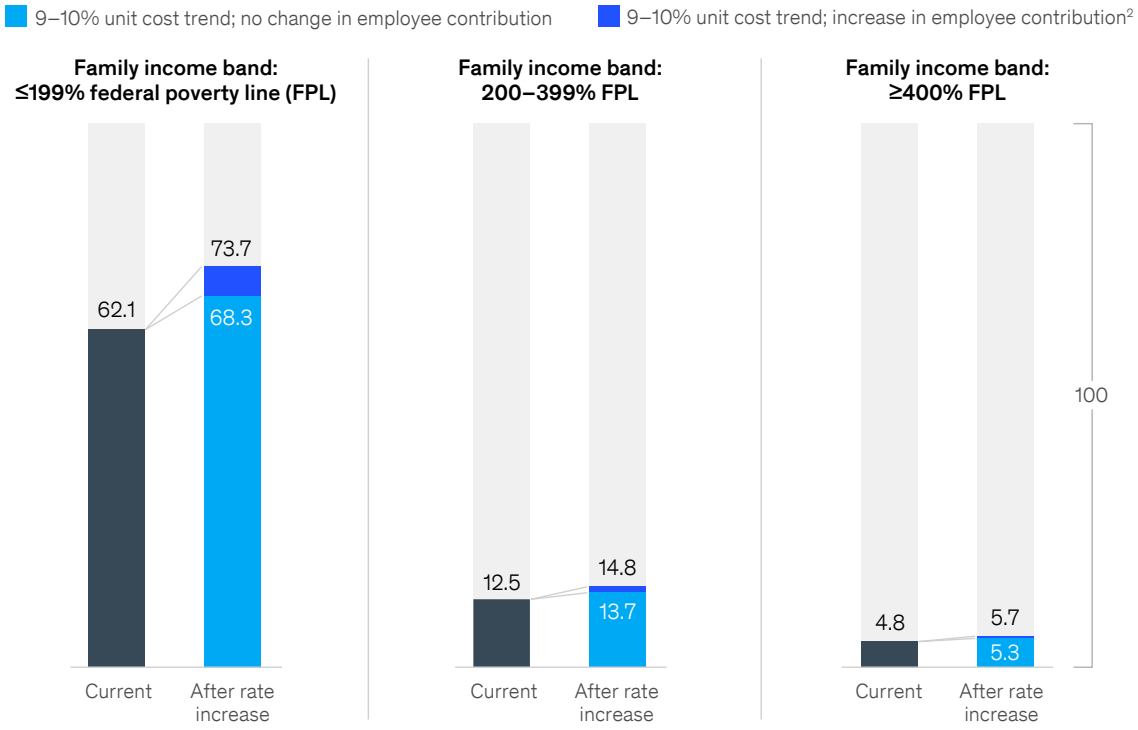


Note: Figures may not sum to 100%, because of rounding; n = 301.
[1] Question: *What is a sustainable annual increase for health benefits over the next 6–18 months?*
[2] 4% repondents selected 'Don't know' reponse for this question.
[3] Question: *Which of the following benefits optimization strategy are you likely to consider to tackle inflation and recession challenges over the next 6–18 months?*
Source: 2022 McKinsey Healthcare Stakeholder survey, July 1, 2022

Exhibit 4

Lower income populations could spend ~68–75 percent of discretionary income on medical costs due to unmanaged cost increases.

Average medical contributions for family coverage, % of discretionary income[1]



[1] Total medical contributions incl. out-of-pocket and premium costs. Assumes: 9–10% allowed cost trend; ~$20,000 average cost of care PEPY; 85% average MLR; OOP spend based on KFF survey data.
[2] Assumes employee contribution to increase by 2%.
Source: Enrollment projection tool, KFF 2021 Employer Health Benefits Survey, Peterson-KFF Health System Tracker, 2020 US Census data

of value available in the healthcare system.[11] The current economic situation could spur the industry to pursue this opportunity and take effective cost-management action. Employers could partner with payers, pharmacy benefits managers, or providers to push for system-level change to address cost pressures, as well as improve care, enhance employee experience, and increase productivity.

While there is no "silver bullet," a combination of five measures could help employers defray cost increases in the near term as well as put the system on a more sustainable long-term trajectory.

Reimagine medical networks

Levers to improve network performance have long been available but not widely deployed. As stated in industry research, high-performance, narrow provider networks can reduce costs while maintaining efficiency and quality of care.[12] Other levers, including tiered networks, centers of excellence, referral management, and site-of-care strategies, can generate savings of 5 to 15 percent. These measures can be applied across the care continuum—hospitals, primary care, specialty groups, post-acute providers, and ancillary care—while maintaining access and quality of care.

Consumer-centric solutions, like reference-based pricing, can enable patient-level financial transparency and lead to savings of up to 30 percent.[13] Financial transparency should increase as payer price-transparency mandates enhance visibility into cost variation. Consumer-friendly cost comparison tools could empower employees to make tradeoffs based on cost

and other metrics, such as quality, access, and experience.

Manage specialty drug expense

Specialty drug spending is expected to continue to grow at an 8 percent CAGR through 2025.[14,15] Although fewer than two percent of insured members use specialty drugs, specialty prescriptions account for close to 50 percent of total pharmacy spending.[16] These individuals have serious health conditions (such as cancer, cystic fibrosis, multiple sclerosis, HIV/AIDS, and rheumatoid arthritis) that require complex therapies and higher-touch care models.

Employers could re-focus their attention on the broader healthcare needs and conditions of these patients, given their complex needs and costly care. Managing these costs requires a comprehensive approach, employing both traditional and innovative levers.

Employing traditional levers to optimize the use of cost-effective drugs in optimal care settings (for example, home or ambulatory infusion sites) will be paramount. These levers include formulary and utilization management, and network and benefit design. To minimize waste and optimize health outcomes in the highest value settings, employers should work with pharmacy benefits managers and payers to redefine formularies across brands, generics, and biosimilars. This can realize savings from cost-management measures and help adopt targeted care-management programs to facilitate a more streamlined patient experience and improve patient outcomes. In addition to these levers, employers can explore value-based care programs with manufacturers or participation in financing solutions (such as risk-pooling and pay-per-performance programs) that may require adopting a longer-term lens to capture savings.

Increase the use of value-based care or risk-sharing models

Value-based care (VBC) models can better align incentives across employers and providers by incorporating quality of care and outcomes in provider reimbursement arrangements. Successful risk-sharing models involve an efficient network and a new approach to benefits management that requires greater use of analytics, patient engagement, and targeted care-management interventions.

VBC models that show promise in the employer context include high-performance provider networks with cost- and quality-based metrics, episode-based payments for standardized patient-care journeys (for example, cancer), and risk-based contracts for end-to-end management of high-cost conditions (Exhibit 5). Employers have an opportunity to scale proven VBC models, especially by applying extensive learning from Medicare.

Adopt high ROI care-management programs

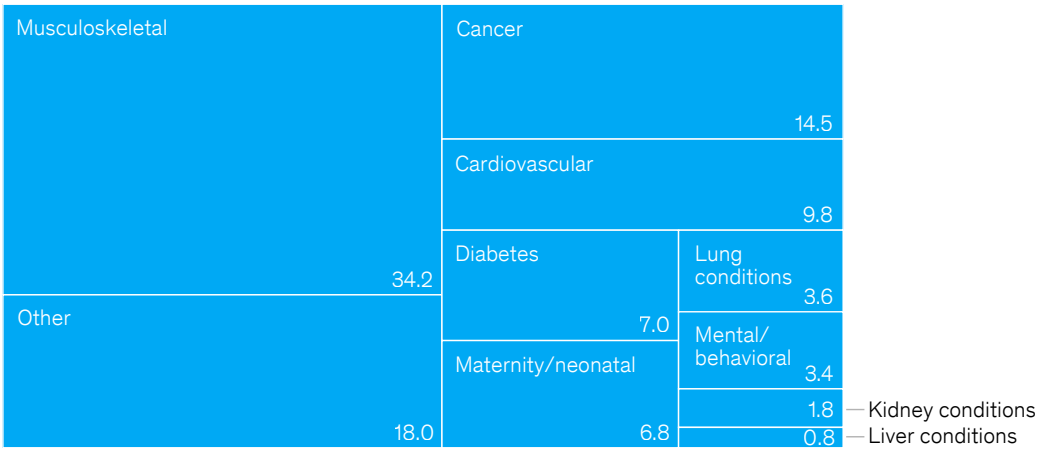
Continued rising costs and the COVID-19 pandemic have generated substantial demand for care-management programs focused on the most prevalent conditions and episodes, such as diabetes, musculoskeletal, maternity, and cardiovascular, as well as behavioral health (Exhibit 6). Employers could work together with their healthcare partners to make greater use of the vast amount of healthcare data at their disposal to understand their employees' healthcare needs and risks, determine the

Employing traditional levers to optimize the use of cost-effective drugs in optimal care settings (for example, home or ambulatory infusion sites) will be paramount.

Exhibit 5

Employers could prioritize innovative value-based care or risk-sharing models around the top spend conditions.

Total employer-covered healthcare spending by condition, 2019, %



Note: Figures do not sum to 100%, because of rounding.
Source: Truven 2019

Exhibit 6

There is opportunity to better address employee sub-segments of healthcare risk through improved care management.

Type of member; average annual cost per member	Example conditions	Share of members, %	Share of costs, %	Example programs
Healthy *<$2,500*	• Preventative care • Minor acute care • Pregnancy	>80	<20	• Maternity program featuring e-consult, digital member education, care condition, remote patient monitoring for high-risk pregnancy
Rising risk *>$8,000*	• Early-stage single chronic illness (eg, type 2 diabetes)	~15	~20	• Diabetes management with remote patient monitoring, digital engagement/consultation, and medication adherence management
Persistent super utilzers[1] *~$90,000*	• Unmanaged behavioral health needs (eg, anxiety, depression) • Poorly managed chronic illnesses (musculoskeletal, diabetes, hypertension) • Cancer	2–3	~30	• Behavioral health program focusing on virtual consulting, digital-driven personalized care, prescription monitoring, peer engagement • Joint pain/joint replacement management via Rx utilization management, patient navigation, remote therapy
Catastrophic *>$100,000*	• NICU/PICU[2] cases • Heart failure • Renal disease	2–3	~30	• Cardiovascular disease management with remote patient monitoring and multi-discipline post-acute care coordination

$6k
Average spend per member

[1] More than one year in top ~5% of spending.
[2] Newborn intensive care unit/pediatric intensive care unit.
Source: Kaiser Family Foundation 2019; Population Health Management 2019

best way to engage them, and deploy the right combination of high-performance care-management solutions.

Employers who were early adopters of care management are likely to have already implemented such programs. To continue encouraging uptake, offerings should show true return on investment (ROI) impact. Employers could work with solution providers to transition activity-based reimbursement arrangements (typically structured as per-employee per month) to higher quality engagement (for example, fees per engaged employee), and from fee-for-service to percentage of shared savings and ROI guarantees. With these enhancements, ROI of two times or more for care-management programs is feasible.

Consider using value-based insurance plans

Innovation is a prerequisite for transforming the benefits system and creating a stronger incentive for consumers to encourage preventive care and shop for high-efficiency providers. In particular, value-based insurance design (VBID) plans carefully structure benefit coverage and cost-sharing policy based on the degree of consumer discretion and influence, the ability of consumers to absorb cost risk, and the value at stake. This approach attempts to align patient and payer financial incentives around utilization of care (Exhibit 7). Employers can work directly with payers or third-party vendors to tailor such designs based on their employee population and provider networks.

Employers have tried some of the approaches discussed above but only sporadically and not at scale. Achieving impact in benefits reform requires employers to adopt a transformational approach, including pursuing multiple levers in a coordinated way and at scale within a local market. Employers could move to enhance member engagement with intuitive consumer navigation using contemporary technology, real-time localized market and employee data, and advanced analytics. This transformational approach could offer tailored solutions for employee sub-segments based on their underlying conditions, healthcare and socioeconomic needs, and local market context.

Exhibit 7

Next-generation benefit design accounts for healthcare risk, consumer discretion and ability to absorb risk, and value.

Comparison by risk category

Low Medium High

Type of risk	Example	Consumer discretion	Consumer ability to absorb risk (cost)	Value
Routine	Minor acute low-cost conditions; usually require outpatient medical care	High	High	Medium
Preventive	Evidence-based preventative care	High	Medium	High
Chronic care	Evidence-based chronic disease management	High	Medium	High
Catastrophic, chronic	High-cost chronic disease management	High	Low	High
Catastrophic, not chronic	High-cost acute care	Low	Low	Low
End of life	Specialized care at the end of life	Low	Medium	High
Discretionary	Shoppable non-emergent services	High	Medium	Medium
Purely elective	Procedures often not covered by medical benefits	High	Medium	Low

The economic imperative for employers to address rising healthcare costs is clear. Also, pressure on health benefits will affect employer value proposition at a time of continuous talent shortage. Employers must act now. While premiums are already set for 2023 in most cases, there is an opportunity to adopt the above actions to spur a step change in long-term affordability. Partnering with healthcare services' vendors and challenging them to comprehensively redesign employer health benefits will be necessary to ensure that healthcare coverage is affordable—for both employers and employees.

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[1] Addie Fleron, Aneesh Krishna, and Shubham Singhal, "The gathering storm: The transformative impact of inflation on the healthcare sector," McKinsey, September 19, 2022.
[2] About $100 billion total incremental inflationary costs for providers due to clinical wage inflation and non-labor inflation, of which about $70 billion could be passed through to non-government payers based on historical provider revenue mix. This is equivalent to a 6 percent ($70 billion divided by $1.2 trillion) incremental increase in provider costs paid by non-government payers.
[3] Assuming a 6 percent incremental medical cost increase driven by inflation on top of a 3 to 4 percent base trend, based on McKinsey analysis.
[4] "National survey of employer-sponsored health plans, 2022," Mercer, 2022.
[5] In deductible leveraging cases, the medical trend does not affect the deductible as it is a fixed dollar value. Thus, it only affects the portion of the bill that crosses the deductible limit, so the employer ends up bearing a greater financial burden each year, either in the form of increased premiums (for fully insured plans) or increased employer share of allowed cost (for self-insured plans).
[6] "Employer health benefits survey 2021," KFF, November 10, 2021. Enrollment in HDHPs is reported to be 28 to 31 percent during the period 2019 to 2021.
[7] "Consumer price index – August 2022," Bureau of Labor Statistics, US Department of Labor, September 13, 2022.
[8] Assumes 2 percent annual EBITDA growth with baseline benefit cost trend, 4 percent baseline benefit cost trend, and 5.5 percent/9.5 percent/9.5 percent elevated benefit cost trend over 2023 to 2025, based on McKinsey analysis.
[9] For a family of four under 199 percent of the federal poverty line, with an average annual discretionary income of $8,400. The 9 to 10 percent premium increase and 2 percent increase in the employee share of cost would translate to $1,200 more in healthcare spending for a total of about $6,200 per year, equivalent to 74 percent of discretionary income.
[10] "Rate review," HealthCare.gov.
[11] "The gathering storm: The transformative impact of inflation on the healthcare sector," September 19, 2022.
[12] Jonathan Gruber and Robin McKnight, "Controlling health care costs through limited network insurance plans: Evidence from Massachusetts state employees," National Bureau of Economic Research, September 2014.
[13] Reference-based pricing refers to the pricing approach where the employer (supported by a third-party administrator or other vendor) pays a set price for each healthcare service instead of negotiating prices with providers. When a provider bills for the service, the payer remits the set amount. If the provider is dissatisfied with the payment, it can bill the patient for the unpaid portion of the claim.
[14] Specialty drugs are often classified as high-complexity (for example, requiring complex logistics), high-touch (patient monitoring and case management), and higher-cost (compared with traditional drugs).
[15] Shubham Singal and Neha Patel, "The future of US healthcare: What's next for the industry post-COVID-19?" McKinsey, July 19, 2022.
[16] Adam J. Fein, *2022 Economic report on U.S. pharmacies and pharmacy benefit manager*s, Drug Channels Institute, March 2022.

Care delivery transformation

Transforming care delivery could yield up to $420 billion to $550 billion in savings.

The next frontier of healthcare delivery

Mathangi Radha, Shubham Singhal, and Nithya Vinjamoori

March 24, 2022

Ten big shifts will define the future of care delivery in the United States.

The realignment of the US healthcare system to better address the population's chronic-disease burden has accelerated significantly in the past few years. This transformation manifests itself as a shift to the next frontier of care delivery, spurred by a combination of changes in consumer preferences, technology adoption, policy direction, reimbursement, and investor appetite.

In this article, we identify and discuss the ten big shifts that will affect the future of care delivery in the United States. Payers, providers, and policy makers should take stock of these shifts as they seek to provide the best care possible to the nation's consumers. The future of care delivery is:

- patient-centric
- virtual
- ambulatory
- in the home
- value-based and risk-bearing
- driven by data and technology
- enabled by new medical technologies
- transparent and interoperable
- funded by private investors
- both fragmented and integrated

Patient-centric

We define "patient centricity" as a healthcare experience that is convenient, transparent, and personalized. Consumers expect to be treated as individuals with specific needs, not as problems to be solved. Indeed, US consumers are already taking steps to manage their own health and well-being, spending between $300 billion and $400 billion a year beyond qualified medical spending on goods and services they consider important to improving health (Exhibit 1).[1] US consumer spending on wellness categories,[2] including fitness, nutrition, appearance, sleep, and mindfulness, is increasing: 30 to 40 percent of US consumers consider these categories to be a high priority (see sidebar "Categories of wellness spending").[3]

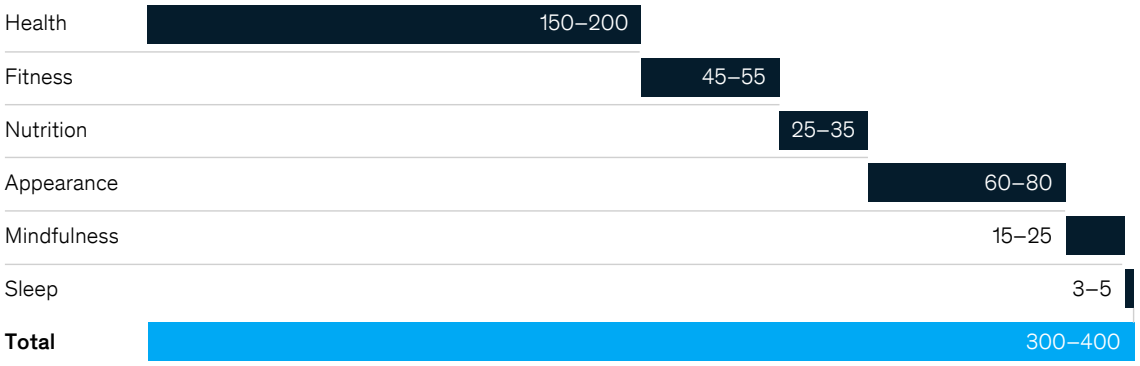
Consumers are also demanding greater access to care and a more seamless experience. For example, more than 60 percent of consumers expect to be able to change or schedule a healthcare appointment, check medical records and test results, and renew a medication online.[4] The expectation that healthcare information should be available at one's fingertips has been rising with the ubiquity of mobile phones and has grown even more during the pandemic with the increase in virtual healthcare.

The economic case for patient-centric models is clear. Our recent surveys show that satisfied patients who use patient-centric models report having 36 percent fewer visits, are 28 percent less likely to switch providers, and are five to six times more likely to use other services from the same provider.[5] While this cohort may be generally more involved in their healthcare, it is clear that satisfied patients feel more empowered to engage in their own health and feel as though they are getting better care, leading to improved outcomes overall.

Exhibit 1

US consumers spend $300 billion to $400 billion per year across six dimensions on goods and services they consider important to improving health.

US holistic health and wellness market, $ billions[1]



[1] Figures may not sum, because of rounding.
Source: Shaun Callaghan, Martin Lösch, Anna Pione, and Warren Teichner, "Feeling good: The future of the $1.5 trillion wellness market," McKinsey, April 8, 2021; McKinsey Future of Wellness Survey (August 2020, n = 7,500); McKinsey Consumer Health Insights Survey (August 2021, n = 2,125); PatientPop

Private investors are spurring much of today's innovation around patient-centric models. Digital healthcare start-ups, differentiated by their patient-centric models, are gaining traction with venture funds. Venture funds invested more than $29 billion in digital healthcare start-ups in 2021—more than double the level of investment in 2020.[6] Consumer preference and the ROI for patient-centric models have become clearer, but the challenge is now one of scale.

Categories of wellness spending

Consumer spending on wellness falls into several categories:

- ***fitness:*** home gym equipment and fitness classes
- ***nutrition:*** vitamins and nutrition supplements
- ***appearance:*** beauty and skincare products, "athleisure" clothing, and nonsurgical aesthetic procedures
- ***mindfulness:*** meditation apps or courses
- ***sleep:*** app-enabled sleep trackers and melatonin or sleep-enhancing supplements

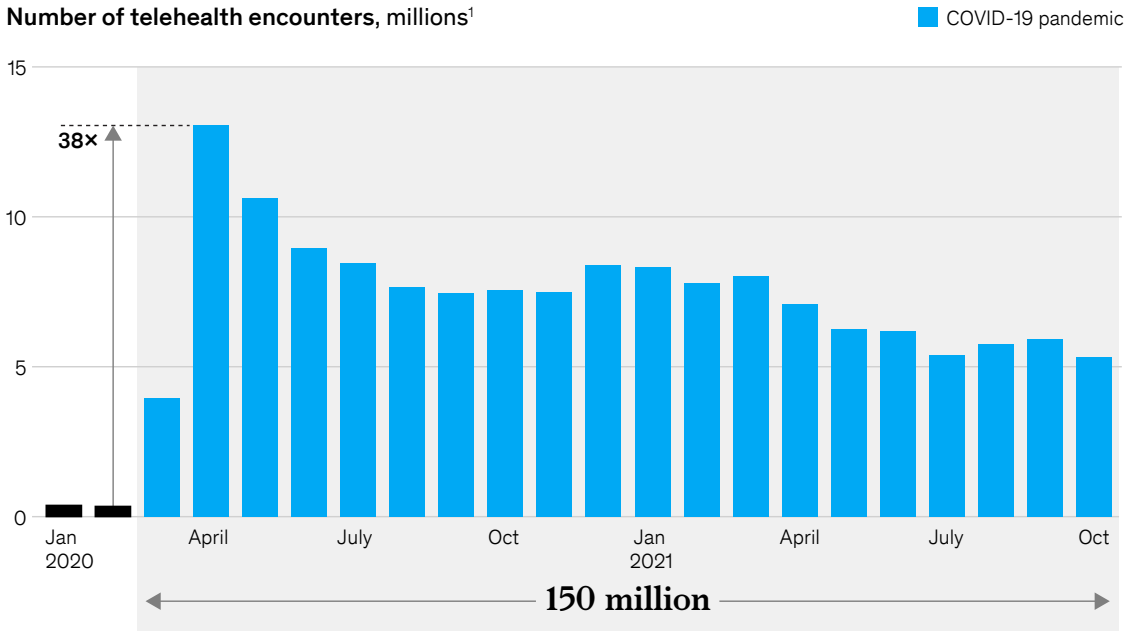
Virtual

Virtual health comprises services such as telehealth, digital therapeutics, digital pharmacy management, and remote patient monitoring. Virtual health has experienced substantial growth during the pandemic. Even as in-person health services return to normal levels, the level of telehealth visits in October 2021 remained more than 1,300 percent higher than before the pandemic (Exhibit 2).[7] Behavioral health, for example, experienced a strong shift toward virtual visits during the early stages of the COVID-19 pandemic and continues to see a higher proportion of visits delivered virtually than prepandemic (Exhibit 3).

The past two years have shown the potential of virtual care to spur innovation in healthcare delivery. Virtual care provides convenient and timely access to healthcare and holds the promise of reimagined care pathways. Favorable consumer perception and ongoing investment are likely to drive continued long-term growth of virtual health. In a previous article, we estimated that about $250 billion in outpatient spending could shift to virtual settings.[8] Much of this value lies in going beyond urgent care to more advanced care, including primary and specialty care and

Exhibit 2

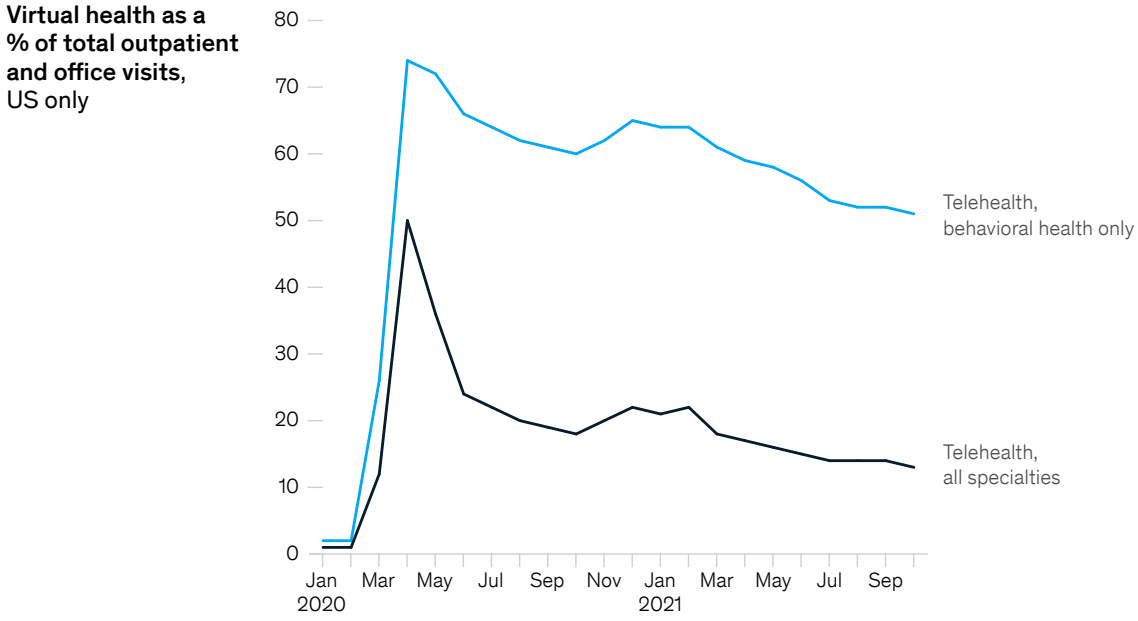
Virtual health visits grew 38-fold early on in the COVID-19 pandemic.



[1] Includes evaluation and management visits only; excludes emergency-department, hospital inpatient, and physiatry inpatient claims; excludes certain low-volume specialties; extrapolated to the commercial market.
Source: Compile Health database; McKinsey analysis

Exhibit 3

There has been a sustained shift of behavioral health services to telehealth-based delivery during COVID-19.



Source: Compile Health database, 2020–21

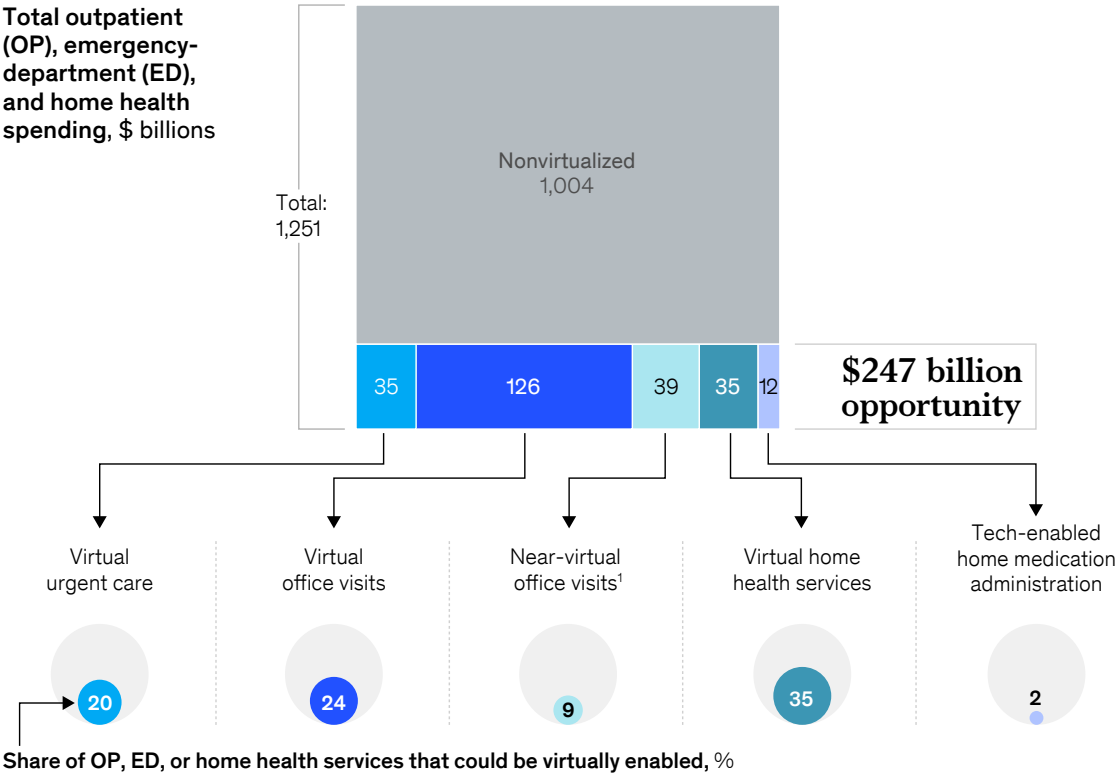
diagnostics and monitoring (Exhibit 4). The potential for savings is substantially higher for virtual models in acute care—including tele-intensive care units—and for those that are combined with models such as remote patient monitoring and hospital-at-home programs. While the initial opportunity is aimed at enhancing convenience and access for patients, we see the potential for virtual care to improve cost and outcomes with further innovation.

Virtual models could revolutionize care delivery. As these models become more prevalent, healthcare leaders should ensure that their approaches are patient-centric and do not unintentionally worsen health inequities[9] (for example, by missing opportunities to provide access to care for communities that do not have broadband or by inadvertently failing to meet the needs of minority, non-English-speaking, or disabled populations). Providers should also put guardrails in place to mitigate the risks of overdiagnosing or overprescribing in a virtual-care model.[10]

Finally, leaders should monitor regulatory action regarding the future of telehealth. During the pandemic, the US Centers for Medicare & Medicaid Services (CMS) facilitated the use of telehealth by temporarily waiving rules requiring clinicians to hold a valid license in the state where their patient was located. Some states are rolling back these waivers, creating potential headwinds for the use of virtual health. In addition, according to our latest research, physicians indicate a preference for seeing patients in their clinics[11]—though many consumers remain enthusiastic about using virtual care.[12]

Exhibit 4

Around 20 percent of all Medicare, Medicaid, and commercial outpatient, emergency-department, and home health spending could be virtually enabled.



[1] Near-virtual office visits are services that require lab tests or diagnostics, with a portion of the visit requiring in-person interaction (for example, a blood draw), but the consultation with the physician or the review of the lab test results is virtual.
Source: McKinsey analysis

Ambulatory

The growing segment of ambulatory care accounts for one-third of provider revenue (about $750 billion) in the United States.[13] Several providers are embedded within ambulatory care, including physician practices, outpatient behavioral-health centers, ambulatory surgery centers, and urgent-care centers. Studies have shown that ambulatory care settings may offer advantages for patients when appropriate. One such advantage is shorter average visit length—25 percent shorter for ambulatory care services than comparable hospital outpatient visits. Also, there were lower complication rates, such as 1.1 percent total hip arthroplasty complication rates in ambulatory care services compared with 5.2 percent in hospital outpatient departments.[14]

While inpatient hospital stays remain important for complex situations, the types of care that can be delivered safely in outpatient ambulatory settings are expanding. In a recent rule, CMS removed 255 of the 267 codes that were added to its Ambulatory Surgical Center Covered Procedure List (ASC CPL) in 2021. This was due to concerns that the codes were put in place prematurely, as these codes still typically involve stays or active medical monitoring that spans overnight. However, in the same rule, CMS indicated that it expected to "continue to expand the ASC CPL in future years."[15] Such expansion could accelerate the shift to ambulatory outpatient settings. Overall provider profit pools reflect the shift, as the general acute care setting faces continued margin pressure, while ambulatory outpatient settings are expected to grow more than 5 percent a year from 2021 to 2025.[16]

Despite the anticipated growth, ambulatory care remains a fragmented part of the patient journey, with different providers managing each type of service with minimal coordination. In addition, as we wrote in a previous article, there are significant variations in the penetration of ambulatory care across regions and specialties.[17]

Looking ahead, there will be continued opportunities for health systems, stand-alone operators, and investors to build ambulatory sites of care across varied specialty areas. Also, integrating and managing transitions of care will be increasingly important for ambulatory care. We will likely see greater consolidation and coordination among providers, with an uptake of technology and analytics to knit together the various services across the ambulatory continuum.

In the home

Opportunities for in-home care are expanding to different patient profiles and types of care. As we noted in an earlier article,[18] more commoditized services, such as traditional post-acute home health and personal-care services, still make up about two-thirds of market revenue ($75 billion to $85 billion in 2019).[19] However, some emerging home-care segments, including infusions, dialysis, primary care, and hospital-at-home models, are growing rapidly. These segments are more complex and technology-enabled than traditional post-acute home health. In many cases, these are areas in which the capability to scale is still nascent.

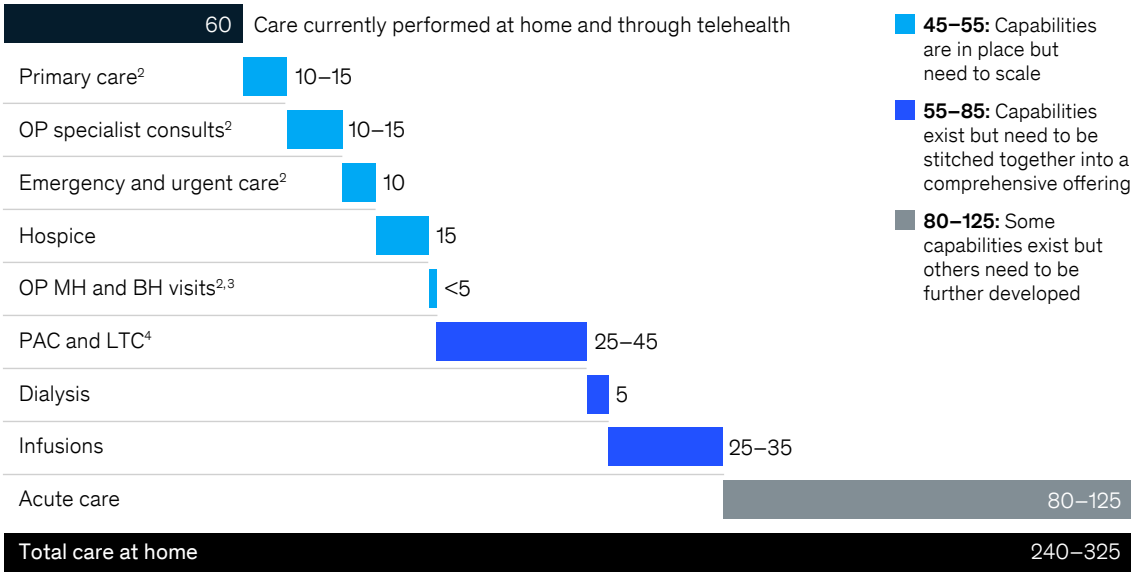
We estimate that over the next three years, Medicare beneficiaries could see three to four times more care in their homes if relevant capabilities continue to develop into at-scale offerings.[20] That would translate into projected incremental Medicare spending of $265 billion or more on care potentially delivered in the home in 2025 (Exhibit 5).

Delivering complex in-home care will require more specialized resources and skilled healthcare workers. Yet this hasn't deterred innovators from moving into sophisticated, emerging segments such as hospital-at-home care. There is a substantial amount of expected value in these capabilities, buoyed by regulatory and reimbursement support, because a growing body of evidence shows that the home can be a high-quality site of care. This follows a pattern of regulatory guidance during the pandemic facilitating innovation in many other types of home care, such as reimbursement for remote patient monitoring,[21] increased coverage for telehealth services,[22] and the expansion of hospital-at-home models.[23]

Exhibit 5

Medicare beneficiaries could see approximately three to four times more at-home care by 2025.

Medicare spend on services that could be performed at home by 2025,[1] $ billions



[1] Rounded to the nearest 5 billion; 2025 spend based on national health expenditure (NHE) projections for Medicare annual growth rates.
[2] Categories have experienced significant growth in use of telemedicine and care at home due to the COVID-19 pandemic.
[3] Outpatient mental health, and behavioral health.
[4] Post-acute care and long-term care.
Source: 2018 Medicare claims data (Medicare limited data set files); NHE-projected Medicare annual growth rates

The challenge of stitching together multiple modalities of care to build a cohesive patient journey remains an opportunity for innovators (see sidebar "Shifting the traditional patient journey"). If done correctly, integrating the many pieces of the patient journey—and making smart use of technology to do so—could create value for patients by supporting the delivery of better health outcomes in an easier-to-navigate manner.

Value-based and risk-bearing

The use of value-based models continues to grow.[24] We expect the proportion of the insured population in "at risk" contracts to increase rapidly: 10 percent annually from 2021 to 2025, compared with the 1 percent growth of the overall insured population over the same period. The shift to value-based care is evident across various care model segments (Exhibit 6) and payer types (Exhibit 7). Management services organizations (MSOs), which can support the shift to these models by offering technology and administrative services for providers seeking to take on risk, are projected to grow rapidly over the next few years. MSOs could account for 9 percent of total insured lives by 2025, up from 5 percent today.[25] The situation is similar for capitated-risk staff or employed-risk models, although these account for the smallest segment of at-risk models.[26]

Accountable care organizations[27] are also expected to grow at a steady pace through 2025. Overall, between 2021 and 2025, value-based contracts are projected to increase from about 15 percent of insured lives to 22 percent, covering nearly 65 million people in the United States.[28]

Value-based models are most prevalent in primary care, but specialties are also seeing increasing activity. Within the specialty segment, orthopedics has experienced one of

the highest adoption rates of value-based care. In orthopedics, an estimated 65 to 75 percent of spending is tied to risk-based models[29] such as bundled payments for care improvement, shared savings, pay for performance, and capitation. Other specialty segments are starting to pursue value-based care, including women's health and nephrology.

There is broad support for risk-based models, influenced by the fact that risk-bearing providers have demonstrated superior outcomes at lower costs. For example, fully capitated primary care providers have demonstrated total cost-of-care savings of 10 to 15 percent[30] over traditional fee-for- service providers for high-risk populations.[31]

The valuation of risk-bearing models is substantial: value-based care players that received investment in 2020 have an implied total valuation of $40 billion by 2025.[32] While several healthcare companies built around value-based principles saw their stock price deflate in the 12 months from March 2021 to March 2022, this may reflect the uncertainty around the ability of these organizations to scale to achieve their aspirations based on their current capabilities—capabilities that may improve over time, especially regarding physician engagement and technology and analytics. In contrast, valuations of those organizations with proven models and with positive profitability did not experience a dip.

Driven by data and technology

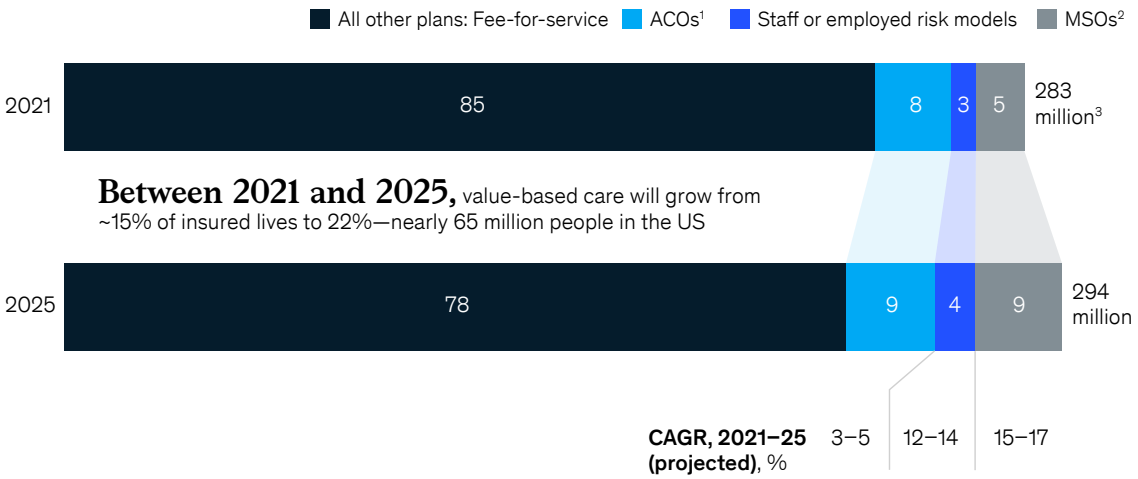
Generally, new technologies have increased costs in healthcare rather than reduced them. But that trend may shift as technologies improve and become more useful for helping healthcare innovations to scale. As mentioned in a previous article, if the industry could rely more on labor productivity gains than workforce expansion to meet demand growth, by 2028, spending could be about $280 billion to $550 billion less than current health expenditure projections.[33] Continued improvements to care delivery technologies will no doubt play a role in capturing productivity gains.

Technology will enable the next frontier of care delivery in several ways. Care can be more virtualized, through advances in elec-

Exhibit 6

In terms of care models, the shift to value-based care will be substantial over the next few years.

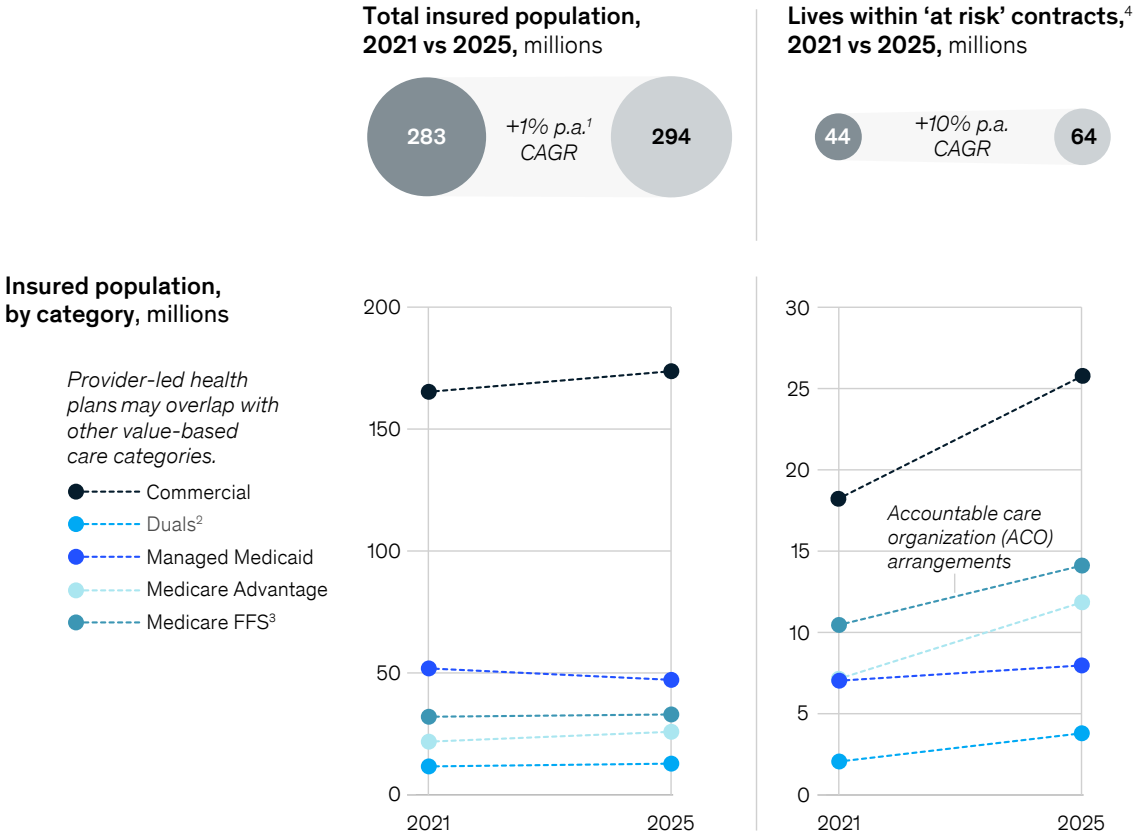
Total US insured lives by physician reimbursement arrangement, % of all plan types



Note: Figures may not sum, because of rounding.
[1] Accountable care organizations.
[2] Management service organizations.
[3] Does not include 7.5 million people with other government insurance or 29.1 million people without insurance.
Source: American Heart Association; Enrollment Projection Tool; expert interviews; Medicare limited data set; Truven Health Analytics

Exhibit 7

For payers, the shift to value-based care will be substantial over the next few years.



Note: Value-based care (VBC) refers to a spectrum of reimbursement models from shared savings, bonus payments, and upside and downside risk models to capitation. [1] Per annum. [2] Dual-eligible individuals: people enrolled in both Medicare and Medicaid. [3] Fee-for-service. [4] For delegated lives, the assumption is that hospital lives largely do not overlap with other categories.
Source: American Heart Association; expert interviews; InterStudy and diagnosis-related group enrollment data; Medicare limited data set; McKinsey insurance enrollment projection model; Truven Health Analytics

tronic medical records and telehealth capabilities. Care can be more closely linked to value, as data become more available in the workflow at the time of the physician encounter. Care can be more personalized, as analytics and insights deliver the right messages to the right patients at the right time. Finally, care can be seamlessly transmitted, by integrating capabilities across the patient experience. For example, many physicians spend a significant portion of their day updating medical data. One study found that physicians spend 49 percent of their total time and 37 percent of their time with patients in the examination room working on electronic health records and desk work.[34] Easier-to-use technologies could give physicians more time with their patients and colleagues.

Another example of technology-driven improvement of care delivery is automatic appointment reminders.[35] By helping patients to remember to attend appointments, these reminders could both improve care outcomes for the patient (by reducing delays and skipped care) and increase the efficiency of physician utilization (by reducing unexpected gaps in the appointment schedule).

Enabled by new medical technologies

Medical technologies are facilitating innovation in patient care in three ways. First, new products and services are creating self-service opportunities that can also reduce the number of patient touchpoints

needed to deliver care. Products such as wearables to track blood sugar levels in patients with risk factors for diabetes are still not widely used but could soon enable many opportunities for self-service, such as continuous care for chronic-condition management. Similarly, technologies such as remote patient monitoring, home telemetry, and robotic technologies are supporting the blending of automated, virtual, and home-based care delivery, which could extend the time between clinical touchpoints by equipping patients with the data-tracking and alerting tools needed to prevent acute episodes.

Shifting the traditional patient journey

To illustrate how a traditional patient journey could shift through the support of virtual, ambulatory, and home-based models, consider a pregnancy care journey (Exhibit).

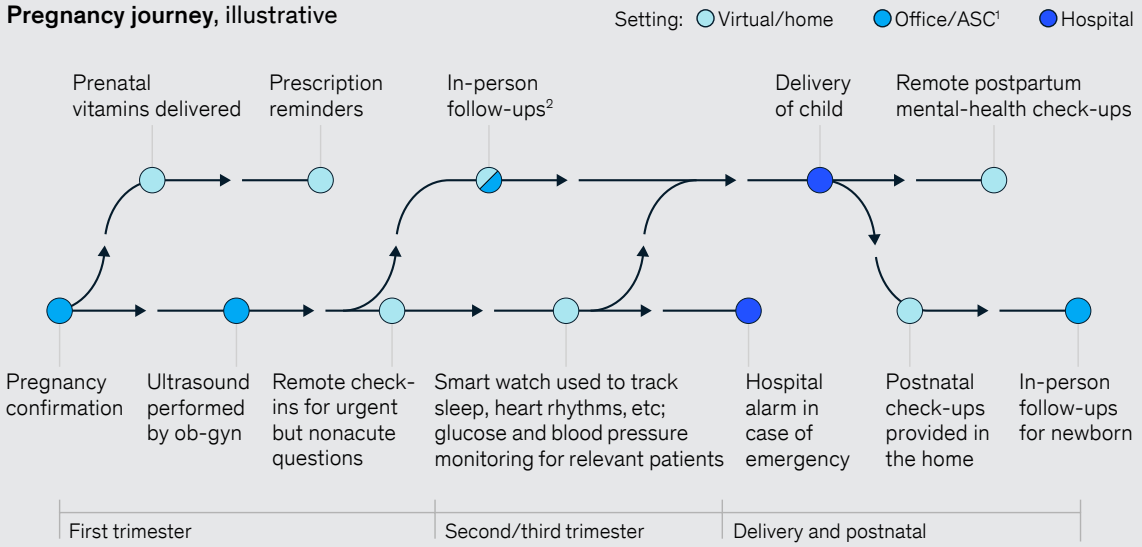
Prenatal vitamin prescriptions could be filled online and mailed directly to the home. Virtual visits could replace in-office visits for more urgent but nonacute questions. Providers could conduct examinations (one per trimester at a minimum) to monitor fetal growth in the home using portable ultrasound devices. Wearables and monitoring devices (for example, continuous glucose monitors for patients with gestational diabetes) could transmit data to providers for more proactive monitoring, especially for higher-risk patients.

Home delivery opportunities for low-risk patients who wish to give birth at home could be further expanded given recent advancements in remote patient monitoring to augment in-person care (assuming robust clinical and data-driven assessment and contingencies are in place). Post birth, physicians and other practitioners—such as lactation specialists, doulas, or behavioral-health specialists—could conduct more frequent check-ups in the home. The option of in-house check-ins could ease the burden of new parents who are balancing the care of a newborn with managing their own health.

Exhibit

Traditional patient journeys can be shifted fundamentally through support of virtual, ambulatory, and home-based models.

Pregnancy journey, illustrative



[1]Ambulatory surgery center.
[2]Any acute changes or changes in the patient's condition may require additional hospital visits.

Second, new medical technologies are aiding the shift to lower-acuity sites of care. For example, medical wearables can help detect health issues earlier and may prevent hospitalizations. And joint-replacement surgery robots that have been approved for use for certain procedures in ambulatory surgery centers can improve and lower variances in surgical outcomes, increasing the odds of avoiding inpatient care.

Third, new medical technologies are also helping to reduce care delivery costs (Exhibit 8). For example, clinicians can use cardiac monitoring patches to identify arrhythmias for about 90 percent less cost than an implantable loop recorder.[36]

Transparent and interoperable

As recent regulatory changes take effect, we are seeing the first wave of industry responses to improve transparency and data sharing. Three themes are emerging: price transparency, data interoperability, and data access.

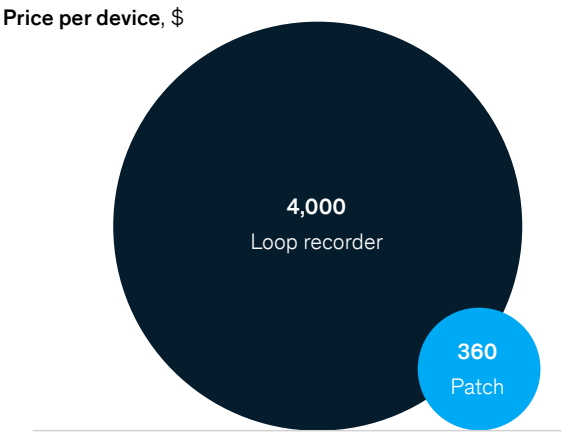
Improved price transparency has been on the regulatory agenda for years, but negotiated-rate information is finally becoming available. Since hospitals began publishing rate information in January 2020, about 70 percent of hospitals (based on a review of about 320 providers) have published some form of negotiated rate by payer.[37] In 2022, another wave of negotiated-rate information will become available—this time from payers.[38] By the end of 2022, consumers will likely be able to use this negotiated-rate information more readily through cost-sharing calculator tools that payers are required to provide. Increased transparency could result in changes to competitive dynamics throughout the industry. For example, hospitals could use newly available rate data from their competitors to shape negotiations with payers. Similarly, payers will have information about what their competitors have negotiated with hospitals in a particular region. The integration of price and quality-rating information could affect consumer decisions about where to go for care.

Interoperability[39] rules went into effect in 2021.[40] These include prohibitions on data blocking among providers: CMS-regulated

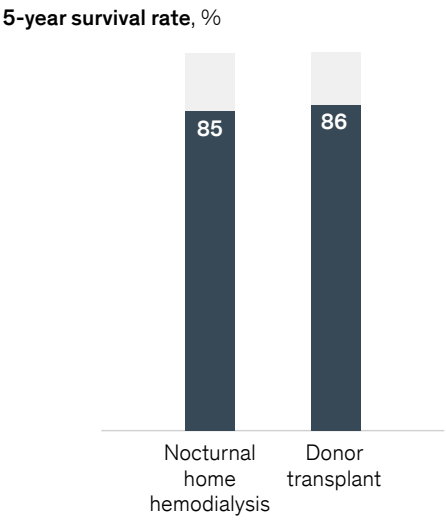
Exhibit 8

New technologies are improving cost and outcomes without increasing the intensity of the care patients experience.

Cardiac monitoring patches are a noninvasive, lower-cost way to identify arrhythmias



Home dialysis enables comparable outcomes to transplantation through more frequent, extended dialysis

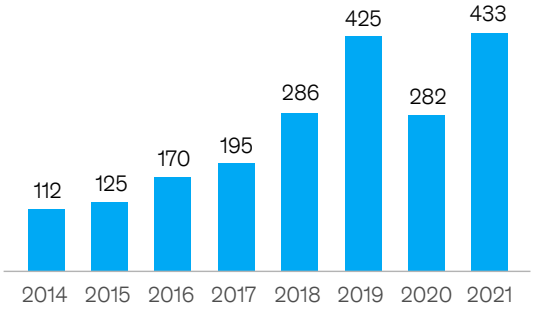


Source: CNBC; Expert interviews; Nephrology Dialysis Transplantation, 2009

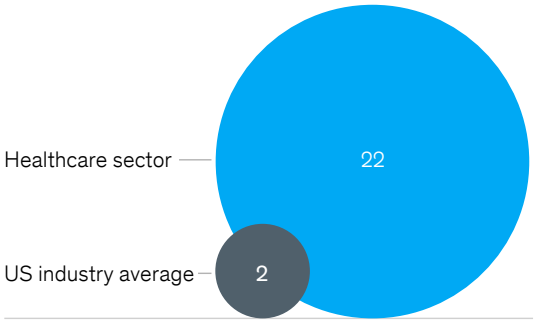
Exhibit 9

Investment activity within healthcare services has been robust.

US healthcare private-equity (PE) and venture capital (VC) deals, total per year



PE and VC deal growth, 2014–21, CAGR, %



Source: Dealogic; Irving Levin Associates; S&P Capital IQ

payers must make encounter and claims data available to members via publicly accessible APIs. At the end of 2022, new requirements for vendors of electronic health records will take effect[41] that will make structured data—including clinical components—available to both consumers and third parties. As a result, providers and technology companies will be able to access these structured data, potentially helping them to make strategic and investment decisions in competitive markets.

Finally, more Medicare and Medicaid claims data from CMS are available than ever. When we combine the size of these data sets with trends in price transparency and interoperability, we see a path forward to a better understanding of care utilization and cost trends for patients.

Funded by private investors

Private investment in healthcare has evolved thematically over the past decade. For much of the 2010s, investors focused on consolidation of healthcare assets and optimization of back-end functions.[42] Beginning around 2018, business model expansion plays became more popular, reflected in investments in platform models and the integration of ancillary offerings.[43] Looking ahead, we expect significant investment in care delivery innovation, including redesigning the patient journey through digital enablement, shifting care into ambulatory and home settings, and expanding value-based care models.

Private-equity deal volume in healthcare is outpacing the overall US industry average. Healthcare private-equity and venture capital deal volume grew at a 22 percent annualized rate from 2014 to 2021, compared with only about 2 percent for all private investment deals (Exhibit 9).[44]

It's important to consider the investment emphasis on care delivery innovation in the broader context of US private investment. Excess capital for US-based funds has nearly doubled in five years, from $700 billion in 2016 to $1.3 trillion in 2021.[45] Healthcare remains a top-three investment area, with more than 10 percent of committed funds in 2021 earmarked for healthcare.[46]

In this investment environment, incumbents such as large health systems, ancillary providers, and insurers should consider strategic partnerships with emerging innovators, including technology and services companies backed by venture capital and private equity. The goal would be to build an ecosystem of alliances to support the future of care delivery.[47]

Finally, private investors should aspire to improve the quality of care and health outcomes as well as to institute more effective management across vulnerable populations, ensuring

long-term sustainability and growth. This will require guardrails and performance management systems to monitor the impact of investments on healthcare improvements.

Both fragmented and integrated

To support greater patient-centricity and on-demand accessibility, care delivery in the United States is evolving toward greater integration of care around the patient. We can see this in the emergence of "one stop shop" innovators in care management and care coordination. These players partner with payers, providers, and, in some cases, employers to ease consumers' navigation of complex care journeys, such as prenatal care or kidney disease management. Consolidation is occurring as well. For example, payer incumbents are investing in data-driven care delivery start-ups. Hospital systems are acquiring provider groups and pursuing partnerships or joint ventures with providers of post-acute and ambulatory care to support value-based strategies.

But the development of more integrated models will take time. Paradoxically, the ongoing shift from hospital-based, specialized care to more value-based, consumer-centric models will create even more access points in the care journey (for example, primary care, diagnostics, prevention, and wellness). As more players enter the scene, fragmentation will persist.

In time, we may see a new type of "integrated yet fragmented" ecosystem. In this model, atomized sites of care would work in concert with one another, while technology-enabled platforms facilitate easy transfer and sharing of data,[48] clinical care is harmonized, and patients seamlessly transition from one part of their care journey to the next.

There are major changes ahead in the delivery of care in the United States. Participants in the healthcare system must reflect on how the ten shifts described above will influence their strategies over the next decade. One thing is certain: there's no stopping innovation in the delivery of care. The open question is how players can support that innovation and take advantage of it to the benefit of consumers and society in general.

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[25] Based on data from the American Hospital Association, Medicare Limited Data Set Files (LDS), and Truven Health Analytics, analyzed through McKinsey's proprietary Enrollment Projection Tool.
[26] These are providers (typically primary care physicians but could also include specialists) who are employed by the risk-bearing entity and intensively manage care for patient populations.
[27] Accountable care organizations (ACOs) are groups of doctors, hospitals, and other healthcare providers that come together voluntarily to give coordinated care to Medicare patients.
[28] Based on data from the American Hospital Association, Medicare Limited Data Set Files (LDS), and Truven Health Analytics, analyzed through McKinsey's proprietary Enrollment Projection Tool.
[29] Expert interviews with payers, providers, and Medicaid specialists.
[30] McKinsey analysis of provider risk-bearing models in primary care.
[31] "High-risk populations" are typically defined as Medicare Advantage or dual (receiving both Medicare and Medicaid) populations with risk scores above 1.8.
[32] Based on valuation data from Preqin, Crunchbase, and publicly available news reports. The total is the summed valuation of Agilon, Aledade, Best Value, Cano Health, Iora, MBMG, Oak Street, P3, and VillageMD. The weighted average is between the public-market rate of 7 percent and the private-equity rate of return of 18 percent.
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[43] Ibid.
[44] Ibid.
[45] Based on McKinsey analysis of data from Bloomberg, MSCI North America, and Preqin.
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[48] Data sharing would be in compliance with HIPAA rules, patient privacy, and data security considerations.

Telehealth: A quarter-trillion-dollar post-COVID-19 reality?

Oleg Bestsennyy, Greg Gilbert, Alex Harris, and Jennifer Rost

July 9, 2021

Strong continued uptake, favorable consumer perception, and tangible investment into this space are all contributing to the continued growth of telehealth in 2021. New analysis indicates telehealth use has increased 38X from the pre-COVID-19 baseline.

Early in the COVID-19 pandemic, telehealth usage surged as consumers and providers sought ways to safely access and deliver healthcare. In April 2020, overall telehealth utilization for office visits and outpatient care was 78 times higher than in February 2020 (Exhibit 1).

This step-change, borne out of necessity, was enabled by these factors: 1) increased consumer willingness to use telehealth, 2) increased provider willingness to use telehealth, 3) regulatory changes enabling greater access and reimbursement. During the tragedy of the pandemic, telehealth offered a bridge to care, and now offers a chance to reinvent virtual and hybrid virtual/in-person care models, with a goal of improved healthcare access, outcomes, and affordability.

A year ago, we estimated that up to $250 billion of US healthcare spend could potentially be shifted to virtual or virtually enabled care. Approaching this potential level of virtual health is not a foregone conclusion. It would likely require sustained consumer and clinician adoption and accelerated redesign of care pathways to incorporate virtual modalities.

As of July 2021, we step back to review the progress of telehealth since the initial COVID-19 spike and to assess implications for telehealth and virtual health[1] more broadly going forward. Our findings include the following insights:

— *Telehealth utilization has stabilized at levels 38X higher than before the pandemic.* After an initial spike to more than 32 percent of office and outpatient visits occurring via telehealth in April 2020, utilization levels have largely stabilized, ranging from 13 to 17 percent across all specialties.[2] This utilization reflects more than two-thirds of what we anticipated as visits that could be virtualized.[3]

— *Similarly, consumer and provider attitudes toward telehealth have improved since the pre-COVID-19 era.* Perceptions and usage have dropped slightly since the peak in spring 2020. Some barriers—such as perceptions of technology security—remain to be addressed to sustain consumer and provider virtual health adoption, and models are likely to evolve to optimize hybrid virtual and in-person care delivery.

— *Some regulatory changes that facilitated expanded use of telehealth have been made permanent*, for example, the Centers for Medicare & Medicaid Services' expansion of reimbursable telehealth codes for the 2021 physician fee schedule. But uncertainty still exists as to the fate of other services that may lose their waiver status when the public health emergency ends.

— *Investment in virtual care and digital health more broadly has skyrocketed*, fueling further innovation, with 3X the level of venture capitalist digital health investment in 2020 than it had in 2017.[4]

— *Virtual healthcare models and business models are evolving and proliferating*, moving from purely "virtual urgent care" to a range of services enabling longitudinal virtual care, integration of telehealth with other virtual health solutions, and hybrid virtual/in-person care models, with the potential to improve consumer experience/convenience, access, outcomes, and affordability.

Telehealth uptake

Since the initial spike in April 2020, telehealth adoption overall has approached up to 17 percent of all outpatient/office visit claims with evaluation and management (E&M) services. This utilization has been relatively stable since June 2020.

We are also seeing a differential uptake of telehealth depending on specialty, with the highest penetration in psychiatry (50 percent) and substance use treatment (30 percent) (Exhibit 2).

Consumer and provider perceptions of telehealth

Our consumer research[5] shows that consumers continue to view telehealth as an important modality for their future care needs, but—as expected—this view varies widely depending on the type of care. Overall, consumer perception tracks closely to what we believe is possible telehealth uptake by various specialties (Exhibit 3).

Around 40 percent of surveyed consumers stated that they believe they will continue to use telehealth going forward—up from 11 percent of consumers using telehealth prior to COVID-19.

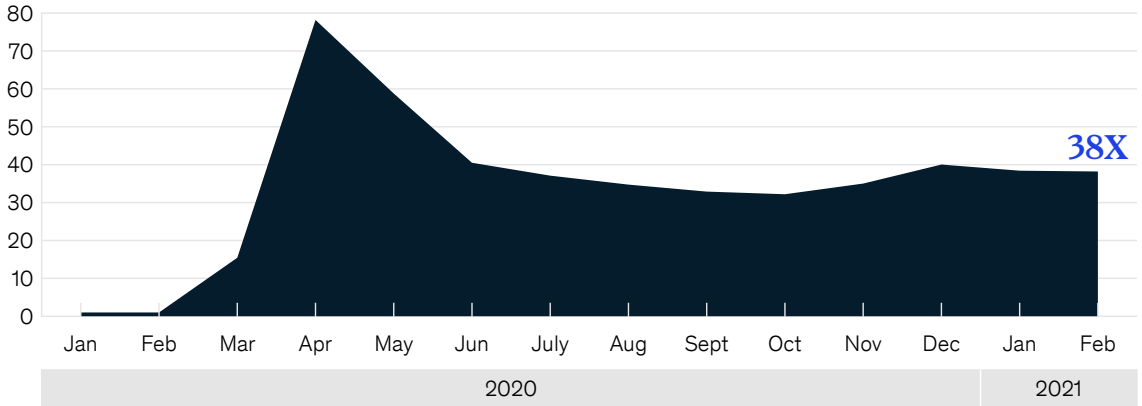
Moreover, our research shows between 40 and 60 percent of consumers express interest in a set of broader virtual health solutions, such as a "digital front door" or lower-cost virtual-first health plan.[6] However, a gap has historically existed between consumers' expressed interest in digital health solutions and actual usage. Continuing to focus on creating a seamless consumer interface, breaking down silos in care provision (across virtual and in-person) with improved data integration and insights, and proactive consumer engagement will all be important to sustaining and growing consumer use of virtual health as the pandemic wanes.

On the provider side, 58 percent of physicians continue to view telehealth more favorably now than they did before COVID-19, though perceptions have come down slightly since September

Exhibit 1

Growth in telehealth usage peaked during April 2020 but has since stabilized.

Telehealth claims volumes, compared to pre-COVID-19 levels (February 2020 = 1)[1]

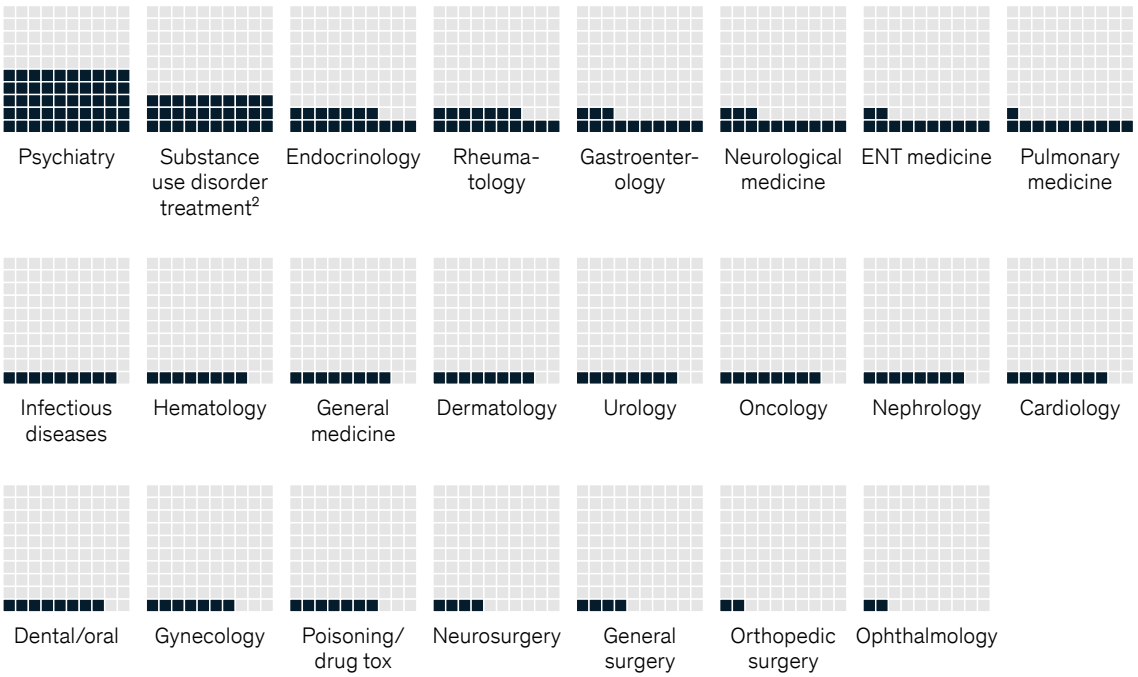


[1] Includes cardiology, dental/oral, dermatology, endocrinology, ENT medicine, gastroenterology, general medicine, general surgery, gynecology, hematology, infectious diseases, neonatal, nephrology, neurological medicine, neurosurgery, oncology, ophthalmology, orthopedic surgery, poisoning/drug tox./comp. of TX, psychiatry, pulmonary medicine, rheumatology, substance use disorder treatment, urology. Also includes only evaluation and management visits; excludes emergency department, hospital inpatient, and physiatry inpatient claims; excludes certain low-volume specialties.
Source: Compile database; McKinsey analysis

Exhibit 2

Substantial variation exists in share of telehealth claims across specialities.

Share of telehealth of outpatient and office visit claims by specialty (February 2021[1]), %



[1] Includes only evaluation and management claims; excludes emergency department, hospital inpatient, and physiatry inpatient claims; excludes certain low-volume specialties.
[2] Also includes addiction medicine and addiction treatment.
Source: Compile database; "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?" May 2020, McKinsey.com; McKinsey analysis

2020 (64 percent of physicians). As of April 2021, 84 percent of physicians were offering virtual visits and 57 percent would prefer to continue offering virtual care. However, 54 percent would not offer virtual care at a 15 percent discount to in-person care.[7] Most health systems are closely monitoring reimbursement. Those in bed capacity-constrained environments and value-based care arrangements are looking to understand whether there is scalable volume decanting or cost savings potential at equivalent quality.

Regulatory changes

Some regulatory changes that enabled greater telehealth access during COVID-19 have been made permanent. For example, CMS allowed telehealth coverage for a number of current procedural terminology (CPT) codes permanent in the 2021 physician fee schedule final rule.[8]

However, other restrictions on telehealth may return to pre-COVID-19 normal when the public health emergency expires. For example, there were several dozen additional CPT codes that CMS allowed telehealth coverage for on a temporary basis in the 2021 physician fee schedule.[9] In addition, a waiver for public health emergency allowed telehealth to be provided for Medicare beneficiaries outside of rural areas and from home rather than from a provider's office. The future of these provisions once the public health emergency ends is not yet clear.

Investor activity

Investment in virtual health continues to accelerate. Per Rock Health's H1 2021 digital health funding report[10] the total venture capital investment into the digital health space in the first half of 2021 totaled $14.7 billion, which is more than all of the investment in 2020 ($14.6 billion) and nearly twice the investment in 2019 ($7.7

billion) (Exhibit 4). This increase would reflect an annualized investment of $25 billion to $30 billion in 2021, if this rate continues. In addition, total revenue of the top 60 virtual health players increased in 2020 to $5.5 billion, from around $3 billion the year before.[11]

As the investment into virtual health companies continues to grow at record levels, so does the pressure on the companies within the ecosystem to innovate and find winning models that will provide sustainable competitive advantage in this quickly evolving space. This is good news for consumers and patients, as we are likely to continue seeing increased innovation in the virtual care delivery models.

The next chapter of telehealth

Telehealth appears poised to stay a robust option for care. Strong continued uptake, favorable consumer perception, the regulatory environment, and strong investment into this space are all contributing to this rate of adoption.

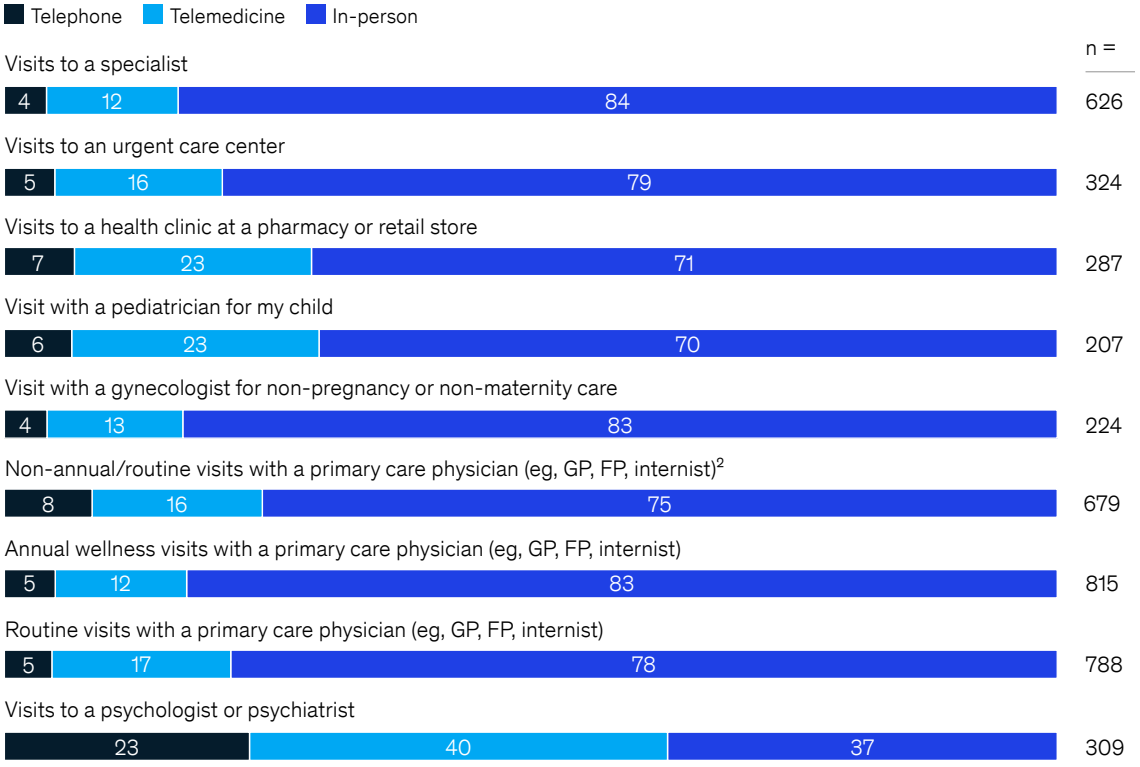
We are observing a quick evolution of the space and innovation beyond the "virtual urgent care" convenience. Innovations around virtual longitudinal care (both primary and specialty), enablement of care at home through remote patient monitoring and self-diagnostics, investment in "digital front doors," and experimentation with hybrid "online/offline" models will bring new care

Exhibit 3

Most recent care received utilized telemedicine, with some moderate increases since January.

Modality of most recent appointment by setting, current as of June 14, 2021

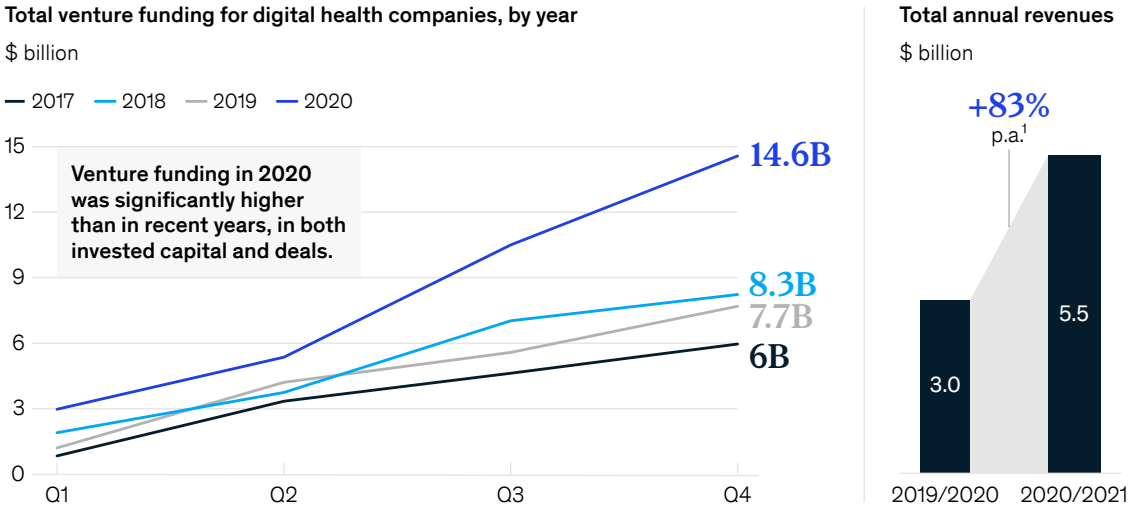
Respondents who reported receiving care in the specified setting (sample size varies by row),[1] %



APPT1. For each of the following types of care below, indicate whether your most recent appointment was either at an in-person appointment, or an online/video visit with a physician (eg, Doctor on Demand, Skype, FaceTime); also called telemedicine, or a telephone (voice call) appointment.
[1] Figures may not sum to 100%, because of rounding.
[2] FP, family physician; GP, general practitioner.
Source: McKinsey COVID-19 Consumer Survey 1/15/2021, 6/14/2021

Exhibit 4

Investment in digital health and the revenues of telehealth players almost doubled compared to 2019.



[1] p.a., per annum.
Source: Adriana Krasniansky et al., "H1 2021 Digital Health Funding: Another Blockbuster Year…In Six Months," Rock Health, July 2021, rockhealth.com; McKinsey virtual health vendor database

models for consumers that help achieve healthcare's "triple aim."

In order to fully realize the potential of virtually enabled care models, both payers and providers should consider these new delivery models part of the core day-to-day value proposition to consumers across three areas:

1. **Increasing convenience to receive routine care**
   - *Integrating e-triage solutions with virtual visits to create a broader "digital front door"* for healthcare that enables consumers to easily get care when they need it, through the most convenient channels, and lowers the cost of care by avoiding unnecessary emergency department visits
   - *Integrating care advocacy and telehealth solutions*, as evidenced by recent M&A activity with the value proposition to make it easy for consumers to access care and find the best provider for their individual needs
   - *Experimenting with virtual-first health plans.* The number of virtual-first health plans grew from one in 2019 to at least eight in 2020. While these products are still nascent, they offer the potential of lower premiums and greater convenience, in return for seeing a virtual primary care provider as the first point of care. These advantages are attracting increasing attention from employers, brokers, and payers
   - *Expanding the types of care that can be delivered virtually or near-virtually* with innovations in at-home diagnostics/equipment or combining virtual care with at-home nurse visits
2. **Improving access, especially for behavioral health and specialty care**
   - *Continuing to expand the range of behavioral health offerings* with potential to address provider shortages in many parts of the country. For example, 56 percent of counties in the United States are without a psychiatrist, 64 percent of counties have a shortage of mental health providers, and 70 percent of counties lack a child psychiatrist.[12] This

kind of access may also be an opportunity to expand community, payer, and provider partnerships

- *Expanding access to specialty care capacity*, such as in rural areas where many specialties may not be available. Even outside of rural areas, provider-to-provider virtual health can improve experience and quality of care by rapidly getting specialist input

3. **Improving care models and health outcomes, particularly for those with chronic conditions or in need of post-acute care support**
   - *Integrating remote monitoring and digital therapeutics with virtual visits, especially in value-based provider arrangements*, where incorporating virtual health into their care models could improve patient outcomes and overall performance
   - *Growing hospital-at-home and post-acute care-at-home models*

Remaining challenges to scale

Even with these innovations, challenges remain to be worked through to realize the full potential of virtual care. These challenges include the following items:

— The need for better data integration and improved data flows across the various players in the ecosystem, in light of the fast proliferation of point solutions, which are overwhelming consumers, payers, and providers alike

— The need for better integration of the virtual health-related activities into day-to-day workflows of clinicians, particularly to enable hybrid care models that combine online and in-person care delivery

— Alignment of incentives for virtual health activities with the broader movement toward value-based care, to break out of the fee-for-service mentality and the worry about reimbursement parity, especially for the virtual health models that aim to reduce total cost of care

Potential exists to improve access, quality, and affordability of healthcare, plus embrace the quarter-trillion dollar economic opportunity represented by telehealth. Collectively, industry leaders have a chance to help consumers and providers improve access and quality through the power of telehealth.

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[1] We define virtual health as a range of solutions for healthcare provider-patient interactions to occur outside of in-person visits, including telehealth (video/phone), text-based care, e-triage, and remote monitoring.
[2] Compile data set, compile.com.
[3] Compile data set, compile.com; Exhibit 2 on page 10.
[4] Rock Health venture funding database, 2017–21, rockhealth.com.
[5] Jenny Cordina, Eric Levin, and George Stein, "COVID-19 Consumer Healthcare Insights: What 2021 may hold," June 24, 2021, McKinsey.com.
[6] McKinsey Consumer Health Insights Survey, June 2021.
[7] McKinsey Physician Insights Survey, April 2021.
[8] Centers for Medicare & Medicaid Services, "CY 2021 Medicare Physician Fee Schedule Final Rule," effective on January 1, 2021, 85 Fed. Reg. 84472, federalregister.gov.
[9] Ibid.
[10] Adriana Krasniansky et al., "H1 2021 Digital Health Funding: Another Blockbuster Year…In Six Months," Rock Health, July 2021, rockhealth.com.
[11] McKinsey Virtual Health Vendor Database as of June 2021.
[12] Erica Coe, Lisa Crystal, Kana Enomoto, and Razili Lewis, "A holistic approach for the US behavioral health crisis during the COVID-19 pandemic," August 6, 2020, McKinsey.com.

From facility to home: How healthcare could shift by 2025

Oleg Bestsennyy, Michelle Chmielewski, Anne Koffel, and Amit Shah

February 1, 2022

Up to $265 billion worth of care services for Medicare fee-for-service and Medicare Advantage beneficiaries could shift to the home by 2025.

When patients enter a healthcare facility, their primary aims are to become well again and to go home. While increasing disease burden and rising healthcare costs in the United States have already contributed to a boost in Care at Home services, the COVID-19 pandemic has created a catalyst to truly reimagine their future.[1]

Based on a survey of physicians who serve predominantly Medicare fee-for-service (FFS) and Medicare Advantage (MA) patients, we estimate that up to $265 billion worth of care services (representing up to 25 percent of the total cost of care) for Medicare FFS and MA beneficiaries could shift from traditional facilities to the home by 2025 without a reduction in quality or access.[2] That number represents a three- to fourfold increase in the cost of care being delivered at home today for this population, although how the shift will affect reimbursement rates is not yet clear. What's more, Care at Home could create value for payers, healthcare facilities and physician groups, Care at Home providers, technology companies, and investors. It also could improve patients' quality of care and experience.

That said, several factors could affect adoption of these services. We outline those factors below, along with actions that stakeholders can take to address them. We also discuss why Care at Home services are rising, how Care at Home could create value for stakeholders and lead to higher-quality care for patients, areas where care could shift from traditional facilities to the home, and strategies for successfully adopting Care at Home.

How the COVID-19 pandemic has catalyzed Care at Home

A variety of pandemic-related factors have created an opportunity to rethink Care at Home. These include the following:

— *Growth in virtual care:* In February 2021, the use of telehealth was 38 times higher than prepandemic levels.[3] While the future of reimbursement parity for telehealth is not yet clear, payers and providers have an opportunity to respond to evolving consumer needs. About 40 percent of surveyed consumers said that they expect to continue using telehealth going forward. This represents an increase from 11 percent of consumers using telehealth prior to the COVID-19 pandemic.[4]

— *More patients with post-acute and long-term care needs may be evaluating their options:* As baby boomers age and families contend with the ongoing impact of the COVID-19 crisis, a growing number of patients and families may be considering their options for post-acute and long-term care. Ideally, eligible individuals would receive care in the most appropriate setting, whether that is at home or in a facility for rehabilitation, assisted living, skilled nursing, or

long-term care. A combination of remote monitoring, telehealth, social supports, and home modification may enable more patients to receive some level of Care at Home. The share of Medicare visits conducted through telehealth, for example, rose to 52.7 million in 2020, from approximately 840,000 in 2019, according to a December 2021 report from the US Department of Health & Human Services.[5]

— *Emergence of new technologies and capabilities:* New technologies are making Care at Home possible for more people. Remote patient-monitoring devices, for example, allow providers to monitor patient progress remotely and receive alerts if there is an issue. In an April 2021 poll, more than one in five healthcare leaders said that their practice offers remote patient monitoring.[6] The pandemic has accelerated the use of remote patient monitoring. For example, the Mayo Clinic used remote patient monitoring for ambulatory management of patients with COVID-19 and found that it was effective, with a 78.9 percent engagement rate; 11.4 percent and 9.4 percent 30-day emergency-department-visit and hospitalization rates, respectively; and a 0.4 percent 30-day mortality rate.[7]

— *Growing investment in the digital health market:* Venture funding for digital health companies was a record-breaking $29.1 billion in 2021. Comparatively, there was $14.9 billion invested in 2020 and $8.2 billion invested in 2019.[8]

Care at Home may deliver more value and higher-quality care

As the United States faces the ongoing COVID-19 crisis, stakeholders are exploring ways to provide higher-quality care, especially for an aging population. The answer may lie with Care at Home, with examples that include primary-care visits via telehealth, self-administered dialysis at home, and skilled nursing-facility services at home with remote patient monitoring and support for activities of daily living. These interventions can be delivered to different kinds of patient archetypes (for example, high-risk patients with chronic conditions or those who are healthy and at low risk) throughout the patient journey (for example, diagnosis, treatment and discharge, or self-care) as either point solutions or as a comprehensive offering.

To examine the current and future impact of this type of care, we have created hypothetical journeys with Care at Home for various patient archetypes (Exhibit 1). For example, consider 75-year-old Bernadette, who has coronary artery disease, chronic obstructive pulmonary disease (COPD), and diabetes. She lives with her husband, has limited mobility, and struggles to access healthy food. Under a traditional-care model, she may be admitted to the hospital with a heart attack and then discharged to a skilled nursing facility because of concerns about her ability to stay safe and engaged at home. Under a Care at Home model, she might be evaluated by a physician and sent home, where she could have an assigned nurse and care manager, remote patient monitoring, daily telehealth visits with a physician coupled with in-person care from a nurse, and meals delivered to her home by a community-based organization.

Care at Home could improve the quality of care and the patient experience by providing patients with care in the comfort of their homes and by potentially reducing preventable adverse health events. Additionally, stakeholders—including payers, healthcare facilities and physician groups, Care at Home providers, technology companies, and investors—could see substantial value, although the types of benefits and costs would vary by stakeholder (Exhibit 2). For example, a payer could benefit from lower medical costs resulting from the reduction of preventable adverse health events and the use of a lower-cost site of care. Value could also result from enhanced quality performance and more

Exhibit 1

Care at Home could leverage digitally enabled interventions to address the physical, behavioral, and social needs of patients.

Phase: Diagnosis

Archetype: Emerging risk

- 50 years old; has obesity and other risk factors potentially related to diabetes
- Doesn't drive; has a husband and a son

Current state

- Schedules routine in-person wellness appointment with primary care physician (PCP) in an office
- PCP orders urine sample and A1C test (blood test for glucose levels) to screen for diabetes

Potential future state

- Schedules routine telehealth wellness appointment
- Because of diabetes risk factors, urine and A1C tests shipped in advance to send back via mail
- PCP discusses results via telehealth visit

Patient: Mary

Care at Home interventions

- At-home diagnostics via mail
- Telehealth PCP visit

Phase: Provider consultation

Archetype: Healthy/low risk

- 20 years old; has no chronic conditions
- Not married and has no children

Current state

- Wakes up with burning sensation during urination; goes to urgent-care center
- Picks up prescribed antibiotics at pharmacy for urinary tract infection (UTI)

Potential future state

- Connects with on-demand doctor through telehealth and drops off urine sample at urgent-care clinic
- Diagnosed with a UTI and is prescribed antibiotics
- Antibiotics are ordered and delivered to home by end of day

Patient: Laurie

Care at Home interventions

- Medication delivered to home quickly
- Telehealth urgent-care visit

Exhibit 1 *(continued)*

Phase: Treatment and discharge

Archetype: Unplanned acute

- 75 years old; has coronary artery disease, chronic obstructive pulmonary disease, and diabetes
- Lives with husband, who has limited mobility; struggles to secure healthy nutrition

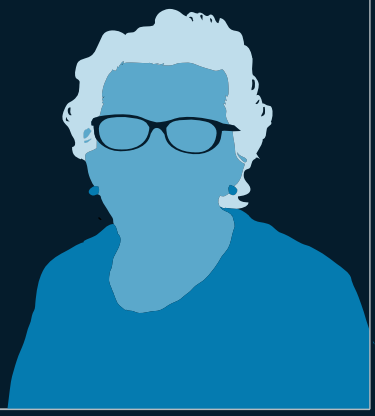
Current state

- Admitted to hospital with heart attack
- Discharged to skilled nursing facility because of concerns about staying safe and engaged at home

Potential future state

- Once recovered from heart attack, evaluated by a physician; sent home with assigned nurse and care manager
- Set up with remote patient monitoring
- Has daily telehealth visits with a physician coupled with in-person care from a nurse
- Community organization delivers meals to home

Patient: Bernadette



Care at Home interventions

- Hospital-at-home program
- Remote patient monitoring
- Care-management support
- Social support

Phase: Self-care

Archetype: High-risk chronic conditions

- 80 years old; has congestive heart failure, diabetes, and depression
- Divorced, with no children

Current state

- Has difficulty remembering to take medications, making lifestyle changes, and keeping appointments
- No psychologist available nearby to treat depression

Potential future state

- Primary care provider (PCP) assigns a care manager and sets up remote patient monitoring
- PCP gives referral for telebehavioral-health providers

Patient: John

Care at Home interventions

- Care-management support
- Referral to specialist for telehealth visit
- Remote patient monitoring

Exhibit 1 *(continued)*

Phase: Ongoing management

Archetype: Planned procedural

- 50 years old; has kidney failure
- Has a wife and 2 children

Current state

- Has kidney failure and receives dialysis 3 times a week at a nearby clinic

Potential future state

- Frank and his wife are trained on how to administer dialysis at home
- Able to administer dialysis at home with wife's support
- Set up with remote patient monitoring to prevent adverse outcomes

Patient: Frank

Care at Home interventions

- Self-administer treatment (eg, dialysis) at home
- Remote patient monitoring

Phase: End of life

Archetype: End of life

- 60 years old; has been undergoing chemotherapy for lung cancer
- Widowed and has a daughter

Current state

- Not responding to treatment so elects comfort care
- Oncologist helps select a nearby hospice facility

Potential future state

- Oncologist refers a hospice team who can provide Care at Home
- Daughter moves in to care for Nathan

Patient: Nathan

Care at Home interventions

- Home visits by clinical staff

Exhibit 2

Care at Home could generate substantial value for stakeholders, but the benefits and costs may vary.

Potential benefits and costs for Care at Home, by segment

	Payers	Healthcare facilities and physician groups	Care at Home providers, technology companies, and investors	Patients
Potential benefits	■ Lower medical costs from reducing preventable adverse health events and leveraging a lower-cost site of care ■ Revenue benefits from enhancing quality performance, improving clinically appropriate and accurate risk coding, and improving patient experience	■ Any savings opportunities from value-based payment arrangements or reimbursement for any Care at Home services if provided ■ Margin benefits from freed-up capacity if it currently does not exist for patients who need facility-based care	■ Potential to capture substantial market opportunity	■ Reduction in preventable adverse health events ■ Closure of care gaps from enhanced care ■ Lower-cost site of care ■ More convenient care
Potential costs	■ Reimbursement for Care at Home services ■ Potential induced demand through more convenient care	■ Potential lost reimbursement or lower reimbursement if Care at Home provided instead of care in a facility ■ Any costs to partner with other providers to deliver Care at Home services or to deliver them internally if provided	■ Investment costs ■ Variable costs from delivering Care at Home products	■ Limited

clinically appropriate and accurate risk coding. This value may be partially offset by the reimbursement for Care at Home services and the potential for induced demand through more convenient care. Ultimately, the value from Care at Home will likely depend on which specific opportunities are pursued and adopted.

Where care could shift from traditional facilities to the home

Care at Home cannot succeed without physician buy-in. To understand the percentage of care being delivered in an office or facility today that could be provided at home—in clinically appropriate and cost-effective ways—for different service categories by 2025, we conducted a survey of physicians who serve predominantly Medicare FFS and MA patients.[9] We focused on Medicare FFS and MA because beneficiaries expressed an appetite for Care at Home (McKinsey's Consumer Health Insights survey from June 2021 found that 16 percent of respondents aged 65 and older said that they are more likely now than they were before the pandemic to receive home health services), and some have conditions that could be treated at home at a substantially lower cost.[10] As a result, the opportunity to expand Care at Home services for Medicare FFS and MA beneficiaries could be broader than for other groups.

The survey investigated the extent to which care for a given service can shift to the home in a clinically appropriate and cost-effective way. Based on the results, we estimate that up to $265 billion worth of care currently being delivered in traditional facilities for Medicare FFS and MA bene-

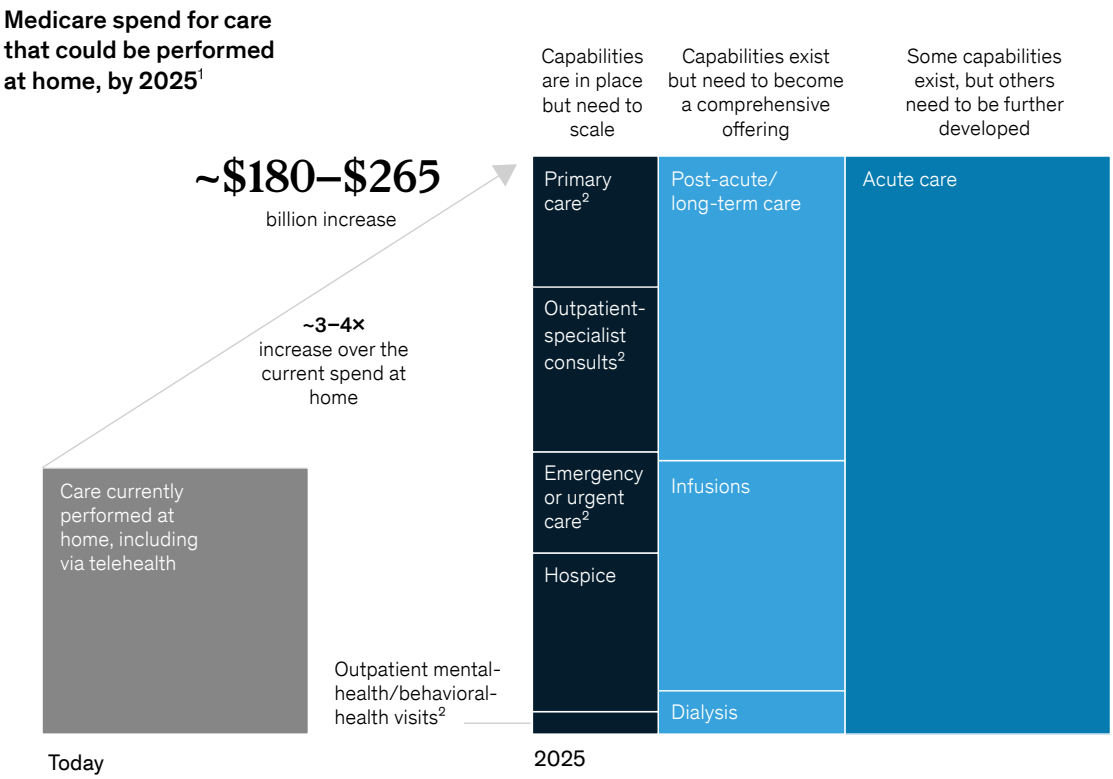
ficiaries (representing up to 25 percent of the total cost of care) could shift to the home. This represents a three- to fourfold increase in the current spend at home for this population today, although how the shift will affect reimbursement rates is not yet clear (Exhibit 3).

We categorized the services that can be delivered at home into three groups:

1. *Services with capabilities in place that may benefit from scaling:* These services include primary care, outpatient-specialist consults, emergency-department and urgent care, hospice, and outpatient mental- and behavioral-health visits. Many of these services have seen an increase in usage during the COVID-19 pandemic.[11] These services have the potential to scale at home as point solutions. Our survey results suggest that roughly 15 to 40 percent of additional Medicare FFS and MA spending for these services could be delivered at home, with emergency-department and urgent care on the lower end, at 15 to 20 percent, and outpatient mental- and behavioral-health visits on the higher end, at 30 to 40 percent (Exhibit 4).
2. *Services where capabilities exist that could be stitched together into a comprehensive offering:* These services include dialysis, post-acute care (PAC) and long-term care (LTC), and infusions. Our survey results suggest that roughly 15 to 40 percent of additional Medicare FFS and MA spending on these services could be delivered at home, with dialysis

Exhibit 3

Up to $265 billion worth of care services currently being delivered in clinics, facilities, and physicians' offices could shift to the home by 2025.

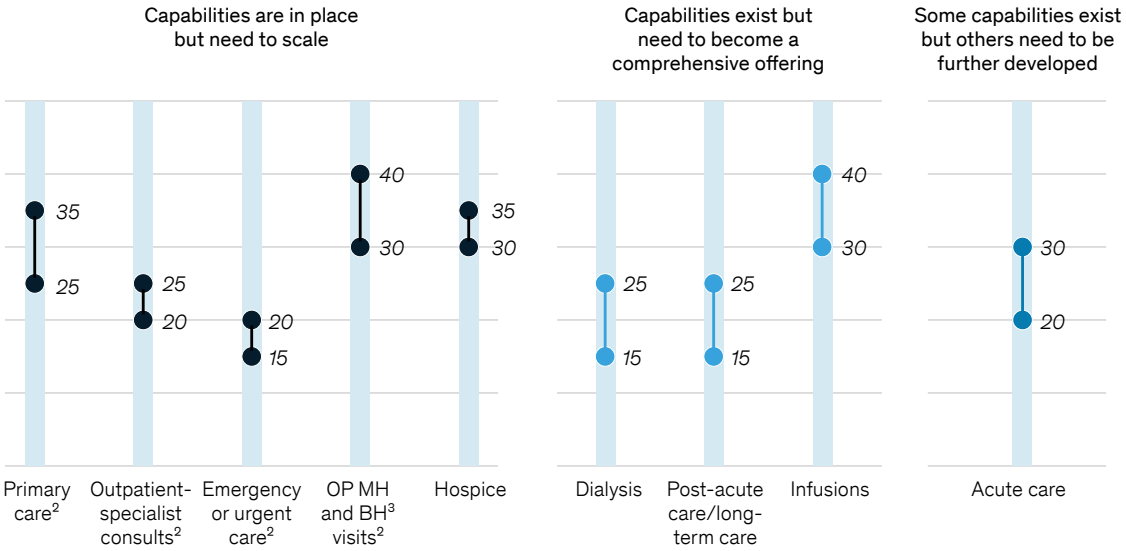


[1]Based on 2018 Medicare claims data (Medicare Limited Data Set), NHE-projected Medicare annual growth rates, and results of external physician survey to understand what percentage of care being delivered in an office or facility today could be provided at home.
[2]Categories have experienced substantial growth in telemedicine as a result of the COVID-19 pandemic. For more, see Oleg Bestsennyy, Greg Gilbert, Alex Harris, and Jennifer Rost, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality," McKinsey, July 9, 2021.

Exhibit 4

A substantial amount of care currently being performed in clinics, facilities, and physicians' offices could shift to the home across service categories.

Shift to Care at Home,[1] % range of shift, by individual category



[1]Based on 2018 Medicare claims data (Medicare Limited Data Set) and results of external physician survey to understand what percentage of care being delivered in an office or facility today could be provided at home.
[2]Categories have experienced substantial growth in telemedicine as a result of the COVID-19 pandemic. For more, see Oleg Bestsennyy, Greg Gilbert, Alex Harris, and Jennifer Rost, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality," McKinsey, July 9, 2021.
[3]Outpatient mental-health and behavioral-health visits.

and PAC and LTC on the lower end (15 to 25 percent) and infusions on the higher end (30 to 40 percent).

The capabilities needed to deliver many of these services at home are available today: for example, infusion services of intravenous therapies, post-acute nursing and rehabilitative therapy, and dialysis are already being provided at home, but these services could grow further by bringing together capabilities in a comprehensive offering.[12]

For PAC, such an offering may include a nurse to deliver Care at Home, a remote patient-monitoring device to check patients' vitals and alert providers if there is a concern, a care manager to follow up with patients to make sure they understand the discharge instructions and to schedule follow-up visits, and prepared meals to be delivered to the home.

3. *Services with some capabilities but others that could be further developed:* This category includes a single service: acute care. Our survey results suggest that roughly 20 to 30 percent of additional Medicare FFS and MA spending for acute care can be delivered at home. Some acute-care services can be treated at home today, but others rely on capabilities that require further technological advancement. The Centers for Medicare & Medicaid Services has stated that "treatment for more than 60 different acute conditions, such as asthma, congestive heart failure, pneumonia, and chronic obstructive pulmonary disease (COPD) care, can be treated appropriately and safely in home settings with proper monitoring and treatment protocols."[13] However, higher-acuity and more complicated conditions (for example, severe sepsis, unstable cardiac arrhythmias) cannot yet be treated at home in a high-quality and economical way.

Factors that could affect adoption

The growth of Care at Home services could vary based on several factors. First, stakeholders will need to evaluate which services can be delivered at home to treat patients' physical, behavioral, and social needs effectively. Care at Home providers, technology companies, and investors could play a role here by accelerating innovation.

Second, adoption could depend on the economic viability of Care at Home. Some healthcare facilities and physician groups have had less incentive to pursue Care at Home for their patients because of the potential for lower (or nonexistent) reimbursement for care if provided at home instead of in a higher-cost setting.[14] New reimbursement policies or payment innovation (for example, payment parity for telehealth or value-based payment arrangements) could improve adoption.

Third, physician awareness, perceptions, and capabilities may be factors. Physicians could learn about the capabilities of Care at Home, investigate case studies and results of how high-quality care can be delivered at home, and receive training to administer the interventions. Payers could play an important role in spurring awareness and providing training and education to providers.

Finally, adoption will depend on how patients feel about Care at Home. Patients could be made aware of Care at Home options, and they could state a preference for them over facility-based care. To encourage adoption, payers could cover certain services, and providers could recommend Care at Home to patients where clinically appropriate.

How to accelerate growth

To help accelerate the adoption of Care at Home services, payers, healthcare facilities and physician groups, Care at Home providers, technology companies, and investors could consider a variety of potential actions:

Payers

— *Develop a value-backed Care at Home strategy* with specific use cases. This may include situations where the reduced medical costs and increased revenues will outweigh reimbursement for services and potential for induced demand.

— *Redesign benefits to support direct delivery of Care at Home,* as well as enabling services (for example, remote monitoring, care management, social supports, or assistance with daily living).

— *Create awareness and provide training and education to providers* on the technologies available for Care at Home, as well as their uses and benefits.

— *Develop a network of high-value Care at Home providers and technology companies, as well as community-based organizations* (for example, food banks), that can support Care at Home.

— *Expand reimbursement policies* (for example, Care at Home reimbursement at parity with traditional reimbursement) *or payment innovation models* (such as shared savings on total cost of care) to encourage providers to support Care at Home.

— *Adopt utilization-management policies* (for example, determination of appropriate discharge destination as part of transition-of-care programs) *to facilitate the shift of care to the home from other settings where medically appropriate.*

— *Leverage care management to raise awareness of Care at Home options with members.*

Healthcare facilities and physician groups

— *Create value-backed Care at Home strategy* with specific use cases in which the economics are favorable and patients benefit from higher-quality and more accessible care.

— *Develop Care at Home clinical models to deploy with patients* (for example, primary and specialty telehealth care, in-home acute care, or in-home infusion services).

— *Establish partnerships with other providers or technology companies that can provide Care at Home or enabling*

services (for example, remote monitoring, care management, social supports, or assistance with daily living) or build capabilities internally.

— *Establish contracts with payers to ensure that Care at Home services are reimbursed in an economically viable way* (for example, reimbursement at parity with traditional reimbursement or value-based payment arrangements).

— *Develop analytics to identify patients who would benefit from Care at Home* based on the use cases (for example, high-risk patients with chronic conditions who could benefit from more support at home to prevent exacerbations).

Care at Home providers, technology companies, and investors

— *Develop business cases or investment theses* for Care at Home (for example, primary telehealth care, in-home dialysis, and remote monitoring). Size the market potential, evaluate the market landscape, and understand how the market may be evolving.

— *Evaluate opportunities,* with providers and technology companies assessing how to build, buy, or partner for capabilities, and investors identifying potential assets.

— *Implement theses,* with providers and technology companies creating new offerings in these markets, and investors investing in assets in the market.

The COVID-19 pandemic has created a catalyst to fundamentally reimagine Care at Home to help improve quality of care and patient experience while also creating potential value for payers, healthcare facilities and physician groups, Care at Home providers, technology companies, and investors. The ultimate value will depend on a variety of factors that are in the hands of stakeholders.

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These materials do not constitute legal, medical, policy, or other regulated advice and do not contain all the information needed to determine a future course of action. This report and its findings are meant to be an analysis of trends seen in pre-acute, acute, and post-acute care and are not meant to reflect or imply preference of any particular model. While Care at Home is one growing option in pre-acute, acute, and post-acute care, care delivered in facilities will continue to have value and may be the right choice for individuals and their families.

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[1] We define "Care at Home" as digitally enabled interventions, either self-administered or administered by a caregiver, delivered at home to address the physical, behavioral, and social needs of patients.
[2] Facilities include hospitals, outpatient clinics, physicians' offices, skilled nursing facilities, and urgent-care centers and emergency departments.
[3] Oleg Bestsennyy, Greg Gilbert, Alex Harris, and Jennifer Rost, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?," McKinsey, July 9, 2021.
[4] Ibid.
[5] "New HHS study shows 63-fold increase in Medicare telehealth utilization during the pandemic," US Department of Health & Human Services, December 3, 2021.
[6] "Is there room to grow with remote patient monitoring as COVID-19 continues?," Medical Group Management Association, April 22, 2021.
[7] Dennis M. Bierle et al., "Implementation of a multisite interdisciplinary remote patient monitoring program for ambulatory management of patients with COVID-19," *npj Digital Medicine*, August 2021, Volume 4, Article 123.
[8] Bill Evans et al., "2021 year-end digital health funding: Seismic shifts beneath the surface," Rock Health, January 10, 2022.
[9] Survey of more than 200 physicians conducted in fall 2020, filtering down to 70 physicians reporting that the majority of their patients are either Medicare FFS or MA beneficiaries.
[10] Jenny Cordina, Eric Levin, and George Stein, "COVID-19 Consumer Healthcare Insights: What 2021 may hold," McKinsey, June 24, 2021.
[11] "Telehealth," July 9, 2021.
[12] See Justin E. Bekelman et al., "Outpatient treatment at home for Medicare beneficiaries during and after the COVID-19 pandemic," *JAMA*, June 3, 2020, Volume 324, Number 1, pp. 21–22; and Klemens B. Meyer and Daniel E. Weiner, "Home dialysis in the United States: To increase utilization, address disparities," *Kidney Medicine*, March–April 2020, Volume 2, Number 2, pp. 95–97.
[13] "CMS announces comprehensive strategy to enhance hospital capacity amid COVID-19 surge," Centers for Medicare & Medicaid Services, November 25, 2020.
[14] Sarah Klein, "'Hospital at home' programs improve outcomes, lower costs but face resistance from providers and payers," Commonwealth Fund, August–September 2011.

The math of ACOs

Michael Chernew, Rachel Groh, David Nuzum, and Nikhil R. Sahni

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Factors shaping the financial performance of physician- and hospital-led organizations under total cost of care payment models.

Introduction

Broad consensus has long existed among public- and private-sector leaders in US healthcare that improvements in healthcare affordability will require, among other changes, a shift away from fee-for-service (FFS) payments to alternative payment models that reward quality and efficiency. The alternative payment model that has gained broadest adoption over the past ten years is the accountable care organization (ACO), in which physicians and/or hospitals assume responsibility for the total cost of care for a population of patients.

Launched by the Centers for Medicare & Medicaid Services (CMS) Innovation Center in 2012, Pioneer ACO was the first such model design to generate savings for Medicare. In this incarnation, Medicare set a benchmark for total cost of care per attributed ACO beneficiary: If total cost of care was kept below the benchmark, ACOs were eligible to share in the implied savings, as long as they also met established targets for quality of care. If total cost of care exceeded the benchmark, ACOs were required to repay the government for a portion of total cost of care above the benchmark.

Payment models similar to the one adopted by Pioneer ACOs also have been extended to other Medicare ACO programs, with important technical differences in estimates for savings and rules for the distribution of savings or losses as well as some models offering gain sharing without potential for penalties for costs exceeding the benchmark. State Medicaid programs as well as private payers (across Commercial, Medicare Advantage, and Medicaid Managed Care) also have adopted ACO-like models with similar goals and payment model structures. Of the roughly 33 million lives covered by an ACO in 2018, more than 50 percent were commercially insured and approximately 10 percent were Medicaid lives.[1]

On the whole, ACOs in the Medicare Shared Savings Program (MSSP) have delivered high-quality care, with an average composite score of 93.4 percent for quality metrics. However, cost savings achieved by the program have been limited: ACOs that entered MSSP during the period from January 1, 2012 to December 31, 2014, were estimated to have reduced cumulative Medicare FFS spending by $704M by 2015; after bonuses were accounted for, net savings to the Medicare program were estimated to be $144M.[2] Put another way, in aggregate, savings from Medicare ACOs in 2015 represented only 0.02 percent of total Medicare spending. The savings achieved were largely concentrated among physician-led ACOs (rather than hospital-led ACOs). In fact, after accounting for bonuses, hospital-led ACOs actually had *higher* total Medicare spending by $112M on average over three years.[3]

While savings from MSSP have been relatively limited, in aggregate, numerous examples exist of ACOs that have achieved meaningful savings—in some cases in excess of 5 percent of total cost of care—with significant rewards to both themselves as well as sponsoring payers (for example, Millennium, Palm Beach, BCBSMA AQC).[4,5,6] The wide disparity of performance among ACOs (and across Medicare, Medicaid, and Commercial ACO programs) raises the question of whether certain provider organizations are better suited than others to succeed under total cost of care arrange-

ments, and whether success is dictated more by ACO model design or by structural characteristics of participating providers.

In the pages that follow, we examine these questions in two ways. First, we analyze "the math of ACOs" by isolating four factors that contribute to overall ACO profitability: bonus payments, "demand destruction," market share gains, and operating expenses. Following these factors, we illustrate the math of ACOs through modeling of the performance of five different archetypes: physician-led ACOs; hospital-led ACOs with low ACO penetration and low leakage reduction; hospital-led ACOs with high ACO penetration; hospital-led ACOs with high leakage reduction; and hospital-led ACOs with high penetration and leakage reduction.

The math of ACOs

In the pages that follow, we break down "the math of ACOs" into several key parameters, each of which hospital and physician group leaders could consider evaluating when deciding whether to participate in an ACO arrangement with one or more payers. Specifically, we measure the total economic value to ACO-participating providers as the sum of four factors: bonus payments, less "demand destruction," plus market share gains, less operating costs for the ACO (Exhibit 1).

In the discussion that follows, we examine each of these factors and understand their importance to the overall profitability of ACOs, using both academic research as well as McKinsey's experience advising and supporting payers and providers participating in ACO models.

1. BONUS PAYMENTS

The premise of ACOs rests on the opportunity for payers and participating providers to share in cost savings arising from curbing unnecessary utilization and more efficient population health management, thus aligning incentives to control total cost of care. Because ACOs are designed to reduce utilization, the bonus—or share of estimated savings received by an ACO—is one factor that significantly influences ACO profitability and has garnered the greatest attention both in academic research and in private sector negotiations and deliberations over ACO participation. Bonus payments made to ACOs are themselves based on several key design elements:

(a) The **baseline and benchmark** for total costs, against which savings are estimated[7];

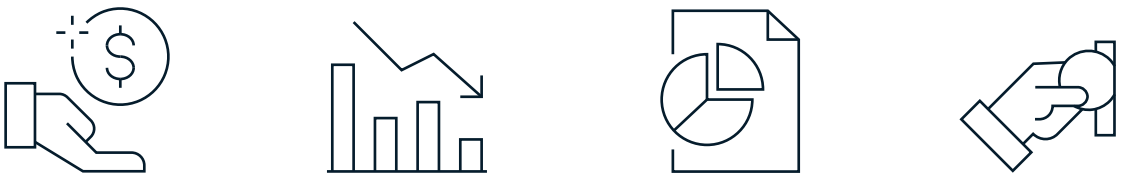
(b) The **shared savings rate and minimum savings/loss rates**;

(c) **Risk corridors**, based on caps on gains/losses and/or "haircuts" to benchmarks; and,

(d) **Frequency of rebasing**, with implications for benchmark and shared savings.

Exhibit 1

The equation for the math of ACOs.



ACO, accountable care organization.

1a. Baseline and benchmark

Most ACO models are grounded in a historical **baseline** for total cost of care, typically on the population attributed to providers participating in the ACO. Most ACO models apply an annual **trend rate** to the historical baseline, in order to develop a **benchmark** for total cost of care for the performance period. This benchmark is then used as the point of reference to which actual costs are compared for purposes of determining the bonus to be paid.

Historical baselines may be based either on one year or averaged over multiple years in order to mitigate the potential for a single-year fluctuation in total cost of care that could create an artificially high or low point of comparison in the future. Trend factors may be based on historically observed growth rates in per capita costs, or forward-looking projections, which may depart from historical trends due to changes in policy, fee schedules, or anticipated differences between past and future population health. Trend factors may be based on national projections, more market-specific projections, or even ACO-specific projections. For these and other reasons, a pre-determined benchmark may not be a good estimate of what total cost of care would have been in the absence of the ACO. As a result, estimated savings, and hence bonuses, may not reflect the true savings generated by ACOs if compared to a rigorous assessment of what otherwise would have occurred.

Recent research suggests that an ACO's benchmark should be set using trend data from providers in similar geographic areas and/or with similar populations instead of using a national market average trend factor.[8] It has been observed in Medicare (and other) populations that regions (and therefore possibly ACOs) that start at a lower-than-average cost base tend to have a higher-than-average growth trend. For example, Medicare FFS spending in low-cost regions grew at a rate 1.2 percentage points faster than the national average (2.8 percent and 1.6 percent from 2013 to 2017 compound annual growth rate, respectively). This finding is particularly relevant in low-cost rural communities, where healthcare spending grows faster than the national average.[9] Based on this research, some ACO models, such as MSSP and the Next Generation Medicare ACO model, have developed benchmarks based on blending ACO-specific baselines with market-wide baselines. This approach is intended to account for the differences in "status quo" trend, which sponsoring payers may project in the absence of ACO arrangements or associated improvements in care patterns. Some model architects have advocated for this provider-market blended approach to benchmark development because they believe such an approach balances the need to reward providers who improve their own performance with a principle tenet of this model: That ACOs within a market should be held accountable to the same targets (at least in the long term).

1b. Shared savings rate (and minimum savings/loss rates)

The shared savings rate is the percentage of any estimated savings (compared with benchmark) that is paid to the ACO, subject to meeting any requirements for quality performance. For example, an ACO with a savings rate of 50 percent that outperforms its benchmark by 3 percent would keep 1.5 percent of benchmark spend. Under the array of Medicare ACO models, the shared savings rate percentage ranges anywhere from 40 percent to 100 percent.[10]

In some ACO models, particularly one-sided gain sharing models that do not introduce downside risk, payers impose a minimum savings rate (MSR), which is the savings threshold for an ACO to receive a payout, typically 2 percent, but can be higher or lower.[11] For example, assume ACO Alpha has a savings rate of 60 percent and MSR of 1.5 percent. If Alpha overperforms the benchmark by 1 percent, there would be no bonus payout, because the total savings do not meet or exceed the MSR. If, however, Alpha overperforms the benchmark by 3 percent, Alpha would receive a bonus of 1.8 percent of benchmark (60 percent of 3 percent). An MSR is common in one-sided risk agreements to protect the payer from paying out the ACO if modest

savings are a result of random variations. ACOs in two-sided risk arrangements may often choose whether to have an MSR.

Both factors impact the payout an ACO receives. Between 2012 and 2018, average earned shared savings for MSSP ACOs were between $1.0M and $1.6M per ACO (between $10 and $100 per beneficiary).[12] However, while nearly two out of three MSSP ACOs in 2018 were under benchmark, only about half of them (37 percent of all MSSP ACOs) received a payout due to the MSR.[13]

1c. Risk corridors

In certain arrangements, payers include clauses that limit an ACO's gains or losses to protect against extreme situations. Caps depend on the risk-sharing agreement (for example, one-sided or two-sided) as well as the shared savings/loss rate. For example, MSSP Track 1 ACOs (one-sided risk sharing) cap shared savings at the ACO's share of 10 percent variance to the benchmark, while Track 3 ACOs (two-sided risk sharing) cap shared savings at the ACO's share of 20 percent variance to the benchmark and cap shared losses at 15 percent variance to the benchmark.[14] In contrast with these Medicare models, many Commercial and Medicaid ACO models have applied narrower risk corridors, with common ranges of 3 to 5 percent. In our experience, payers have elected to offer narrower risk corridors. Their choice is based on their desire to mitigate risk as well as the interest of some payers (and state Medicaid programs) to share in extraordinary savings that may be attributable in part to policy changes or other interventions undertaken by the payers themselves, whether in coordination with ACOs or independent of their efforts.

Payers also may vary the level of shared savings (and/or risk), between that which applies to the first dollar of savings (versus benchmark) compared with more significant savings. For example, by applying a 1 percent adjustment or "haircut" to the benchmark, a payer might keep 100 percent of the first 1 percent of savings and share any incremental savings with the ACO at a negotiated shared savings rate. Depending on what higher shared savings rate may be offered in trade for the "haircut," such a structure has the potential to increase the incentive for ACOs to significantly outperform the benchmark. For example, an ACO that beats the benchmark by 4 percentage points and earns 100 percent of savings after 1 percentage point would net 75 percent of total estimated savings. However, under the same risk model, if the ACO were to beat the benchmark by 2 percentage points, they would only earn 50 percent of total savings. Such a structure could therefore be either more favorable or less favorable than 60 percent shared savings without a "haircut," depending on the ACO's anticipated performance.

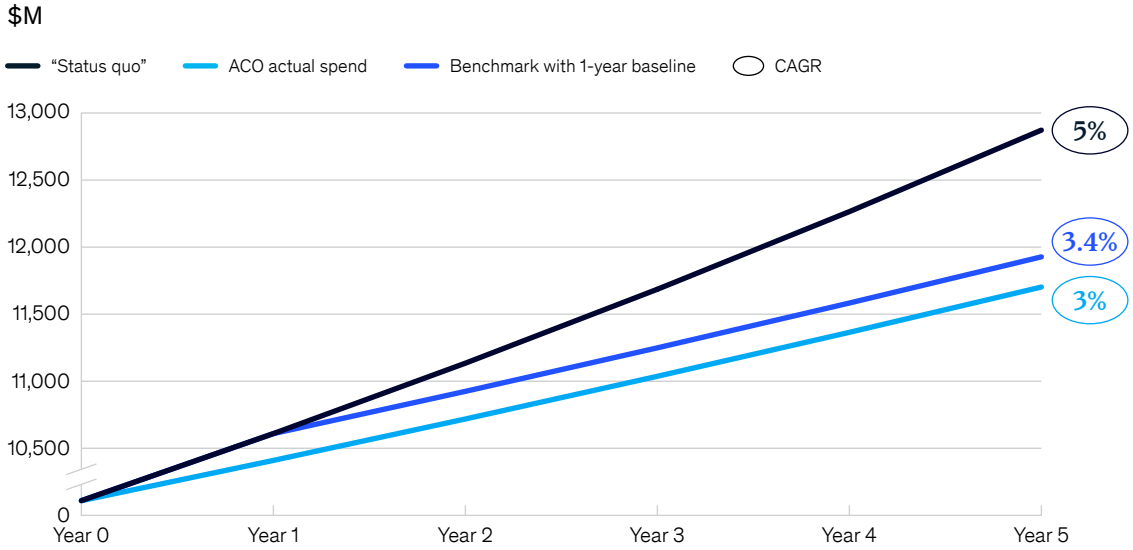
1d. Frequency of rebasing

In most ACO models (including those adopted by CMS for the Medicare FFS program), the ACO's benchmark is reset for each performance period based (at least in part) on the ACO's performance in the immediate prior year. This approach is commonly referred to as "rebasing." The main criticism of this approach toward ACO model design—which is also evident in capitation rate setting for Managed Care Organizations—is that ACOs become "victims of their own success": Improvements made by the ACO in one year lead to a benchmark that is even harder to beat in the following year. The corollary is also true: An ACO with "excessive" costs in Year 1 may be setting themselves up for significant shared savings in Year 2 simply by bringing their performance back to "normal" levels.

Even in situations where ACOs show steady improvements in management of total cost of care over several years, the "ratchet" effect of rebasing can have significant implications for the share of estimated savings that flow to the ACO. Exhibit 2 illustrates the shared savings that would be captured by an ACO, if it were to mitigate trend by 2 percentage points consistently for 5 years (assumes linear growth), under a model that provides 50 percent shared savings against a benchmark that is set with annual rebasing. In this scenario, although the ACO would earn 50 percent of the savings estimated in any one

Exhibit 2

The per-member per-year cost over 5 years after becoming an ACO.



ACO, accountable care organization; CAGR, compound annual growth rate.

year (against benchmark), the ACO would derive only 16 percent of total savings achieved relative to a "status quo" trend.

Some ACO model designs (including MSSP) have mitigated this "ratchet" effect, to some extent, by using **multi-year baselines**, whereby the benchmark for a given performance year is based not on the ACO's baseline performance in the immediate prior year but over multiple prior years. This approach smooths out the effect of one-year fluctuations in performance on the benchmark for subsequent years; by implication, improvements made by an ACO in Year 1 and sustained in Year 2 create shared savings in both years. Under a three-year baseline, weighted toward the most recent year 60/30/10 percent (as applies to new contracts under the MSSP), the ACO in Exhibit 2 would capture 22 percent of total estimated savings over 5 years. If the model were instead to adopt an evenly weighted three-year baseline, that same ACO would capture 28 percent over 5 years.

In select cases, particularly in the Commercial market, payers and ACOs have agreed to **multi-year prospective benchmarks**. Under this approach, the benchmark for performance Years 1 to 5 (for example) are set prospectively in Year 0; the benchmarks for Years 2 and 3, for example, are not impacted by the ACO's performance in Year 1. If this approach were to be applied to the ACO depicted in Exhibit 2, they would earn fully 50 percent of the total savings, assuming that the prospectively established 5-year benchmark was set at the "status quo" trend line. While prospective multi-year benchmarks may be more favorable to ACOs, they also increase the sensitivity of ACO performance to both the original baseline as well as the reasonableness of the prospectively applied trend rate.

Key takeaways

While in many cases healthcare organizations are highly focused on the percent of shared savings they will receive (shared savings rate), in our experience, the financial sustainability of ACO arrangements may be equally or more greatly affected by several other design parameters outlined here, among them: the inclusion of an MSR or a "haircut" to benchmark, either of which may dampen the incentive to perform; benchmark definitions including the use of provider-specific, market-specific, and/or national baseline and trend factors;

and the frequency of rebasing, as implied by the use of a single-year or multi-year baseline, or the adoption of prospectively determined multi-year benchmarks.

2. DEMAND DESTRUCTION

Although shared savings arrangements are meant to align providers' incentives with curbing unnecessary utilization, the calculation of bonus payments based on avoided claims costs (as described in Section 1) does not account for the foregone provider revenue (and margins) attached to reductions in patient volume. The economic impact of this reduction in patient volume, sometimes referred to as "demand destruction," is described in this section, which we address in two parts:

(a) **Foregone economic contribution** based on reduced utilization in the ACO population; and,

(b) **Spillover effects** from reduced utilization in the non-ACO population, based on clinical and operational changes that "spillover" from the ACO population to the non-ACO population.

2a. Foregone economic contribution

Claims paid to hospital systems for inpatient, outpatient, and post-acute facility utilization typically comprise 40 to 70 percent of total cost of care, with hospital systems that own a greater share of outpatient diagnostic lab and/or imaging and/or skilled nursing beds falling at the upper end of this range. These same categories of facility utilization may comprise 60 to 80 percent of reductions in utilization arising from improvements in population health management by an ACO. Given the high fixed costs (and correspondingly high gross margins) associated with inpatient, outpatient, and post-acute facilities, foregone facility volume could come at an opportunity cost of 30 to 70 percent of foregone revenue—that opportunity cost being the gross contribution margin associated with incremental patient volume, calculated as revenue less variable costs: Commercially insured ACO populations are more likely to fall into the upper end of this range and Medicaid populations into the lower end. This is the reason savings rates tend to be higher in the Commercial market, to offset the larger (negative) financial impact of "demand destruction."

For example, a hospital-led ACO that mitigates total cost of care by 3 percent (or $300 based on a benchmark of $10,000 per capita) might forego $180 to $240 of revenue per patient (assuming 60 to 80 percent of savings derived from hospital services), which may represent $90 to $120 in foregone economic contribution, assuming 50 percent gross margins. As this example shows, this foregone economic contribution may represent a significant offset to any bonus paid under shared savings arrangements, unless the shared savings percentage is significantly greater than the gross margin percentage for foregone patient revenue.

For some hospitals that are capacity constrained, the lost patient volume may be replaced (that is, backfilled) with additional patient volume that may be more or less profitable depending on the payer (for example, an ACO that backfills with more profitable Commercial patients). However, the vast majority of hospitals are not traditionally capacity constrained and therefore must look to other methods (for example, growing market share) to be financially sustainable.

In contrast, physician-led ACOs have comparatively little need to consider the financial impact of "demand destruction," given that they never benefitted from hospitalizations and thus do not lose profits from forgone care. Furthermore, primary care

The adverse impact of "demand destruction" is what most distinguishes the math of hospital-led ACOs from that of physician-led ACOs.

practices may actually experience an increase, rather than decrease, in patient revenue, based on more effective population health management. Even for multispecialty physician practices that sponsor ACO formation, any reductions in patient volume arising from the ACO may have only modest impact on practice profitability due to narrow contribution margins attached to incremental patient volume. Physician-led ACOs may need to be concerned with "demand destruction" only to the extent that a disproportionate share of savings is derived from reductions in practice-owned diagnostics or other high-margin services; however, the savings derived from such sources are typically smaller than reductions in utilization for emergency department, inpatient, and post-acute facility utilization.

2b. Spillover effects

Though ACOs are not explicitly incentivized to reduce total cost of care of their non-ACO populations (including FFS), organizations often see increased efficiency across their full patient population after becoming an ACO. For example, research over the last decade has found reductions in spend for non-ACO lives between 1 and 3 percent (Exhibit 3).

The impact of spillover effects on an ACO's profitability depends on the proportion of ACO and non-ACO lives that comprise a provider's patient panel. Further, impact also depends on the ACO's ability to implement differentiated processes for ACO and non-ACO lives to limit the spillover of the efficiencies. Although conventional wisdom implies that physicians will not discriminate their clinical practice patterns based on the type of payer (or payment), nonetheless many examples exist of hospitals and other providers with the ability to differentiate processes based on payer or payment type. For example, many hospitals deploy greater resources to discharge planning or initiate the process earlier for patients reimbursed under a Diagnosis Related Group (case rate) than for those reimbursed on a per diem or percent of charges model. Moreover, ACOs and other risk-bearing entities routinely direct care management activities disproportionately or exclusively toward patients for whom they have greater financial accountability for quality and/or efficiency. For physician-led ACOs, differentiating resource deployment between ACO- and non-ACO populations may be necessary to achieve a return on

Exhibit 3

The spillover effects in non-ACO populations.

Population studied	Impact of spillover effects	Source
Explored effect of Medicare HMO penetration on healthcare spending of Medicare FFS enrollees between 1994–2001	0.7–0.8% reduction in FFS spend associated with every 1% increase in Medicare HMO enrollment	Chernew M et al., "Managed care and medical expenditures of Medicare beneficiaries," *J Health Econ*, 2008
Explored effect of BCBS of Massachusetts' Alternative Quality Contract (AQC)—an early commercial ACO initiative on beneficiaries not covered by AQC (3 years before and 2 years after AQC entry)	3.4% reduction in spend (~$400 annually) per FFS beneficiary in Year 2; no significant decrease in spending in Year 1	McWilliams JM et al., "Changes in health care spending and quality for Medicare beneficiaries associated with a commercial ACO contract," *JAMA*, 2013
Explored effect of Medicare Advantage program on the traditional Medicare program nationwide, from 1997–2009	While greater managed care penetration is not associated with fewer hospitalizations, it is associated with lower costs and shorter stays per hospitalization. These spillovers are substantial.	Baicker K et al., "The spillover effects of Medicare managed care: Medicare Advantage and hospital utilization," *J Health Econ*, 2013

ACO, accountable care organization; FFS, fee for service; HMO, health maintenance organization.

investment for new care management or other population health management activities. For hospital sponsors of ACOs that continue to derive the majority of their revenue from FFS populations outside the ACO, differentiating population health management efforts across ACO and FFS populations are of paramount importance to overall financial sustainability. To the extent that hospital-led ACOs are unable to do so, they may find total cost of care financial arrangements to be financially sustainable only if extended to the substantial majority of their patient populations in order to reduce the severity of any spillover effects.

Key takeaways

The adverse impact of "demand destruction" is what most distinguishes the math of hospital-led ACOs from that of physician-led ACOs. The structure of ACO-sponsoring hospitals—whether they own post-acute assets, for example—further shapes the severity of demand destruction, which then provides a point of reference for determining what shared savings percentage may be necessary to overcome the impact of demand destruction. Though in the long term, hospitals may be able to right size capacity, in the near term when deciding to become an ACO, there is often limited ability to alter the fixed-cost base. Finally, the extent of "spillover effects" from the ACO to the non-ACO population further impacts the financial sustainability of hospital-led ACOs. Hospital-led ACOs can seek to minimize the impact through 1) differentiating processes between the two populations, and/or 2) transitioning the substantial majority of their patient population into ACO arrangements.

3. MARKET SHARE GAINS

Providers can further improve profitability through market share gains, specifically:

(a) **Reduced system leakage** through improved alignment of referring physicians across both ACO and non-ACO patients; and,

(b) **Improved network status** as an ACO.

3a. Reduced system leakage

ACOs can grow market share by coordinating patients within the system (that is, reduce leakage) to better manage total cost of care and quality. This coordination is often accomplished by improving the provider's alignment with the referring physician; for example, ACOs can establish a comprehensive governance structure and process around network integrity, standardize the referral process between physicians and practices, and improve physician relationships within, and with awareness of, the network. Furthermore, ACOs can develop a process to ensure that a patient schedules follow-up appointments before leaving the physician's office, optimizing the scheduling system and call center.

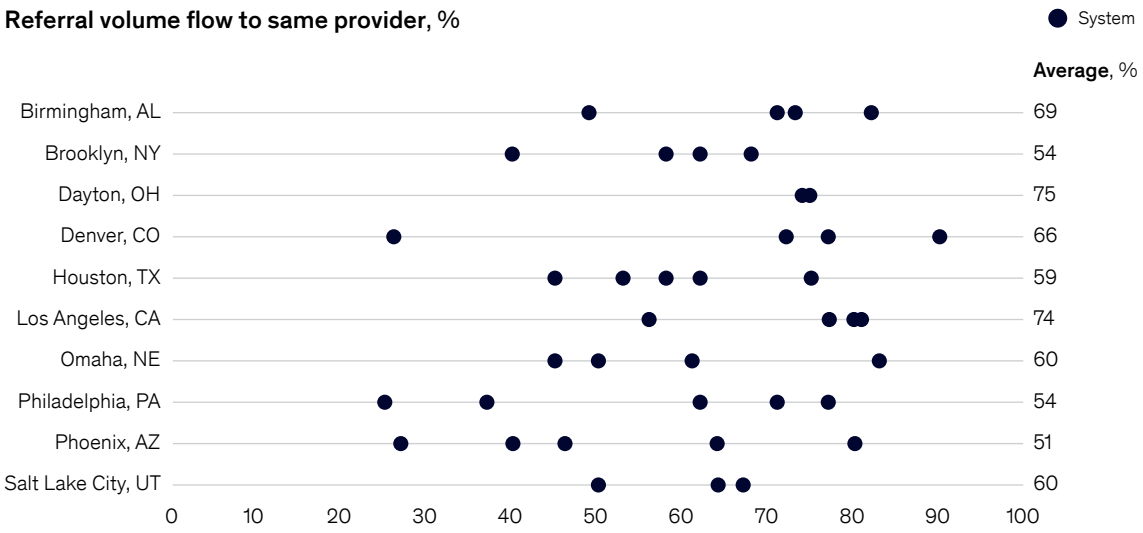
Stark Laws (anti-kickback regulations) have historically prevented systems from giving physicians financial incentives to reduce leakage. While maintaining high-quality standards, ACOs are given a waiver to this law and therefore are allowed to pursue initiatives that improve network integrity to better coordinate care for patients. In our experience, hospitals generally experience 30 to 50 percent leakage (Exhibit 4), but ACOs can improve leakage by 10 to 30 percent.

3b. Improved network status

In some instances for Commercial payers, an ACO may receive preferential status within a network by entering into a total cost of care arrangement with a payer. As a result, the ACO would see greater utilization, which will improve profitability. For example, in 2012, the Cooley Dickinson Hospital (CDH) and Cooley Dickinson Physician Hospital Organization, a health system in western Massachusetts with 66 primary care providers and 160 specialists, joined Blue Cross Blue Shield of Massachusetts' (BCBSMA) Alternative Quality Contract (AQC), which established a per-patient global budget to cover all services and expenses for its Commercial population. As a result of joining the AQC, reducing the prices charged for services, and providing high quality of care, CDH was "designated as a high-value option

Exhibit 4

The network integrity across ten US metro areas.



Note: In this analysis, network integrity captures what portion of a specialist's referrals are to his/her affiliated facility, either for inpatient or outpatient procedures (eg, cardiac surgery in hospital, endoscopy in ambulatory surgical center). The referral patterns between specialists and hospitals in the ten US metro areas were identified through analyzing over 3.6 billion submitted Medicare and Commercial claims from 2017 through Q1 2019, representing 35% of US professional and facility claims.

in the Western Mass. Region," which meant BCBSMA members with certain plans "[paid] less out-of-pocket when they [sought] care" at CDH.[15] Other payers have also established similar mutually beneficial offerings to providers who assume more accountability for care.[16,17] An ACO can benefit from these arrangements up until most or all other provider systems in the same market join.

Key takeaways

These factors to improve market share (at lower cost and better quality) can help an ACO compensate for any lost profits from "demand destruction" (foregone profits and spillover effects) and increased operating costs. The opportunity from this factor, which requires initiatives that focus on reducing leakage, can be the difference between a net-neutral hospital-led ACO and a significantly profitable ACO. An example initiative would be performance management systems that analyze physician referral patterns.

4. OPERATING COSTS

Finally, profitability is impacted by operating costs or any additional expenses associated with running an ACO. These costs generally are lower for physician-led ACOs than for hospital-led ACOs (and also depend on buy-versus-build decisions). In our experience, operating costs to run an ACO vary widely depending on the provider's operating model, cost structure (for example, existing personnel, IT capabilities), and ACO patient population (for example, number and percent of ACO lives). However, we will focus on three specific types of costs:

(a) **Care management costs**, often variable, or a marginal expense for every life;

(b) **Data and analytics operating costs**, which can vary widely depending on whether the ACO builds or buys this capability; and

(c) **Additional administrative costs**, which are fixed or independent of the number of lives.

4a. Care management costs

In our experience, care management costs to operate an ACO range from 0.5 to 2.0 percent of total cost of care for a given ACO population. These care management costs include ensuring patients with chronic

conditions are continuously managing those conditions and coordinating with physician teams to improve efficacy and efficiency of care. A core lever of success involves reducing use of unnecessary care. ACOs that spend closer to 2 percent and/or those whose efforts focus on expanding care coordination for high-risk patients struggle to achieve enough economic contribution to break even. This is because care coordination (devoting more resources to testing and treating patients with chronic disease) often does not have a positive return on investment.[18] ACOs that do this effectively and ultimately spend less on care management (around 0.5 percent of the total cost of care) tend to create value primarily through curbing unnecessary utilization and steering patients toward more efficient facilities rather than managing chronic conditions. This value creation is particularly true for Commercial ACO contracts, where there is greater price variation across providers compared with Medicare and Medicaid contracts, where pricing is standardized.

4b. Data and analytics operating costs
Data and analytics operating costs are critical to supporting ACO effectiveness. For example, high-performing ACOs prioritize data interoperability across physicians and hospitals and constantly analyze electronic health records and claims data to identify opportunities to better manage patient care and reduce system leakage. ACOs can either build or license data and analytics tools, a decision that often depends on the number of ACO lives. In our experience, an ACO that decides to build its own data and analytics solutions in-house will on average invest around $24M for upfront development, amortized over 8 years for $3M per year, plus $6M in annual costs (for example, using data scientists and analysts to generate insights from the data), for a total of $9M per year. Alternatively, ACOs can license analytics software on a per-patient basis, typically costing 0.5 to 1.5 percent of the total cost of care. Thus, we find the breakeven point at around 100,000 covered ACO lives; therefore, it often makes financial sense for ACOs with more than 100,000 lives to build in-house.

4c. Additional administrative costs
Organizations must also invest in personnel to operate an ACO, typically including an executive director, head of real estate, head of care management, and lawyers and actuaries. The ACO leadership team's responsibilities often include setting the ACO's strategy (for example, target markets, lines of business, services offered, through which physicians and hospitals) and developing, managing, and communicating with the physician network to support continuity of care.

Key takeaways
Operating costs to run an ACO are significant. Ability to find ways to invest in fixed costs that are more transformational in nature may result in lower near-term profitability but can provide a greater return on investment in the long term both for the ACO and the rest of the system. The decision to make these investments is dependent on the number of lives covered by an individual ACO.

ACO archetypes

Drawing on the analysis outlined above, we conducted scenario modeling of "the math of ACOs" using five different ACO archetypes, which vary in structure and performance under a common set of rules. These five archetypes include:

1. Typical physician-led ACO
2. Hospital-led ACO with low ACO penetration and low leakage reduction
3. Hospital-led ACO with high ACO penetration
4. Hospital-led ACO with high leakage reduction
5. Hospital-led ACO with high leakage reduction and high ACO penetration

Subsequently, taking an ACO's structure as a given, we describe for each ACO archetype the key model design parameters and other strategic and operational choices that ACOs might make to maximize their performance.

Comparision of archetypes based on scenario modeling

Summarizing the four factors, the profitability of each archetype reveals certain insights (Exhibit 5).

In a situation with only 25 percent of lives in the ACO, Scenario 2 (one-sided hospital-led ACO) compared with Scenario 4 (two-sided hospital-led ACO with high leakage reduction) highlights the importance of the shared savings rate (over $15M) and managing leakage (over $30M). Individually, each of these factors will bring the hospital-led ACO to (nearly) break even, but for a hospital-led ACO to function without concern of yearly fluctuations, both factors must be addressed.

As scale increases though, so does the profitability of participating in an ACO, as seen between Scenarios 2 and 3, which are the same except for the increase in a hospital's covered lives from 25 percent to 80 percent. While the operating expenses are also greater, the bonus payments offset those necessary investments. Scenario 5 further shows the impact of also managing leakage, the value of which increases proportionally with the number of covered lives. All the hospital paths show how focusing only on the bonus payment, and not accounting for "demand destruction" and operating expenses, can lead to an incomplete view of the economic impact of becoming an ACO.

Conclusion

Based on ACO results published to date, physician-led ACOs generally do better and are more profitable than their hospital counterparts. Thus, the real question we aimed to unpack is how can hospital-led ACOs adapt to be more profitable? We created a series of scenarios in an attempt to represent most hospitals in the United States and found four common themes:

— ***Know the implications of your structure:*** As our results show, hospitals that commit to ACOs—high savings rate from taking on two-sided risk and a large number of lives—will find it easier for the math to work. But making the commitment itself is not enough: A hard look needs to be taken at the internal and external structure, both of the hospital and affiliated network, as well as the local market, to understand the probability of success. A hospital can take certain broad actions, such as having the right organizational structure or owning the right assets, to increase the probability of success. However, certain factors are unchangeable but important to account for, such as geographic isolation.

— ***Take a multi-year view:*** When a hospital fully commits to becoming an ACO, it is essential to take a multi-year view. This view applies to major contract terms,

Exhibit 5

Five scenarios for organizations entering ACOs.

Description						ACO profitability equation, $M				
Path	Leader	ACO lives (% of total)	Risk-sharing arrangement	Savings rate, %	Percent leakage reduction,[1] %	Bonus payments ⊕	Demand destruction ⊕	Market share gains ⊕	Operating costs ⊜	Net contribution margin
1	Physician	100K (25%)	One-sided	50	0	15	4	0	–10	9
2	Hospital	100K (25%)	One-sided	50	0	15	–21	0	–10	–16
3	Hospital	320K (80%)	Two-sided	100	0	96	–36	0	–32	28
4	Hospital	100K (25%)	Two-sided	100	30	30	–21	30	–10	29
5	Hospital	320K (80%)	Two-sided	100	30	96	–36	96	–32	124

ACO, accountable care organization.
[1] From pre-ACO 50% network integrity.

Checklist for hospital-led ACOs

From these scenarios, we have uncovered a checklist that hospitals should review before transitioning to an ACO:

- How large an ACO are you planning to create? Are you really willing and able to go "all-in?"
- If you do not become an ACO, what is your alternative option (for example, status quo)?
- Can you manage "demand destruction" given your market structure? Will physicians change their behavior?
- Do you have the right assets to manage total cost of care? What additional capital investments will be needed?
- Is there wasteful spending across your current organization that could be "harvested" to increase profitability?
- How well developed are your core systems to manage an ACO population? What additional investments will you need to make?
- Can you negotiate financial terms that allow you to succeed over multiple years?

such as aligning on the re-baselining methodology, as well as investments in programs to manage the concepts of "demand destruction" and to improve physician satisfaction.

- ***Operationalize locally:*** As hospitals develop new programs, they must avoid using "blunt" instruments and instead take a nuanced and personalized approach. While vendors of population health programs may offer off-the-shelf solutions, those capabilities need to be tailored to manage the profile of the covered lives under the ACO. Furthermore, pulling the same levers (for example, post-acute care) may be common place for all ACOs, but how it is done (for example, network optimization, owning assets) may differ based on the local market. Accounting for the local market will be important to effectively manage spillover effects, which our results show can be a critical difference between profitability and unprofitability.
- ***Be smart about economies of scale when building infrastructure:*** No one doubts the additional operating expenses involved in becoming an ACO. Yet it is important to be strategic about what to build versus what to buy. Many of the needed capabilities, such as analytics, have been developed and can be leveraged off-the-shelf through partnerships, vendor arrangements, and the like. Accessing these services can lessen the burden of high fixed costs to aid hospitals when they first decide to participate in an ACO.

The above themes help determine why it is important to "know who you are." Without access to all of these value levers and the ability to adjust each variable in the math equation, the success rate for a hospital-led ACO narrows significantly. Thus, not all hospitals are set up for success as an ACO, given the way ACOs currently operate. Completing a checklist of readiness (see sidebar) that also contemplates timing of implementation is important to assess impact and the likelihood of success.

Likewise, for private and public payers, these findings should help identify potential modifications in ACO designs that will likely both increase the number of hospitals that could be successful and decrease the margin of error for a participating hospital to make programs more attractive. ACOs are important vehicles that can help the United States realize its healthcare spending goals, but they require further refinement to increase adoption and success.

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Administrative simplification

Reducing spend on administrative tasks could yield up to $270 billion to $320 billion in savings.

Administrative simplification: How to save a quarter-trillion dollars in US healthcare

Brandon Carrus, David M. Cutler, Prakriti Mishra, and Nikhil R. Sahni

October 20, 2021

Perspectives on the productivity imperative in US healthcare delivery.

Every organization or large-scale system needs a base of administrative functions to run. As these functions adopt new technologies and innovations, spending typically drops and quality improves. Consider payment processing, which is faster and cheaper than ever, or signing up for a new mortgage, for which you can get preliminary approval on your phone in minutes. Despite generations of technological advancements, however, the US healthcare system remains stuck: productivity and quality have stagnated, and change has been slow.[1]

Of the nearly $4 trillion spent on healthcare annually in the United States, administrative spending is about one-quarter of the total; delivery of care is about three-quarters. But what portion of that administrative spending is unnecessary, and how can it be simplified?

To answer these questions, it is critical to understand what is truly necessary spending. The US healthcare system, with thousands of hospitals and physician groups and more than 900 payers, is geared both to local service and to competition.[2] The predominant fee-for-service payment model puts competitive checks and balances on payers, hospitals, and physician groups. This leads to a number of benefits for the United States, such as being known as a world leader of innovative care delivery. But this fragmentation can also lead to unnecessary spending due to the number of communication and transaction points among all these organizations. For example, for a healthcare claim to be paid, it must go through multiple hand-offs: payers may have to validate the medical necessity of a procedure before authorizing physicians to provide the service; physicians and members must submit claims to payers; payers need to review and then contact providers to confirm details; payments have to flow through multiple clearinghouses; and, in some cases, appeals by providers who disagree with the payment amount must be heard.

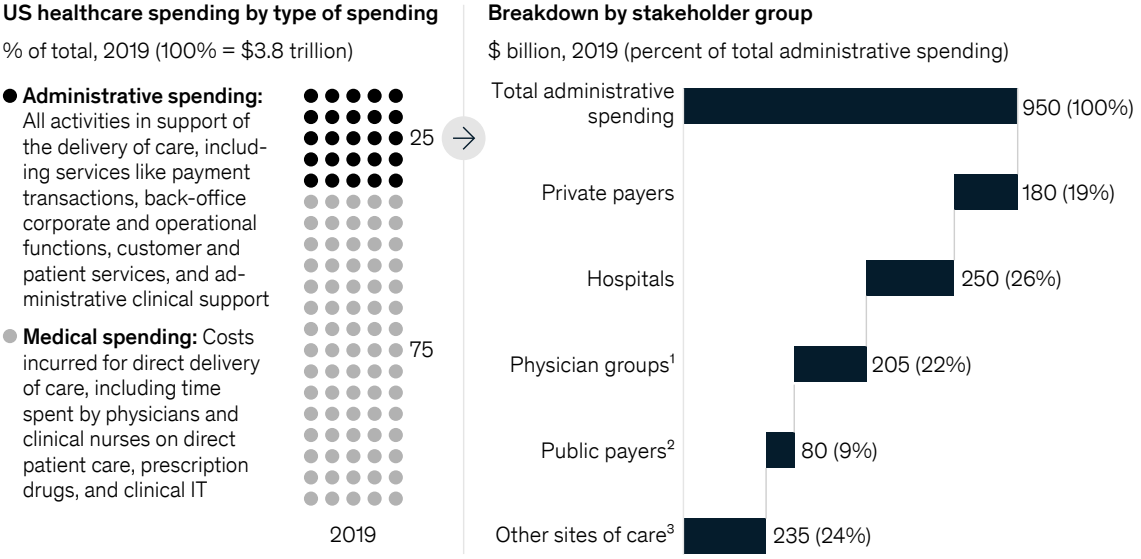
Further, the US healthcare system is highly regulated. This leads to more administrative spending in areas ranging from adhering to compliance requirements, such as the Health Insurance Portability and Accountability Act of 1996 (HIPAA), to participating in new markets like Medicare Advantage. The intent of policymakers is to provide patients with better healthcare; often, for organizations, new administrative expenses are partially the cost of doing business to meet these requirements. But this can also become another layer of expense into which inefficiencies and errors can creep. Other challenges include the need to manage labor displacement in an industry that is a driver of US workforce growth.[3]

A new approach

Typical approaches to sizing the opportunity for administrative spending reduction tend to compare the United States to other countries in the Organisation for Economic Co-Operation

Exhibit 1

Breakdown of administrative spending by stakeholder group.



Note: Medical spending is not within the scope of this report.
[1] Hospital-affiliated and independent physician groups; employed physician groups included in hospitals.
[2] Includes administrative spending for fee-for-service Medicare and Medicaid, Children's Health Insurance Program (CHIP), Department of Defense, Department of Veterans Affairs, and other federal programs.
[3] Includes, for example, dental services, home healthcare, and nursing care facilities.
Source: Centers for Medicare & Medicaid Services; McKinsey analysis

and Development (OECD). However, the conclusions reached from such an approach may not account for the idiosyncrasies of the US healthcare system and thus may not provide a basis for action. For example, Canada may have lower administrative spending as a percent of total healthcare spending, but it mostly uses a single-payer system that may not provide the level of choice, access, and innovation that the US system fosters and that some Americans demand.

Instead, we offer a pragmatic perspective that addresses how the US healthcare system could reshape administrative spending by payers and providers within the current system (Exhibit 1). The goal is not to reduce administrative spending to zero but rather to gain the highest value for each administrative dollar spent without sacrificing quality or access.

Too often, payers' and providers' profit-and-loss (P&L) statements do not provide enough detail to estimate what is necessary and unnecessary spending. Even when they do, the data are not broken down in a way that mimics how the organization operates. From our experience, administrative spending can instead be reorganized into five functional focus areas (Exhibit 2):

— *Financial transactions ecosystem:* The movement of all payments, claims, and billing throughout the healthcare ecosystem among payers, hospitals, physician groups, and customers

— *Industry-agnostic corporate functions:* Back-office, non-clinical functions that are mostly industry-agnostic, such as finance and human resources

— *Industry-specific operational functions:* Back-office, non-clinical functions that are mostly industry-specific, such as underwriting, enrollment, quality reporting, and accreditation

— *Customer and patient services:* The set of activities and processes that provide services to customers, typically done via call centers and increasingly moving toward digital and self-service functions

— *Administrative clinical support functions:* Activities that have a clinical component (for example, nursing administration, case management), which can be customer-facing and require some clinical expertise but are not related to the hands-on care of patients

Saving a quarter-trillion dollars

To our knowledge, this approach to categorizing administrative spending is the first of its kind. It allows us to break up an administrative function into two parts: what work is necessary, and what could be eliminated in the next three years through proven techniques while holding or improving access and quality at today's levels.[4] By identifying simplification opportunities for each functional focus area, we were able to build a roadmap of about 30 interventions that could deliver up to $265 billion in annual savings (Exhibit 3). This is based on three types of interventions: "within," "between," and "seismic."

The first type is "within" interventions, which can be controlled and implemented by individual organizations. These within interventions could deliver about $175 billion in annual savings, or 18 percent of total administrative spending. Some examples include automating repetitive work in back-office functions, such as human resources and finance, and integrating a suite of tools and solutions that nurse managers use to manage staffing and budgeting.

Some other interventions can be made "between" organizations. These require agreement and collaboration between organizations but not broader, industry-wide change; they could deliver about $35 billion in annual savings, or 4 percent of total administrative spending. Building payer–provider communications platforms that unify messaging to customers is one example.

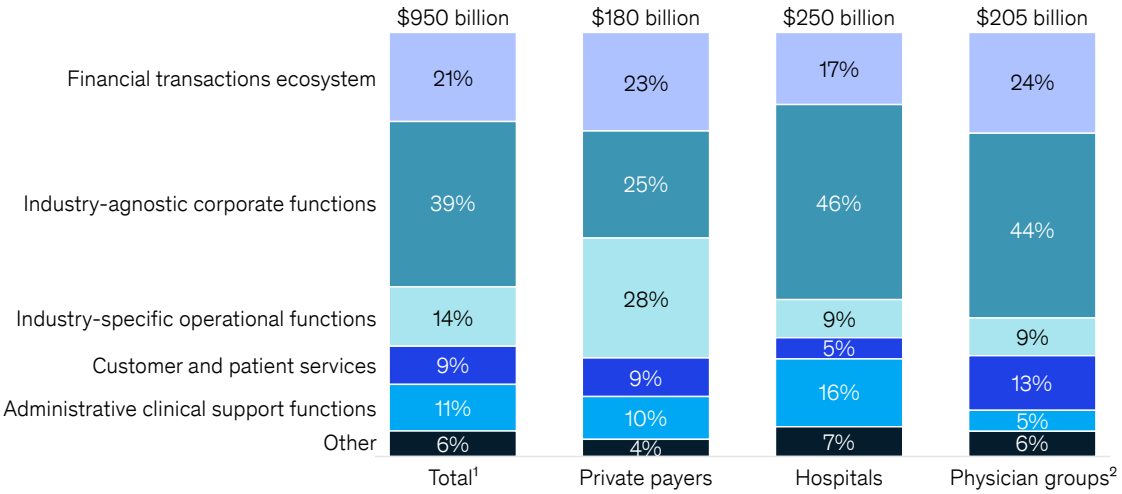
All the within and between interventions have a positive return on investment and, in our experience, can be deployed using current technology and nominal investment (that is, one-time spending of 0.7 to 1.0 times the annual run-rate savings).

The third intervention type is "seismic" and requires broad, structural agreement and changes across the US healthcare system.[5]

Exhibit 2

Breakdown of administrative spending by functional focus area.

$ billion, 2019



Note: Figures may not sum to 100%, because of rounding.
[1] Stakeholder groups not shown include public payers ($80B) and other sites of care ($235B).
[2] Hospital-affiliated and independent physician groups; employed physician groups included in hospitals.
Source: Centers for Medicare & Medicaid Services; McKinsey analysis

These interventions could deliver about $105 billion in annual savings, or 11 percent of total administrative spending. Seismic interventions—including those that require technology platforms, operational alignment, or payment design—generally benefit from partnerships between the public and private sectors to align incentives for change.

Many seismic interventions address the same sources of spending as the within and between ones but take the savings a step further. Accounting for this overlap, we estimate total savings across all three types of interventions at about $265 billion, or 28 percent of total administrative spending.[6]

Furthermore, all interventions come with some specific limitations: when deploying these interventions, especially automation, healthcare organizations must be vigilant to avoid biases, such as algorithms built on skewed data that could adversely affect equity or access for vulnerable populations. In addition, many interventions that rely on automation should be coupled with reskilling programs that allow existing talent to be placed in higher-value roles.

A roadmap for action

Administrative simplification may not be at the top of stakeholders' priority lists, but the potential to save $265 billion could be

Exhibit 3

Savings opportunities across known intervention types.

Type of known intervention	Example interventions	Savings, $ billion	Total administrative spending, %
"Within" Interventions that can be controlled and implemented by individual organizations	• **Financial transactions ecosystem (claims processing):** Streamline claims submission process through simplified provider platforms; clarify Explanation of Benefits • **Industry-agnostic corporate functions:** Automate repetitive work in human resources and finance; build functions of the future leveraging new technologies, such as analytics and cloud computing • **Administrative clinical support functions:** Remove manual work for nursing managers through automated tools for scheduling and staffing; integrate suite of tools and solutions to communicate 360-degree view of patients to case managers	**~$175**	18
"Between" Interventions that require agreement and collaboration between organizations but not broader, industry-wide change	• **Financial transactions ecosystem (prior authorization):** Align jointly on PA criteria such as medical necessity or required documentation • **Customer and patient services:** Build strategic payer-provider platforms to reduce demand by proactively sharing data (for example, providing list of in-network specialists to physicians)	**~$35**	4
"Seismic" Interventions that require broad, structural agreement and changes across the US healthcare system	• **Technology platforms:** Adopt a centralized, automated claims clearinghouse; prioritize high-value interoperability use cases • **Operational alignment:** Standardize medical policies; standardize physician licensure; streamline quality reporting • **Payment design:** Modularize product design; adopt globally capitated payment models for segments of the care delivery system	**~$105**	11
	After accounting for overlap[1]	**~$265**	28

[1] We estimated $50 billion of overlap across within and between interventions and seismic interventions. As a result, the total estimate is not fully additive.
Source: Centers for Medicare & Medicaid Services; McKinsey analysis

$265 billion is greater than Medicare Part A spending ($201 billion in 2019) and is equivalent to $1,300 for each American adult.

compelling to leaders across healthcare. Even better, these savings are available today. If fully realized, these savings would be more than three times the combined budgets of the National Institutes of Health ($39 billion), the Health Resources and Services Administration ($12 billion), the Substance Abuse and Mental Health Services Administration ($6 billion), and the Centers for Disease Control and Prevention ($12 billon).[7] Put another way, $265 billion is greater than Medicare Part A spending ($201 billion in 2019) and is equivalent to $1,300 for each American adult.[8]

Some organizations have made impressive progress on administrative simplification by deploying within and between interventions. At these organizations we found a set of common denominators of success. These include the following:

— Prioritizing administrative simplification as a strategic initiative

— Committing to transformational change versus incremental steps

— Engaging the broader partnership ecosystem on the right capabilities and investments

— Disproportionally allocating resources, such as capital and talent, to the underlying drivers of productivity

Seismic interventions are more difficult, largely because they are generally needed due to a lack of motivation to innovate at the organization level.[9] For example, today, the Centers for Medicare & Medicaid Services (CMS) requires reporting on more than 1,700 quality measures.[10] Physicians spend the time equivalent to seeing nine patients reporting on such measures weekly.[11] Laying out mechanisms that could promote standardization, such as convening a public–private partnership to identify and streamline to the highest-value measures, could be a seismic way to unlock this opportunity by accelerating technology modernization in organizations (for example, digitizing sources of data).

Apart from the outsize potential for savings, external forces are also creating pressure for organizations to act. Across the US economy, the COVID-19 pandemic and subsequent economic downturn have prompted organizations to rethink operations and invest in digital transformations. Indeed, research has shown that organizations that aggressively pursue industry-leading productivity programs are twice as likely to be in the top quintile of their peers as measured by economic profit.[12]

To galvanize the seismic opportunity, we see actions for three sets of stakeholders:

— *Government* could set the framework in which other organizations operate. Federal and state bodies can set guardrails for payers, hospitals, and physician groups.

— *Investors* can prove ideas with pilots. They might create public–private partnerships to test interventions within a state and then scale up success stories nationally.

— *Third parties,* such as foundations and bipartisan groups, can conduct objective fact gathering and analyses. An arbiter of facts can galvanize action.

There is an opportunity to capture over a quarter-trillion dollars in savings in the next few years without compromising care delivery in the current US healthcare system. There is a clear roadmap ahead with proven solutions; the choice to act is upon everyone.

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[4] We used financial and operational lenses in our analysis but acknowledge the broader benefits these interventions can have on outcomes such as access, quality, patient experience, physician experience, and equity, which we did not focus on or quantify in this report.
[5] We do not propose a comprehensive list of all seismic interventions. We identified a few examples based on analogs from other industries where such interventions delivered a discontinuous but substantial improvement. These example interventions are meant to show the potential in US healthcare but are not a specific point-of-view of what is best or should be pursued.
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Next-generation payer operations: How to prioritize for success

Brandon Carrus, Sameer Chowdhary, and Addie Fleron

January 20, 2021

A journey-based view for payer operations allows insight into how different functions contribute to strategic value.

At the onset of COVID-19, payers, much like their cohorts in other industries, zeroed in on immediate actions. While the crisis of the pandemic itself is far from over, it is clear many are evaluating the long-term repercussions for the healthcare sector, due in no small part to the current economic downturn. Against this backdrop, we discuss how payer operations will look three-to-five years from now based on decisions and actions that are being put in place today.

Building on "The great acceleration in healthcare: Six trends to heed,"[1] payers may consider strategies to commensurately evolve their operations. We see three major drivers for payers to respond to:

— *Changing payer business models with increased diversification.* For example, the growth of payer-owned care delivery arms and acquisition of services and technology assets by payers. This change leads us to *specific operational archetypes for the next-generation payer.*

— *Increased reliance on specific capabilities to enable these strategies.* This decision may include next-generation managed care models and the increased use of digital and virtual care solutions, as well as the rise in availability of technical solutions such as automation.

— *Need to adapt quickly in the face of uncertainty and rapid change, and shift resource allocation to the areas that drive the most value.* This includes the ability to respond to potential healthcare reform driven by the current economic downturn and other financial needs.

Operational archetypes for the next-generation payer

The traditional frame of reference for payer operations has been specific, individual functions. Next-generation payer operations, however, may be framed as journeys, each with a specific stakeholder lens. A journey is the end-to-end experience of accomplishing a specific goal or task; this experience may cut across many functional areas in the service of that single end goal. This stakeholder-based lens creates an important switch in perspective. While the pure functional view of operations has contributed to the perception that core processes (such as processing claims) are cost drivers, rather than strategic value enablers, the journey-based view allows us to articulate how different functions contribute to processes that ultimately are critical to driving strategic value. This view may include, for example, building and running value-based relationships with provider partners.

We map payer operations into 18 specific journeys (Exhibit 1), each of which has two classifying characteristics: key stakeholder (member, employer/broker, provider, or government) and core value driver (healthcare value, growth, core transactions excellence, or service excellence). This list

Exhibit 1

Payer operations journeys describe the end-to-end experience of accomplishing a specific goal or task.

Journeys can be organized by core stakeholder and core value driver

Core stakeholders	Value drivers: Growth	Healthcare value	Core transactions	Service
Member	1.1 Member: Select, enroll in, and manage my plan	1.2 Member: Manage my health 1.3 Member: Find and use the right care	1.4 Member: Manage my claims and finances	1.5 Member: Answer my questions and resolve my issues
Employer/ broker	2.1 Employer/broker: Select products 2.2 Employer/broker: Enroll members 2.3 Employer/broker: Manage my business			2.4 Employer/broker: Answer my questions and resolve my issues
Provider		3.4 Provider: Find resources to care for my patients 3.5 Provider: Set up and manage value-based care arrangements	3.1 Provider: Enroll/ onboard/renew network status 3.2 Provider: Update my data 3.3 Provider: Be paid for the care I provide 3.6 Provider: Report on my patients	3.7 Provider: Answer my questions and resolve my issues
Government			4.1 Government: Provide me assurance that my members are being served well	4.2 Government: Answer my questions and resolve my issues

excludes journeys that are internal employee-facing only (for example, hiring and onboarding new employees).

In a survey of payer executives conducted in August 2020,[2] we asked payer executives to rate the strategic value of each of these journeys.[3] While all create value in running the business, some drive disproportionately more strategic value. Based on this research, we find that journeys fall into three categories for a given payer:

— *The core value drivers:* Three journeys remain consistent in almost all strategic contexts. These three journeys help payers drive healthcare value (for example, manage medical cost) and often translate to membership growth:

- Member: Find and use the right care
- Member: Manage my health
- Member: Select, enroll in, and manage my plan

— *The strategic value drivers:* These are journeys that payers rely on to advance their unique strategy, and therefore vary by strategic context. For example, a payer whose core strategy is setting up value-based relationships with providers and using these to drive value will likely place a high emphasis on

journey 3.5: Set up and manage value-based care relationships.

— *Business operations:* The remaining journeys, which fulfill essential business functions but are not differentiating sources of strategic value (for example, 3.2: Provider: Update my data).

For a given payer, **the strategic value drivers will vary depending on the strategy the payer is pursuing,** which can be classified into archetypes. While payers may display characteristics from across all three archetypes, they tend to create value using one of the archetypes much more strongly than the others.

A payer that understands its primary archetype can identify the most important actions to take and capabilities to build. We see three archetypes (Exhibit 2):

— *Ecosystem builders* focus on strategic journeys that together allow them to develop complex relationships across multiple traditional and non-traditional healthcare stakeholders and service providers, and may serve as the "convener" or "platform" for multiple services provided by different companies. They will need to integrate data for members, providers, and non-traditional service providers to provide personalized and actionable insights for members, and will often do so with shared incentive structures. We expect these payers to be pursuing differentiated and diversified business models. The ability to adapt quickly and dynamically reinvent the business, as the environment changes, is critical to this archetype.

— *Value partners* focus on developing value-based relationships with core (as opposed to all) stakeholders. Specialization, and the ability to apply industry best practices to a specific situation, are likely to be critical to success in this paradigm.

— *Administrators* focus on delivering core transactions well, and tend to have slightly higher emphasis than their peers on the business operations journeys. We expect these payers to retain the traditional role of the payer as a manager and distributor of healthcare spending as much as possible. Success in this archetype requires continuously increasing levels of operational excellence, through levers such as automation and right-shoring, as cost pressures in healthcare continue to grow.

Each archetype relies on specific capabilities to drive differential value

Once payers choose a specific archetype, they can consider their strategy as a guiding principle for other decisions, including which operational capabilities to build and how to deploy scarce resources. Some payers have already begun pursuing a specific archetype, and the key for these payers will be ensuring that this choice informs future prioritization decisions.

The next step is to invest in the capabilities to build those journeys. These capabilities vary based on archetype, as detailed below.

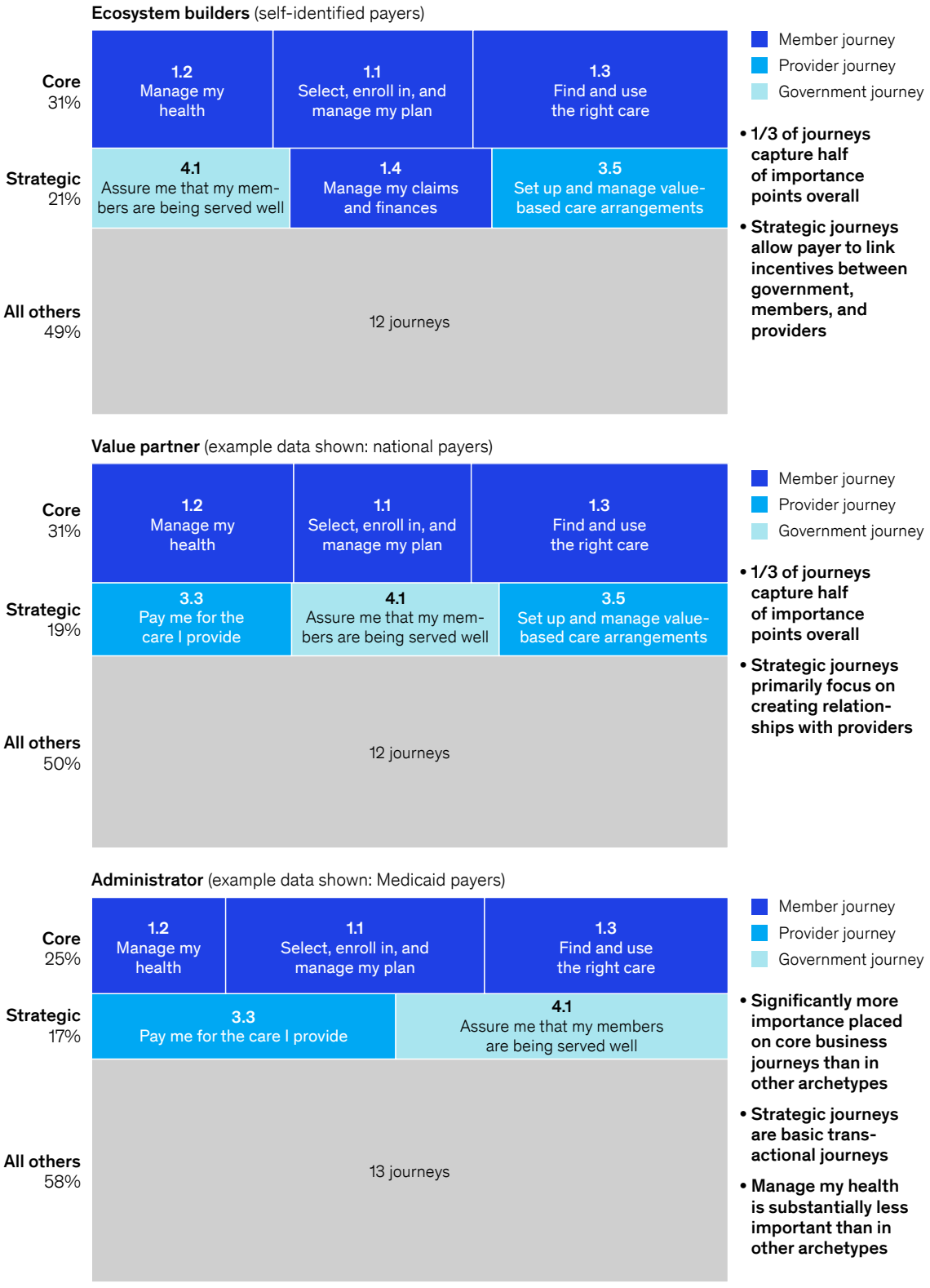
— ***For ecosystem builders*,** unique capabilities that will drive differentiated value include:

- *The ability to engage in complex vendor partnerships and flexibly integrate* with diverse ecosystems. An ecosystem is itself based on partnerships and payers will use external partners to build priority capabilities over the next three-to-five years. Payer respondents in a recent McKinsey survey said, for example, they plan to invest 10 percent of their resources into digital service channels over the next three-to-five years. Half said they planned to partner with another company to deploy these channels (either through a partnership mechanism or a purchaser-supplier arrangement). Forty percent of respondents said they may consider outsourcing or partnering to develop data infrastructure.

Exhibit 2

Strategic journeys vary depending on payer archetype.

There are three payer archetypes, each with unique characteristics



These partnerships may be critical to success because payers think that significant room exists to improve internal performance on these capabilities. Of respondents pursuing an ecosystem-builder strategy, only 16 percent rate their own performance on digital service channels at a 6 or 7 (of 7); only 12 percent rate their own performance on data infrastructure at a 6 or 7 (of 7).[4]

- *Foundational data platforms that enable speed, flexibility, and quality.* In the survey referenced above, ecosystem builders rank foundational data platforms as only eighth out of 13 capabilities in terms of investment priorities. However, this underlying architecture will be critical to the success of ecosystems and is a commonly cited pain point today; payers pursuing this strategy should consider whether increased investment is needed.

— *For value partners*, the capabilities important to future success depend on the main stakeholder(s) that the payer is solving for (for example, providers, specific member cohorts). In many cases, the ability to design and service increasingly complex and custom products and bring them to market may become more important. This capability needs to be further built out; only 14 percent of respondents felt they were ready to build this capability to the degree required (6 or 7 on a scale of 7).[5]

— *For administrators*, levers that drive improved efficiency will be most important to success. These include the **ability to digitize and automate core business processes**. These levers can be prioritized over other next-generation capabilities such as digital service channels, though survey data shows that payers are not planning to do so. Payers who are pursuing the administrator path may consider shifting their priorities to ensure they are investing where it will create the most value relative to their specific strategy. Automation is underdeveloped in the industry; it offers an industry-wide $150 billion opportunity for operational improvement.[6] Even otherwise "best in class" payers have room to improve: in the survey referenced above, only 22 percent of respondents said that best-in-class payers were performing at a 6 or 7 (of 7) on their ability to digitize and automate core processes. As discussed in "Making healthcare more affordable through scalable automation,"[7] areas for potential success include improving data quality through auto-validation algorithms, strengthening customer-agent relationships using portals and smart workflows, and simplifying the enrollment and onboarding process using bots.

Successful organizations understand and activate the elements that strategically differentiate them from the pack

Several success factors may contribute to payers' ability to drive value for their organizations over the next few years. Successful organizations are likely to have a clear strategic approach tied to specific areas of competitive differentiation, a plan to shift resource allocation to those areas, and a path to execute within a nimble and flexible organization (Exhibit 3). Administrative expenses have been roughly flat in commercial lines of business and grew by 10-to-15 percent in government lines of business between 2017 and 2019.[8] Establishing clear criteria for how and where to deploy this funding will help organizations both maximize every administrative dollar and potentially decrease spend overall through rigorous prioritization.

1. **Understand strategic differentiators.** Each organization, in line with its overall strategy, can rely on specific strategic value drivers. As detailed above, we find that we can classify payers into three broad categories based on this prioritization. Understanding and articulating the value drivers for the organization is a critical first step in ensuring differential investment in those areas.

Exhibit 3

Prioritizing and differentially investing in journeys and capabilities that drive strategic value may help drive success.

Key steps for payers to take

1 Understand strategic differentiators and what is required to enable them	• Articulate **which operational archetype** is most aligned with the organizational strategy and will therefore drive disproportionate value • Identify the **journeys and capabilities that will be strategic differentiators** for the organization, in line with this archetype
2A Differentially invest in journeys and capabilities that are strategic value drivers **2B Ensure other journeys and capabilities are as efficient and scalable as possible**	• Use a **strategic lens against investment priorities**: align resources and capital to the areas that will drive strategic value • **Lean out other areas of the business** so they are as efficient as possible, freeing up capital for the strategic priorities
3 Reimagine the organization for speed and flexibility	• Prepare the organization to **make decisions and act quickly** • Build **agile principles** into the operating model • **Flatten the organization** where appropriate

2. **Use a strategic lens against investment priorities.** The organization's investment approach should be "fit-for-strategy." This means considering heavy investment (capital, executive energy, resources) where it will drive the most value, and minimizing the spend on other "table stakes" areas, as detailed below. A zero-based budgeting methodology can help make these decisions.[9]

   a. *In successful next-generation payers, we would expect operating expense and capital deployment to be concentrated in the areas driving strategic value.* Historical analysis from McKinsey's payer administrative cost database shows that payers do not consistently allocate disproportionate value on these priorities. Non-journey spend[10] is up to 50 percent of payer administrative expense. Payers have an opportunity to further invest in journeys that drive strategic value if they can reduce the portion of their spend on this area. National payers have been able to do this, but only marginally: spend in these priority areas grew by only $1 per member per month (PMPM) (6 percent)[11] between 2017 and 2019. Medicaid payers have decreased spend on healthcare value journeys by approximately $3 PMPM (20 percent) while spend on service journeys grew $4 PMPM (25 percent).[12] Reallocating spend from healthcare value journeys to service journeys in Medicaid would be consistent with an administrator archetype; however, for any Medicaid payers who want to drive value through healthcare value levers, this shift in spend demonstrates that payers are not consistently able to allocate disproportionate value to priority areas.

   b. *To enable this investment, payers may consider developing operations that are as efficient and scalable as possible, especially in "table stakes" areas of the business.* Administrative costs have outpaced revenue growth in recent years for many payers.[13] Controlling this trend could loosen investment capital for strategic priorities, position

the organization for growth, and provide balance sheet flexibility to weather unexpected changes. This approach includes deploying operational efficiency levers to critical processes (for example, lean redesign, strategic sourcing), especially those that will not need differentiated investment for the organization's strategy. Journey-based redesign, where payers break down each process step of a priority or high-cost journey to identify key areas for improvement, can also help drive simultaneous cost and quality improvements.

3. **Reimagine the organization for speed and flexibility.** Healthcare payers have historically struggled to change rapidly, in part due to the high degree of regulation in the sector. The COVID-19 pandemic has shown that this lack of speed does not always need to be the case: for example, payers and providers have moved quickly to implement telehealth,[14] which can better serve members. Payers who can make business decisions quickly will be best positioned to adapt and thrive in complex and changing environments, even post-COVID-19. Among the ways to reimagine organizations for speed include deploying agile methodologies to rapidly test new solutions and products, flattening organizational structures to increase the speed of decision making, and cultivating partnerships that spur technological and business model innovation, as detailed in our paper "Reinventing the organization for speed in the post-COVID-19 era."[15]

The pace of change in healthcare continues to accelerate and this acceleration will have an impact on payer operations. Payers will increasingly drive value through varying business models that require prioritizing different operational capabilities. Payers can position themselves for success by understanding early on what operational archetype will best enable their strategy, and dynamically allocating resources—including organizational mindshare—to those areas that will drive differentiated value.

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[1] Singhal S and Repasky C, "The great acceleration in healthcare: Six trends to heed," September 9, 2020, McKinsey.com.
[2] McKinsey's survey of 50 payer executives was conducted online in August 2020 and included executives from health plans of all sizes and lines of business. Respondents held strategy roles (36 percent) and operations roles (74 percent). They responded to quantitative and qualitative questions.
[3] Question A2B: We would like to understand the relative importance of each of the journeys below to healthcare payers' success over the next 3-to-5 years. Please allocate 100 points across these journeys, with the most points going to the most important journeys.
[4] Respondents were asked to rate on a scale of 1 to 7 where 1=poor and 7=distinctive.
[5] Ibid.
[6] Carrus B, Chowdhary S, and Whiteman R, "Making healthcare more affordable through scalable automation," September 16, 2020, McKinsey.com.
[7] Ibid.
[8] McKinsey payer administrative cost database.
[9] Chowdhary S, Hopman D, Jochim M, and Ward T, "Zero-based budgeting for health plans: Dealing with uncertainty ahead," September 24, 2020, McKinsey.com.
[10] Non-journey spend is largely corporate business functions such as HR, legal, finance, etc., as well as overall IT spend.
[11] Represents commercial lines of business only, because of data availability.
[12] Represents average smaller (Blues) plans only, because of data availability.
[13] Chowdhary S, Hopman D, Jochim M, and Ward T, "Zero-based budgeting for health plans: Dealing with uncertainty ahead," September 24, 2020, McKinsey.com.
[14] Bestsennyy O, Gilbert G, Harris A, and Rost J, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?" May 29, 2020, McKinsey.com.
[15] De Smet A, Pacthod D, Relyea C, and Sternfels B, "Ready, set, go: Reinventing the organization for speed in the post-COVID-19 era," June 26, 2020, McKinsey.com.

Workforce and clinical productivity

Improving clinical productivity could yield up to $160 billion to $310 billion in savings.

Assessing the lingering impact of COVID-19 on the nursing workforce

Gretchen Berlin, Meredith Lapointe, Mhoire Murphy, and Joanna Wexler

May 11, 2022

Analysis suggests potential instability and workforce gaps in the US healthcare sector. A call to action for all stakeholders could help.

The journey to becoming a nurse often begins with a desire to help improve people's lives. In the years before COVID-19, the United States' healthcare sector—while not without its challenges—had created a steady pipeline for those seeking to become registered nurses (RNs) and licensed practical nurses (LPNs).[1] For example, prepandemic, the number of new nursing licenses continued to grow at around 4 percent per year, infusing additional talent into the workforce to replace talent that retired.[2]

COVID-19 has altered many US nurses' career plans. Over the past two years, McKinsey has found that nurses consistently, and increasingly, report planning to leave the workforce at higher rates compared with the past decade.[3] In our latest McKinsey survey, 29 percent of responding RNs in the United States indicated they were likely to leave their current role in direct patient care, with many respondents noting their intent to leave the workforce entirely.[4]

Even as COVID-19 cases fluctuate, US healthcare providers are still experiencing the workforce and operational challenges exacerbated by the pandemic.[5] Patient demand is expected to rise, given the growing and aging population of the United States. Without addressing this potentially wider divide between patient demand and the clinical workforce, with a specific focus on nurses, the US health sector could face substantial repercussions. For example, as of February 2022, 90 percent of McKinsey COVID-19 Hospital Insights Survey respondents said workforce shortages were a barrier to increasing elective surgery volume, up 11 percentage points from July 2021.[6]

If no actions are taken, there will likely be more patients in the United States who will need care than nurses available to deliver it.

By 2025, we estimate the United States may have a gap of between 200,000 to 450,000 nurses available for direct patient care, equating to a 10 to 20 percent gap (see sidebar, "Our methodology"). To meet this demand, the United States would need to more than double the number of new graduates entering and staying in the nursing workforce every year for the next three years straight. While we do not directly address rapid evolutions in healthcare productivity in this article, we acknowledge it may affect the nursing shortage. These may include evolution in allocation of care team members to ensure constrained nurse time is focused on things they are uniquely qualified for (for example, medication administration or physical assessment), technology-enabled productivity tools, or alternative sites of care settings for patients to receive care. These advances may have a substantial impact in the long term, but our experience suggests these measures may have limited impact over the next three years.

There are strategies that may boost an influx of nurses into the healthcare workforce and address these immediate and medium-term shortages.

In this article, we provide context for how COVID-19 changed the nursing workforce, the long-term implications for nurses and healthcare stakeholders, and actions to consider to increase the odds of closing the gap. In the last section, we highlight how healthcare providers, federal and state governments, the private sector, the nursing workforce, and broader society could encourage those who are training to be nurses.

How COVID-19 bruised the healthcare workforce

Healthcare leaders worrying about having enough qualified staff is not a new problem. In 2019, for example, around 80 percent of hospital chief executives cited RN shortages among their top three staffing concerns.[7] By 2021, the clinical workforce was the number-one overall concern for hospital CEOs.[8] In February 2022, in addition to the barriers with workforce short-

Our methodology

Our methodology relied on the following: registered nurse (RN) supply and demand were calculated by applying trends to the 2019 baseline of RNs in the United States from the Bureau of Labor Statistics and the healthcare demand in days or visits from multiple sources. These reflect the American Hospital Association (inpatient days, emergency department visits, and other outpatient visits); Definitive Healthcare (home health visits, skilled nursing facility days, and hospice days); Centers for Disease Control and Prevention (physician office visits); and the Kaiser Family Foundation (nursing home residents).

For RN supply, we assumed an annual influx of new nurses based on the average historical growth rate of new US RN licenses from the National Council Licensure Examination (NCLEX, 2016–2020). Our number for outgoing nurses was based on nurses who reported leaving direct patient care in our recent surveys (7 percent per year from 2020 to 2022) and the historical retirement rate of about 3 percent per year. We assumed a range of additional nurses who may exit the profession to be 1 to 4 percent in the years 2023 to 2025, given that we expect a decline in the levels of nurses exiting the workforce in future years compared with 2020–22. We assumed the percent of total actively employed RNs who are employed in direct patient care roles remained consistent with prepandemic levels (85 percent) to remain conservative.[1]

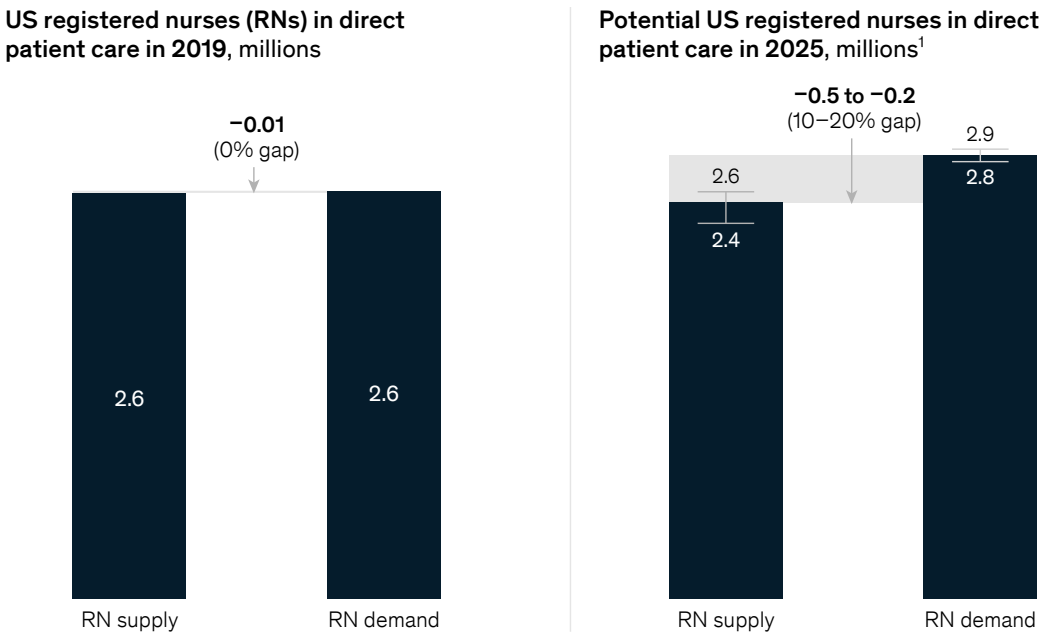
For RN demand, we used historical growth rates by work setting (for example, the patient's site of care) to estimate healthcare utilization trends in 2025. We then assumed additional demand from steady-state COVID-19 volume, based on COVID-19 peaks and troughs over the past two years and the potential impact of "long COVID" on inpatient hospitalizations (from 1 to 12 percent of additional inpatient days). We estimated long COVID impact by assuming 20 percent of cases result in long COVID symptoms, of which 1.5 percent are hospitalized (consistent with the flu) at the average length of stay in the United States (4.5 days) to take a conservative estimate of potential demand.

Care delivery models assumed nurses are available to work in direct patient care 38 hours per week, 50 weeks per year, on average, for full-time nurses (about 80 percent of the workforce) and 24 hours per week, 50 weeks per year, for part-time nurses (about 20 percent of the workforce).

[1] Bureau of Labor Statistics, 2019.

Exhibit 1

There may be up to a 10–20 percent gap between supply and demand of registered nurses by 2025.



[1] The ranges 2.4–2.6 and 2.8–2.9 indicate values denoted by confidence intervals.
Source: American Hospital Association, 2016–19; Centers for Disease Control and Prevention; Definitive Healthcare data, 2020; Kaiser Family Foundation, 2016–20; Grandview Healthcare Market Size Reports, 2021; David Auerbach et al., "Will the RN workforce weather the retirement of the baby boomers?" *Med Care*, October 2015; National Council Licensure Examination (NCLEX) data, 2016–20; *New York Times*; United States Bureau of Labor Statistics; McKinsey analysis

ages and elective surgery, 84 percent of respondents in the McKinsey COVID-19 Hospital Insights Survey said a lack of availability of clinical support staff was a barrier to increasing patient volume.[9]

Our analysis indicates that by 2025, the United States may be facing three challenges to effectively meeting patient care needs:

— decreased supply of the absolute RN workforce

— increased inpatient demand from or related to COVID-19

— continued work setting shifts and increased demand due to a growing and aging population

While we devote our focus to the decreased supply of the absolute RN workforce, it is important to note that the problem is not solely limited to RNs. As a group, LPNs, certified nursing assistants (CNAs), and advanced practice nurse respondents all reported a more than 20 percent likelihood of leaving as of fall 2021.[10] Additionally, this analysis looks at head count and may not fully account for capacity impact of potential shifting between full-time, part-time, or per diem status.

Decreased supply of the absolute RN workforce

The United States was projected to experience a 9 percent growth in available jobs for registered nurses from 2020 to 2030. This was driven by an aging population and shifting sites of care for patients, creating the need for more nurses.[11] The pandemic has accelerated potential workforce shortages, according to our survey results. If there are no changes in current care delivery models, our research indicates a gap of 200,000 to 450,000 nurses nationwide by 2025 (Exhibit 1). For every 1 percent expansion of capacity, created through changes in care delivery models,

technology-enabled productivity tools, or alternative sites of care settings for patients, the number of nurses needed would decrease by about 25,000. Alternatively, we estimate that for every 1 percent of nurses that leave direct patient care, the shortage worsens by about 30,000 nurses.

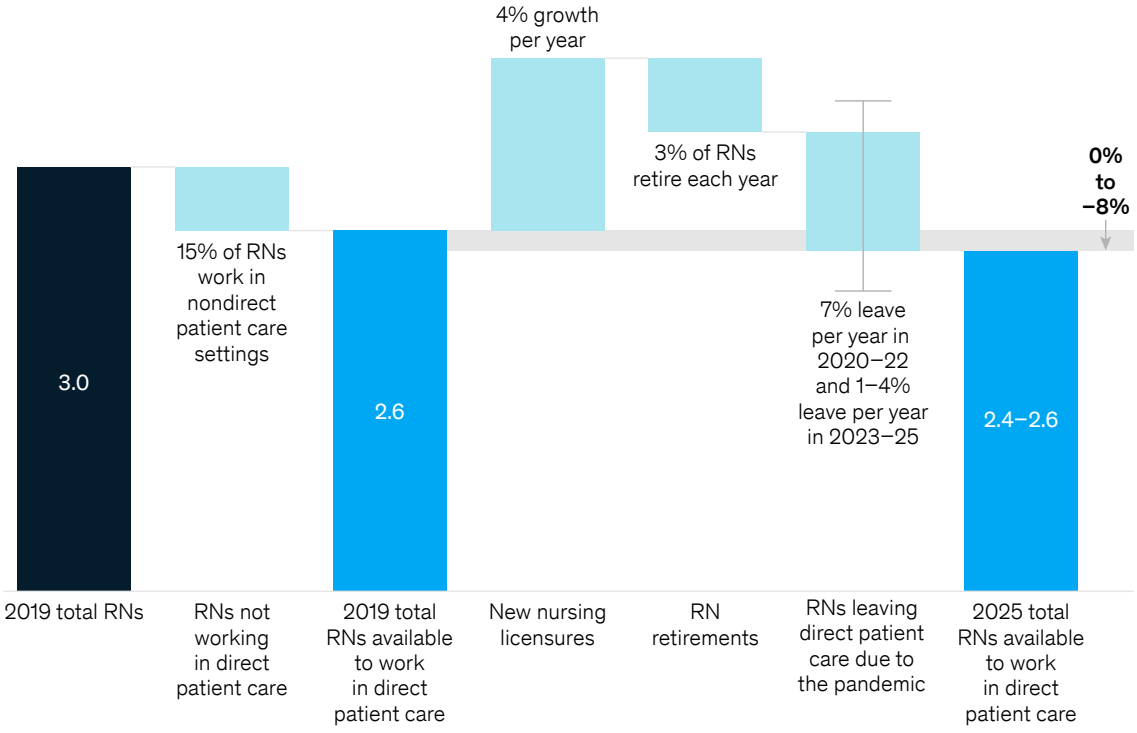
The rates of RN turnover in the United States ticked up over the past five years, growing from 17 percent in 2017 to 26 percent by 2021.[12] McKinsey's Frontline Workforce Survey, conducted in March 2022, found that 29 percent of RN respondents were likely to leave direct patient care.[13] Of those expecting to leave, 15 percent said they intended to leave the workforce entirely.[14] For those who have remained in patient care, 18 percent of surveyed RNs said they had voluntarily left another direct patient care job in the past year and a half.

There are not currently enough graduating nurses to replace the nurses who are leaving. From 2016 to 2019, new registered nursing licenses grew by about 4 percent per year, but in 2020 the growth rate was only about 1 percent.[15] Due to the pandemic, 2020 may have been an anomaly in new license issuances. But even using prepandemic rates, assuming the percentage of nurses remaining in direct patient care roles is constant and retirement rates remain at historical levels of about 3 percent per year, the rates are likely not sufficient to grow the nursing workforce at pace with rising demand (Exhibit 2). Plus, new nurses will not yet have the knowledge or experience of the nurses that are leaving the workforce. Additionally, new nursing licensures may not even continue to grow at a steady rate if there are not sufficient educators to train new nurses.

Exhibit 2

There are several factors influencing the supply of registered nurses through 2025.

US registered nurse (RN) headcount, millions



Source: David Auerbach et al., "Will the RN workforce weather the retirement of the baby boomers?" *Med Care*, October 2015; National Council Licensure Examination (NCLEX) data, 2016–20; United States Bureau of Labor Statistics; McKinsey analysis

Increased inpatient demand from or directly related to COVID-19

There is also a second challenge: as COVID-19 shifts to its endemic phase, additional pressure is likely to persist on healthcare providers in the United States for at least the next three years. More Americans are expected to be in need of care, with an estimated 1 to 12 percent increase in inpatient hospitalization days in 2025 relative to 2019.[16] This increase may reflect patients who contract COVID-19 (similar to annual flu rate spikes); those who survived COVID-19 but have "long COVID" (symptoms such as chronic breathing problems); or those who have serious symptoms because of contracting the virus (for example, kidney damage caused by COVID-19 that would require dialysis).

Even beyond these numbers, it is unclear how much the effects of delayed care between 2020 and 2022 will affect inpatient hospitalizations and care across settings. It is also unknown when the backlog of outpatient procedures will winnow. What is clearer, based on research, is that a delay in timely preventative care during the pandemic changed inpatient volume and life expectancy.[17]

Continued site-of-care shifts and increased demand due to a growing and aging population

Prior to the pandemic, healthcare leaders were already grappling with the challenge of caring for an aging population with an increasing number of chronic care needs. Shifting sites of care for patients and the aging population were causing greater demand for nurses in most settings. These needs are only expected to expand. Additionally, as ambulatory and outpatient settings rise in popularity, visits are expected to grow (Exhibit 3).

Actions to consider

There is no one-size-fits-all solution to the workforce challenges that are likely to persist over the short and medium term. However, respondents from the McKinsey Frontline Workforce Survey in March 2022 who had left direct patient care said a more manageable workload, increased total compensation, ability to take time off, and being more valued by an organization would be the most important factors they would consider when evaluating a return.[18]

Comprehensive support for the existing nursing workforce could help retention or allow those RNs who left to contemplate a return. Additionally, large-scale solutions could boost entrants to the nursing field, with a focus on sustainable career paths and flexibility in care delivery models and operations.

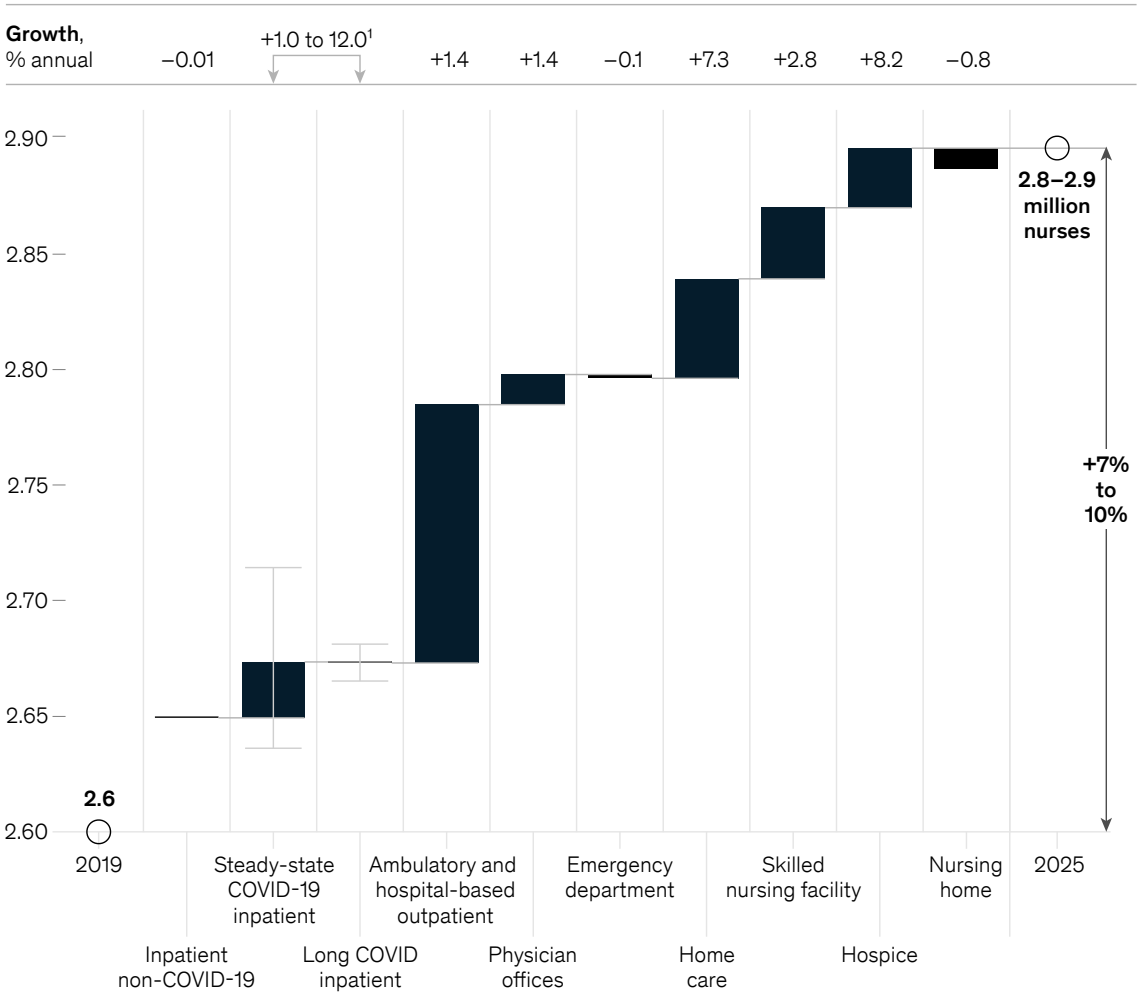
We offer four potential opportunities to address the challenge:

1. Attracting more people to nursing roles. Casting nursing as an attractive and exciting career opportunity could help more people understand how they could thrive in the profession. Making the value proposition and pathways for a nursing career more visible and clear for high school students and midcareer joiners may also help. That may start with educational institutions promoting a traditional nursing path (to aide, LPN, or RN), as well as encouraging allied health professionals (such as technicians) to consider nursing. It could also require institutions to identify and train new sources of talent (for example, from adjacent industries and from international programs). Innovative partnerships might create the opportunities—via education programs, funding support, and skills training—for individuals new to nursing and healthcare to gain skills and credentials.
2. Increasing the number of academic and clinical spots. Even if there was a huge increase in high school or college students seeking nursing careers, they would likely run into a block: there are not enough spots in nursing schools and there are not enough educators, clinical rotation spots, or mentors for the next generation of nurses. To increase the number of spots, higher education institutions could increase resources and

Exhibit 3

There are several shifts influencing the demand for registered nurses through 2025.

US registered nurse (RN) headcount, millions[1]



[1] COVID-19 volume is not an annual growth rate, but is growth in IP nurses from 2019 to 2025, based on 2020–2022 share of IP beds occupied by COVID-19 (steady-state) and assumptions of long COVID rates from literature review.
Source: Source: American Hospital Association data 2016–19; Centers for Disease Control and Prevention; Definitive Healthcare data 2020; Kaiser Family Foundation 2016–20; Grandview Healthcare Market Size Reports, 2021; *New York Times*

healthcare providers could find ways to support training while still often managing their own staff shortages. Regulators also may consider additional flexibility in how to accredit programs and on streamlining timely licensure processes.

Progress may depend on creating attractive situations for nurse educators, a role traditionally plagued with shortages.[19] This may involve creating incentives, monetary and other, for educators. It also could involve clearly defined career pathways or flexibility in different teaching models, such as part-time and rotational teaching or special positions in partnerships.[20]

3. Reimagining clinical education. Academic institutions could consider partnering with healthcare providers to

identify and address skill gaps and to connect potential candidates with employers. For instance, an employer collaborative of Cleveland Clinic, MetroHealth, and University Hospitals in Ohio partnered with Cuyahoga Community College as part of the Workforce Connect Healthcare Sector Partnership (HSP). The partnership's goal is to hire 100 entry-level full-time workers by June 2022.[21] Among the projects of the HSP is a training program called Healthcare Career On-Ramp, where students complete virtual or on-site training over eight days. Those who finish are guaranteed at least one interview, and the program provides six months of job training to new hires.

Shorter programs also may jump-start interest. For example, Portland Community College, through a Title III Rises grant, offers a two-week, 20-hour course called "On-Ramp to Healthcare" at no cost to participants.[22]

The federal Health Profession Opportunity Grants program offers another example of on-ramp training. Of more than 14,000 participants who began healthcare training in September 2015, 88 percent completed or were still enrolled in the program by the end of its third year. Sixty-seven percent of participants who completed healthcare training went on to earn a professional license or certification, while three-fifths started a job or were promoted in their current healthcare job.[23] Finally, local higher educational institutions could partner with providers to support nurses. One example: Advocate Aurora Health and the Mennonite College of Nursing (Illinois State University) let Advocate Aurora's RNs complete the college's online RN to BSN (Bachelor of Science in Nursing) program at zero cost.[24]

Last, virtual classes and simulation-based learning activities could help fill two challenges. First, these efforts could count or partially count toward credit hours more consistently, as deemed appropriate by educational and credentialing bodies. Second, the activities could be designed to help students and trainees gain confidence and comfort with new situations and concepts.

4. **Innovating care delivery models to reduce burden on nurses.** To maximize nurses' time and energy, providers could prioritize innovating their care delivery models. They may learn from other industries. Airlines, for example, have been moving toward a customer-centric model where seamless integration of data and flight options has nearly eliminated the need for staff to spend time on simple tasks related to flight bookings and communications. In a healthcare setting, sensitive healthcare information and interpretation are often analyzed via digital platforms that only require clinician intervention in extreme circumstances. Internationally, providers have launched innovations such as self-dialysis, which can enable patients to perform their own dialysis in dialysis centers or at home and allow clinicians to remotely follow up with low-risk patients.[25]

   The goal of innovation is to improve patient engagement and outcomes while allowing nurses to focus their care on those who need their help most. Healthcare providers may consider enabling such change through digital, clinician, regulatory, and labor union collaboration.

Beyond the specific opportunities and actions described above, healthcare stakeholders across the spectrum have a role to play in boosting the nursing workforce. These stakeholders include healthcare providers, federal and state governments, private-sector organizations, and broader society.

Healthcare providers

Healthcare providers could begin by using more analytics to find greater effectiveness and efficiency in workforce planning and deployment. Predictive analytics may allow healthcare providers to ensure optimal

resourcing, while AI-enabled workforce planning may help match talent with expected needs.

Creating more virtual-learning opportunities may also attract more nurse educators, allowing them greater flexibility. Providers could consider revamping the hiring process to attract more talent to healthcare at a faster pace. This process begins by mapping the current hiring experience. Leaders could paint a comprehensive picture of the current experience and touchpoints from both the candidate's point of view and the recruiter or hiring manager's point of view. One element may include job postings that more explicitly outline the value proposition of a healthcare career. For example, providers may want to state in a listing that a new director of nursing may be eligible for a specific sign-on bonus or outline how the healthcare provider's culture prioritizes mentorship and collaboration. The goal is to relieve pain points and hire qualified candidates faster.

Healthcare executives may evaluate how to amplify support for all nurses, ranging from those who joined the profession during the onset of COVID-19 to those who are tenured and those who may join the field. By building out clinical pathways and demonstrating how to progress in the field, nurses could see their potential paths illuminated. That may not only attract potential nurses to the role but also help to retain nurses by showing them their possible career progression and growth in the profession.

Healthcare providers and their leadership executives may consider three actions to accomplish this amplification. One, they can develop and implement thoughtful total rewards and total support for nurses to support them throughout their careers. Some examples could include benefits such as providing dependent care support, offering flexible programs to improve nurses' work–life balance, and building in rotational and mobility options for nurses. Two, they may rethink clinical support mechanisms. These may include novice clinician support, a "phone a friend" program, or targeted leadership development programs throughout a nurse's career. They may also consider flexibility, which may include easier shift changes, same-day pay, or rotations. Three, they may envision ways to support nurses who want to return to bedside or direct patient care roles. This could include streamlining the process within the nursing licensure boards to allow nurses who are retired or who have become unlicensed to be reissued licenses. Other ideas—such as sign-on bonuses, increased clerical support, or increased benefits for part-time workers—could help bring back long-tenured nurses.

Finally, nurses themselves also have a role to play. They should feel encouraged to submit ideas on how to retain and recruit. They will likely benefit from a platform that allows them to tell others why they love their careers.

Federal or state governments

Governments may evaluate their needs for nurses by considering their broader local healthcare workforce needs and ask how they could help stem the gap. Public entities may consider launching educational campaigns that highlight nursing through social media, print media, email marketing, or television slots. These materials could then be distributed at career fairs, webinars, or other in-person or virtual events that highlight a need for healthcare professionals.

Another strategy could be incentives created for current and prospective nurses. This could include enhanced financial support, tuition reimbursement, student loan forgiveness for nurses or dependents of nurses, or other strategies to promote nursing education. For example, a state could consider offering a childcare stipend for nurses enrolled full-time in school. Financial incentives also could help public institutions take in more students or new graduates into clinical programs. For example, increased funding could allow additional preceptors or trainers. States or counties could evaluate whether nursing graduates are eligible for financial incentives if they work with at-risk or low-income populations in specific hard-to-hire settings.

Private sector

The private sector may be able to fast-track innovation in ways that support the nursing workforce. For example, the private sector may continue to develop digital technology that can reduce paperwork or redundancies in a patient's medical information or continue to innovate shift-scheduling software to address supply and demand. New technology could be developed or scaled to focus on nurses' physical and mental well-being.

The private sector could also offer resources to healthcare providers and educators in the United States, for example, by developing or loaning in-person training spaces or investigating ways to offer mentorship outside the healthcare universe.

Businesses could consider supporting continuing-education programs for employees who want to transition into medical roles. Rather than seeing those seeking to leave retail or entry-level jobs as a loss to one industry, certain companies could reimagine themselves as healthcare partners for the next generation of workers.

Broader society

Society itself may examine how it shows its appreciation for nurses. Individuals could show gratitude and respect both within a healthcare facility and in daily life, such as with nurses that are family members or friends. Businesses could consider discounts for nurses or other ways to materially show appreciation. Family members also may encourage each other to consider a career in nursing, highlighting the need and demand for and the salary and value of a career in direct patient care. In all avenues, individuals could expand their vision and understanding of all nurses can, and will, do for patients. In addition to a commitment to patients, nursing careers can also be financially attractive.[26] The median RN salary in the United States was around $77,600 in 2021.[27] Comparatively, the median household income was $67,521 in 2020.[28]

Addressing the short-term workforce challenges and avoiding a major gap in the future is likely dependent on appropriate incentives and conditions for keeping nursing a desirable and supported profession. If these steps are put into motion, patient outcomes and the stability of the healthcare workforce could improve, improving the overall US healthcare sector. From what we have seen—and the resilience shown throughout the pandemic—healthcare, academic, and community leaders are up for the challenge but could use help from every part of society. Without action, every part of the healthcare sector, notably patients and those who care for them, could be at risk.

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Care for the caretakers: Building the global public health workforce

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Public health systems globally can play a pivotal role in addressing workforce shortages across the health ecosystem. Here are four shifts that governments can implement today to prepare for tomorrow.

Health workforces face persistent challenges, including understaffing, underfunding, and underappreciation, that affect many roles in both public health and healthcare delivery. The unrelenting nature and global scale of the COVID-19 pandemic have exacerbated these difficulties. Public health systems have rapidly scaled up their operations to respond, including issuing clear and timely guidance based on science, expanding testing operations, pursuing sequencing, expanding disease investigation infrastructure, and swiftly and equitably distributing vaccines—all while maintaining baseline services and contending with waves of new variants, evolving scientific findings, and worldwide pandemic fatigue.[1]

As the world begins to shift from fighting COVID-19 on a day-to-day basis to living with endemic COVID-19, public health systems are wrestling with where and how to rebuild their workforce and talent pipelines.[2] The to-do list can feel endless, and available resources are limited. But governments could consider capitalizing on the renewed attention and resources being devoted to the broader health ecosystem, which includes both healthcare delivery and public health at the central and local levels.[3] By thinking holistically across this ecosystem,[4] government leaders could rebuild their workforces to effectively serve constituents for decades to come. This article examines the workforce shortages of today and defines a short list of potential initiatives that jurisdictions around the world may wish to pursue to start rebuilding.

Defining the health workforce

Governmental public health is charged with a broad mandate: health promotion, health protection, and disease prevention. While there is substantial variation in how public health systems around the world fulfill this mission—from the infrastructure in place to the services provided—they all rely on diverse and robust workforces to get the job done. This includes the central public health system, which focuses on countrywide or statewide efforts; local public health systems, which are responsible for core public health and often a subset of healthcare delivery services; and traditional healthcare delivery systems, which employ clinically trained professionals for patient-level services (Exhibit 1). While governments have often focused on one subsegment at a time, they may want to take a holistic view when building for the future by defining a potential workforce strategy for health professionals that caters to the needs of—and capitalizes on the synergies between—individual entities within the health ecosystem.

While these entities may have distinct governance structures, compensation

Exhibit 1

Public health systems are uniquely positioned to holistically rebuild the workforce of health professionals.

1. Central public health system

Responsible for statewide efforts regarding infectious disease, health policy, emergency management, environmental protection, and so on

Directly employs core public health professionals

2. Local public health system

Responsible for local health education, community-based partnerships, immunization campaigns, case management, and so on

Employs core public health roles and, often, a subset of healthcare delivery roles

3. Healthcare delivery system

Responsible primarily for individual-level services such as primary care, behavioral health, and so on

Employs clinically trained professionals through a combination of private and public health systems

models, and job descriptions, the ecosystem is interconnected, with a shared talent pool and an overlapping set of critical roles (Exhibit 2). Each is facing acute workforce shortages, and any solution that focuses on only one entity may negatively affect others.

Given their overarching responsibility to all constituents and their view across public bodies, public health system leaders are optimally positioned to play a proactive role in defining and developing the talent pool needed to transform workforces across the entire health ecosystem, furthering all entities' unified mission of saving lives and improving livelihoods.

Understanding public health workforce shortages

Definitions of public health vary by geography, making it difficult to quantify the full extent of global workforce shortages.

Reports from workers and employers reveal, however, that shortages across the ecosystem are acute. These shortages existed prior to the pandemic, with a recent *Lancet* report finding that, globally, the health workforce (including physicians, nurses and midwives, dentistry personnel, and pharmaceutical personnel) fell short by approximately 43 million in 2019.[5] The pandemic exemplified how shortages can be further exacerbated across all levels of care in times of crisis:

— Countries in Europe enlisted retired or inactive professionals to return to work as contact tracers or telephone hotline workers.[6]

— The World Health Organization (WHO) deployed surge teams around the world as needed to respond to new COVID-19 variants, as it did in South Africa to help fight the omicron variant.[7]

The shortage is likely to increase due to supply-side constraints and evolving demand. Moreover, trends indicate that supply shortages could continue to worsen. For example, a McKinsey survey conducted in November 2021 revealed that 32 percent of surveyed registered nurses indicated that they were likely to leave their current position of providing direct patient care within one year, a 10 percent increase from ten months prior.[8] These capacity constraints will likely be compounded by rising demand for health services due to an aging population,[9] increasing emphasis on prevention, and evolving health priorities, including an expanded focus on behavioral health and the need to continually address new pathogens.

The root causes of workforce shortages differ by region, country, state, and locality but often include insufficient education pipelines, long recruitment timelines, and compensation gaps between the public and private sectors. In preparing for the future, each public health system will have a unique set of circumstances to be holistically assessed, including its needs, constraints, and processes for attracting, developing, and retaining workers.

Four shifts that public health systems can consider implementing today to prepare for tomorrow

Although the challenge is daunting, our experience suggests that four specific shifts could help governments rebuild central public health workforces and support the rebuilding of local public health

Exhibit 2

Roles and responsibilities often overlap across the health-professional ecosystem.

Overlapping roles and responsibilities

1. Central public health system

- Public health leadership
- Health policy experts
- Health economists
- Healthcare logistics and supply chain specialists
- Crisis and emergency management personnel
- Environmental health experts
- Epidemiologists
- Health data and IT analysts
- Health technology experts and developers
- Communications experts
- Health promotion specialists and educators
- Community partnership liaisons
- Social workers
- Laboratory technicians
- Contact tracers

2. Local public health system

- Health promotion specialists and educators
- Community partnership liaisons
- Social workers
- Laboratory technicians
- Contact tracers
- Physicians (PCPs,[1] specialists)
- Physician assistants
- Nurses (CNAs, LVNs, RNs, NPs, APRNs)[2]
- Physical and occupational therapists
- Behavioral health professionals
- Dentists
- Phlebotomists
- Vital-records personnel
- Health inspectors
- Case managers
- Community health workers

3. Healthcare delivery system

- Physicians (PCPs,[1] specialists)
- Physician assistants
- Nurses (CNAs, LVNs, RNs, NPs, APRNs)[2]
- Physical and occupational therapists
- Behavioral health professionals
- Dentists
- Phlebotomists
- Laboratory technicians
- Speech, hearing, and vision specialists
- Pharmacists
- Medical technicians (eg, ultrasound)

[1] Primary care physicians.
[2] Certified nursing assistants, licensed vocational nurses, registered nurses, nurse practitioners, and advanced practice registered nurses.
Source: McKinsey analysis

Exhibit 3

Four sets of critical shifts can help governments rebuild the public health workforce.

	From	*To*
Support and retain the current workforce 	**Mission before people** Focus on the immediate needs of community members with less dedicated attention to employee well-being, especially throughout COVID-19	**Mission *and* people** Create an environment that meets the expectations of modern employees, focusing on wellness and individual development while fulfilling the public health system's mission
Build for evolving capability needs 	**Plug existing gaps** Hire as quickly as possible to combat attrition and fill existing vacant roles	**Strategically hire and train** Hire and upskill employees in targeted capability areas, catering to evolving public health priorities (eg, climate change)
Innovate to flexibly extend workforce 	**Reactive scale-up** Launch initiatives during health crises or during other times of need to quickly expand workforce capacity (including resources to hire contracted or temporary staff, in response to changes to policies)	**Proactive scale-up** Continuously plan for crises, ensuring the necessary policies, protocol, and resources are in place to effectively and efficiently leverage the workforce during times of crisis
Create robust talent pipelines 	**Difficult to navigate** Rely on historic, cumbersome, and often narrowly scoped processes to recruit candidates to public health roles	**Streamlined and user-friendly** Build efficient and robust processes with clear, tactical steps that apply across public health systems

and healthcare delivery workforces (Exhibit 3). These strategies will likely need to be tailored to each public health system but may serve as starting points.

Supporting and retaining the current workforce by equally emphasizing mission and people

The Great Attrition continues to challenge all industries, with more than 52 percent of Gen Z and millennials worldwide reporting that they are likely to consider changing employers this year.[10] Public health leaders could commit to creating an environment that meets the expectations of the present-day workforce, focusing simultaneously on employee well-being and on fulfilling the public health system's mission.

Meeting expectations of the modern worker. Public health systems will be asked to respond to demands for new ways of working. At the organization level, this may mean creating an operating model that is fast, nimble, and frictionless—and flattening the historically hierarchical public-sector bureaucracy.[11] In addition, given the uncertainty of the past two years, employees are seeking clear statements of employer expectations. A recent McKinsey survey showed that organizations with well-articulated policies for the future workplace have seen a rise in employee well-being and productivity. For example, organizations that have clearly stated post-pandemic work arrangements have seen a threefold increase in feelings of inclusion and an almost fivefold increase in feelings of individual productivity.[12]

At the individual level, workers are prioritizing career development more than ever, with recent global survey results indicating that 43 percent of respondents across industries see career advancement opportunities as a top priority. That said, few were satisfied with the opportunities provided by their current employer.[13] Providing a culture of development can have substantial effects on retention. For example, when a sales organization implemented a mentorship program that focused on frontline career pathing, it saw a double-digit increase in employee retention.[14] Public health systems could restructure career pathways to support advancement, train future leaders, and allow lateral movement for staff members who wish to explore a variety of roles within public health, perhaps through rotational programs.[15]

Within the health ecosystem specifically, employee expectations are compounded by a need to recover from burnout caused by the pandemic. A McKinsey survey of registered nurses indicated that among those reporting a likelihood to leave direct patient care, top factors influencing their decision included insufficient staffing levels, a feeling of being ignored or unsupported at work, and the emotional toll of the job.[16]

Broadly, prospective employees also increasingly seek work that is mission-oriented, with 71 percent of LinkedIn members surveyed believing job purpose is as important as compensation or status.[17] Public health system leaders may wish to capitalize on this sentiment by promoting their mission of transforming public health and promising a meaningful career that makes a real difference in people's lives.[18]

Launching tailored retention efforts. Given the breadth of roles within the public health system, the challenges faced by workers vary widely. As such, public health system leaders can consider building analytically backed systems to identify needs and tailor retention initiatives to subsegments of the workforce. For example, initiatives that effectively address burnout among frontline local public health educators may differ from those needed to support centralized, hospital-based public health nurses or regional data analysts who continue to work remotely. Governments could play an active role in helping employees recover from the pandemic through new expanded paid leave or vacation time policies, behavioral health and recovery-focused programs, and enhanced benefits, among other measures.[19] Public health systems can follow private-sector counterparts that have launched a variety of initiatives focused on mental wellness to support their workforces throughout the pandemic. For example, the Mount Sinai Health System in New York City launched a Center for Stress, Resilience, and Personal Growth, which continues to sponsor resilience workshops, individual behavioral healthcare services, and mental health self-screening services.[20] Customizing retention efforts could create an environment that entices workers to

Public health leaders could commit to creating an environment that meets the expectations of the present-day workforce, focusing on employee well-being and on fulfilling the public health system's mission.

build careers in public health and could actively demonstrate the commitment of public health leaders to the well-being of their staff.

Building for evolving capability needs by strategically hiring and training

As global health priorities continue to evolve and as new challenges arise due to factors such as climate change and entrenched health inequities, public health system leaders can consider reassessing the roles needed within the workforce.[21] These changes will likely require public health entities to hire or train for fundamentally new types of competencies.[22] Our global experience with workforce development, including partnering with a UN agency that set capability and capacity targets to fuel growth and achieve sustainable development goals, has demonstrated the importance of clearly understanding needs and setting targets when building for the future.

Assessing capability needs. The past two years have highlighted a new set of roles and capabilities that will likely be required by public health systems worldwide. Examples include those within the Global Epidemic Response and Mobilization (GERM) team proposed by Bill Gates, which includes roles in epidemiology, communications, genetics, data systems diplomacy, rapid response, logistics, computer modeling, and more.[23] While many of these topics have historically been core to public health, others are new roles for which the public health ecosystem will actively need to recruit or train, including the following:

— *Health IT and analytics specialists.* Modernizing IT, data science, and informatics to improve public health capabilities in disease monitoring and forecasting will be critical in informing health priorities, policies, and actions. There has been a substantial increase in both demand for, and supply of, data in public health, resulting from the proliferation of new digital health technologies, growing reporting requirements related to disease surveillance, and public expectations regarding transparency and open data (for example, in epidemiological modeling or in race and ethnic data). Innovations in advanced analytics have led to increased opportunities to drive insights, such as using syndromic surveillance techniques to predict outbreaks or analyzing environmental and social data to predict risks of lead poisoning. Finally, the federal government has introduced legislation to modernize data and increase interoperability (for example, the Strengthening U.S. Public Health Infrastructure, Workforce, and Data Systems grants from the from Centers for Disease Control and Prevention [CDC]; or Epidemiology and Laboratory Capacity [ELC] funding).[24] As the future of public health becomes more data-driven, it will be key to build IT and data capacity and skills across public health systems, including engineering capacity (for example, data engineering and cloud native engineering); data translation capacity (for instance, data science and clinical informatics); and other capacities (such as agile, design thinking and vendor management). Furthermore, building data literacy skills in those acting as public health decision makers—from policy makers to local implementing partners—will also be a priority.

— *Behavioral-health professionals.* The pandemic has exacerbated the existing worldwide mental health crisis. For example, the global prevalence of anxiety and depression increased by 25 percent in the first year of the pandemic.[25] The United States alone is expected to have 510,000 vacancies in the skilled and semiskilled mental health workforce by 2026.[26] Public health systems could help fill this dire need by hiring professionals, creating training programs, and building partnerships with community organizations, academic institutions, and others.

— *Climate change specialists.* WHO asserts that the single largest threat to humanity's

health is climate change, predicting that between 2030 and 2050, approximately 250,000 additional people will die per year from malnutrition, malaria, diarrhea, and heat stress exacerbated by climate change.[27] Public health systems could help by building a workforce that is able to research and address the effects of climate change on health.

— *Communications experts.* As scientific guidelines evolved during the pandemic, the importance of accurate, timely, and accessible public health communications became widely apparent. Meanwhile, only 51 percent of countries in the Organisation for Economic Co-operation and Development (OECD) in 2020 reported trust in their governments.[28] To help boost trust, public health systems can consider communications capabilities to successfully tell the story of public health's societal value, both in stable times and when the next health crisis strikes.

Determining optimal avenues for filling gaps. According to a McKinsey Global Survey on future workforce needs, recruitment is not the only (nor the most effective, necessarily) way to fill gaps—especially in tight labor markets or where public-sector hiring is a challenge.[29] Beyond hiring, public health system leaders can consider the following opportunities:

— *Outsource or automate.* In addition to hiring externally, public health system leaders can pursue opportunities to outsource or automate specific services and upskill current staff. Skill building can emphasize core strategic and technical competencies (such as in bioinformatics or IT) and critical management skills (such as change management, decision making, and consumer centricity).

— *Resource sharing.* Public health system leaders can evaluate resource-sharing opportunities. Although certain roles, such as health educators, require a substantial local presence, others, such as data analysts, may be effectively filled in a regional or central staffing model. This approach can be especially beneficial in rural communities and for roles that are hard to staff, such as nurses.

— *Creative service delivery.* Creative service delivery models, including rotational staffing and virtual care, can allow public health systems to reach a much broader constituency, as can models that have gained traction in recent years but have yet to fully scale, including those that employ professionalized community health workers. Governments can also build staffing partnerships with public- and private-sector organizations outside of the public health system. This may include temporary or contracted staff and rapid-response teams—all of which were used temporarily during the pandemic.

Innovating to flexibly extend the workforce by proactively scaling up

The COVID-19 pandemic highlighted the need for public health systems to quickly respond when a new threat arises. This response should neither overburden existing employees nor reduce a system's ability to continue delivering core services. Public health system leaders can proactively plan

To boost trust, public health systems can consider communications capabilities to successfully tell the story of public health's societal value.

and implement infrastructure to effectively expand their workforces when a crisis strikes.[30]

Building central and local reserves on 'warm standby.' Public health systems can build infrastructure to marshal extra resources at a moment's notice. For highly specialized roles, national or international organizations could train staff centrally and deploy them around the globe as needed. This model is used today by the CDC's Global Rapid Response Team, which has more than 50 staff members who can be deployed within 24 to 48 hours. For less specialized roles, public health systems could offer frequent and widely accessible training to build up local reserves—made up of volunteers, private-sector partners, and others—that are on "warm standby." This approach proved successful when the United States deployed the National Guard during the pandemic and when Japan mobilized more than 160,000 volunteers to respond to the 2011 Tōhoku earthquake.[31] Creating this infrastructure could enable public health systems to augment their workforces during emergencies while controlling full-time labor costs.

Instituting flexible policies. Public health system leaders can reassess policies and regulations to optimize staff members' productivity. This may include a focus on reassessing how and when providers are credentialed. Governments may consider where they can increase the flexibility of who can perform each set of services they administer. By allowing providers to practice at the top of their license and extending privileges across borders, governments may be able to substantially increase workforce capacity in both times of steady state and times of crisis. Similarly, public health systems can rethink how services can be delivered, including staffing ratios, virtual care guidelines, and so on.[32] While some policy changes may make sense during ordinary times, others may be appropriate only in times of extreme need. The latter may include temporarily suspending licensing restrictions to allow providers to practice across borders; adjusting regulations to expand the responsibilities of individuals, such as authorizing pharmacists to prescribe critical medications and expediting formal education requirements; or simplifying license renewal processes to bring potential workers out of retirement.[33] To enable a nimble response, public health system leaders can consider setting emergency thresholds—for example, when medical needs exceed immediately available resources or when incidence rates exceed a predetermined level—that immediately trigger policy changes.

Creating robust talent pipelines that are streamlined and user-friendly

As demands on public health systems continue to increase, public health system leaders may need to creatively expand their approaches to sourcing talent.

Growing partnership networks. Public health systems can build from the events of the COVID-19 pandemic to broaden talent pipelines through strengthened relationships with community-based organizations, academic institutions, private-sector businesses, and government partners. Our experience has shown that partnerships can be used to great effect. For example, as part of a digital transformation, one ministry of immigration in a G-20 country established more than 15 partnerships to attract tech talent, which helped funnel approximately 100 candidates through its pipeline.[34] Separately, through efforts with some African and European countries, public unemployment agencies are partnering with private-sector businesses and academic institutions to train individuals in high-demand capabilities and arrange internships. These programs not only decrease unemployment rates but also ensure that training is fit for purpose. Partnership networks can also help diversify the workforce, potentially targeting community-based organizations in rural areas, creating exchange programs within academic institutions, or launching tailored recruitment plans for specific subsegments of the population.

Modernizing recruitment functions. Outdated, cumbersome recruitment processes could be transformed into streamlined, user-friendly systems to maximize application completion and yield. While the employment landscape varies widely around the world, all public health system leaders can reassess their hiring processes by mapping the user journey of potential candidates and recruitment staff. Our experience has shown the benefits of streamlining processes, clearly defining roles across the system, implementing new technology, building HR capabilities, and implementing modern performance management systems. For example, a federal agency in the United States has seen a reduction in time to hire by up to 75 percent, as well as significant capacity expansion.[35]

Other potential initiatives include simplifying job qualifications to emphasize required capabilities rather than relying exclusively on prior experience, centralizing public health job listings, ensuring reasonable application turnaround times, creating long-term job security, providing competitive compensation packages, and offering remote or hybrid work models. Where feasible, public health systems may also consider leveraging analytically backed digital labor platforms to increase efficiency and reduce human biases throughout the recruitment process.[36]

Next steps

Although the work ahead isn't easy, following the COVID-19 pandemic, public health systems can play a pivotal role in building a better future for societies and communities at large. While the above initiatives will likely propel jurisdictions forward in their quests to recover and rebuild, public health system leaders could concurrently ensure that they have a long-term, systemwide, strategic plan to develop and maintain their workforces. This approach could include defining the future vision for health, deciding which entities are best equipped to deliver each service, assessing the set of capabilities needed across relevant sites of care, determining future workforce needs by role type, and defining the public health system's role in meeting demand.

If properly redesigned and implemented, the full ecosystem—including the central public health system, local public health systems, and global healthcare delivery systems—could be improved for generations to come. Public health system leaders will likely need to strategically source, proactively develop, and creatively retain talent that is well equipped to face the next set of challenges, whether serving communities around the world under normal circumstances or quickly mobilizing to confront the next life-threatening health crisis.

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How it gets done

Capital flows accelerated and grew globally by more than 50 percent annually in 2019–21.

Overcoming the cost of healthcare transformation through partnerships

Emily Clark, Jack Gordon, Neil Rao, Drew Ungerman, and Liz Wol

August 11, 2022

Players are adapting to the evolving healthcare landscape by using a range of partnership models—beyond M&A—to create value. Anticipating and avoiding five common mistakes can be key for success.

In recent years the healthcare industry has experienced significant changes, which have been further accelerated by the COVID-19 pandemic. Shifts in healthcare delivery, regulation, and expectations of providers will likely create both opportunities and imperatives for incumbents and new entrants to create new approaches to delivering and financing care.

In this context, many of the largest players are turning to M&A to build new businesses and access new capabilities. In an environment of high competition for innovative assets and the growing involvement of institutional investors, however, many organizations may find M&A increasingly out of reach to pursue on their own. Partnerships—including joint ventures (JVs) and alliances with other healthcare organizations and new entrants—may offer a promising avenue to access new capabilities, increase speed to market, and achieve capital, scale, and operational efficiencies.

Though partnerships differ in many ways from traditional M&A, they typically require at least as much attention to drive value for all partners. To succeed, organizations must steer clear of five common partnership mistakes: jumping into deal terms without clarity on the vision and strategic plan, defining the operational and governance plan before clarifying the business plan, failing to prioritize potential deal breakers effectively, failing to build long-term agility into the partnership structure, and lacking either leadership commitment or consistent accountability.

Incumbents looking to retain their market position will need to be proactive

Recent years have seen wide-ranging shifts in the healthcare landscape, including a growing disease burden, evolving health needs, rising consumer expectations, and an increasing emphasis on affordable and high-quality care, alongside an increased appetite for value-based models. These shifts have reconfigured the healthcare landscape toward a more interconnected market.

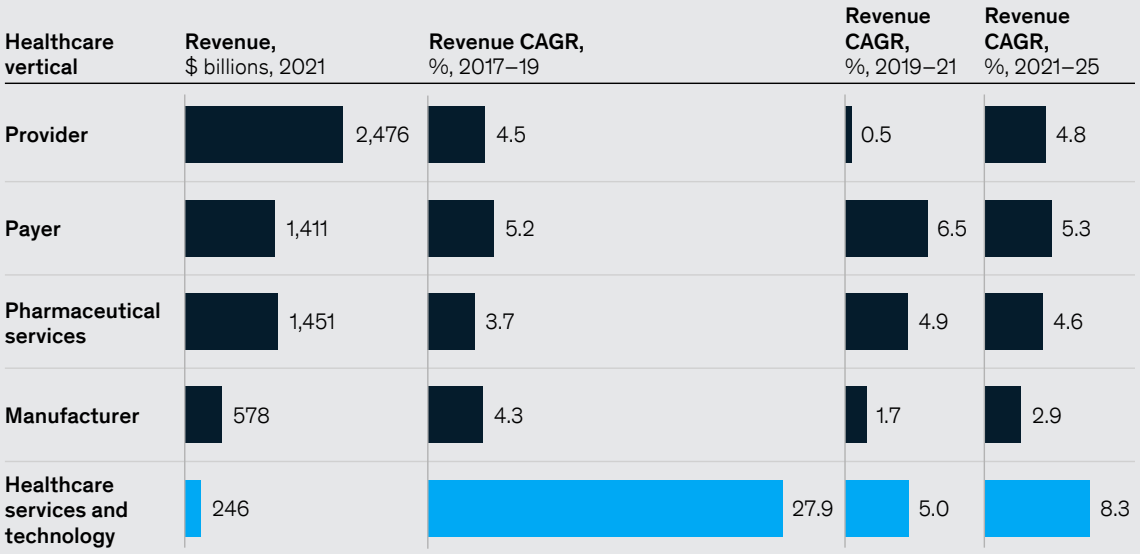
The healthcare industry has responded with a proliferation of innovative and often technology-enabled models of delivering, accessing, and experiencing care. To deliver their full potential, these models require new business approaches and new capabilities. As a result, the industry's recovery from the pandemic is expected to be strong but uneven. We expect to see disproportionate gains in certain subsegments, including government-sponsored insurance markets, virtual care, and data analytics. These gains may address current inefficiencies and accelerate shifts that could enable more convenient delivery of care at a lower total cost (see sidebar, "New technologies

New technologies offer a potential route to address inefficiencies and convenience

Some healthcare services and technology subsegments—including clinical services, health data analytics, and healthcare platforms and technology, to name just a few—have the potential to enable care to be delivered in fundamentally new ways. We expect these subsegments to experience significant growth, in some cases more than 10 percent a year (Exhibit). Both for-profit and nonprofit entities can deliver benefits to their stakeholders by deploying these capabilities to improve outcomes for patients; deliver affordable, high-quality, and convenient care; and create more sustainable business models.

Exhibit

Healthcare services and technology that facilitate high-value, convenient, and equitable care offer potential for outpaced growth.



Source: McKinsey analysis

offer a potential route to address inefficiencies and convenience").

Incumbents may have an advantage within this shifting landscape. They can build on their existing relationships (including with consumers, healthcare stakeholders, and community organizations), brand equity, and expertise to deliver new models of care. However, these advantages may erode without meaningful action in the face of trends emerging in the wake of the pandemic.[1] While initial evidence suggests payers that are investing in innovative managed-care models are seeing positive results,[2] those that maintain the status quo could be left behind.

Given this external landscape, many organizations are considering opportunities to reimagine their own business models and access new capabilities. Yet those same organizations have found it challenging to build new business on their own.[3] One factor has been the high cost of driving innovation and unlocking access to required capabilities. While some organizations have the capital and expertise required to build new capabilities, many

others are turning to M&A to accelerate their strategies. Between 2010 and 2019, the ten largest public payers and providers in the Global 2000[4] collectively made more than 360 acquisitions, a significant portion of which were deals that involved adjacent segments.[5]

The cost of these acquisitions, especially in attractive subsegments with innovative capabilities, can be high. For example, transaction multiples (enterprise value by EBITDA) for healthcare data and analytics assets have traded at 1.5 to 3.0 times the multiples of health system and hospital deals that disclosed financial detail over the past two years.[6] As financial and strategic buyers continue to invest,[7] M&A may be out of reach for many organizations to pursue on their own.

As a result, organizations may need to consider different approaches to access the capabilities and expertise that they need to succeed. Partnerships, including JVs and alliances, may provide a more financially accessible alternative.

Potential options to unlock value

Before assessing the optimal approach for accessing new capabilities, healthcare organizations can first determine how to respond to the changing healthcare landscape and set enterprise and business unit strategies accordingly. Once these strategies are defined, organizations could then consider whether—and how—M&A and partnerships can help unlock additional value and deliver higher-quality, lower-cost care.[8]

When it comes to M&A and partnerships, organizations have multiple options to consider (Exhibit 1). The right option—or combination of options—will depend on the organization's aims, capability gaps, desired timeline, and financial position.

To illustrate the differences among these options and highlight the factors involved in making a choice, consider a payer that wants to respond to recent shifts in how care is accessed[9] by making virtual-first engagement a core pillar of its strategy. The payer might consider three paths to access and deploy the innovative capabilities required to enable its strategy:

1. Build and scale virtual-first insurance products and associated capabilities.
2. Develop a digital platform for consumer engagement that guides members across their healthcare journey in new and innovative ways.
3. Assemble a portfolio of leading point solutions, such as consumer self-service and self-care tools, that drive significant value when integrated with existing solutions.

This payer may pursue any of these paths through M&A or partnerships. Once the best path has been selected, the payer can identify the key capabilities required for success, assess the organization's existing gaps, and determine the best partnership approach to fill each gap.

Organizations may need to consider different approaches to access the capabilities and expertise that they need to succeed. Partnerships, including JVs and alliances, may provide a more financially accessible alternative.

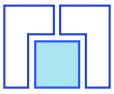
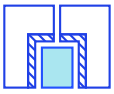
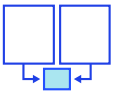
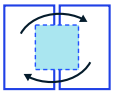
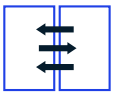
M&A

Acquisition typically provides the highest degree of control because the integration can be guided by a single corporate entity, vision, and strategy. In this example, the payer may aim to acquire an attractive asset that provides a comprehensive solution or "cornerstone" around which to build a new digital consumer engagement platform. However, potential synergies may not justify paying for control in environments when asset valuations are elevated, and smaller players may not have sufficient scale to justify committing capital to integrate and sustain these assets.

If an internal build, merger, or acquisition is not an option for achieving strategic ambitions, partnerships—including JVs and alliances—may provide a path forward. These approaches may be a practical way to deliver value to stakeholders by pooling capital across more lives.

Exhibit 1

Organizations have multiple options for M&A and partnership to consider.

			Equity involvement
Mergers and acquisitions *(Single new company)*	**Large-deal M&A**		Greater
		Full combination of two entities, target is > 30% acquirer market cap All degrees of operational integration possible *Example: Two large-scale providers merge to expand services and geographies*	
	Programmatic and "tuck-in" M&A		
		Full acquisition of single asset or series of smaller, related assets All degrees of operational integration possible *Example: Payer develops diversified business unit to aggregate and commercialize solutions*	
Joint-venture partnerships *(Separate new company)*	**Full-business JV**		
		Partner contributions placed into new JV entity Operations led by separate management team *Example: Multiple health systems create post-acute JV with combined operations*	
	Partial-business JV		
		Select resources contributed into a new JV entity Vital other resources remain in parent companies *Example: Multiple payers combine claims platforms*	
	"Consortium play" JV		
		Parents contribute capital to new entity to jointly purchase asset All previously existing resources remain in parents *Example: Multiple provider systems build brand new organization to jointly purchase medications*	
Alliance partnerships *(Existing companies)*	**Strategic alliance with equity holding**		
		Partnership is substantiated with noncontrolling (cross) shareholding *Example: Payer invests in innovative point-solution vendor and white labels*	Lesser
	Contractual alliance		No equity involvement
		Resources are made available to the partner, but remain inside the parent *Example: Provider and payer contract to develop cobranded health plan*	

Joint ventures

JVs allow partners with shared interests to collaborate on a specific opportunity by creating a new entity with a clear mandate to innovate new offerings and improve existing services. There are multiple approaches to consider when creating a JV:

— *Contribute existing resources and assets.* Partners with existing complementary capabilities may create a new company that combines existing assets and resources under separate, focused management. Doing so could unlock value by eliminating redundancies, unlocking access to both scale and best-in-breed capabilities, and enabling capital efficiency for future investment. In our example, the payer may determine that the digital engagement platform is best built by combining the payer's own capabilities and expertise (such as medical management and core payer administration) with digital expertise (such as user experience, design, and advanced analytics) from a leading technology company. A new entity with the mandate and resources to build this platform can support the strategies of all partners, enabling each to generate more value than it could by acting alone.

— *Create a 'consortium.'* Partners may consider a "consortium play" in which each partner has a strategic interest requiring new capabilities but lacks the resources to build a competitive offering—especially when there is disproportionate value from adding scale (such as a clinical-data platform to enable cross-industry research). Joint investment can enable partners to both access more capital and deploy it at scale. In our example, the payer may collaborate with other payers to acquire a proven high-engagement wellness platform as the foundation for the digital-engagement platform. Joint ownership can aggregate scale beyond what any few parties may be able to achieve, unlocking both investment efficiencies and greater platform benefits (such as access to bigger and more innovative point solution providers). The partners may then make further acquisitions or contribute specialized assets to further enhance the JV.

In either approach, governance is key. The external environment and competitive pressures will evolve, sometimes significantly, over time. Establishing clear guardrails while maintaining strategic flexibility can enable the JV to adapt as required. Decision rights, dispute resolution mechanisms, and exit options are important considerations for both a successful launch and ongoing success. Balancing the number of participants with speed to market and effective ongoing governance is also important.

Alliances

Alliances can give partners the flexibility to adapt to potential market and strategic changes and are generally easier to put into place than JVs. This approach may be appropriate when the party acquiring the capability does not consider itself the "natural owner" of that capability but realizes the potential value in offering leading solutions to its members.

However, alliances rely on partners to act collaboratively without the management team focus that a JV provides. To mitigate this lack of management focus, some alliances leverage cross-equity holdings to help align incentives. Without this or another mechanism, the lack of formalized or structural linkages between partners can make it easy for one partner to walk away or for the overall effort to simply lose momentum. Alliances are most likely to succeed when both parties clearly understand the case for joint investment.

In our example, the payer may consider a strategic alliance with an innovative point solution start-up to quickly access new capabilities. In return for gaining a core customer base and immediate scale, the start-up may agree to customize its core

offering for the payer. Each party has a clear rationale for maintaining the alliance, increasing the likelihood of longer-term success.

Five mistakes to avoid

JVs and alliances are less capital intensive than M&A at the outset, but there are other costs. First, each of the partnership approaches laid out above requires significant investment in up-front planning and execution. To create meaningful value, potential issues can be tackled during the partnership formation phase, rather than deferred for postlaunch resolution. Second, JVs and alliances require an ongoing coordination cost to ensure that independent partners remain aligned on strategic and operational objectives. Potential mismatches between partners' strategic aims may derail negotiations and long-term value capture, especially if these mismatches lead to indecision that threatens implementation.

This need for both extensive up-front planning and continued investment in partner alignment is one of the principal areas in which the partnership playbook differs from that of M&A. Organizations can follow a specific sequence of steps when developing successful JVs and alliances (Exhibit 2).

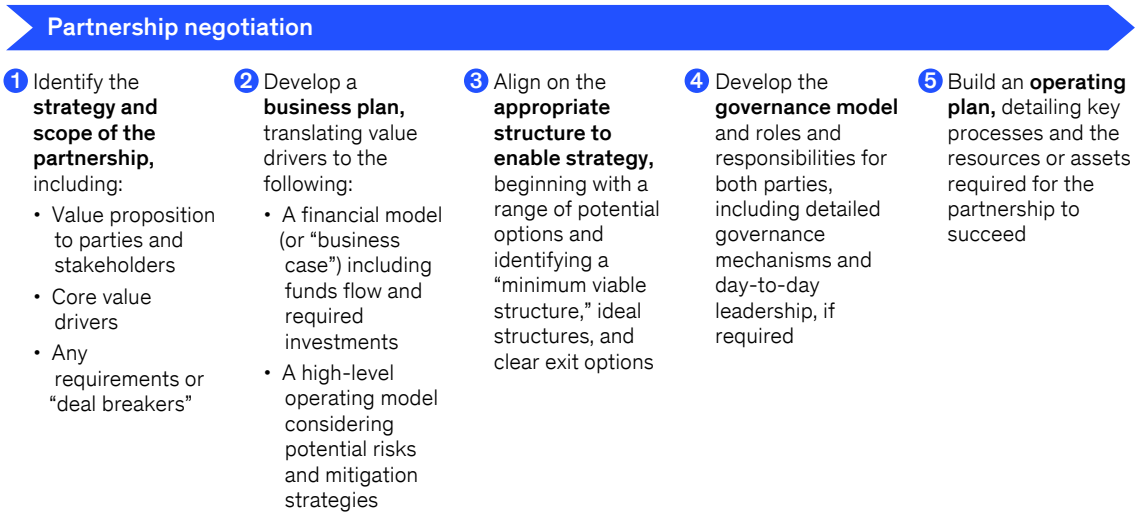
Organizations looking to build strong value-creating partnerships may want to anticipate five possible partnership pitfalls—and make plans to avoid them.

1. **Jumping into deal terms without clarity on the vision and strategic plan**

The first step in considering a partnership via JV or alliance is to define a future-state vision and detail the strategic plan (including the combined value proposition, core value drivers, and what is in and out of scope) that supports it. While the importance of starting with the strategic plan may seem obvious, even seasoned executives have made the mistake of deferring too many decisions in the interest of "not complicating" the dealmaking process. Too often, partners in the early stages of dealmaking skip to deal terms and partnership structure without clear alignment on the strategic plan and vision.[10] The result is often a broken deal or a partnership that fails to deliver on the goals of either party.

Exhibit 2

Best-practice partnership negotiation encompasses five carefully sequenced discussion topics between parties.



Both parties must clearly understand why they chose this partner and this partnership, in terms of both strategic fit and long-term value creation.

Aligning on a vision for the partnership requires that partners have a common view on how the industry is likely to evolve, how this partnership will offer a distinctive and lasting solution, and how they will balance potential tension between individual enterprise strategies and the vision for the partnership. Both parties must also clearly understand why they chose this partner and this partnership, in terms of both strategic fit and long-term value creation.

Consider, for example, a potential partnership between two regional health systems to combine and scale their core general and administrative (G&A) functions. One health system may consider this G&A partnership a scalable asset that could serve both partners and other systems nationwide, while the other health system may have limited aspirations beyond optimizing its own G&A cost. If this strategic mismatch is not resolved up front, the partnership could be more likely to break up during later, more detailed negotiations or after the partnership is established.

Once the vision and the scope of the solution space are defined—including products, geographies, and commercialization plans—partners should establish a business case that quantifies the core value drivers of the partnership. They should align on the potential all-in opportunity, distinguishing between the value derived from the combination and the additional value available through more transformative moves, such as new-product development. A rigorous assessment of each value driver is useful, but only if leaders do not become bogged down in overly precise value-capture assessments. In the above example, partners might look to develop a high-level G&A mapping to identify combinational synergies, but may not yet require a full line-level G&A teardown.

2. **Defining the operational and governance plan before clarifying the business plan**

After partners establish the vision and strategic plan for the partnership, the next step is often to define a business plan for how the partnership will capture the identified value, including high-level governance and operational considerations. Organizations often struggle with the appropriate level of depth for this business plan. It needs to be sufficiently granular to enable alignment on key issues, but not so detailed that it becomes an execution or implementation plan.

The business plan can also address the most important aspects of governance required to deliver on the value thesis for the partnership, including board structure, critical decision rights, decision-making processes, operations, organizational structure, and key IT platforms and systems. However, straying into detailed process mapping and integration planning is not necessarily useful and could slow progress in reaching a deal. Leaving all options on the table can be beneficial at this stage, which means focusing the plan on the major actions required to unlock the full value potential, even if some may be considered deal breakers.

Consider, for example, two payers considering entry into government-sponsored segments with a new joint entity. At the

outset, it is useful for the organizations to align on who will control the entity (governance and ownership) as well as on an overall business plan and operating model. Both sides can benefit from understanding how each organization's capabilities and technologies will contribute to the key value drivers. However, many organizations attempt to begin planning actual integration—for example, through granular identification of how core data and systems should work together. By doing this, leaders may jeopardize potential partnerships by reducing the overall momentum and committing more resources than necessary at this juncture.

3. **Failing to prioritize potential deal breakers effectively**

Executives from both organizations can benefit from understanding what they consider to be definitive deal breakers when they go into any partnership discussion, but deal breakers need not be the first topic on the agenda. Early engagement should focus on scope, value drivers, and what the organizations aim to build together. Deal breakers can then be considered after partners align on the full value creation potential.

True deal breakers are generally few in number and justified by their impact on value creation for the partnership and the partners. Executives can benefit from aligning with their teams on a handful of "nonnegotiables" that may prevent the parent organization from meeting its strategic goals or delivering on its core mission. Consider, for example, a potential partnership between two regional health systems that have different views on the employee impacts they are willing to consider. One system may be open to an approach that consolidates functions centrally, whereas the other may be unwilling to consider any action that transfers any positions out of their existing service areas. Brand is another common nonnegotiable.

Once deal breakers are identified, parties can look to jointly align on the strategic and financial impact of taking each one off the table. It can be useful to start with the initial business plan, which includes 100 percent of the potential opportunity, and quantify how much value may be eroded by addressing each deal breaker. Some issues that were articulated as deal breakers at the outset may prove to be major value drivers. Parties can then engage in healthy debate, each determining whether a given issue is worth the potential loss in value or walking away from the partnership altogether.

4. **Failing to build long-term agility into the partnership structure**

The healthcare landscape is constantly changing, and, as the COVID-19 pandemic has made clear, strategic imperatives may change abruptly. These changes can create shifts—and therefore divergences—in partners' priorities. Strong partnerships are often those that have built-in agility to adapt and investment and operational rules that anticipate change. Clear exit procedures can also be beneficial in case unwinding is required.

Evaluating, structuring, and operationalizing a JV or an alliance requires significant effort. Success is more likely when the partnership is a top priority for every party.

During negotiations, parties can benefit from considering both how the partnership will evolve and how it will be poised to address the potentially divergent perspectives and goals of each partner. Clear decision rights are one component, but flexibility in the partnership structure is an important consideration as well. Parties can clearly align on the process to change the partnership structure as needed (such as by bringing in new participants or rebalancing ownership stakes) and expectations around the ongoing performance and contributions of involved parties. In some examples, dedicated partnership management teams[11] and associated processes may be stood up to maintain focus on key performance metrics through "health checks."[12] These can help teams spot potential areas of concern and escalate changes to executives before issues arise.

Consider, for example, a partnership in which multiple hospital systems come together to jointly purchase medical supplies, using their combined scale to secure better rates with manufacturers. Successful negotiators might look to set minimum commitments and performance expectations (such as minimum volume of purchase and exclusive sourcing through partnership) from each party, helping to ensure the partnership supports all parties' strategic aims. But negotiators can also benefit from laying out clear procedures to unwind arrangements if these cannot be met.

Investing the time up front to identify how a partnership can be agile—to add partners, to add capital, or even to unwind—can reduce risk to all organizations in the long term.

5. Lacking either leadership commitment or consistent accountability

Evaluating, structuring, and operationalizing a JV or an alliance requires significant effort. Success is more likely when the partnership is a top priority for every party.

As partnership negotiations begin, each party can designate an executive leader (likely a business unit owner or C-suite executive) as the "deal owner," empowering that person to act as the single point of accountability across the entire deal cycle. Deal owners are more likely to be effective if they have the authority to make critical decisions quickly and are supported by a core set of deputies—in charge of, for example, business development and legal issues—who help drive forward the partnership assessment.

Deal owners cannot fully delegate important tasks, however, because the deal must remain among their top priorities. Deal owners are more likely to be successful if they maintain a consistent focus on the partnership, commit a consistent amount of time to it, and work closely with their counterparts rather than keeping them at arm's length. This commitment, particularly early in the process, helps each party develop trust-based relationships, maintain a relentless focus on the partnership's key value drivers, and ensure partnership momentum.

Looking ahead

Healthcare leaders have a wealth of opportunities as they adapt their strategic aims to succeed in the new normal. Partnerships, including JVs and alliances with other healthcare organizations and with new entrants, are just one way to access new capabilities, unlock speed to market, and achieve capital, scale, and operational efficiencies. In an environment with continued competition for attractive assets and significant capital in play from institutional investors, these partnerships may also be the most accessible way for organizations to capture value in expanding healthcare services and technology value pools.

Though these structures are not mergers or acquisitions, they require at least as much attention as M&A to drive value for all partners. By understanding where to focus efforts early on—and where not to—leaders can help build meaningful partnerships that deploy best-in-class capabilities and that create innovative products and services for patients.

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The gathering storm: An opportunity to reorder the healthcare industry

Daniel Brown, Addie Fleron, Shubham Singhal, and Drew Ungerman

September 23, 2022

Leaders will redesign their organizations for speed, accelerate productivity improvements, reshape their portfolios, innovate with new business models, and reallocate constrained resources.

The once-in-a-century pandemic thrust the healthcare industry into the teeth of the storm. The combination of accelerating affordability challenges, access issues exacerbated by clinical staff shortages and COVID-19, and limited population-wide progress on outcomes is ominous. This gathering storm has the potential to reorder the healthcare industry and put nearly half of the profit pools at risk. Those who thrive will tap into the $1 trillion of known improvement opportunities by redesigning their organizations for speed, accelerating productivity improvements, reshaping their portfolio, innovating new business models to refashion care, and reallocating constrained resources. The healthcare industry has lagged behind other industries in applying these practices; players that are able to do so in this crisis could set themselves up for success in the coming years.

"Fate whispers to the warrior, 'You cannot withstand the storm.' The warrior whispers back, 'I am the storm.'" — Source unknown

Reorder or be reordered. That is the rallying cry for industry leaders.

The healthcare industry faces an acceleration in costs of nearly $600 billion in 2027, which could make healthcare less affordable and threaten the sustainability of industry margins. However, a path to weather the storm exists—the staggering $1 trillion opportunity to create value and improve healthcare by transforming the delivery of care, improving clinical productivity, applying technology, and simplifying administrative procedures.[1] What's more, this level of opportunity is based on innovations already in use and available to executives today. The imperative for companies that seek to thrive in coming years will be scaling up these innovations much more quickly than they currently do.

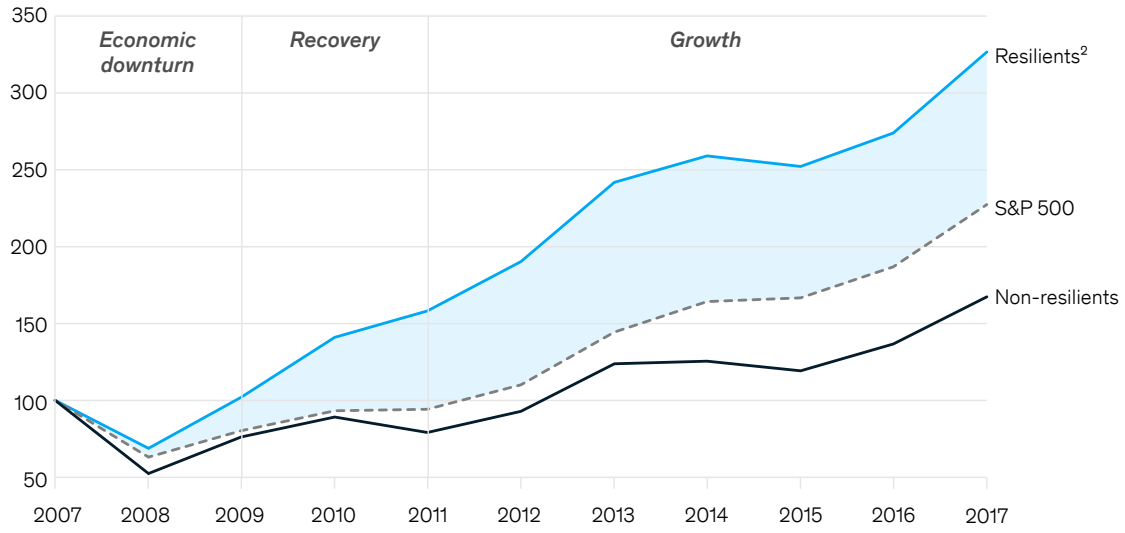
Our research from the last recession (2007–09) shows that challenging times for an industry can create a significant separation between resilient companies and others, meaningfully reordering the sector (Exhibit 1). The "resilients"—the top-quintile performers in each sector—did better at the outset of the downturn and widened the performance gap in subsequent years, delivering a cumulative total-return-to-shareholders lead of more than 150 percentage points, compared with the non-resilients, by 2017.[2] For non-resilients, this lead was tough to reverse: nearly 70 percent of resilients remained top-quintile performers at the end of the decade, with few non-resilients joining them.[3]

The coming years will provide a test for leaders of incumbents and disruptors across the healthcare industry. If history

Exhibit 1

In the last recession, 'resilient' companies thrived, widening the performance gap.

Cumulative total shareholder returns (TSR) performance,[1] index (100 = 2007)



[1] TSR calculated as average of subsectors' median performance within resilient and nonresilient categories; n = 1,140 companies; excludes financial companies and real-estate investment trusts.
[2] Resilient companies defined as top quintile in TSR performance by sector.
Source: S&P Capital IQ; McKinsey analysis

serves as a guide, companies that rise to the occasion will probably be rewarded with sustained overperformance, creating strategic distance from their competitors and establishing themselves as recognized leaders in improving healthcare. In the healthcare sector, resilients are likely to be organizations that deploy four actions faster and more effectively than their peers.

Action 1: Redesign for speed

The pandemic forced executives in all sectors to make extensive changes to increase the flexibility and speed of decision making in their organizations. Nowhere were these changes more critical than in healthcare, which served as the nation's front line of defense against COVID-19. As society transitions toward managing COVID-19 as an endemic disease, healthcare leaders might take this opportunity to identify which changes from the past two years are working and which have outlived their usefulness. Of particular importance is for leaders to be even more bold to sustain the gains made during the pandemic and further increase the speed of decision making and execution.

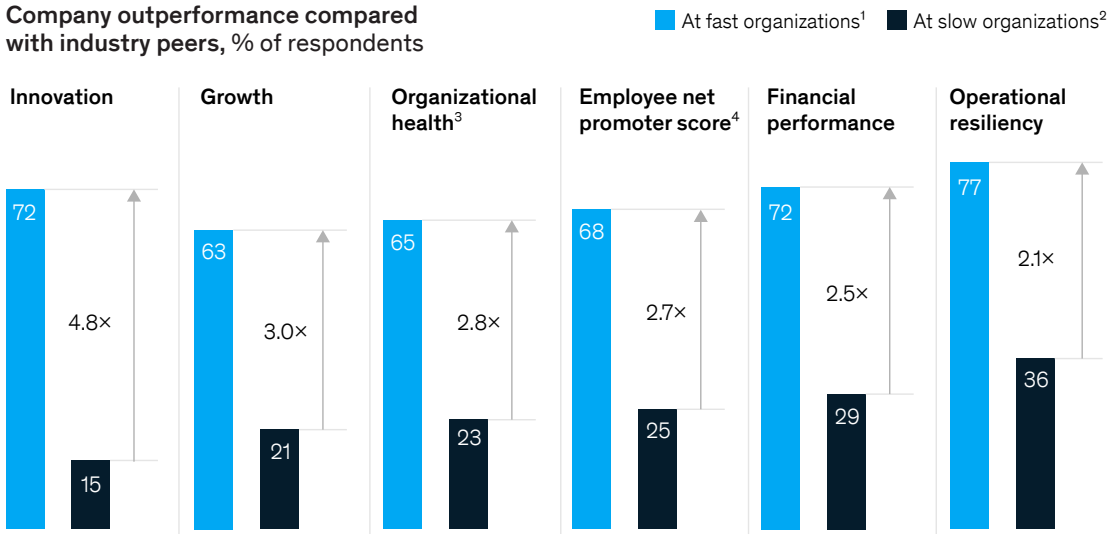
Our research shows that a concerted effort to become faster pays off (Exhibit 2). Fast organizations outperform others by a wide margin on a range of outcomes, including profitability, operational resilience, organizational health, and growth.[4] Often, these advantages are even more significant in difficult times, when decisions have more important consequences, and it is necessary to outpace competitors at every phase of the process. That kind of speed will be essential during the next few years. The devastating effects of cost increases eroding affordability and margins require scaling-up speeds (for example, executing a six-fold increase in the number of patients in risk-bearing, value-based care arrangements in the next five years) unlike those the industry has ever attempted.

But increasing an organization's speed isn't easy. Even most executives at sector-leading operators can identify at least a few hurdles that prevent them from moving even faster. Organizational silos, unclear strategies, and

Exhibit 2

Fast organizations appear to outperform others on innovation, growth, and other metrics.

Company outperformance compared with industry peers, % of respondents



[1] We define a fast organization as one that, according to respondents, significantly outperforms its industry peers on speed.
[2] We define a slow organization as one that, according to respondents, somewhat or significantly underperforms its industry peers on speed.
[3] That is, an organization's ability to align around a clear vision, strategy, and culture; to execute with excellence; and to renew the organization's focus over time by responding to market trends.
[4] That is, employee engagement and promotion.

slow processes frequently interfere with attempts to make decisions and get work done more quickly. To increase speed and improve resilience, leaders could start by asking these questions:

Identify the bottlenecks. What are the top one to three bottlenecks slowing down the organization? What has prevented the organization from addressing them, and what can you do to remove them now?

Enhance the operating model. Are roles and responsibilities for key processes identified clearly? Have unnecessary stage gates that stymie decision making been removed?

Actively monitor potential risks. Have trigger points been set to enable immediate action when thresholds for key decisions are crossed?

Action 2: Double down on productivity

Increasing efficiency is a perennial objective of healthcare executives, but for most organizations, incremental improvements probably cannot meet the moment. To survive the coming storm, leaders must shift their mindset and adopt much bolder aspirations to raise productivity. Of course, bold actions must be thoughtfully prioritized to improve not only the costs but also the quality of care, access, and the patients' experience.

Our research shows that challenging times can create opportunities for step changes in productivity and that, as we have noted, companies making faster and bolder moves during downturns perform better over the long run (Exhibit 3). In the last recession, the resilients heeded the warning signs earlier, cutting operating costs as a percentage of revenue by an average of 50 basis points at the start of the downturn and by 350 basis points through the recovery. These moves gave resilients a substantial head start over the non-resilients, where costs rose during the downturn and fell only slightly in the recovery.[5]

Simply put, transformations are vital in this environment.

Providers

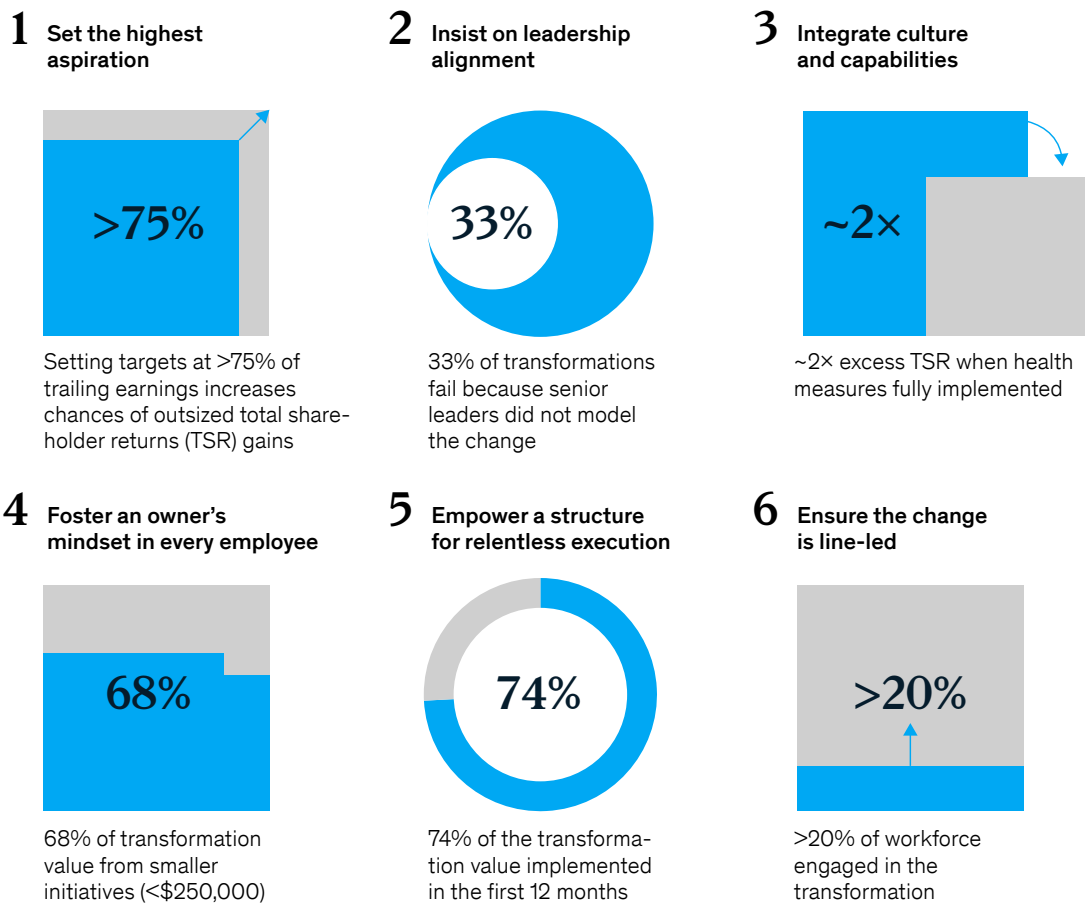
The need for improvement is particularly urgent for providers, many of which face a one- to two-year lag between the elevated costs they incur today and the opportunity to negotiate higher reimbursement rates from payers. On top of this, providers are experiencing poor year-to-date performance and a souring outlook for investment income, which has served as a significant buoy for health system finances over the past decade.

To manage through this difficult period, providers have an opportunity to reimagine how things get done in back-office functions and the delivery of clinical care and to prioritize the most critical work. Providers can pursue transformations that address a comprehensive set of value levers, including clinical operations, external spending, and general and administrative expenses.

They might also use current labor shortages and increased competition for talent as an opportunity to reduce the amount of labor needed to get work done: for example, to help teams work at top of license, providers could roll out innovative technologies (including automation) and use tried-and-true playbooks for staffing, scheduling, and redesigning models of care. Successful initiatives could improve not only financial performance but also the patient and caregiver experience, while increasing access and quality.

Exhibit 3

Across hundreds of transformations, we consistently see six elements that underpin the most successful outcomes.



Source: McKinsey analysis of 82 public companies that undertook a full-scale transformation in the past 10 years with observable 18-month transformation track record

Payers

To avoid unsustainable price increases for purchasers, payers too will need to accelerate their efforts to cut medical and administrative costs. In particular, payers could play a leadership role in transforming the delivery of care—for example, by significantly increasing the number of value-based care programs, enabling and scaling up new care models in lower-acuity and more convenient sites of care (including homes and virtual care), and reimagining care pathways to make them more effective and efficient.

At the same time, payers should also improve their productivity—for example, by redesigning internal processes, deploying new technology (including automation), and focusing on performance management. Beyond their own four walls, payers should seek ways to help reduce the 25 percent of national health expenditures spent on administrative expenses. Known interventions could lower the level to 18 percent, a goal that payers are well placed to pursue in their role as orchestrators of the healthcare system.

Most institutions have undertaken performance improvement journeys, but few successfully assemble all the elements needed to ensure lasting change. In fact, our research finds that 70 percent of performance transformations fail. However, the odds of success increase dramatically—raising the success rate to nearly 80 percent—when organizations apply a proven playbook.[6]

Action 3: Adopt a growth mindset

In downturns, resilient companies seize the opportunity to distance themselves from competitors through investments in strategic growth.[7] This strategy is doubly necessary in healthcare, where profit pools are rapidly shifting—in many cases, away from the core segments of the sector's incumbents.

Unfortunately for those incumbents, the competition for attractive profit pools is fierce. Increasingly well-capitalized disruptors, for example, are rapidly deploying new business models to capture the fastest-growing and highest-margin segments. These disruptors are often unburdened by legacy constraints, bureaucracy, or the need to manage a separate core business. Some are backed by substantial venture-capital and private-equity funding. As a result, disruptors often get to market faster than incumbents accustomed to incrementally evolving business models.

But incumbents do not have to cede these opportunities. Although disruptors may have speed, incumbents may have their own natural advantages. These include existing relationships and the trust of patients and members, the ability to quickly scale up what works across markets, time-honed operational discipline at scale, and, in some cases, opportunities for diversified growth to strengthen the core business as well.[8]

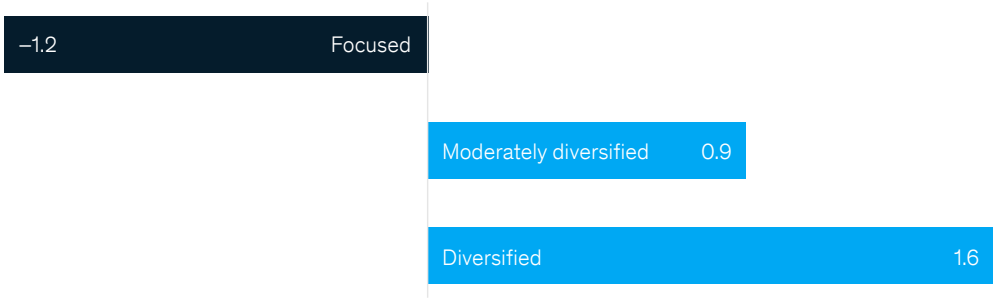
Several incumbents have already begun to see success through diversification. Large payers, for instance, have created diversified business units operating in care delivery, data and analytics, pharmacy services, care and utilization management, and other technology and service businesses. Some providers have created very profitable units to manage revenue cycles and enable value-based care. Our analysis has shown that diversified healthcare companies can deliver higher returns. Although this analysis is based on the returns of publicly traded companies, in our experience private not-for-profit healthcare organizations also often see financial benefits from diversification (Exhibit 4).

Where exactly might the sector's leaders look for growth? For providers, profit pools are continuing to shift away from core acute-care segments and facilities[9] and toward higher-value, lower-cost ambulatory, virtual, and home sites for care. These changes are driven by the preferences of patients and physicians and by sectoral shifts, including the increased adoption of value-based care models. Many health systems are already far along in developing a robust ambulatory foot-

Exhibit 4

Diversified healthcare companies are rewarded for better meeting the complex healthcare needs of the market.

Excess total shareholder returns 2007–17,[1] %



[1]The analysis included more than 300 healthcare companies globally. Each company was categorized based on the proportion of its 2017 revenue derived from sources outside its core business. "Excess total shareholder returns" is calculated as a company's total shareholder returns (TSR) minus a reference TSR.
Source: McKinsey Growth Beyond the Core Healthcare analysis

print. Still, in these spaces it will probably be important to focus on buying, building, or partnering with innovators—for example, primary-care disruptors, risk-bearing management service organizations (MSOs), and virtual-care companies (Exhibit 5).

Payers face a similar imperative to diversify and reinvent their business models. Profit pools are shifting away from individual, small-group, and administrative-services-only insurance plans and toward government segments: the Medicaid, Medicare Advantage, and Medicare supplements segments are forecast to grow at a CAGR of more than 10 percent through 2025.

Moreover, the most successful managed-care models increasingly center on value-based–care arrangements with meaningful risk, the orchestration (and sometimes ownership) of nonacute care (for example, through risk-bearing MSOs), the integration of pharmacy services, and member engagement across the care journey. These models are improving costs, the quality of care, and the experience of members while expanding the total profit pool for payers. Our research has found that payers investing in such next-generation managed-care models achieve higher financial returns than their peers by delivering better value to the healthcare system.[10]

To succeed in achieving diversified growth, organizations need a set of competencies that may be new—and different from those required in the day-to-day business. These new competencies include programmatic M&A, partnerships, effective integration, and rapid business building.

Programmatic M&A and partnerships. Two decades of McKinsey research across sectors shows that programmatic M&A is more likely than large deals to deliver excess TSR at lower levels of risk.[11] In healthcare, most innovative companies are small or midsize, and programmatic M&A is often the optimal approach for diversifying efficiently or for acquiring the capabilities needed to reinvent business models. Many of these assets are in high demand and command high multiples that may place them out of reach for all but the largest players. But even when an acquisition isn't feasible, a range of partnership models could be structured to achieve as much value as M&A. These models typically require at least as much attention to derive value and must avoid a range of common pitfalls that derail negotiations and the long-term capture of value.[12]

Effective integration. Although the transformation playbook is essential to unlock value in the ordinary course of business, it is particularly salient during M&A inte-

grations, to ensure that the anticipated value of the deal thesis is realized.[13] Further, programmatic acquirers need to develop an integration competency that is "always on" and makes it possible to scale up and integrate an acquired company's core operations quickly.

Rapid business building. Across sectors, business building is a top priority for growth, and healthcare is no exception.[14] Developing a strong business-building capability may prove essential if attractive acquisition targets or potential partners do not exist or are not economical and the skills and experiences required to rapidly scale a new enterprise are quite different from the typical capabilities of healthcare incumbents. Business building is also essential when large incumbents buy innovative small to midsize companies but need to enlarge them many times over to handle the scale of the incumbents' volume. However, the skills and experience required to scale a new enterprise rapidly are quite different from those typical of healthcare incumbents.

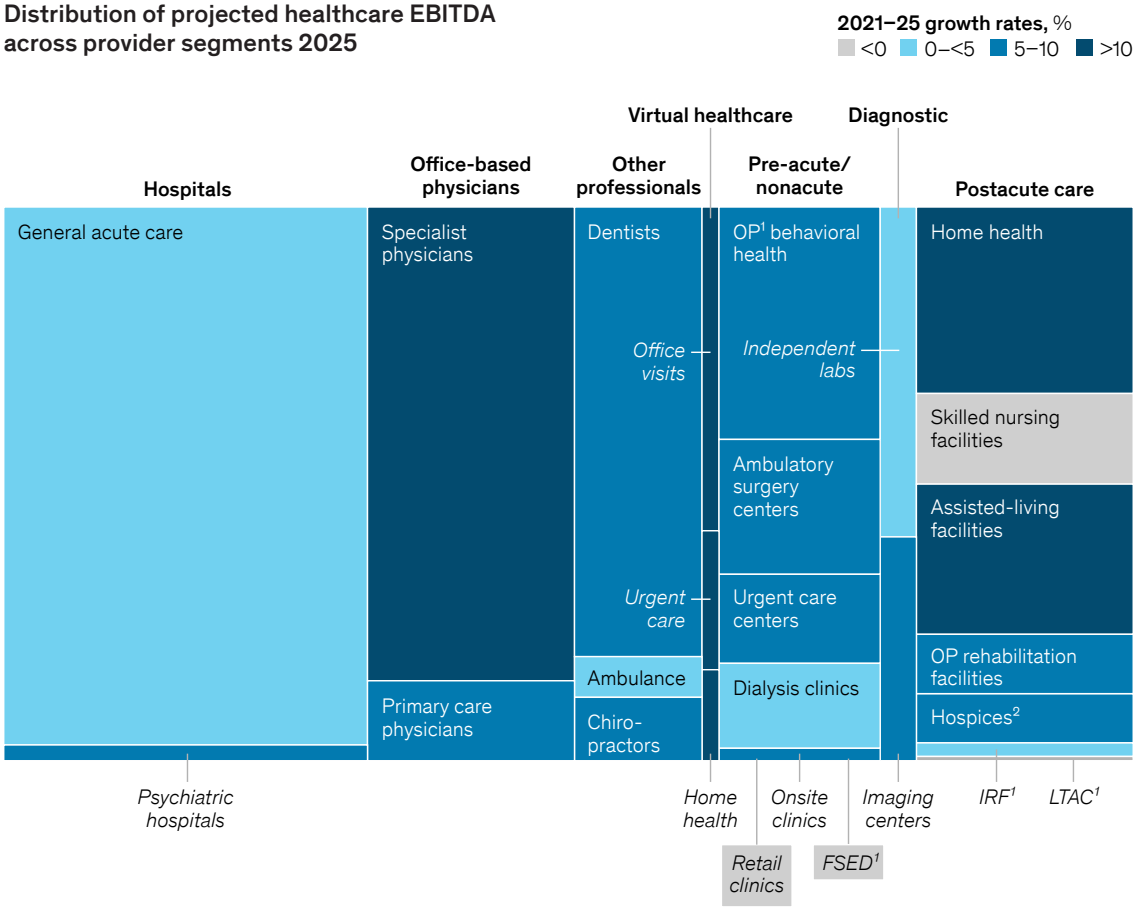
Action 4: Reallocate constrained resources

Our research shows that across economic contexts, companies that actively reallocate

Exhibit 5

For providers, profit pools continue to shift away from core acute-care segments and facilities.

Distribution of projected healthcare EBITDA across provider segments 2025



[1] FSED, freestanding emergency department; IRF, inpatient rehabilitation facilities; LTAC, long-term acute-care hospitals; OP, outpatient.
[2] Hospice includes palliative care centers.
Source: McKinsey Profit Pools Model

resources outperform those that don't.[15] In challenging times, such a reallocation is more important than ever. Many organizations struggle to reallocate at the necessary pace. Successful reallocators follow a tested portfolio of processes that aim to seed high-growth areas with the resources necessary to succeed, while avoiding retrenchment in the core business.

Maintain absolute clarity on the objectives for capital allocation. The most successful reallocators take a clean-sheet, not incremental, approach to allocating strategic (as opposed to maintenance) capital. They focus on identifying the minimum allocation of maintenance capital to sustain the core business.

Take a dynamic approach to budgeting. To act quickly when markets shift or new opportunities arise, organizations should see budgets as rolling, not fixed. Remove budget anchors to avoid rubber-stamping the same allocations every year. And have clear ground rules for early termination to stop underperforming projects.

Align talent to value. Ensure that the best talent focuses on the most important growth areas.

To sum up, four sets of actions will help the healthcare sector weather the storm and outperform through the recovery. First, assess the speed of your organization to ensure that you can make hard decisions faster than your peers do. Second, launch (or recommit your organization to) a bold performance transformation that protects the core business, create business optionality on the balance sheet, and prepare to reinvest in growth.

Third, do invest in growth proactively through programmatic M&A and partnerships, effective integrations, and rapid business building. Put a particular focus on diversification and innovative business models aligned with the $1 trillion opportunity. Finally, reallocate organizational resources to realize the value creation agenda—for example, by taking a clean-sheet approach to capital and budget allocations.

The opportunities are known and the approaches we describe are proven. The imperative is strong leadership. Healthcare leaders must set clear priorities, adopt proven approaches for the necessary transformation, use M&A, build new businesses, and inspire action.

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[1] This opportunity does not reflect any changes to baseline trends in the social determinants of health or personal health-promoting behavior. Any improvements in these areas would be incremental.
[2] Martin Hirt, Kevin Laczkowski, and Mihir Mysore, "Bubbles pop, downturns stop," McKinsey, May 21, 2019.
[3] Ibid. This analysis is based on the returns of publicly traded companies, which are used as a proxy for performance across a downturn.
[4] Aaron De Smet, Elizabeth Mygatt, Iyad Sheikh, and Brooke Weddle, "The need for speed in the post-COVID-19 era—and how to achieve it," McKinsey, September 9, 2020.
[5] "Bubbles pop, downturns stop," May 21, 2019.
[6] Michael Bucy, Bill Schaninger, Kate VanAkin, and Brooke Weddle, "Losing from day one: Why even successful transformations fall short," McKinsey, December 7, 2021.
[7] Neha Patel and Shubham Singhal, "The future of US healthcare: What's next for the industry post-COVID-19," McKinsey, July 19, 2022.
[8] Annie Kurdziel, Prashanth Reddy, and Lara Sanfilippo, "Transformative healthcare growth through diversification," McKinsey, August 9, 2019.
[9] For example, the EBITDAs of general acute-care hospitals are expected to increase at a CAGR of less than 5 percent through 2025. The EBITDAs of skilled nursing facilities, inpatient rehabilitation facilities, and long-term acute-care hospitals are expected to decline over the same period.
[10] Emily Clark, Jennifer Rost, and Anna Stolyarova, "Innovation and value: What payer-led managed-care models may look like," McKinsey, December 2, 2021.
[11] "How one approach to M&A is more likely to create value than all others," McKinsey, October 13, 2021.
[12] "Overcoming the cost of healthcare transformation through partnerships," McKinsey, August 11, 2022.
[13] "Unlocking value in large-deal healthcare M&A: How to achieve transformation during integration," McKinsey, September 14, 2021.
[14] Ari Libarikian and Shubham Singhal, "Leap to the future of healthcare: Reinvent through business building," McKinsey, April 9, 2021; Shaun Collins, Ralf Dreischmeier, Ari Libarikian, and Upasana Unni, "Why business building is the new priority for growth," McKinsey, December 10, 2020.
[15] Massimo Garbuio, Tim Koller, and Zane Williams, "Admit it, your investments are stuck in neutral," McKinsey, July 10, 2019.

Something's coming: How US companies can build resilience, survive a downturn, and thrive in the next cycle

Stephan Görner, Arvind Govindarajan, Ezra Greenberg, John Kelleher, Ida Kristensen, Linda Liu, Asutosh Padhi, Alex Panas, and Zachary Silverman

September 16, 2022

The US economy continues to throw off mixed signals. But one thing is becoming clear: executives should prepare for an extended period of higher interest rates.

Since our July 28 article, the US economy has produced another confusing batch of signals. Start with the good news: Q2 GDP was revised higher, consumer sentiment moved a touch higher, Q2 corporate profits rebounded (rising 6.1 percent in the quarter, after falling 2.2 percent in Q1),[1] headline and core inflation moderated slightly, and two new regulations (the Inflation Reduction Act, and an executive order to forgive student loans) were signed, aimed at helping companies and households.

But it's not all sweetness and light. An August survey of CEOs found that 81 percent of leaders expect a recession.[2] And while the upward revision in Q2 GDP is welcome, the –0.6 percent reading is precisely in line with McKinsey Global Institute's downside scenario. The latest report on job openings showed that the labor market remains white hot. While more people are rejoining the workforce, that's both good and bad news: more workers could ease labor shortages but also create more demand, stoking inflation.[3] In addition, the Bureau of Labor Statistics' latest consumer price index indicated that core inflation has increased. For a complete wrap-up of all the US and global economic news, see "Global Economics Intelligence executive summary, August 2022."

Amid all the uncertainty, one trend has been consistently clear: the US Federal Reserve's stated commitment to fighting inflation, using the tools at its disposal—higher rates and "quantitative tightening." As Fed chair Jerome Powell said, the Fed's "overarching focus right now is to bring inflation back down to our 2 percent goal. Price stability is the responsibility of the Federal Reserve and serves as the bedrock of our economy. Without price stability, the economy does not work for anyone."[4]

The clarity and commitment may have reassured some executives. But not all have yet come to terms with the scale of the effort required. It might take years to reduce inflation to the Fed's target level. Consider these comments from the head of the Federal Reserve Bank of New York: "I think inflation expectations are well anchored. We've communicated over and over and over again our commitment to achieve that 2 percent goal … Today we're very clear on that … the situation is very

challenging. Inflation is very high. The economy, like I said, has a lot of cross-currents. I do think it'll take a few years, but we're going to get that done."[5]

What does that mean for US companies? It's likely that the private sector is entering a new era of "higher for longer" interest rates and cost of capital. The good news, such as it is, is that higher rates, while unpleasant and potentially painful, are becoming less of an uncertainty and more of a sure thing. Companies need to draw on the proven playbook for success in a world of slower growth, higher inflation, and more expensive capital. That's a big switch from the activities of the past several months, when many management teams have been putting out fires, so to speak—finding fixes for problems like rapidly rising costs for raw materials and labor. And as Fed chair Powell indicated, it won't be easy—the switch to a higher-for-longer environment "will bring some pain to consumers and businesses."[6]

In this update, we'll look at two new McKinsey research efforts (one on consumers, one on corporates) that point up the ways that consumer behavior is affecting corporate profits and will likely continue to do so. We'll close with some notes from the field on what we see companies doing today, and four strategies that can help companies thrive in a higher-for-longer world.

Higher for longer: The risk of entrenched inflation

How high, and for how long? Those are quickly becoming the questions of the day. On the first, our recent work with hundreds of US companies suggests that executives should not worry about whether the next rate hike is 75 basis points or something else. It's the terminal rate that counts, and how long rates remain there, since a quick pivot seems unlikely. Many economists currently expect the Fed's key lending rate to top out at about 4 percent or slightly higher, which equates to a prime rate of about 7 percent.[7]

On the second question, history provides some guide. Alan Blinder of Princeton University notes that of 11 rounds of Fed tightening since 1965, one lasted three years, most lasted from one to three years, and only one was over in less than a year.[8] All but three resulted in an official recession, and only one qualified as what Blinder calls a perfect soft landing.

The difference between one year and three or four is enormous, of course. The key distinction between a quick resolution and a drawn-out battle is the degree to which inflation has become entrenched in consumers' and business leaders' minds. Two new McKinsey research efforts point up the challenges some companies face in a higher-for-longer world.

Consumers: Seeing inflation everywhere

When we surveyed 4,000 US customers in July, they were alarmed at the rapid onset of inflation (Exhibit 1).

It's no wonder that consumers are somewhat shell-shocked. When we look across the broadest measures of consumer spending on goods and services, we see that inflation is widespread—over the past 12 months, prices have increased in more than 90 percent of categories, a rate of diffusion not seen since the 1970s (Exhibit 2).

Not only does this create challenges on its face, but, as our colleagues identified in their recent consumer survey, consumers' perceptions of inflation may even exceed the rate of inflation itself. One potential implication of these facts and perceptions is that higher inflation may become entrenched in consumers' outlooks—precisely the phenomenon that the Federal Reserve seeks to avoid.

All in all, it's a daunting outlook. Consumer sentiment rose very slightly in August but remains at an all-time low (Exhibit 3).[9]

Corporations: The forward-looking view on profits

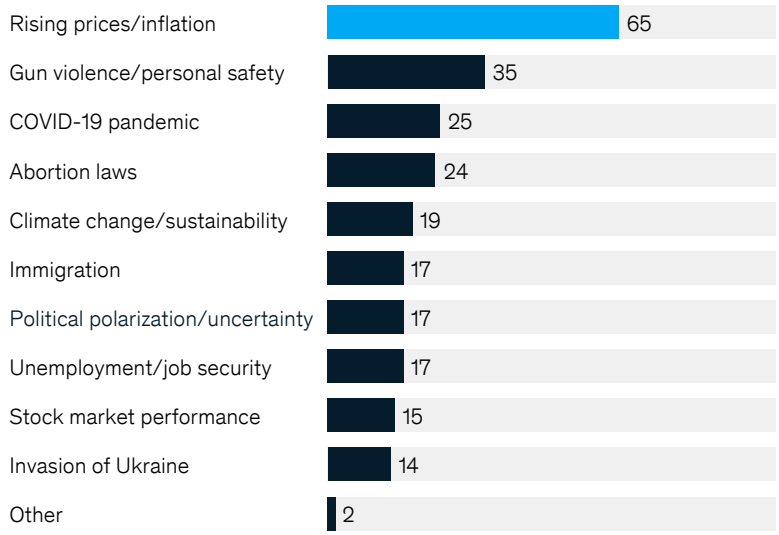
As companies reported their earnings from the second quarter, it was evident

that changing consumer behaviors are hurting results, especially among consumer-facing sectors. What comes next? We looked into equity analysts' most recent estimates of both revenue and earnings for the full year 2022 and compared with their estimates from the beginning of the year (Exhibit 4). On the revenue side, we found that the median analyst expects the trend (materials and commodities up, consumer companies down) to persist. Since equity analysts think about this in nominal terms

Exhibit 1

Two-thirds of US consumers are concerned about inflation.

Top 3 concerns,[1] % of respondents

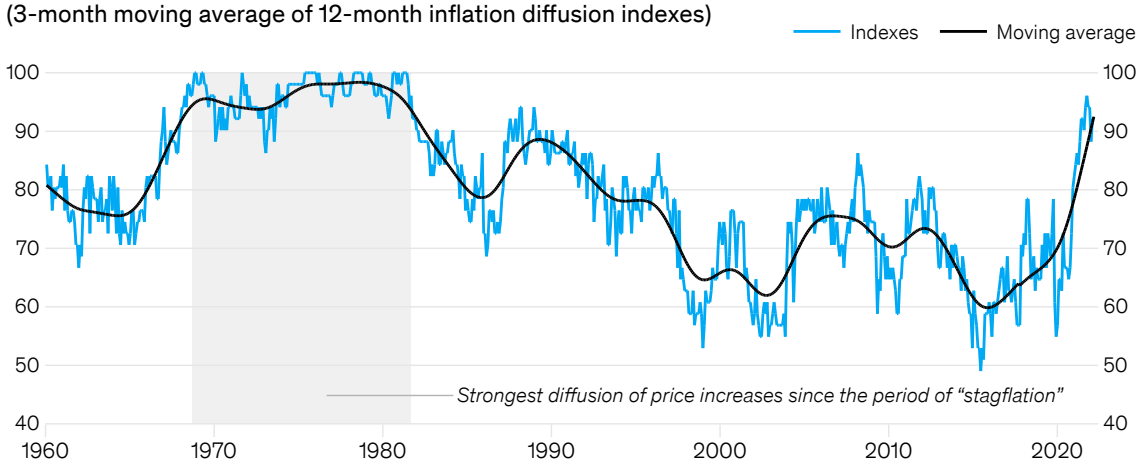


[1] Question: What are the greatest source(s) of concern for you right now? (Choose as many as 3 from provided list of options.)
Source: McKinsey US Consumer Pulse Survey, July 6–10, 2022; n = 4,009 sampled and weighted to match the US general population 18+ years

Exhibit 2

Pricing pressures have spread across more than 92 percent of consumer spending categories.

Consumer spending categories with price increases over previous year through June 2022, % share (3-month moving average of 12-month inflation diffusion indexes)



Source: Federal Reserve Board of San Francisco; SGH Macro Advisors; US Bureau of Economic Analysis; McKinsey analysis

(that is, not adjusting for inflation), this also held true across many other industries, perhaps as pass-through inflation costs outweigh volume declines.

The story on earnings, however, is far bleaker. The median analyst expects EBITDA margins to decline in all but a handful of industries. Not only do analysts expect that consumer-facing industries will face pain but they also expect that this pain will ripple through most other industries as well. Making matters worse, this measure of earnings does not even account for higher borrowing costs.

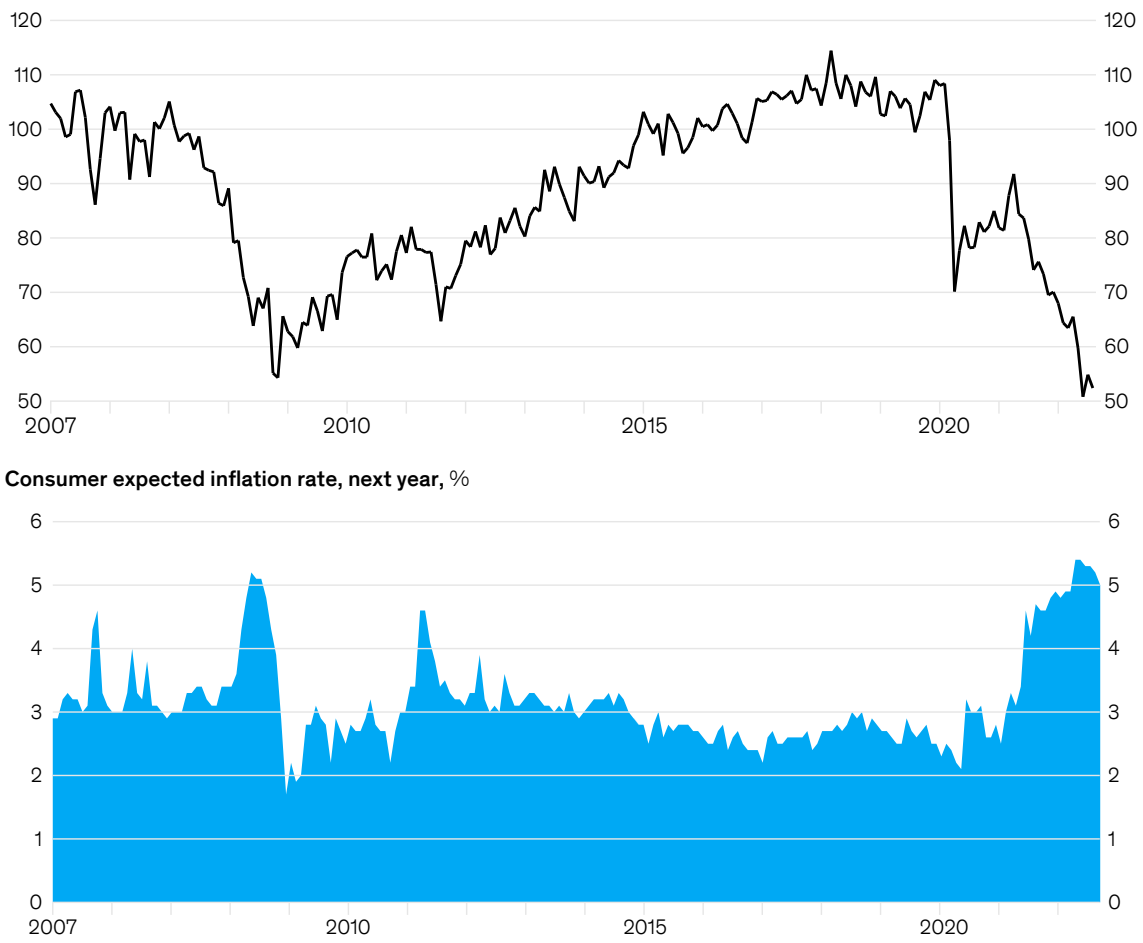
Operating in a higher-for-longer world

We've seen companies take many of the short-term moves our colleagues outlined in their playbook for inflation. Some of the most common include pricing adjustments and managing exposure to input costs. Some companies are also taking action on operating expenses. These short-term moves can help many companies. But they're more like firefighting than putting in fire-resistant materials—and in a higher-for-longer environment, companies should also be thinking about more structural solutions that not only manage costs but

Exhibit 3

Consumer sentiment remains at an all-time low; expectations of inflation remain near an all-time high.

Consumer sentiment and consumer expected inflation rate through August 2022

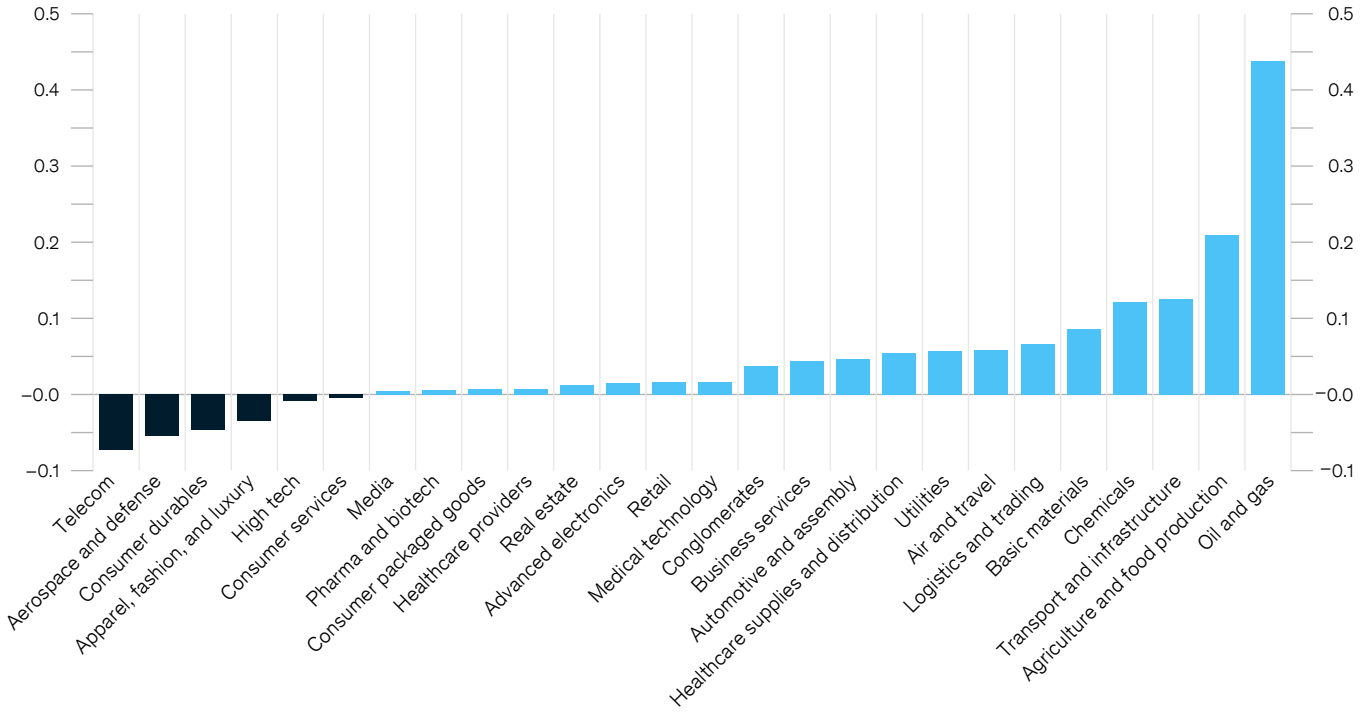


Source: University of Michigan; McKinsey analysis

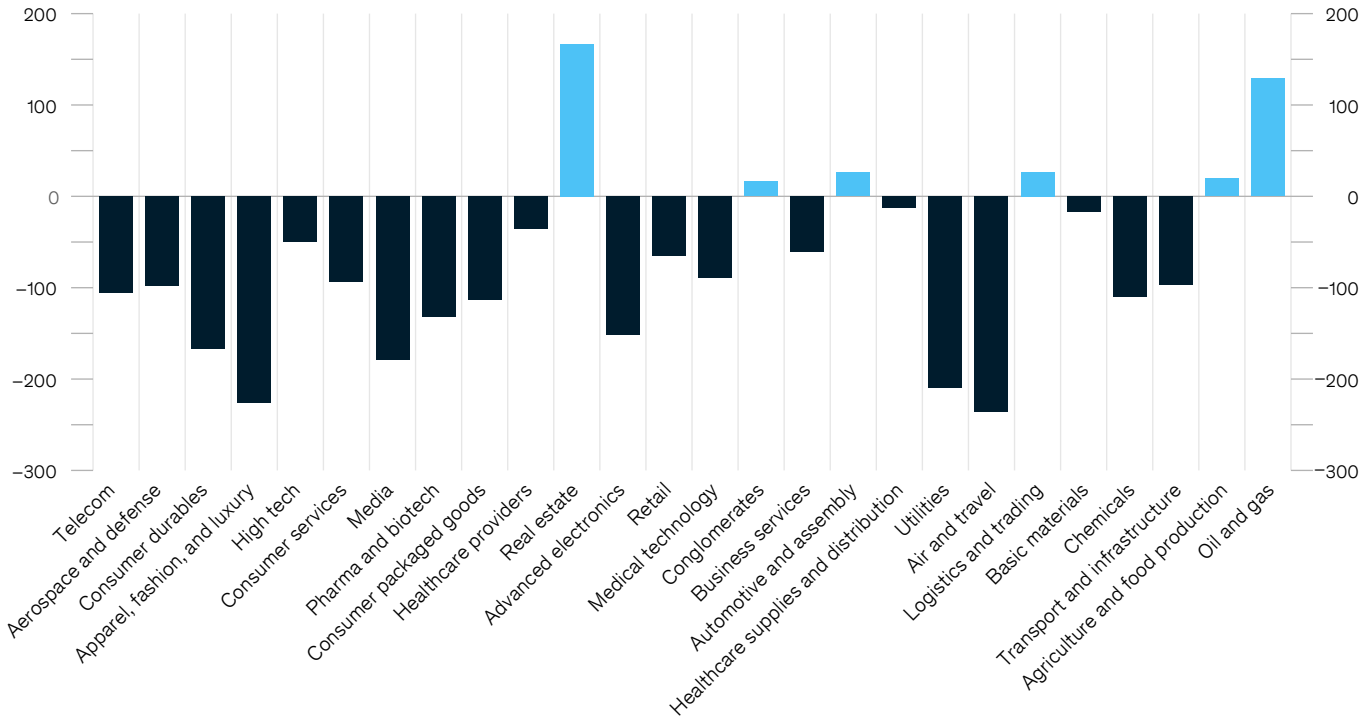
Exhibit 4

Analysts expect revenues to rise broadly, but earnings to fall.

Median analyst expectations of revenue margin, Aug 2022 vs Dec 2021,[1] % change



Median analyst expectations of EBITDA margin, Aug 2022 vs Dec 2021,[1] % change



[1] Data set includes top 1,000 US companies by market cap in 2021, excluding financial and insurance companies and some subsidiaries, holding companies, and companies that have delisted since; calculated using weighted average YTD local currency.

Source: S&P Global; McKinsey Strategy & Corporate Finance Insights; Corporate Performance Analytics by McKinsey

also build resilience and can drive long-term value creation. Here we offer four themes that business leaders can consider. It's a complex and difficult program and will require leaders to build new strengths to see it through. But the payoff will be worth the effort and investment.

Growth: Opting in. Growth is always a top priority for C-level executives but remains elusive for many. In fact, about a quarter of companies don't grow at all, often because leaders don't look widely for growth opportunities and then hedge their bets, often zeroing in on just a couple of initiatives. Inflation and the rising cost of capital have made it even harder to know where to invest. In an economic moment like this, a structured approach to growth is paramount.

Outperforming executives break the powerful force of inertia by prioritizing growth, a choice that shapes behavior, mindset, risk appetite, and investment decisions across the organization. Intriguingly, our research shows that growth-oriented leaders react decisively to shorter-term disruptions that can be turned into opportunities—what we term "timely jolts"—and build organizational resilience and agility to respond to change and leverage disruption. A higher-for-longer environment is exactly the kind of jolt to growth that leading companies recognize and take advantage of.

Talent: Closing supply–demand gaps. Even in this environment, many companies are still hiring. But our research indicates that talent pools in many industries are drying up as employees quit to enter other sectors, go after nontraditional opportunities such as gig-economy work, or leave the workforce altogether. Shortages of digitally savvy workers are especially acute: in our recent survey, nearly 90 percent of C-suite executives said they don't have adequate digital skills.

Leading companies are taking several approaches to strengthen their workforces. Many have sought to motivate workers with more meaningful assignments and better opportunities for career advancement. Often, these approaches go hand in hand with training in skills that are hard for companies to find. Some companies are choosing to deemphasize (or discard) requirements for education and relevant experience and hire people from unconventional backgrounds—other industries, adjacent majors, overlooked colleges and universities—who are ready to learn. We're also seeing businesses streamline their hiring processes and enhance candidate experiences to attract more applicants and lift conversion rates.

Evidence also suggests that improving workers' emotional experience on the job can do more for retention than employers might expect. McKinsey surveys of managers and employees found that employers often fail to understand just why workers leave their jobs. In particular, employers tend to overrate "transactional" factors such as pay and development and underrate the "relational" elements—a feeling of being valued by managers and the organization, the companionship of trusting teammates, a sense of belonging, a flexible work schedule—that employees say matter most. Companies that successfully create this kind of meaningful purpose can benefit from greater organizational cohesion and resilience.

Sustainability: Staying the course. In a slowing economy, with margins under pressure and the cost of capital sharply higher, should companies invest in sustainability? Our answer is yes. In an economically constrained environment, a through-cycle view on sustainability can be a lever for companies to build resilience, reduce costs, and create value.

Companies in hard-to-abate sectors can protect their core by building resilience against transition risks. Putting an accurate price on the current volatility of fossil fuel prices could make sustainability investments more economical. And transitioning to greener asset and product portfolios

can protect against customer attrition as standards continue to tighten. Further, in a slowing economy, a strong sustainability strategy can accelerate growth by creating value. Companies may adjust their business portfolios to capture larger shares of segments with major green growth potential, while others may launch new green businesses altogether. Green products and value propositions may also allow companies to differentiate themselves and gain market share or seek price premiums.

Supply chain: Rebuilding for resilience and efficiency. For many leaders, the COVID-19 pandemic revealed a painful truth about modern approaches to managing supply chains: engineering these vast systems for high efficiency had introduced vulnerabilities. Operational weaknesses such as overreliance on certain suppliers, scant inventories of critical products, and overstretched production networks left companies exposed to shortages and disruptions. Many supply chain leaders declared intentions to make supply chains more resilient, and many did so—though often in the most expedient way possible, by building inventories. Companies can take other, more complex moves to build resilience. For example, our experience suggests that reconfiguring supply networks cut costs by 4 to 8 percent.

Moreover, companies can both build resilience and extract additional savings from already-lean supply chains. We've found that a careful assessment of supply chain vulnerabilities can reveal opportunities to lower spending with high-risk suppliers by 40 percent or more. Adjusting transportation modes and routes and distribution footprints around trade tensions, tariffs, possible customs-clearance problems, and likely disruptions can also lower transportation costs by some 25 percent. Then there are the benefits of refreshing products with modular designs that involve easy-to-find components rather than highly customized ones. This can result in margin expansion of 25 percent, while lessening the risks that come with depending on just a few suppliers.

The plot thickens. As contradictory evidence pours in, the US economy remains too tricky to forecast easily. Companies should rely on scenario planning and prepare a set of long-term moves that will help them thrive in a higher-for-longer environment.

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