McKinsey & Company

Healthcare Practice

McKinsey on healthcare: Innovate to thrive

A selection of articles from 2023

December 2023

McKinsey on healthcare: Innovate to thrive is published by McKinsey's Healthcare Practice.

McKinsey & Company
Healthcare Practice
500 Woodward Avenue, Suite 2850
Detroit, MI 48226

The mission of McKinsey's work in the social, healthcare, and public sectors is to help measurably improve lives, livelihoods, and health and create resilient communities around the world.

Transforming health systems is an essential part of this mission. We are committed to supporting private and public healthcare leaders to improve the affordability, accessibility, quality, and experience of healthcare.

Global leader, Social, Healthcare, and Public Sector Entities Practice: Shubham Singhal
Global leader, Healthcare Practice and McKinsey Health Institute: Drew Ungerman
Editor: Gwyn Herbein
Assistant editor: Julia Anderson Bauer
Art director: LEFF
External relations: Sharmeen Alam and Anna Dirksen
Lead reach and relevance partners: Scott Blackburn and Nikhil Sahni
Cover image: -strizh-/Getty Images

"Investing in the new era of value-based care," by Zahy Abou-Atme, Rob Alterman, Gunjan Khanna, and Edward Levine, copyright © 2022 by McKinsey & Company.

"The gathering storm: The uncertain future of US healthcare," by Addie Fleron and Shubham Singhal, copyright © 2022 by McKinsey & Company.

Image on pages 12–13: © RapidEye/Getty Images, image on pages 38–39: © Jose A. Bernat Bacete/Getty Images, image on pages 66–67: © ko_orn/Getty Images, image on pages 80–81: © oxygen/Getty Images

This publication is not intended to be used as the basis for trading in the shares of any company or for undertaking any other complex or significant financial transaction without consulting appropriate professional advisers. No part of this publication may be copied or redistributed in any form without the prior written consent of McKinsey & Company.

Copyright © 2023 McKinsey & Company. All rights reserved.

What’s ahead for US healthcare in 2024

Uncertainty has been the norm in healthcare in 2023, and that’s not likely to change in 2024. A presidential election year looms in the context of pressure on federal government finances from large budget deficits and the impact of higher interest rates on federal debt servicing costs. In addition, the healthcare industry faces uncertainty about the financing of Medicare and Medicaid; regulation, including views about horizontal and vertical integration; and overall industry economics.

In the face of this uncertainty—some might call it opacity—discerning senior management teams can act on a few trends that are clearer. Some of the trends and possible responses germane to strategy and performance of your organizations are highlighted below.

What’s ahead for healthcare players: An overview

We outlined in 2022 how the gathering storm fueled by inflation and workforce shortages would put pressure on healthcare over the next few years. Indeed, the pressure on healthcare leaders continues unabated. In response, industry players will have to consider repositioning their businesses as well as gearing up to ensure superior business performance:

— Hospital systems face a 200-basis point gap between reimbursement rates and cost inflation, according to McKinsey analysis. The gap could require performance transformations on the part of health systems, including more outsourcing, ramping up digital and automation efforts, and business rationalization.

— In 2024, employers are facing rising health insurance premiums well above their comfort zone of annual increases of less than 4 percent.[1] As payers see continued increases in medical costs and accelerating prescription drug costs, this pressure will require health plans to renew focus on medical and administrative cost control.

— These cost pressures offer many opportunities for tech-enabled services companies that can show customers near-term return on investment from their products. At the same time, many healthcare services and technology companies without demonstrable return will face severe downside to their businesses.

— Higher interest rates and less liquidity in the financial markets have raised the hurdle rate for private equity (PE) and venture capital firms. In these circumstances, private investors must ensure their portfolio companies deliver bottom-line performance, produce organic growth backed by proven business models, and have the ability to make any inorganic growth accretive based on robust capabilities. Large, well-capitalized healthcare companies will find a favorable valuation environment for acquiring PE portfolio companies as well as for forming strategic partnerships with private investors.

What’s ahead for payers

Payer value creation continues to shift from administering health benefits and providing insurance to managing care and capturing delivery and pharmacy economics. Partnering with and enabling physicians, likely in risk-based arrangements, will continue to gain in importance relative to other models of utilization management.

As pressure from rising medical and prescription costs mount, scaling proven physician partnership models (for example, primary care–centered value-based care) as well as innovating

new ones (specialty benefit management and specialty value-based care) will grow in importance. Enhancing health outcomes and members' care experience, prompted by both the incentives in government programs but also rising demand from employers, will be important priorities.

Finally, a renewed focus on reducing administrative costs will be high on the agenda for payers to ensure sustainable margins, offer a better experience for members and clinicians, and to free up resources to invest in strategic capabilities.

What's ahead for health systems

Healthcare delivery will continue its restructuring. The definition of at-scale systems has changed in the past few years; today, it takes more than $13 billion to be a top-20 system by revenue, and many have reached their current position through inorganic growth, according to McKinsey analysis. The recent wave of M&A, however, is distinct from its predecessors. It is characterized by cross-geography deals designed to create value by scaling investments in platform capabilities across digital, analytics, shared services, and workforce management.

Beyond scale, sites of care have shifted increasingly from the hospital to ambulatory, home, and virtual care. This trend was playing out before the COVID-19 pandemic and was certainly accelerated by it. But the pivot toward ambulatory sites has been slower than expected, given the impact such a transition has on health system revenue, among other structural issues. Disruptors are vying to meet consumers' demand for convenient access, but patients can be stuck navigating a complex system of healthcare organizations when their needs become more acute.

In parallel, health systems have struggled to fill their clinical workforce needs. The nursing shortage has become more acute: more than 100,000 nurses left the profession from 2019 to 2022, and health systems could face a shortage of 200,000 to 450,000 nurses by 2025.[2] Anticipated physician shortages are also an issue, though health system employment of physicians has slowed. Regulation (for example, price transparency and the 340B drug pricing program) and rising costs of capital (due to macroeconomic factors as well as ratings trajectories) will continue to create uncertainty.

While health system performance has generally improved over the past year as the industry emerges from the pandemic, a subset of players is really shining. Those that appear to be breaking away are hyperfocused on resilience, taking a multilever approach to growth while continuing to identify and take actions to ensure sustainable margins.

What's ahead for artificial intelligence in healthcare

Generative artificial intelligence (gen AI) has created considerable excitement in the industry. Gen AI could be catalytic in accelerating the application of digital and automation in healthcare, thereby offering some answers to the twin challenges of affordability and workforce availability. For example, adopting currently available technology (including but not limited to automation, AI, and gen AI) could allow payers to reduce administrative costs by 13 to 25 percent, reduce medical costs by 5 to 11 percent, and increase revenue by 3 to 12 percent.

However, healthcare has lagged behind other industries in the adoption of AI. For several reasons, the industry has had a hard time adopting the technology. For example, AI requires time-consuming and often manual preparation of clean and structured data; well-planned, narrow use cases (such as predicting a specific event or outcome); modern infrastructure; and hard-to-hire talent (such as data scientists and data engineers).

Given the need for empathetic and intelligent interactions in a service industry such as healthcare, the recognition, comprehension, and content creation capabilities of gen AI represent a major opportunity. It is particularly appealing in its simplicity: gen AI thrives on unstructured data, which is plentiful in healthcare; it is pretrained; and it is broadly understood by people across the organization. The potential use cases for gen AI cross every domain and function. Gen AI use cases, in addition to existing analytics use cases, could help address real burdens, including reducing preparation time and improving quality of clinical documentation, modernizing outdated or legacy applications, and personalizing patient and member outreach at scale.

Unlocking this value will be a leadership challenge. Senior healthcare executives will need to educate their boards, leadership teams, and employees; attract talent; drive adoption; and pursue change management initiatives such as workflow shifts. Scaling pilots to production-scale solutions with concurrent process changes will be important differentiators in 2024.

What's ahead in prescription drugs

GLP-1 drugs hold the promise of treating type 2 diabetes (in 11 percent of the US population; 38 percent of the population has prediabetes[3]) and obesity (42 percent of adults[4]), potentially helping to avoid many other ailments, such as heart and chronic kidney disease. The population of patients meeting clinical eligibility criteria for GLP-1s is one of the largest of any new drug class in the past 20 to 30 years.

Although there is much to be excited about, experience shows that taking advantage of medical advances is often elusive in healthcare. GLP-1s must be taken consistently to maintain weight loss; however, initial studies indicate persistency and adherence to therapy is poor (32 percent of members remain persistent at one year and 27 percent during the second year[5]).

Nonetheless, the shift in care and financing models that accompany GLP-1 drugs are likely to be material. The growth of the GLP-1 market has amplified the conversation around preventive care and demonstrated the impact of media awareness and consumer-driven demand in treatment decisions. Its expansion has also fueled the rise of telehealth providers, broadening access points for consumers.

The growth of the GLP-1 market presents cost challenges in the near term because benefits will accrue over time. The annual wholesale acquisition cost per patient ranges from $12,000 to $16,000. The high cost of the therapy raises complex coverage decisions for payers and plan sponsors, made even harder by the potential spending waste from therapy discontinuation.

GLP-1 drugs are not the only broad population drugs emerging or in the late-stage pipeline; others include treatments for Alzheimer's and non-alcoholic fatty liver disease. New drugs have the potential to not only improve patients' health but also heighten the need for better therapy and cost management. The resulting business model changes across the healthcare value chain are likely to be meaningful.

In this compendium, we offer an overview of what's to come in 2024 for payers, health systems, and health services, as well as a selection of articles from 2023 on these sectors. We hope that they shed light on the challenges and opportunities your organizations face.

Sincerely,
Shubham Singhal and Drew Ungerman

Shubham Singhal is the global leader of McKinsey's Social, Healthcare, and Public Entities (SHaPE) practices and **Drew Ungerman** is the global leader of McKinsey's Healthcare Practice and the McKinsey Health Institute.

[1] Kathryn Mayer, "Aon report: Big increase projected for 2024 employer health care costs," SHRM, August 29, 2023.
[2] Gretchen Berlin, Meredith Lapointe, Mhoire Murphy, and Joanna Wexler, "Assessing the lingering impact of COVID-19 on the nursing workforce," McKinsey, May 11, 2022.
[3] *National Diabetes Statistics Report*, Centers for Disease Control and Prevention, accessed November 20, 2023.
[4] "Adult obesity facts," Centers for Disease Control and Prevention, accessed November 20, 2023.
[5] "Real-world analysis of glucagon-like peptide-1 antagonist (GLP-1a) obesity treatment one-year cost-effectiveness and therapy adherence," Prime Therapeutics and MagellanRx Management, July 11, 2023.

Disclaimer: These materials reflect general insight based on currently available information. Future results may differ materially from any statements of expectation, forecasts, or projections. These materials are not a guarantee of results and cannot be relied upon as such. These materials do not constitute legal, medical, policy, or other regulated advice and do not necessarily contain all the information needed to determine a future course of action. These materials are provided "as is" solely for information purposes without any representation or warranty, and all liability is expressly disclaimed. References to specific products or organizations are solely for illustration and do not constitute any endorsement or recommendation. The recipient remains solely responsible for all decisions, use of these materials, and compliance with applicable laws, rules, regulations, and standards.

2024 payers outlook: Opportunities abound

Monisha Machado-Pereira

In 2022, our articles on the gathering storm in healthcare[1] focused on the uncertainty facing the payer sector. While most of the metaphorical storm has passed, its aftereffects should not be underestimated. Looking to 2024, we offer five main considerations for payer executives.

Higher costs—and the promise of generative AI
Payers have noted a rise in utilization spurred by effective but expensive therapies such as broad population drugs (for example, GLP-1s for type 2 diabetes and obesity, and treatments for nonalcoholic fatty liver disease) and high-cost infusion drugs (for example, precision oncology).

Health system labor shortages remain unabated and are unlikely to ease in 2024. We estimate that a $100 billion increase in health system costs could translate into a 9 percent employer insurance rate increase. Cost pass-throughs to employees could result in the most vulnerable members paying more than 75 percent of discretionary income for medical services.

Our analysis shows that even for payers that have undertaken administrative transformations, opportunities remain to further optimize processes using artificial intelligence, including generative AI (gen AI), adjacent automation, and digital technology. The potential reductions in administrative and medical costs, as described by my colleagues in the earlier part of this compendium, show how the rapid pace of adoption of gen AI could have favorable implications for all payers. This could range from health system and benefit contract collation and querying to a more sophisticated request-for-proposal response generation. However, challenges around data privacy, governance, and change management remain. For many payers, the biggest question is where and how to start.

Government business resilience despite constraints
Recent regulatory changes in Medicare rates, risk adjustment models, Stars criteria, and Medicaid redetermination have strained the very businesses (Medicare, Medicaid, and Individual) that have provided a steady source of payer profits and growth.

If Medicare Advantage offers an analogue for the evolution of the Individual segment, the basis of competition may shift from price toward benefits, distribution, and retention. The more established players may therefore displace disruptors, given the depth of their capabilities in those areas.

For Medicare Advantage and Managed Medicaid, relentless execution of established value levers is imperative. Duals (members who qualify for both Medicare and Medicaid) acquisitions and management will be a critical battleground for Medicare Advantage. For Medicaid, our analyses of request for proposals suggest that creating tighter integration with providers through risk-based arrangements and joint ventures could be competitively differentiating.

Pharmacy value-chain complexity driving innovation
Prescription drug purchases are a complicated, frustrating experience for many members. Out-of-pocket spending on prescription drugs will exceed $50 billion in 2023, more than what members pay for hospital care. Despite the benefit structure of a highly shoppable product, choice is limited by difficult-to-transfer prescriptions, network design, and partial price visibility. In many cases, a consumer's drug-cost share exceeds the net price paid by the plan sponsor. Patient out-of-pocket costs on certain drugs can often be set at 25 percent or more of list price, creating significant adherence issues.

Payers could consider working more closely with manufacturers and health systems on alternative payment and financing models (for example, outcome-based or site-neutral payments). Several examples of cost management approaches came to light in 2023: Elevance Health's acquisition of BioPlus to enter specialty pharmacy services, the Blue Cross Blue Shield creation of the Synergie medication contracting organization, and the decision by Blue Shield of California to deconstruct the pharmacy benefit manager value chain and work with partners to move toward net price direct contracting and other models together with pharmaceutical manufacturers.

Reenergizing the administrative-services-only segment
Administrative-services-only (ASO) profitability ranges from negative 5 percent to positive 20 percent EBITDA.[2] For a group of 500 to 2,000 employees, we estimate an average ASO revenue yield differential of about $80 to $120 per employee per month between a leading national and an average regional player. This difference suggests opportunities for greater pricing innovation, comprehensive and tiered product packages targeted to specific customer segments, and corresponding competitive reporting and sales force effectiveness.

Unproven business models paving the way for partnerships at scale
Payers have been experimenting with vertical integration through investments in pharmacies, providers, and alternative sites of care. However, increased value from investments could be realized upon more complete use of and integration with the acquired assets by a plan's members. This has remained elusive. For example, most established payers currently attempting integration have less than 20 percent of their members using their owned provider assets, according to McKinsey analysis. In this case, the payer-agnostic nature of the asset could offer access to new profit pools but without the expected cost benefits of a more integrated model.

For most payers, material M&A transactions are cost-prohibitive. This has resulted in the proliferation of "point solutions." These may be effective viewed individually, but collectively they can be administratively burdensome and can degrade consumer experience. Payers could consider a comprehensive revision of their vendor strategy in favor of building partnerships at scale based on shared risk on outcomes, platform agility, and striving to be a seamless solutions integrator. Those who accelerate and sustain their solutions at scale can not only succeed in the short term but also create a foundation for future growth.

Monisha Machado-Pereira is a senior partner in McKinsey's Bay Area office and leads McKinsey's work with healthcare payers in North America.

[1] "The gathering storm in US healthcare," McKinsey, accessed November 22, 2023.
[2] Based on analyses of health insurers' request-for-proposal responses of public accounts, obtained through FOIA requests, and inputs from benefit consultants.

2024 health systems outlook: A host of challenges ahead

Rupal Malani

As health systems emerge from the COVID-19 pandemic, their focus has shifted from near-term challenges such as demand fluctuations to longer-term implications: an acceleration of secular trends leading to expenses exceeding revenue. Health system revenue rose 12.5 percent from 2021 to 2022 as operating expenses rose 17.2 percent in the same period, according to an S&P Global analysis. This imbalance stems from several industry trends that are putting pressure on inpatient utilization and reimbursement, driving up labor costs, and requiring acquisition of new capabilities.

Key trends in the industry
Health systems are confronting a host of challenges. Among them are increasing competition from nontraditional players, including digital natives, that have more access to capital than incumbents do. These players are cherry-picking attractive patient segments and earning margin by reducing total cost of care, with a primary focus on inpatient utilization. This exacerbates continued pressure from payers on health systems to reduce inpatient utilization and reimbursement.

Also, clinical workforce shortages continue to weigh heavily on health systems. By 2025, we estimate the United States may face a shortage of 200,000 to 450,000 nurses available for direct patient care, equating to a 10 to 20 percent gap.[1] Wage growth for nonclinical roles and inflation more generally are putting additional cost pressure on health systems.

At the same time, stakeholders are demanding new capabilities from health systems. For example, consumers' experience with retailers is forcing health systems to deliver omnichannel experiences, including digital tools such as self-scheduling. Meanwhile, payers are encouraging health systems to move toward value-based care (VBC) arrangements. We estimate that VBC lives will grow from 80 million to 100 million in 2022 to 130 million to 160 million in 2027.[2] This would require health systems to upgrade their risk-bearing capabilities.

Health systems are also closely monitoring regulatory issues, including price transparency requirements and the direction of initiatives such as the US government's 340B drug program.

How healthcare providers are responding
Over the past few years, health systems have focused on managing the pandemic. As the demand on health systems from the pandemic subsides, financial performance of players is diverging. Those that are seeing marked improvement in performance are tightly focused on resilience, including finding efficiencies and taking a multilever approach to growth. These levers range from ensuring the basic blocking and tackling of in-market growth (for example, clinical program

development and care continuity) to diversification of revenue streams (such as investing in ambulatory surgery centers) and monetization of best-in-class capabilities (for example, data and analytics and revenue cycle management).

At the same time, health systems are paying close attention to costs. And they must be intentional about where and how to deploy capital, given the pressure on their balance sheets: S&P Global analysis shows that median days of cash on hand fell from 250 days in 2021 to 209 in 2022 for nonprofit systems. The cost of capital is also rising, which has exacerbated the outlook for health systems: in 2022, ratings actions by the major rating agencies skewed negative by almost 2:1. In 2021, they were essentially even.

Many health systems have undertaken extensive cost transformation programs. While health systems have optimized traditional levers such as commodity supply pricing, they are also focusing on clinical operations (for example, length of stay and throughput in procedural areas such as the operating room), patient access, and talent attraction and retention. As they look for efficiencies, health systems are taking a more holistic view of technology deployment. Many are pursuing end-to-end improvement of processes that drive value for patients and for the business while selectively deploying technologies to promote efficiency and patient experience.

The industry is also in the throes of the biggest M&A wave in more than a decade, with healthcare deal activity having grown 42 percent since 2010, according to our analysis. Unlike past deal waves, this one is characterized by a marked increase in cross-geography deals aimed at shared investment for platform capabilities to weather the turbulence facing the industry.

Rupal Malani is a senior partner in McKinsey's Cleveland office and leads McKinsey's work with healthcare providers in North America.

[1] Gretchen Berlin, Meredith Lapointe, Mhoire Murphy, and Joanna Wexler, "Assessing the lingering impact of COVID-19 on the nursing workforce," McKinsey, May 11, 2022.
[2] Zahy Abou-Atme, Rob Alterman, Gunjan Khanna, and Edward Levine, "Investing in the new era of value-based care," McKinsey, December 16, 2022.

2024 healthcare services outlook: Challenges and opportunities

Neil Rao

Healthcare services comprise a range of organizations, from technology companies and financial sponsors to pharmacies, that focus on the payer and health systems markets. Over the past decade, each of these segments has rapidly grown in number of stand-alone entities and total profit pools. We summarize our views on what 2024 holds for these key segments below.

Healthcare services and technology
Three areas stand out in terms of opportunities and challenges:

Data analytics and artificial intelligence (AI). Generative AI has aroused interest in health services and technology, but use case development and deployment are in their early days.[1] Payers and health systems that have already invested in data analytics (as well as related infrastructure and governance) are beginning to differentiate themselves from competitors. We anticipate a greater focus on use cases that enable clear, near-term operational value—for example, AI that supports more rapid throughput of imaging equipment. Overcoming history, especially with health systems for which investment in technology has underwhelmed in terms of productivity gains, will be essential for health services to fulfill AI's promise.

Outsourcing. Strategic players, especially not-for-profit health systems and payers, are facing financial headwinds. While many are reticent to outsource given the impact on employees locally, the combination of the financial value proposition, rising gaps in capabilities, and the inability to otherwise access required talent is increasingly compelling. Outsourcing transactions often involve legacy processes that benefit from scale and automation (for example, transactional functions such as human resources and finance), but we are also seeing more point solutions and adoption in critical healthcare-specific business functions such as revenue cycle management.

Programmatic M&A. Many healthcare services and technology companies have seen substantial reductions in their most recent valuations. Several have had to shut down or seek alternatives despite cutting R&D spending and loss-leading customer acquisition programs. Strategic and private equity (PE) investors now have an opportunity

to add both talent and capabilities by acquiring these entities on favorable terms; advantageous refinancing for not-for-profit health systems through 2021 may enable not-for-profit health systems to diversify as opportunities arise.

Private equity

Global private equity deal volume in healthcare rose about 8 percent annually from 2017 to 2022. This period includes a material pull-back in 2022, when deal volume fell 37 percent year over year.[2] Nevertheless, healthcare-focused fundraising remained resilient, with the first quarter of 2023 fundraising posting the second-highest first-quarter total on record.[3]

We see the following trends in 2024, especially as industry expectations of valuations and anticipated rates of return continue to reset:

Carve-outs. As healthcare organizations have reduced R&D spending and completed portfolio evaluations in 2023, these strategic players have shown increasing interest in divesting business units that are further away from the core. Simultaneously, PE firms and PE-backed assets have expressed interest in segments with attractive profit pools.

Public-to-private deals. Reduced valuations have increased the potential for opportunistic buying, especially from public assets for which PE has a strong value creation thesis. We expect an increasing number of these proposals to include partnerships between PE and strategic investors.

Pharmacy

The pharmacy market has undergone major changes in recent years, including from the impact of the COVID-19 pandemic, the establishment of partnerships across the value chain, and the introduction of new pharmacy models. Pharmacy dispensing revenue increased by 9 percent in 2022, to $550 billion, and is projected to grow at a 5 percent CAGR, reaching $700 billion in 2027.[4]

Continued pressure on the retail pharmacy. Retail pharmacies will continue to face reimbursement challenges, labor shortages, inflationary pressures, and a plateauing of generics dispensing rates. To address these headwinds, we expect that chains will:

— continue to optimize core operations through further rationalization of store footprints

— invest in technology enablement, such as micro-fulfillment centers and robotics, to expand work-force capacity and streamline dispensing costs, and AI to optimize pharmacist workflows

— look to further diversify and expand revenue streams beyond the core dispensing business through the provision of healthcare services and the integration of recently acquired assets into a delivery ecosystem

Growth in specialty pharmacy. Specialty pharmacy is one of the fastest-growing subsegments within pharmacy, with revenue rising more than 9 percent annually.[5] This is due to continued growth in utilization and pricing as well as expansion of the treatment pipeline (for example, cell and gene therapies and oncology and rare disease therapies). The growth is expected to be offset partially by pressure on reimbursements, specialty generics, and increased adoption of biosimilars. Additionally, margins among specialty pharmacy players have been affected by manufacturer contract pharmacy pressures, creating headwinds for larger central fulfillment specialty pharmacies and tailwinds for some health system–owned pharmacies.

Evolving regulatory landscape. The pharmacy segment has seen increased calls from regulators to increase transparency of drug prices and improve affordability. Under the Inflation Reduction Act of 2022, the Medicare prescription drug Part D benefit is being redesigned through 2024–25. The redesign includes a new beneficiary out-of-pocket spending cap of $2,000 and a substantial increase in plan liability (from 15 percent to 60 percent) in the catastrophic phase of coverage, increasing plans' imperative to manage high-cost drugs. Additionally, the Centers for Medicare & Medicaid Services (CMS) is set to require pharmacy rebates under Medicare be shared with consumers at the point of sale; it also announced that price transparency rules will apply to prescription drugs. There are several bipartisan bills in Congress that would mandate increased transparency requirements for pharmacy benefit managers (PBMs) in addition to potentially banning spread pricing and PBM-retained rebates.

Last, CMS has announced the first ten drugs covered under Medicare Part D selected for negotiation. The negotiations with drug companies will occur in 2023 and 2024; any negotiated prices will become effective in 2026.

Neil Rao is a senior partner in McKinsey's Seattle office and leads McKinsey's work in the healthcare services sector in North America.

---

[1] Wider adoption of AI could lead to savings of 5 to 10 percent in US healthcare spending, or about $200 billion to $360 billion annually in 2019 dollars. For more, see David M. Cutler, Nikhil Sahni, George Stein, and Rodney Zemmel, *The potential impact of artificial intelligence on healthcare spending*, National Bureau of Economic Research, September 2022.

[2] "McKinsey Global Private Markets Review: Private markets turn down the volume," McKinsey, March 21, 2023.

[3] Louise Fordham, "Chart: Fundraising for healthcare-focused private equity is in good shape," Private Equity International, July 3, 2023.

[4] This measure excludes rebates and discounts paid by manufacturers to pharmacy benefit managers and plan sponsors. It includes pharmacy benefit drugs only. Adam J. Fein, *The 2023 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*, Drug Channels Institute, 2023.

[5] *The 2023 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*, 2023.

Table of contents

Forces at work

What to expect in US healthcare in 2023 and beyond 14

Neha Patel and Shubham Singhal

Recent developments have complicated the outlook for industry profit pools.

Nursing in 2023: How hospitals are confronting shortages 23

Gretchen Berlin, Faith Burns, Connor Essick, Meredith Lapointe, and Mhoire Murphy

Nearly a third of surveyed nurses still report an intent to leave their current jobs. Will hospitals' efforts bend the curve?

Sweeping changes to Medicare Advantage: How payers could respond 30

Gabe Isaacson, Dan Jamieson, Sonja Pedersen-Green, Emily Pender, and Cara Repasky

The Medicare Advantage program is undergoing its biggest shifts in more than two decades. Payers can take steps now to mount a strategic, agile response as the changes unfold.

How stakeholders are responding

Investing in the new era of value-based care 40

Zahy Abou-Atme, Rob Alterman, Gunjan Khanna, and Edward Levine

Recent trends appear to make a case for investing in value-based care. Here's why value-based models now show both the potential and propensity for growth.

Driving growth through consumer centricity in healthcare 50

Jessica Buchter, Jenny Cordina, and Mark Lee

Providing consumers with the experiences they increasingly expect and demand at every stage of the healthcare journey could substantially improve care and cost outcomes.

How stakeholders are responding (continued)

Bolstering health system supply chain resilience to reduce risk 60

Eric Bishop, Brianne Bowen, Sabriya Karim, Margarita Protopappa-Sieke, and William Weinstein

How health systems could enhance their ability to withstand supply shocks and deliver quality care in ordinary times and when crises strike.

Innovate to thrive

Tackling healthcare's biggest burdens with generative AI 68

Shashank Bhasker, Damien Bruce, Jessica Lamb, and George Stein

Disparate sources of unstructured data, which abound in healthcare, are now assets to power generative AI. Here's how private payers and healthcare systems can use the technology to deliver care.

Leadership rundown: How US healthcare leaders are scaling innovation and transformation 74

Shubham Singhal and Drew Ungerman

Healthcare organizations are exploring ways to use data, analytics, and AI to drive and scale innovation and transformation.

McKinsey Health Institute

Reframing employee health: Moving beyond burnout to holistic health 82

Jacqueline Brassey, Brad Herbig, Barbara Jeffery, and Drew Ungerman

A new McKinsey Health Institute survey across 30 countries offers insights into how organizations can help create a workplace that prioritizes physical, mental, social, and spiritual health.

McKinsey Health Institute (continued)

Gen Z mental health: The impact of tech and social media 99

Erica Coe, Andrew Doy, Kana Enomoto, and Cheryl Healy

A new McKinsey Health Institute survey finds that Gen Z's social media engagement can feel negative but can also help with finding mental health support and connectivity.

Appendix: The gathering storm in US healthcare

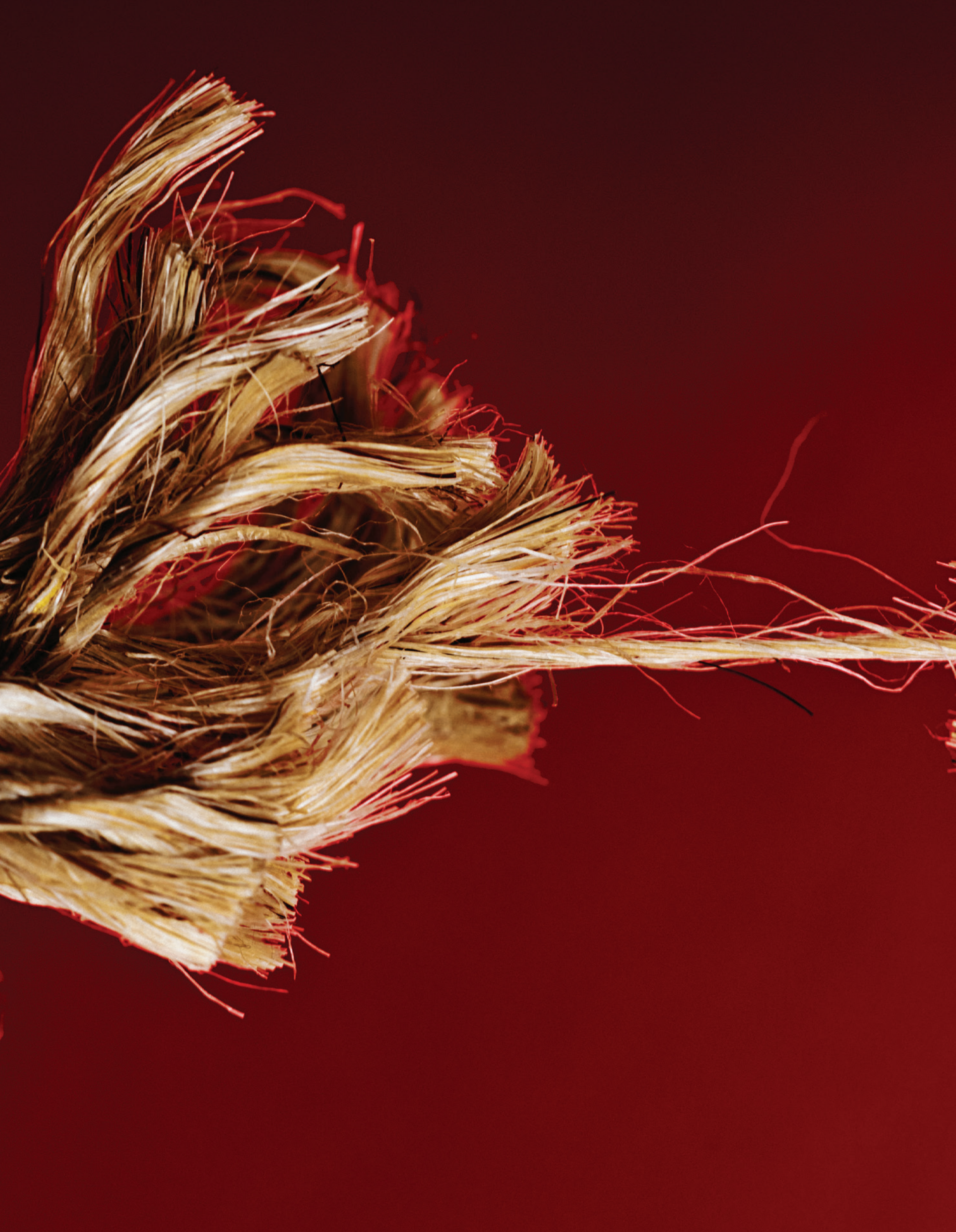
The gathering storm: The uncertain future of US healthcare 111

Addie Fleron and Shubham Singhal

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.

Thank you to the following authors and contributors

Nicolas Abi-Chacra
Zahy Abou-Atme
Shahed Al-Haque
Rob Alterman
Lea Arora
Shubham Banerjee
Naman Bansal
Sanjiv Baxi
Victoria Bennett
Gretchen Berlin
Shashank Bhasker
Eric Bishop
Abby Bloomfield
Brianne Bowen
Jacqueline Brassey
Beth Bravo
Adam Broitman
Daniel Brown
Damien Bruce
Jessica Buchter
David Bueno
Faith Burns
Stephanie Carlton
Alistair Carmichael
Claudia Castelino
Sameer Chowdhary
Erica Coe
Jenny Cordina
Ulrike Deetjen
Alexandru Degeratu
Andrew Doy
Jack Eastburn
Kana Enomoto
Addie Fleron
Arne Gast
Katy George
Renata Giarola
Allan Gold
Zachary Greenberg
Pranay Gupta
Vamsee Gurram
Stephanie Hammer
Cheryl Healy
Scott Heim
Brad Herbig
Gabe Isaacson
Ankit Jain
Dan Jamieson
Barbara Jeffery
Joseph Jung
Sabriya Karim
Omar Kattan
Gunjan Khanna
Jay Krishnan
Amit Kunte
Alok Ladsariya
Jessica Lamb
Mark Lee
Edward Levine
Amy Li
Monisha Machado-Pereira
Abhishek Mahajan
Rupal Malani
Siddharth Manot
Alec McLeod
Roxy Merkand
Hannah Mirman
Avantika Mishra
Rafael Mora
Mhoire Murphy
Jung Paik
Neha Patel
Sonja Pedersen-Green
Emily Pender
Murali Pothupalem
Margarita Protopappa-Sieke
Thomas Pu
Andira Putri
Neil Rao
Cara Repasky
Aldo Rosales
Kim Rubenstein
Roxanne Sabbag
Lara Sanfilippo
Gaurang Satjia
Izzy Savage
Gretchen Scheidler
John Schultz
Sriram Sekar
Shriya Sethi
Shubham Singhal
Curtis Stecyk
Isaac Swaiman
Emma Summerton
Josh Talbot
Pooja Tatwawadi
Brooke Tobin
Drew Ungerman
Oliver Walker
William Weinstein
Catherine Wilkosz
Zoe Williams
Luke Yancy
Delphine Zurkiya



Forces at work

14

What to expect in US healthcare in 2023 and beyond

Neha Patel and Shubham Singhal

Recent developments have complicated the outlook for industry profit pools.

23

Nursing in 2023: How hospitals are confronting shortages

Gretchen Berlin, Faith Burns, Connor Essick, Meredith Lapointe, and Mhoire Murphy

Nearly a third of surveyed nurses still report an intent to leave their current jobs. Will hospitals' efforts bend the curve?

30

Sweeping changes to Medicare Advantage: How payers could respond

Gabe Isaacson, Dan Jamieson, Sonja Pedersen-Green, Emily Pender, and Cara Repasky

The Medicare Advantage program is undergoing its biggest shifts in more than two decades. Payers can take steps now to mount a strategic, agile response as the changes unfold.

What to expect in US healthcare in 2023 and beyond

Neha Patel and Shubham Singhal

January 9, 2023

Recent developments have complicated the outlook for industry profit pools.

When we last looked at the trajectory of the US healthcare industry in our July 2022 article, "The future of US healthcare: What's next for the industry post-COVID-19?," we had emerging concerns about what persistent inflation could cause.[1] It is now clear that inflation is not transitory and that the economic outlook has meaningfully darkened.[2] These economic troubles, combined with a healthcare-worker shortage and endemic COVID-19, are clouding the industry outlook. Below, we update how these changes could affect payers, providers, healthcare services and technology (HST), and pharmacy services.

Based on updated and expanded projections, we estimate that healthcare profit pools will grow at a 4 percent CAGR from $654 billion in 2021 to $790 billion in 2026; in our previous article, we estimated a 6 percent growth from 2021 to 2025. The industry faces difficult conditions in 2023, primarily because of continuing high inflation rates and labor shortages. However, we expect improvement efforts to help the industry overcome these challenges in 2024 and beyond. Several segments can expect higher growth: Medicare Advantage within payers; care settings such as ambulatory surgery centers within providers; software and platforms (for example, patient engagement and clinical decision support) within HST and specialty pharmacy within pharmacy services. These assessments generally align with our earlier article's conclusions. On the other hand, the outlook for some segments has worsened compared with our previous analysis, including general acute care and post-acute care within providers and Medicaid within payers (Exhibit 1).

Going forward, a number of factors will likely influence shifts in profit pools. These include:

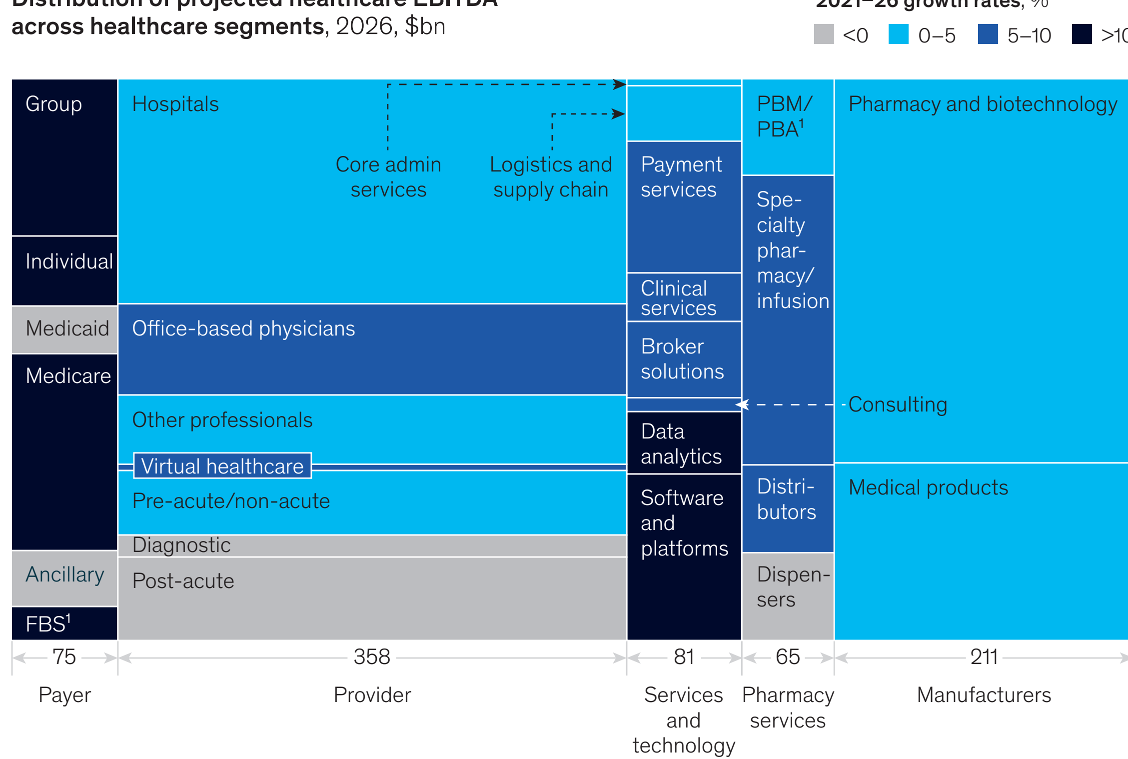
— *Change in payer mix:* A substantial shift toward Medicare will continue, led by growth in the over-65 population of 3 percent per year projected over the next five years and continued popularity of Medicare Advantage among seniors, as reflected in the latest Centers for Medicare & Medicaid Services (CMS) enrollment data.[3] However, based on our models, Medicaid enrollment could decline by about ten million lives over five years given recent legislation that will allow states to begin eligibility redeterminations, which were paused during the federal public health emergency that was declared at the start of the COVID-19 pandemic.[4] Commercial segment margins in 2021 were about 200 basis points lower than 2019 levels, resulting from the return of deferred care. We expect profit pools in this segment to rebound and grow at a 15 percent CAGR as EBITDA margins will likely return to historical averages by 2026. The growth will be partially offset by enrollment changes in the segment, prompted by a shift from fully-insured to self-insured businesses that could accelerate as employers facing recessionary pressure seek to cut costs.

— *Endemic COVID-19:* Since the publication of our last article, COVID-19 has moved

Exhibit 1

Profit pools for commercial and Medicare Advantage segments, physician offices, healthcare services and technology, and specialty pharmacy segments are predicted to grow the fastest post-COVID-19.

Distribution of projected healthcare EBITDA across healthcare segments, 2026, $bn



[1]FBS: fixed-benefit and supplemental; PBM: pharmacy benefit manager; PBA: pharmacy benefit administrator.
Source: McKinsey Profit Pools Model

McKinsey & Company

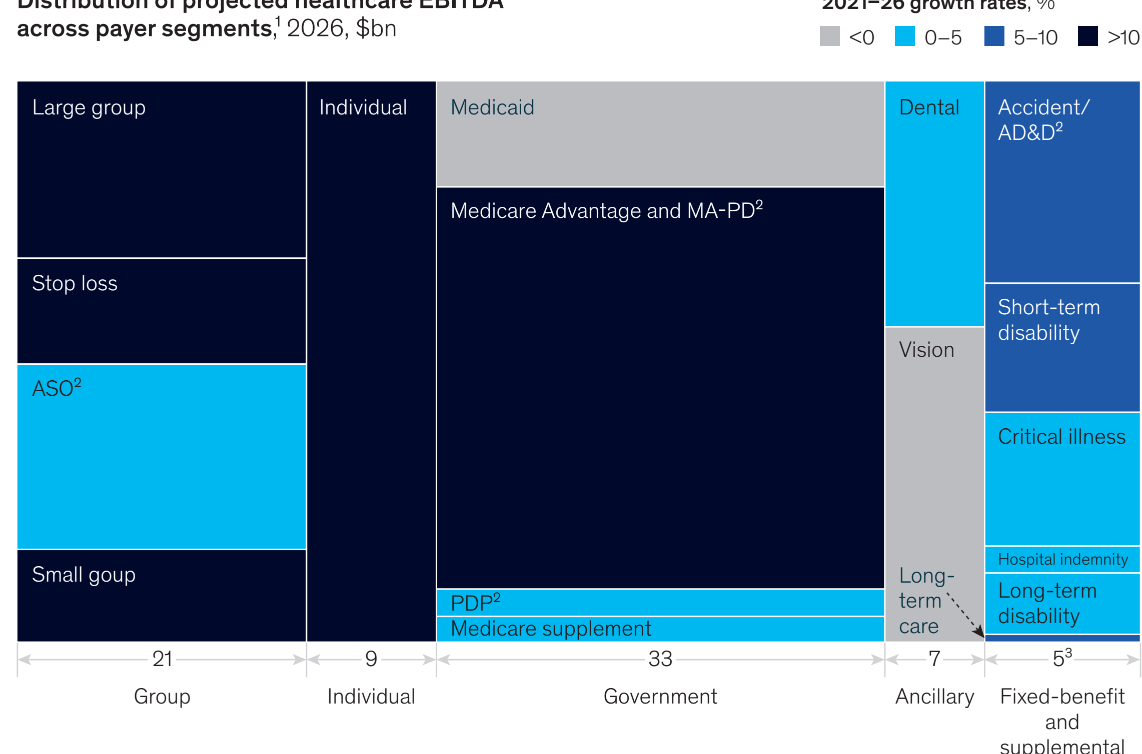
more and more toward an endemic stage. Based on our estimates, endemic COVID-19 could result in healthcare costs of about $200 billion annually in the United States. The majority of these costs would be related to the prevention and treatment of COVID-19 cases as well as long COVID.[5]

In July 2022, we estimated 2021 payer profit pools to be $40 billion, however, actual 2021 profit pools were $5 billion higher. Higher Medicaid EBITDA margins due to the extended public health emergency accounted for the majority of the increase, although it was partially offset by lower-than-expected commercial margins with the return of deferred care. Also, we previously forecasted a 9 percent CAGR in 2021 to 2025 payer profit pools. In our updated and expanded estimates, this profit pool is expected to grow faster at an 11 percent CAGR from 2021 through an additional year to 2026, reaching $75 billion in the latter year. This is underpinned by inflation-driven incremental premium rate increases and accelerated Medicare Advantage penetration. Nonetheless, we expect that growth will be slower than normal between 2022 and 2023 due to inflationary pressure and provider reimbursement rate increases, both in-year margin pressures (Exhibit 2).

Based on our revised estimates, the mix of payer profit pools will shift further toward the government segment. Overall, the estimated profit pools for this segment are expected to be about 50 percent greater than the commercial segment by 2026

Exhibit 2

By 2026, estimated profit pools for government segments will be about 50 percent larger than commercial segments driven by accelerated Medicare Advantage penetration.



[1] Figures exclude investment income.
[2] AD&D: accidental death and dismemberment; ASO: administrative services only; MA-PD: Medicare Advantage prescription drug plan; PDP: prescription drug plan.
[3] Excluding losses from long-term care insurance; total profit in fixed-benefit and supplemental products is $11.4 billion; the width of the vertical represents this amount.
Source: McKinsey Profit Pools Model

McKinsey & Company

($33 billion compared with $21 billion) as Medicare Advantage penetration is expected to reach 52 percent in 2026. Profit pools for the commercial segment declined from $18 billion in 2019 to $11 billion in 2021 as margins compressed with the return of deferred care. We expect the commercial segment's EBITDA margins to return to historical levels by 2026, and profit pools to reach $21 billion, growing at a 15 percent CAGR from 2021 to 2026. Within this segment, a shift from fully-insured to self-insured business will likely accelerate as recessionary pressures prompt employers to cut costs. The fully-insured group enrollment could drop by 150 basis points annually from 2021 to 2026, and self-insured increase by 100 basis points annually during the same period.

We expect increased labor costs and administrative expenses to reduce payer EBITDA by about 60 basis points in 2022 and 2023 combined. In addition, providers will push for reimbursement rate increases (up to about 350 to 400 basis-point incremental rate increases from 2023 to 2026 for the commercial segment and about 200 to 250 basis points for the government segment), according to McKinsey analysis and interviews with external experts.[6]

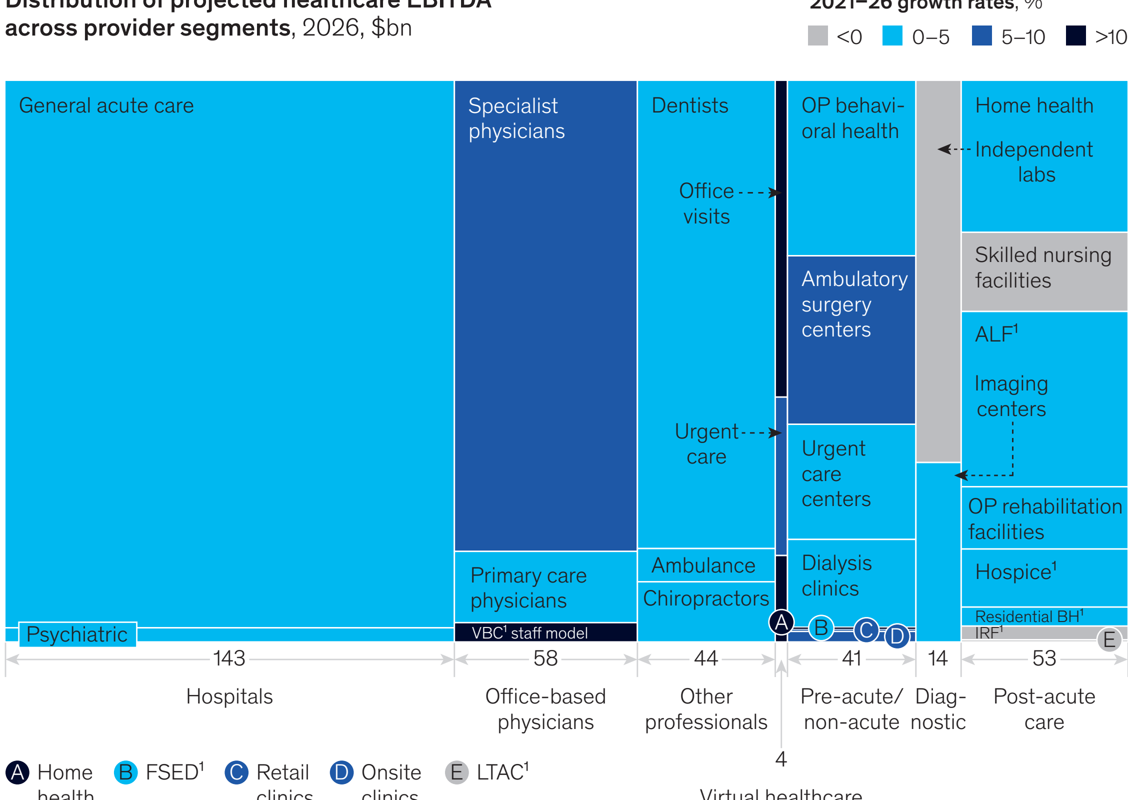
In July 2022, we estimated that provider profit pools would grow at a 7 percent CAGR from 2021 to 2025. We now forecast a 3 percent CAGR from 2021 to 2026 in our updated and expanded estimates, with the decline primarily due to increased costs owing to high inflation and labor shortages (Exhibit 3).

Provider profit pools grew from $273 billion in 2019 to $314 billion in 2021, a 7 percent CAGR. Growth in 2021 resulted from making up for care deferred from the first year of the COVID-19 pandemic as well as additional healthcare demand attributable to COVID-19. Provider profit pools faced substantial pressure in 2022 and are likely to continue to do so in 2023 as a result of inflation and increased labor costs. We now estimate that total EBITDA will fall by 25 percent from 2021 to 2023, declining to $235 billion. We then forecast a rebound, with 15 percent annual growth from 2023 to 2026, or total EBITDA of $358 billion by 2026 (estimates now include 2026 as an additional projected year).

We anticipate that providers will seek reimbursement increases of about 350 basis points from 2023 to 2026 (above set rate increases). There are three potential scenarios that providers may face for EBITDA recovery (Exhibit 4).

Exhibit 3

Most provider segments will grow less than 5 percent CAGR from 2021 to 2026 due to cost increases.

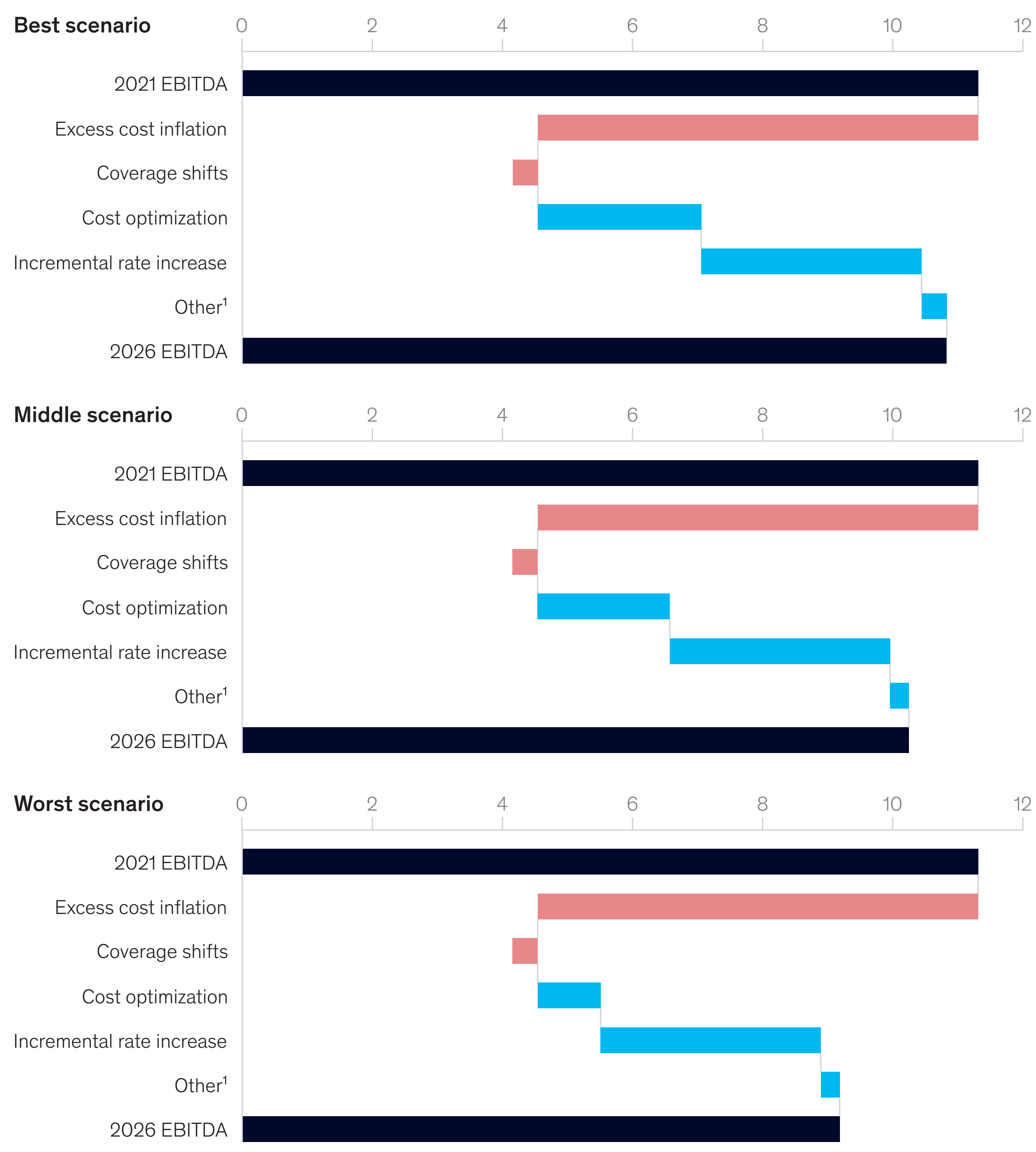


[1] ALF: assisted living facilities; BH: behavioral health; FSED: freestanding emergency department; Hospice includes palliative care centers; IRF: inpatient rehabilitation facilities; LTAC: long-term acute care hospitals; OP: outpatient; VBC: value-based care.
Note: EBITDA and CAGR based on growth in nominal dollar margins.
Source: McKinsey Profit Pools Model

McKinsey & Company

Exhibit 4

Providers may face three potential scenarios for EBITDA recovery.



[1] Other factors include change in provider share mix and service mix.
Source: McKinsey Profit Pools Model

McKinsey & Company

Within this overall negative outlook for providers, there are meaningful exceptions. Although post-acute care profit pools could be severely affected by labor shortages (particularly nurses), other sites of care (such as ambulatory surgery centers) and virtual care should continue to grow.

We also anticipate an accelerated adoption of value-based care as stakeholders, including a broader set of providers and payers, aim for enhanced care management and effective cost management through improved utilization and other measures, such as increasing the use of alternative sites of care.[7]

We expect to see continued cost optimization measures to tackle rising costs, such as increased labor productivity efforts and the application of technological innovation. In a positive best-case scenario, where the majority of hospitals and a third of post-acute players recoup substantial cost savings (350 basis points for hospitals, 250 for post-acute), industry EBITDA margins would decline by 90 basis points. In a downside worst-case scenario, where lower savings are achieved (200 basis points for hospitals, 150 basis points for postacute) for half of hospitals and a quarter of acute care players, we estimate margin deterioration of 250 basis points from a baseline of 12 percent.

In July 2022, we estimated that 2022 HST profit pools would be $53.7 billion. We have revised our estimate to $49 billion because of wage inflation and the drag of fixed technology investment that has not achieved its full benefits yet (Exhibit 5, part 1).

However, we see solid growth in the sector starting in 2023, especially as technology adoption by providers and payers continues to accelerate. We now estimate a 10 percent CAGR between 2021 and 2026, to $81 billion by 2026. This is a one percentage-point-higher CAGR than our July estimates last year for 2021 to 2025 growth, due to greater demand from payers and providers looking to improve efficiency. That would make it the fastest-growing sector in healthcare. We see the greatest acceleration in software and platforms (for example, patient engagement and clinical decision support) as well as data and analytics, with 13 percent and 19 percent CAGRs, respectively (Exhibit 5, part 2).

Three factors account for the anticipated faster growth in HST. First, we expect higher demand from payers and providers to improve efficiency

Exhibit 5, part 1

Healthcare services and technology profit pools are projected to continue positive growth from 2021 to 2026, particularly in data and technology-focused segments.

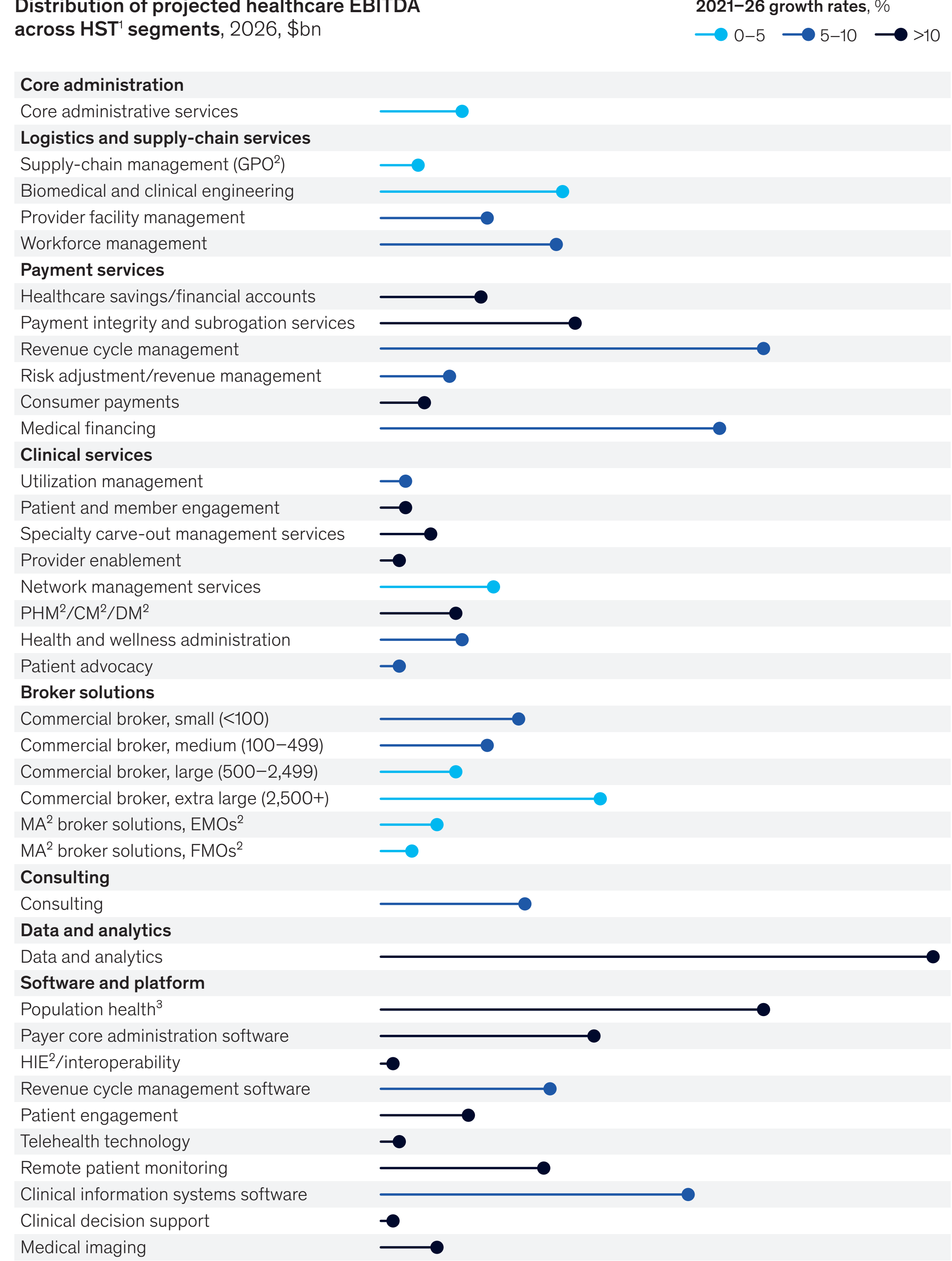
Distribution of projected healthcare EBITDA across HST[1] segments, 2026, $bn

[1] Healthcare services and technology.
Source: McKinsey Profit Pools Model

McKinsey & Company

Exhibit 5, part 2

Healthcare services and technology profit pools are projected to continue positive growth from 2021 to 2026, particularly in data and technology-focused segments.



[1] Healthcare services and technology.
[2] CM: care management; DM: disease management; EMO: electronic marketing organization; FMO: field marketing organization; GPO: group purchasing organization; HIE: health information exchange; MA: Medicare Advantage; PHM: population health management.
[3] Includes patient engagement, CM, DM solutions.
Source: McKinsey Profit Pools Model

McKinsey & Company

and address labor challenges. Second, payers and providers are likely to be willing to absorb vendor price increases where there is clear value. Third, we expect HST companies to make operational changes that will improve efficiency, including through the use of technology and automation across services.

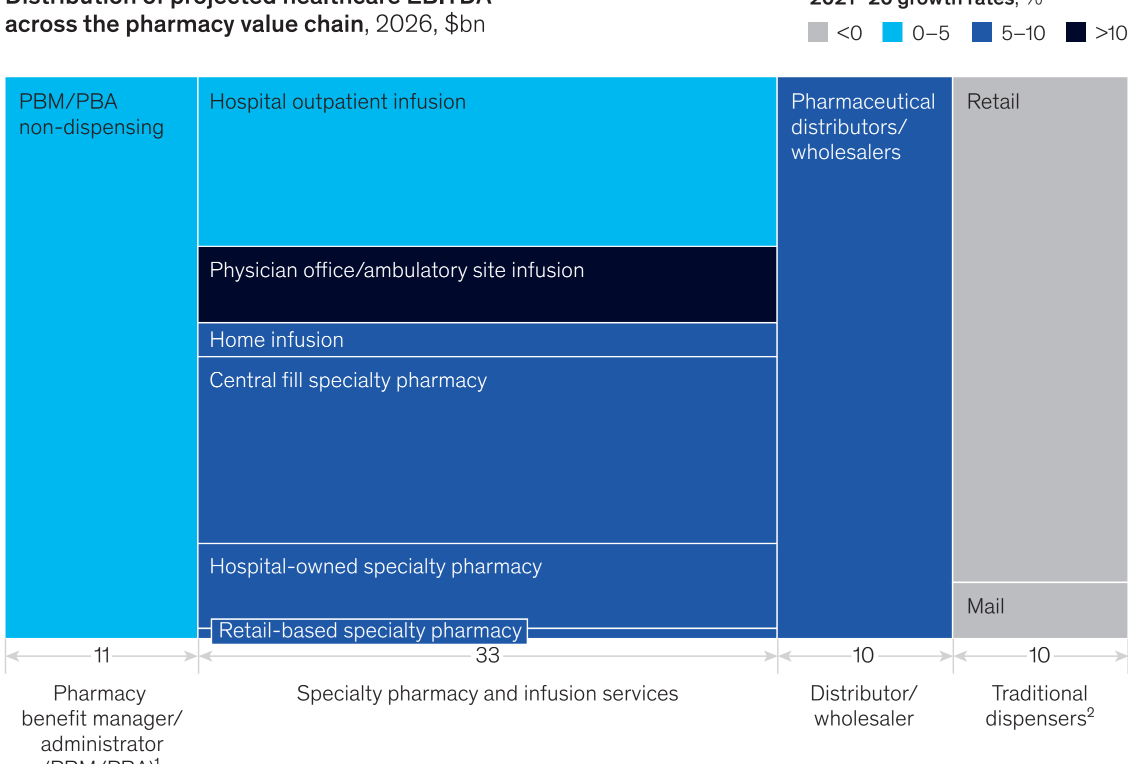
In July 2022, we estimated that pharmacy services profit pools would grow at a 3 percent CAGR from 2021 to 2025. Our updated estimates found that this growth rate will remain the same from 2021 through an additional year of 2026, with profit pools reaching $65 billion by 2026 from $55 billion in 2021. The growth is largely due to continued utilization of drugs and higher prices for specialty drugs but will be partially offset by reimbursement pressure, reduced profit margins, and the growth of specialty generics and biosimilars (Exhibit 6).

Specialty pharmacy profit pools are expected to increase at a 7 percent CAGR from 2021 to 2026, a lower rate than our previous 2021 to 2025 estimate; contract pharmacy pressures in particular have affected margins across this segment. Physician office and ambulatory infusions have outpaced initial growth estimates, with the overall market expected to grow at an 11 percent CAGR from 2021 to 2026 compared to the overall infusion-market growth rate of 9 percent for the same period. Retail

Exhibit 6

Pharmacy services will continue to see benefits from the growth of specialty pharmacy.

Distribution of projected healthcare EBITDA across the pharmacy value chain, 2026, $bn



[1]Excludes profit earned by PBM-owned specialty pharmacies and mail pharmacies, which is captured under central fill specialty pharmacy and mail respectively.
[2]Excludes specialty pharmacy (specialty dispensed through retail channels is captured under retail-based specialty pharmacy).
Source: McKinsey Profit Pools Model

McKinsey & Company

dispenser profit pools are expected to fall due to reimbursement pressures and margin contraction; this is in addition to challenges they face from reductions in COVID-19 vaccine administration and testing (retail pharmacies administered about 200 million vaccines in 2021 compared to about 85 million in 2022).[8]

In addition, the pharmacy services sector continued to face worker shortages and inflationary pressures throughout 2022. These challenges affected dispensers across channels—for example, traditional retail dispensers, and retail-based specialty and provider-based pharmacies. Many of them offered higher wages and benefits, while others limited pharmacy operating hours, closed, or optimized their store footprint.[9] Some larger players are investing in additional technology enablement, like micro-fulfillment centers and robotics, to expand capacity and lower dispensing costs over the next few years.[10] In the future, investment in technology and automation will continue to reshape the pharmacy industry as well as increase the role of pharmacists in delivering services and clinical guidance to patients.

The US healthcare industry faces demanding conditions in 2023, including recessionary pressure, continuing high inflation rates, labor shortages, and endemic COVID-19. But players are not standing still. We expect accelerated improvement efforts to help the industry address these challenges in 2024 and beyond, leading to an eventual return to historical average profit margins.

Neha Patel is a partner in McKinsey's New York office and **Shubham Singhal** is a senior partner in the Detroit office.

The authors wish to thank Shahed Al-Haque, Claudia Castelino, Zachary Greenberg, Scott Heim, Ankit Jain, Alok Ladsariya, Siddharth Manot, Murali Pothupalem, and Lara Sanfilippo for their contributions to this article.

1 Shubham Singhal and Neha Patel, "The future of US healthcare: What's next for the industry post-COVID-19," McKinsey, July 19, 2022.
2 Addie Fleron and Shubham Singhal, "The gathering storm: The uncertain future of US healthcare," McKinsey, September 16, 2022.
3 "Moody's analytics population projections," Moody's Investors Service, December 2022; Medicare Advantage penetration was increasing by less than 2 percent annually from 2016 to 2019 but increased by about 3 percent annually in 2020 and 2021—for further information, see "Medicare advantage/part D contract and enrollment data," Centers for Medicare & Medicaid Services, US Government.
4 Meghana Ammula and Jennifer Tolbert, "10 things to know about the unwinding of the Medicaid Continuous Enrollment requirement," Kaiser Family Foundation, December 8, 2022.
5 The range is $137 billion to $379 billion, based on scenario analysis from McKinsey's COVID-19 Epidemiological Scenario Planning Tool. 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. The cost of COVID-19 treatment is obtained from Blue Cross Blue Shield and Fair Health; long-COVID treatment costs are based on the estimate that 3 percent of cases result in long COVID (UK Office for National Statistics) for three to 12 months; published estimates of long-COVID symptoms (UpToDate); and standard treatment costs for those symptoms (Medical Expenditure Panel Survey). The upper-bound estimates of long-COVID incidents assume about 20 million US long-COVID cases per year (US Census Bureau's July–August 2022 Household Pulse Survey). Despite substantial uncertainty in ascertaining the prevalence and resulting cost impact of long COVID, our aggregate analysis, using these enumerated data sources, employs a point estimate of $19 billion as a conservative estimate. For both ongoing COVID-19 and long-COVID treatment, 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 the US Department of Health and Human Services, and the US Centers for Disease Control and Prevention for 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 2026 estimates.
6 For further information on the government segment, see "Medicare Payment Advisory Commission public meeting," Medicare Payment Advisory Commission, December 8, 2022.
7 Zahy Abou-Atme, Rob Alterman, Gunjan Khanna, and Edward Levine, "Investing in the new era of value-based care," McKinsey, December 16, 2022.
8 "The federal retail pharmacy program for COVID-19 vaccinations," Centers for Disease Control and Prevention, 2022; Adam Fein, *The 2022 economic report on US pharmacies and pharmacy benefit managers*, Drug Channels Institute, March 2022.
9 "Survey: Three-quarters of community pharmacies report staff shortages," National Community of Pharmacists Association, August 11, 2022; "Walgreens Boots Alliance Inc. Q4 2022 earnings call transcript," Seeking Alpha, October 13, 2022; "CVS Health Q3 2022 earnings call transcript," The Motley Fool, November 2, 2022; "Rite Aid (RAD) Q3 2023 earnings call transcript," The Motley Fool, December 21, 2022.
10 "Walgreens Boots Alliance, Inc. (WBA) Q4 2022 earnings call transcript." Seeking Alpha, October 14, 2022; Tom Williams, "CVS tries out remote system to help fill prescription," Wall Street Journal, December 5, 2022.

Nursing in 2023: How hospitals are confronting shortages

Gretchen Berlin, Faith Burns, Connor Essick, Meredith Lapointe, and Mhoire Murphy

May 5, 2023

Nearly a third of surveyed nurses still report an intent to leave their current jobs. Will hospitals' efforts bend the curve?

When we tabulated the results of our first nationwide nursing survey almost two years ago, we were surprised to see such a high reported likelihood of nurses planning to leave their jobs—and we did not expect this trend to persist for such an extended period of time.

But that is what has happened in the wake of the COVID-19 pandemic. In fact, we have seen some of this reported anticipated turnover actually occur, as well as a decrease in the overall active nursing workforce. And there is still cause for concern: today, 31 percent of nurses still say they may leave their current direct patient care jobs in the next year, according to our most recent survey. That said, we are cautiously optimistic that some of the practices implemented by healthcare organizations to improve the experience of nurses are bearing fruit.

In this article, we share the latest data from our September 2022 frontline nursing survey of 368 frontline nurses providing direct patient care in the United States (see sidebar, "About the research"). We offer these insights as resources for organizations as they continue their journeys of attracting, supporting, and retaining a vibrant workforce, as well as promoting longer-term workforce stability.

What's been happening in the nursing workforce

Nursing turnover continues to be a substantial challenge for healthcare organizations as the number of individuals with the intent to leave their jobs remains high. In our most recent nursing survey, 31 percent of respondents indicated they were likely to leave their current role in direct patient care, a figure that has stabilized over the past six to 12 months yet is still higher than the 22 percent rate observed in our first survey in February 2021 (Exhibit 1).[1] Our research further shows that the intent

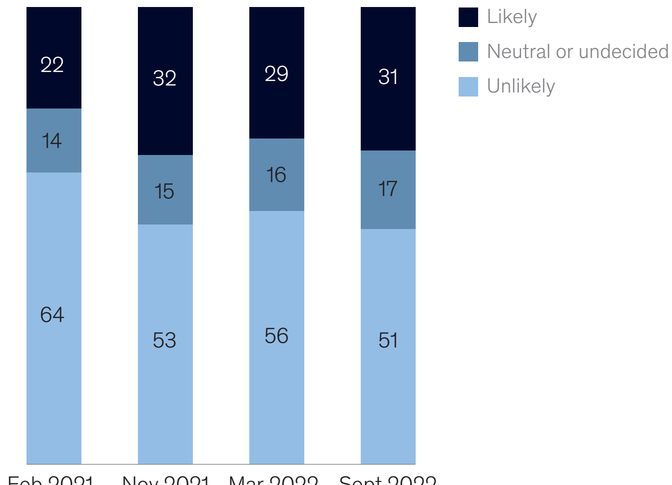
About the research

From September 9 to 30, 2022, McKinsey surveyed 368 frontline nurses providing direct patient care in the United States to better understand their experiences, needs, preferences, and career intentions. All respondents said they spend more than 70 percent of their time delivering direct patient care and that they had at least one year of work experience. All survey questions were based on the experiences of the individual professional. Key insights shared are statistically significant and represent populations with a sample size of $n > 30$; for smaller sample sizes (for example, $n < 100$), results should be taken as directional. Additionally, publicly shared examples, tools, and healthcare systems referenced in this article are representative of actions that stakeholders are taking to address workforce challenges. The examples, tools, and systems have not been vetted and are not endorsed by McKinsey.

Exhibit 1

Thirty-one percent of surveyed RNs indicate they may leave their current direct patient care positions in the next year.

Likelihood of surveyed RNs to leave current direct patient care position in the next year,[1] % of respondents



Note: Figures do not sum to 100%, due to rounding. Question: How likely are you to leave your current position providing direct patient care in the next year?
[1]"Likely" includes "definitely will leave," "very likely," and "somewhat likely"; "unlikely" includes "somewhat unlikely," "very unlikely," and "definitely will not"; Feb 2021, n = 396; Nov 2021, n = 710; Mar 2022, n = 308; Sept 2022, n = 317.
Source: McKinsey Frontline Workforce Survey

McKinsey & Company

to leave varies across settings. For example, inpatient registered nurses (RNs) have consistently reported a higher intent to leave than the average of all surveyed RNs. In our most recent pulse survey of inpatient RNs, we saw intent to leave rise again, from 35 percent in fall 2022 to over 40 percent in March 2023.

Recent analysis of studies comparing intent to leave to actual turnover show that both jumped meaningfully over the course of 2021. A study from Nursing Solutions Inc. (NSI) showed that actual reported hospital and staff RN turnover increased from 18 percent in fiscal year 2020 to 27 percent in fiscal year 2021; the same March 2022 study reported that the workforce lost about 2.5 percent of RNs in 2021.[2] In the latest NSI report (March 2023), turnover reduced to 23 percent in fiscal year 2022 but still remains elevated compared with prepandemic levels.[3] A Health Affairs study published in April 2022 found that the RN workforce fell by about 100,000 by the end of 2021, which is a "far greater drop than ever observed over the past four decades." This decline was particularly pronounced among midtenure nurses (aged 35 to 49).[4] In terms of where they are going, nurses are both leaving the profession entirely as well as simply changing employers or roles. About 35 percent of respondents to our most recent survey who indicated they were likely to leave said they would remain in direct patient care (that is, at a different employer or role). The remainder said they intended to leave the bedside for nondirect patient care roles to pursue different career paths or education or to exit the workforce entirely.

With this persistently high turnover and the corresponding gathering storm in US healthcare, it is more important than ever for healthcare organizations to design and deploy initiatives that respond to and address workforce needs. Most healthcare organizations have learned that attracting and retaining nursing talent in the postpandemic era will require a more nuanced understanding of what nurses are looking for in a profession and an employer.

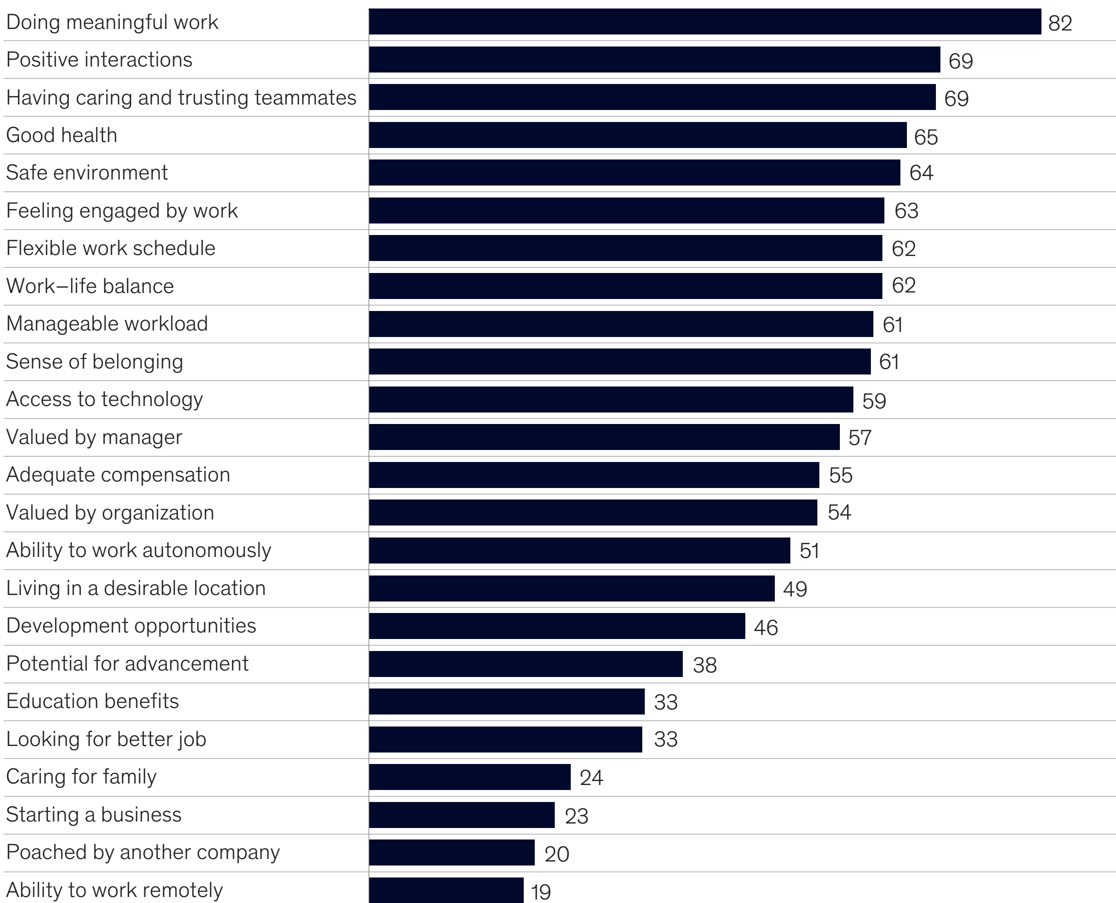
Our four frontline nursing surveys over the past two years have enabled us to glean insights into factors contributing to both attrition and retention. Frontline nursing respondents have consistently ranked elements of flexibility, meaning, and balance as the most important factors affecting their decision to stay in direct patient care (Exhibit 2). Recognition, open lines of communication, and embedding breaks into the operating model (for example, during shifts, between shifts, and formal paid time off) have consistently been rated as the top initiatives to support well-being.

The nursing workforce has evolved over the course of the pandemic, and the strategies aimed at attracting and retaining tomorrow's workforce have evolved as well. To start, structural solutions that help to ensure a manageable workload—for example, consistent support staff, a safe environment, reduced documentation and administrative requirements, predictability of schedule, and ability to take paid time off—continue to be critical. Surveyed nurses who left a direct patient care role in the past 18 months indicated that not being valued, unmanageable

Exhibit 2

Meaningful work and flexible schedules are the most important factors that would influence surveyed RNs to stay in their positions.

Top factors surveyed RNs say impact their likelihood to stay in current position, Sept 2022,
% responding "extremely likely" and "very much likely"



Note: Question: To what extent do the following factors impact your likelihood to stay at your job?; n = 368.
Source: McKinsey Frontline Workforce Survey

McKinsey & Company

workloads, and inadequate compensation were the top factors in their decision to exit (Exhibit 3). There are no one-size-fits-all solutions, but many healthcare organizations have adapted their approaches and carried out interventions that appear to be yielding results.

What stakeholders can do in the short term

Our most recent survey found that 75 percent of nurses who left a job in the past 18 months reported that not being valued by their organization was a factor in their decision.

In addition, 56 percent of total respondents reported that appropriately recognizing nurses for their contributions was the most effective initiative to support well-being. Surveyed nurses suggested various ways to respond to the recognition gap, including simple acknowledgement, appreciation of excellence, and reinforcement through broader workplace culture and support in the field.

Many healthcare systems have found ways to implement the nurses' suggestions. While more research is needed to understand the full impact of these efforts, they may be helpful short-term

Exhibit 3

Not being valued, inadequate pay, and unmanageable workloads are the top factors impacting surveyed RNs' decision to leave a job in the past 18 months.

Top factors surveyed RNs say impact decision to leave direct patient care role, Sept 2022, % responding "extremely" or "very much"

Note: Question: To what extent did the following factors impact your decision to leave your last job?; n = 61.
Source: McKinsey Frontline Workforce Survey

McKinsey & Company

starting points in the attempt to show support for the workforce.

At the Orlando VA Medical Center, "Employee Well-Being Centers" were set up to address the burnout and stress caused by the pandemic. Setting up a dedicated quiet space with amenities like virtual-reality headsets, aroma-therapy, and sound machines, as well as snacks and beverages, resulted in a measurable positive impact on Employee Whole Health engagement scores and decreased feelings of burnout, higher retention, and increased overall well-being. As a result of these improvements, the program has expanded to more than ten medical centers across the Veterans Health Administration network.[5]

Some health systems have employed digital tools to ensure that tailored recognition can be delivered in a timely and meaningful way. For example, nurse managers at the Orange Coast Medical Center in Fountain Valley, California, were using sticky notes, mining emails, spreadsheets, and other manual processes to remind them which nurses did what to deserve recognition or to schedule meetings to help other nurses improve their work. While meaningful, these recognition processes were time-consuming for nurse managers.[6]

To sustain both this type of in-the-moment recognition and to reward bigger milestones, Orange Coast implemented the Laudio technology platform, which enables frontline leaders to monitor and manage team activity and performance. Use of this system has shown that one meaningful, or high quality, interaction per team member per month can reduce turnover by 36 percent.[7] In addition to keeping track of events and alerting managers about matters to engage in with specific nurses, Laudio can send digital cards and notes to nurses to acknowledge high performance.

Safety is also increasingly top of mind for nurses, as troubling incidents involving visitors and patients have risen.[8] In our most recent survey, 42 percent of nurses indicated that not having a safe working environment was an extremely or very important factor affecting their decision to leave direct patient care, up from 24 percent in March 2022.

To address safety concerns and incivility, UMass Memorial Medical Center in Worcester, Massachusetts, developed a patient and visitor code of conduct. At the entrances to facilities, visitors are asked to sign an agreement to adhere to a code of conduct that formalizes parameters and expectations of behavior. In addition, UMass created talking points for employees to use to respond to and de-escalate contentious situations. In just over a month of piloting the program, the hospital collected 56,000 signed agreements and only asked four visitors to leave the premises.[9]

In addition to deploying more effective strategies to support and retain employees, healthcare executives can look at ways to better attract talent in the near term. To recruit staff, health systems should ensure that their value proposition is aligned to the workplace elements that nurses consider most important—especially when differentiating on compensation is less feasible. Aya Healthcare, a healthcare-talent software and staffing company, found that hospitals seen as a great place to work paid less to secure talent throughout the pandemic. In fact, hospitals seen as great places to work had labor compensation rates 11 percent lower than those without this advantage.[10]

What stakeholders can do in the medium term

In the medium term, finding ways to incorporate flexibility into work schedules is an initiative that 63 percent of surveyed nurses ranked as the most effective for their well-being. We saw similar responses regarding nurses' decision to stay in their current position: 86 percent cited a flexible work schedule as the reason, which ranked second after "doing meaningful work." The nature of nurses' work—typically specialized and always in demand—may make providing schedule flexibility seem daunting. But health systems have pursued several creative ways to address the issue.

For example, the Mercy health system launched Mercy Works on Demand, a systemwide on-demand platform that allows its full- and part-time nurses as well as other experienced nurses to select when they work. Through the platform, Mercy has hired about 1,100 individuals they are calling gig nurses and have improved overall fill rates by two percentage points.[11] But flexibility means different things to different people, which has increased complexity for employers. Charting a path forward will require a nuanced understanding of the employee value proposition as well as what options resonate with the workforce.

Job flexibility is at the center of many health systems' strategies to not only attract new talent but also to welcome back nurses who left during the pandemic. Henry Ford Health has been able to bring back 25 percent of the nurses who left by offering flexible opportunities. Nursing leaders worked closely with Henry Ford Health's human resources department to design flexible options such as the ability to work in different settings (for example, inpatient, outpatient, or virtual) or to work only on weekends. The health system also created fixed-term positions for nurses who didn't want full-time permanent jobs, with the option to transition to permanent roles once their term was up.[12]

As in other industries, the flexibility to work remotely has become increasingly important to some nurses. Trinity Health launched a virtual-care model, allowing more experienced nurses to continue providing patient care but away from the bedside. The new virtual model opens the door to nurses who may be physically tired from the demands of in-person care and to those who prefer to work from home. In addition, this program has enabled the virtual nurses to provide support to teams at the bedside and to improve patient experience by giving them more chances to interact with a nurse. The program is being rolled out across Trinity's 88 hospitals nationwide.[13]

What stakeholders can do in the long term

As health systems look beyond retaining the current workforce and meeting the expected demand for nursing talent, they could have a role to play in building a longer-term pipeline through investing in new-graduate nurses and in the infrastructure required to ensure successful onboarding into the profession.

For example, Dignity Health has invested heavily in longer-term pipeline building through a joint venture between Dignity Health Global Education and Global University Systems. The partnership offers online academic degrees to further the education, training, and development of the healthcare workforce. The joint venture spans technical, professional, executive, and leadership training and provides a range of flexible, accessible, and affordable education opportunities for healthcare workers to advance their careers. It also has a scholarship fund to remove financial barriers for education and to increase equity in healthcare. Dignity Health Global Education now has one of the most comprehensive nursing residency programs, available in 21 states.[14]

The commitment to building a longer-term talent pipeline has expanded beyond individual health systems. Many city and regional partnerships have developed across the United States, bringing together critical stakeholders across the healthcare ecosystem to train and upskill unemployed and underemployed job seekers into healthcare occupations. For example, the Birmingham Region Health Partnership, the result of close collaboration among government, healthcare employers, and other community partners, including Birmingham Business Alliance and Innovate Birmingham, won a $10.8 million grant from the Good Jobs Challenge to train and place over 1,000 jobseekers in the region.[15] Similar collaborative partnerships exist in Chicago, Baltimore, and Philadelphia, among others, to build a pipeline of healthcare workers and to create meaningful career opportunities for historically excluded job seekers.[16]

Other stakeholders are taking action at a national level. In 2022, the US Department of Labor budgeted $80 million to encourage not-for-profit organizations, educational institutions, and tribal organizations to apply for grants of up to $6 million each to train current and former nurses to become nursing educators and frontline healthcare workers to train for nursing

careers.[17] The program emphasizes increasing workforce diversity and building partnerships with community-based organizations and training institutions.

Retaining the current nursing workforce while looking ahead to the longer-term talent pipeline will be critical to meeting the projected shortfall in registered nurses. There isn't one answer to the challenges confronting healthcare organizations, and indeed, they have begun taking steps to address nurses' stated needs through short-, medium-, and longer-term strategies that attract, strengthen, and grow a vibrant nurse workforce. There is more to be done, especially in taking account of the voices of the front line and addressing the core drivers behind why nurses are planning to leave. We are optimistic that the issues facing the nursing profession can be addressed, but this will require consistent and dedicated attention from many parties.

Gretchen Berlin, RN, is a senior partner in McKinsey's Washington, DC, office, where **Faith Burns** is a consultant; **Meredith Lapointe** is a partner in the Bay Area office, where **Connor Essick** is a consultant; and **Mhoire Murphy** is a partner in the Boston office.

The authors wish to thank the nurses, physicians, and staff on the front lines who are caring for patients and communities. They also wish to thank Beth Bravo, Stephanie Hammer, Thomas Pu, Brooke Tobin, and Catherine Wilkosz for their contributions to this article.

[1] Gretchen Berlin, Meredith Lapointe, and Mhoire Murphy, "Surveyed nurses consider leaving direct patient care at elevated rates," McKinsey, February 17, 2022; Gretchen Berlin, Meredith Lapointe, Mhoire Murphy, and Molly Viscardi, "Nursing in 2021: Retaining the healthcare workforce when we need it most," McKinsey, May 11, 2021.
[2] *2022 NSI national health care retention & RN staffing report*, NSI Nursing Solutions, March 2022.
[3] *2023 NSI national health care retention & RN staffing report*, March 2023.
[4] David Auerbach, Peter Buerhaus, Karen Donelan, and Douglas Staiger, "A worrisome drop in the number of young nurses," Health Affairs Forefront, April 13, 2022.
[5] "Employee well-being centers and carts," VA Diffusion Marketplace, accessed April 2023.
[6] "Frontline nurses are burning out. This digital health start-up is trying to change that," Laudio, May 13, 2022.
[7] Ibid.
[8] Christine Porath and Adrienne Boissy, "Frustrated patients are making health care workers' jobs even harder," *Harvard Business Review*, May 14, 2021.
[9] Christine Porath, "Frontline work when everyone is angry," *Harvard Business Review*, November 9, 2022.
[10] April Hansen, "The value of a good reputation (or the cost of a bad one…)," The Staffing Stream, April 8, 2021.
[11] Kelly Gooch, "How Mercy embraced a gig mindset for nursing," Becker's Hospital Review, December 5, 2022.
[12] Mackenzie Bean and Erica Carbajal, "How Henry Ford rehired 25% of nurses who left during the pandemic," Becker's Hospital Review, February 15, 2023.
[13] Giles Bruce, "Trinity Health plans to institute virtual nurses across its 88 hospitals in 26 states," Becker's Hospital Review, January 13, 2023.
[14] "Dignity Health and Global University Systems announce joint venture to expand global education for health professionals," Global University Systems press release, January 30, 2019.
[15] "Birmingham receives $10.8 million 'Good Jobs Challenge' grant," Birmingham City Council press release, August 3, 2022.
[16] *BACH Quarterly Newsletter*, Baltimore Alliance for Careers in Healthcare, accessed April 2023; "Cutting the ribbon on new West Philadelphia Skills Initiative Headquarters," University City District, March 29, 2023; CHWC Overview & Update - February 2021, Chicagoland Healthcare Workforce Collaborative, updated March 10, 2021.
[17] "DOL Nursing Expansion Grant Program: Total funding available: Up to $80 million," US Department of Labor Employment and Training Administration, 2022.

Sweeping changes to Medicare Advantage: How payers could respond

Gabe Isaacson, Dan Jamieson, Sonja Pedersen-Green, Emily Pender, and Cara Repasky

July 11, 2023

The Medicare Advantage program is undergoing its biggest shifts in more than two decades. Payers can take steps now to mount a strategic, agile response as the changes unfold.

The Medicare ecosystem is facing a series of simultaneous challenges, disruptions, and opportunities that add up to one certainty: this market will look meaningfully different in the years ahead. Medicare Advantage (MA) is projected to be the line of business that drives the most profit for payers in 2026,[1] even while headwinds are emerging in the Medicare program. The Centers for Medicare & Medicaid Services (CMS) is projecting the Medicare trust fund will run out of money in 2031,[2] although investors continue to pour billions into acquisitions of payers, care delivery partners, and related healthcare services and technology providers across the Medicare value chain. Additionally, market penetration of Medicare Advantage remains hugely variable nationwide, with only about 12 percent of beneficiaries in MA plans in some states but about 60 percent in others.[3] Meaningful disruptions—in demographics, regulations, and member preferences—compound the uncertainty, making it difficult for payers and other Medicare participants to chart a path forward. By making transformational moves in the near term, payers can improve their ability to compete in the years to come.

The strategic decisions private Medicare payers make now will determine their ability to have competitive capabilities and position themselves to succeed as the market changes. Some large payers and investors have already begun placing strategic bets to capture future growth (for example, buying up primary-care centers whose patients are enrolled in MA plans), despite the climate of uncertainty. By closely monitoring the ongoing shifts in Medicare, continually adjusting their priorities, and building new capabilities, payers can position themselves to succeed.

Disruptive trends are shaking up the Medicare landscape

Payers are considering strategies to better address the aging population, a succession of pending regulatory changes, and shifts in member preferences for benefits and engagement

Demographic shifts

The demographic profile of Medicare beneficiaries and eligible individuals is skewing older. From 2020 to 2030, seniors aged 75 to 79, 80 to 84, and 85 and older are projected to grow as a proportion of all seniors. This is a shift from the 2015–20 period, when growth was concentrated in the cohort aged 65 to 74.[4] For many of these aging and higher-need members, today's popular plans (for example, those with zero or negative premiums, rich supplemental benefits, or leaner core medical coverage) may no longer be the best fit. To retain members, payers may need to counsel them to switch to products that better match their evolving health needs, although some members are likely to resist, at least initially.

Medicare beneficiaries aged 85 and older average more than twice the monthly medical costs of those aged 65 to 69 and are more than three times as likely to have at least one

hierarchical condition category.[5] This creates a substantial increase in clinical burden that will require payers to develop new capabilities in care management, social determinants of health (SDoH), and health equity—in line with CMS's priorities. In the meantime, payers will continue to advance their capabilities as risk-bearing entities operating under capitated models. Specifically, where diagnosed conditions are most acute, payers could pursue specialist-centric risk arrangements. As needs intensify and mobility declines, payers could also develop intensive, home-based care models.

Along with the aging Medicare population, MA membership growth is slowing. We estimate that annual growth in MA membership will slow from more than 8 percent in 2022 to about 3 percent in 2031. As growth slows in historically strong and currently penetrated (primarily urban) markets, payers will seek to build the networks and capabilities to grow in historically less penetrated markets, such as those with large rural populations (Exhibit 1).

Regulatory environment

The most sweeping set of regulatory changes to the Medicare Advantage program since the Medicare Modernization Act of 2003 will go into effect in the next three years, affecting rates, risk adjustment, Star ratings, and Part D. To adjust, payers will need to respond to these changes in a nimble way.

MA rates. The 1.12 percent effective MA rate decrease—the change in the amount paid per enrollee per year to payers by CMS—marks the first decline since 2015 (Exhibit 2).[6] This translates to a loss to payers of an average of $150 per member per year.[7]

Risk adjustment. CMS announced changes to MA risk adjustment following careful analysis, including observed higher-than-expected risk scores compared with fee-for-service (FFS).[8] CMS has refreshed the risk adjustment model to bring it more in line with FFS, driving MA rates down by 2.16 percent, on average.[9] Risk adjustment remains a high-priority topic for payers as they respond to CMS's Risk Adjustment Data Validation (RADV) Final Rule, which is expected to enable CMS to recoup $4.7 billion over the next ten years.[10]

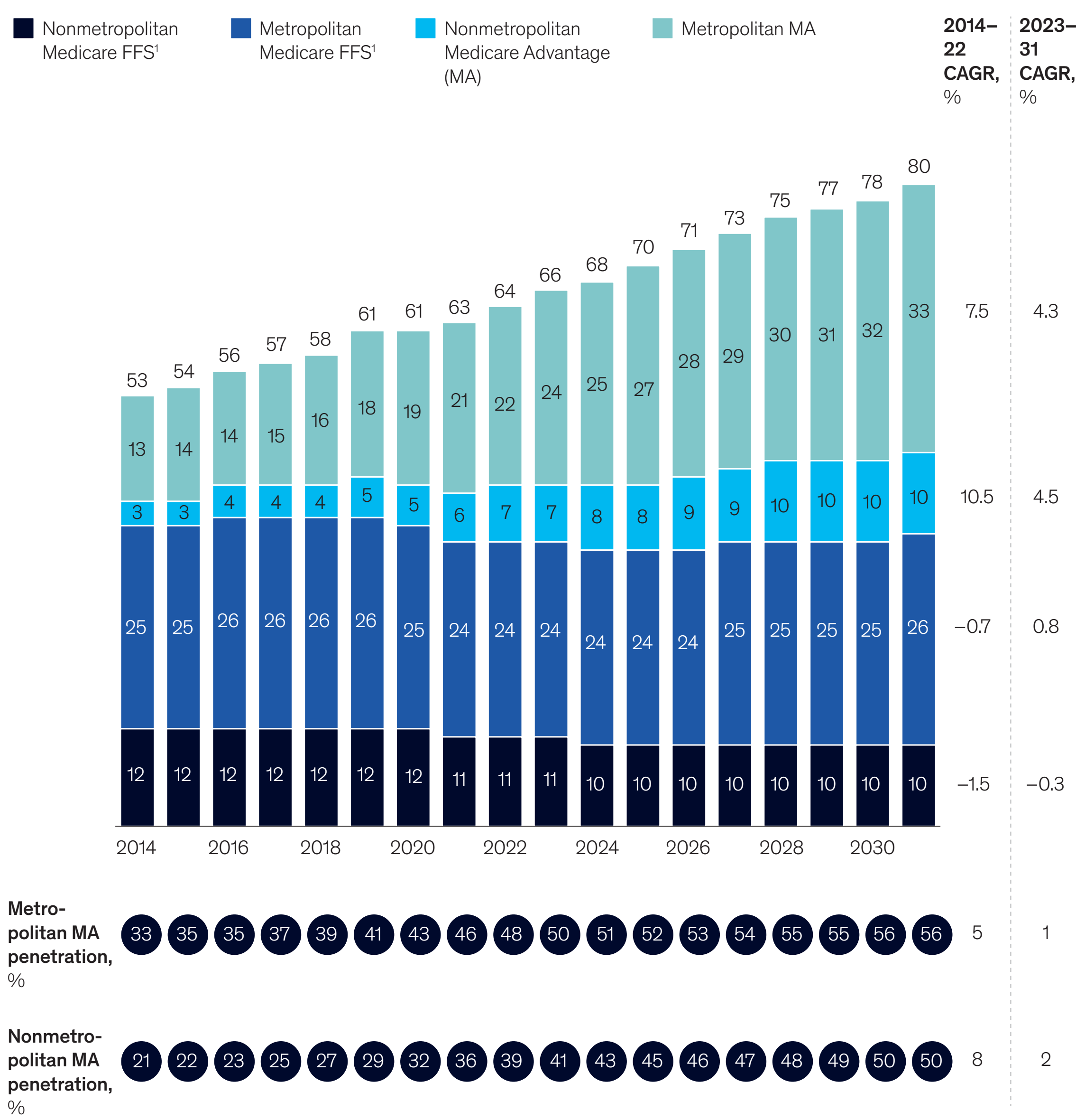
Star ratings. For calendar year 2024, CMS reduced payment rates by 1.24 percent in response to a decline in average MA Star ratings, which resulted largely from expiring COVID-19 provisions and scheduled measure adjustments.[11] Star ratings reached a record high in rating year 2022, with 90 percent of members in plans rated with four or more Stars; that number has fallen to 72 percent in 2023.[12] Payers will likely face further headwinds from Stars technical changes—for example, removal of contract performance outliers using the Tukey method and revisions to disaster provisions—and the introduction of the health equity index (HEI). Starting with 2027 Star ratings, the new HEI will reward contracts for high measure-level scores with low-income subsidy, dual eligible, and disabled enrollees.[13]

According to a simulation of the removal of the current reward factor and addition of the proposed new HEI reward, 1.7 percent (seven) of MA prescription-drug contracts gained a half star on the overall rating, while 13.4 percent (54) of contracts lost a half star on the overall rating.[14] Historically, payers have been able to respond to technical adjustments, the addition or expiration of certain metrics, and other changes to the Stars program, but the magnitude of these changes will be their biggest test yet.

Part D. As a result of CMS changes to Part D plans, payers will be prohibited from collecting back-end payments from pharmacies via Direct and Indirect Remuneration (DIR) fees and will be required to assume greater responsibility for catastrophic drug coverage. Payers will lose more than $11 billion in plan revenue from lost DIR fees, equivalent to 74 percent of revenue from member premiums in 2021 (Exhibit 3).[15] Additionally, reinsurance payments are currently the largest and fastest-growing source of payer revenues. In 2025, however, government coverage for reinsurance will drop by three-quarters, from 80 percent of catastrophic costs to 20 percent, leading to dramatic decreases in reinsurance payments to payers.[16]

Exhibit 1

Amid slowing Medicare Advantage growth, success in nonmetropolitan geographic areas will be critical for growth.



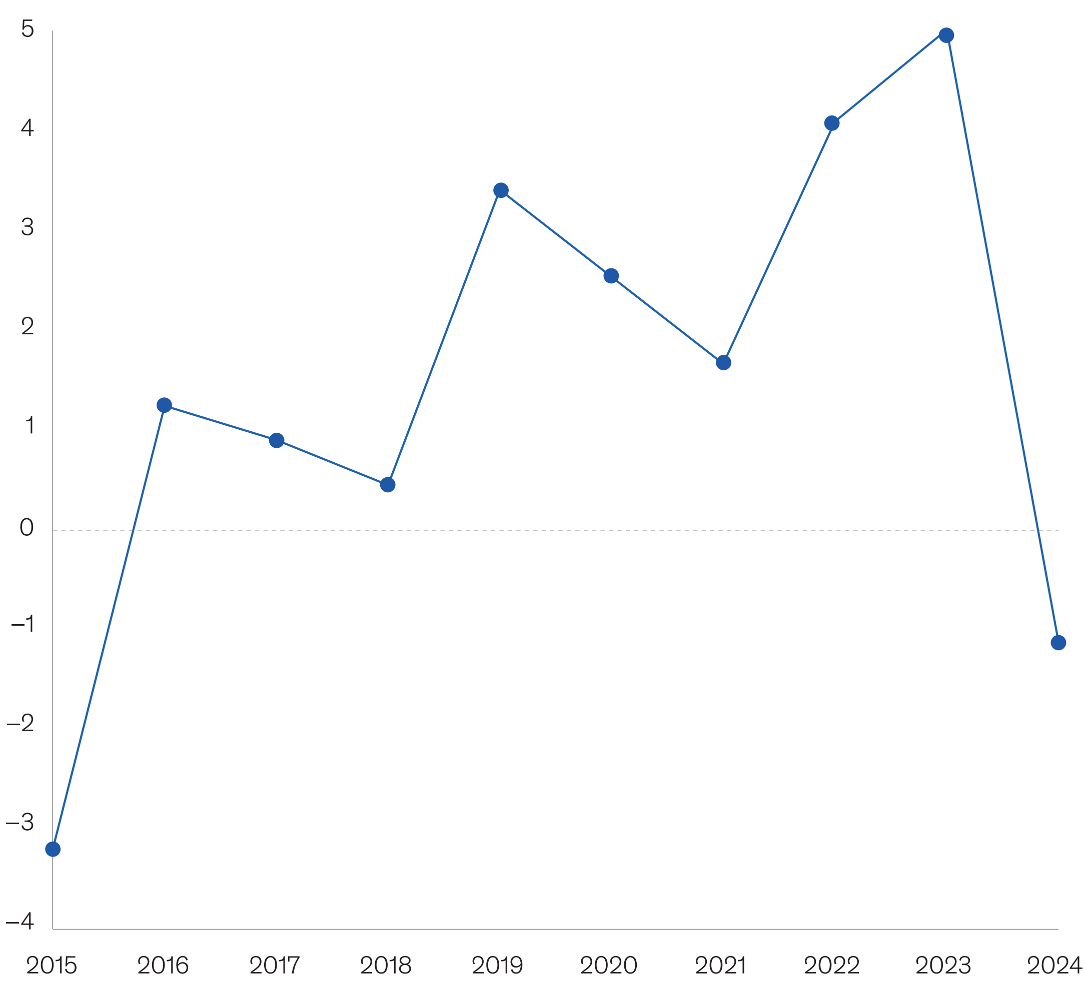
Note: Figures may not sum, because of rounding.
[1]Fee for service.
Source: "Monthly enrollment by CPSC," Centers for Medicare & Medicaid Services, accessed June 20, 2023; "NCHS urban-rural classification scheme for counties," CDC, updated June 1, 2017; McKinsey enrollment projections

McKinsey & Company

Exhibit 2

The rate decline for 2024 is the first rate decline since 2015.

Centers for Medicare & Medicaid Services (CMS) rate changes over time,[1] %



[1]Excludes impact of in-year coding trend, which has ranged from 2.00% to 3.50% historically, and CMS published is 4.44% for 2024.
Source: "Medicare Advantage rate announcement," Centers for Medicare & Medicaid Services, 2015–24

McKinsey & Company

Shifting member preferences

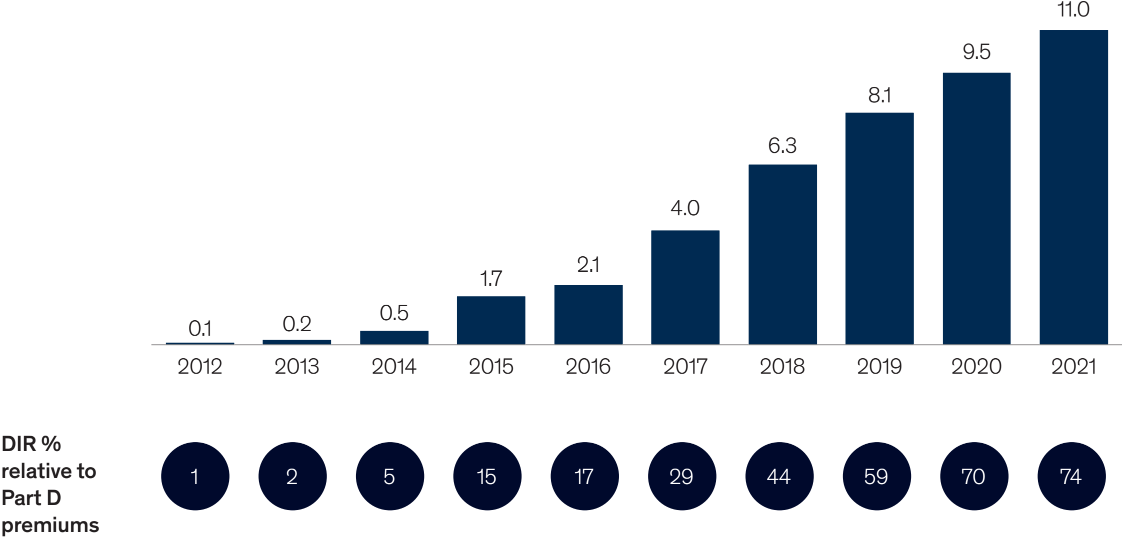
Members' preferences for engagement with MA plans are fundamentally changing—in line with the seamless, omnichannel, and customer-centric experiences they now routinely enjoy with B2C companies such as retailers and technology providers. This change manifests most prominently in rising preferences for digital engagement.[17] This appears first in the extent to which beneficiaries increasingly rely on e-brokers when shopping for MA plans. Of the more than seven million beneficiaries who enrolled in a new MA plan in 2022, more than one-third (about two million) used an e-broker, highlighting a meaningful shift to digital channels compared with even five years ago.[18]

Beyond shopping, our recent survey data indicates that more than two-thirds of members reported using technology in the onboarding journey to understand benefit coverage, manage prescription drugs, and navigate

Exhibit 3

Pharmacy Direct and Indirect Remuneration payments in Part D have been increasing but no longer will be allowed in 2024.

Net value of pharmacy Direct and Indirect Remuneration (DIR) fees in Medicare Part D, 2012–21, $ billion



DIR % relative to Part D premiums

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	2	5	15	17	29	44	59	70	74

Source: Drug Channels Institute research on pharmacy DIR fees; Adam J. Fein, *The 2023 economic report on U.S. pharmacies and pharmacy benefit managers*, Drug Channels Institute, March 2023; plan revenue from *2022 annual report of the boards of trustees of the federal hospital insurance and federal supplementary medical insurance trust funds*, Centers for Medicare & Medicaid, June 2, 2022

McKinsey & Company

physician networks.[19] More broadly, delivering a distinctive omnichannel experience will be critical in retention of members and strong performance on Stars ratings. The quality of members' experiences will be a core component of competitive differentiation in the future.

How payers can respond to the changing Medicare landscape

Payers can address changes in Medicare with near-term, targeted interventions and simultaneously carry out transformative initiatives. In the near term, they could consider the following:

— Pursuing sizable growth opportunities in underpenetrated populations (such as high- and low-income rural areas) with renewed focus and creativity to build products and networks—potentially augmented by virtual care—that will appeal to members traditionally less inclined to enroll in MA and historically presented with fewer plan options.

— Actively engaging in the evolving marketing and sales ecosystem—by diversifying their portfolio of partners to include more field brokers and e-brokers—to enable payers to reach more eligible individuals in their preferred (increasingly digital) channels. By supplementing their captive internal-distribution channels, which rely heavily on standard mailers and other traditional methods, they could also broaden their reach into, for example, communities with a higher proportion of minority residents or residents of relatively low socioeconomic status.

— Prioritizing investment in the Stars program to meet evolving beneficiary needs and address Stars performance and, therefore,

revenue headwinds. Investment in Stars could be targeted to address SDoH needs, close clinical-care gaps, and improve clinical outcomes for an increasingly aging population with more acute care needs, allowing payers to deliver a best-in-class member experience.

— Expanding digital engagement (such as through applications, text, and chatbots) to meet changing member preferences, and developing wraparound support services to increase member uptake and proficiency.

Additionally, a series of transformative initiatives could best position payers to navigate the future Medicare ecosystem.

Serve members with efficiency. For payers facing substantial margin pressure, administrative costs, which commonly exceed $100 per member per month (PMPM),[20] are increasingly unsustainable. Plans can consider entirely new ways of managing administrative costs and running their budgets without sacrificing service quality. Although attaining economies of scale can create cost efficiencies, the distributed nature of MA membership creates challenges. Many single-state payers can boast a strong market presence yet have only tens of thousands of members. For most payers, reducing administrative costs will require investment in nonscale performance levers.

Typically, increasing cost efficiencies would require a meaningful investment in automation, data-backed decision making, and continuous reallocation of resources. Specific actions to consider include the following:

— embarking on true zero-based budgeting,[21] targeting an administrative cost of less than $80 to $100 PMPM so that it could better withstand any changes in top-line revenue

— expanding reliance on shared technology platforms and services to manage costs while also investing strategically in products and capabilities

— investing now in innovative technologies that will soon become standard, including, for example, chatbots to assist members with support and requests (such as generative AI) and self-serve portals with tools to help members find the best plan for them

Deliver seamless shopping, enrollment, and onboarding experiences. Demographic changes will result in fewer seniors enrolling in MA, expanding opportunities to reach new and existing members. Payers could create and deliver integrated experiences, from shopping to enrolling and onboarding to attract and retain members. In a 2022 survey of MA members, nearly half indicated they had shopped around to assess product options in the year prior,[22] highlighting the imperative for easily navigable websites and distinctive benefits positioning.

To achieve their growth targets, payers will also likely expand their reliance on brokers and other third-party partners. Success will hinge on having clearly defined member journeys and integrated internal and external channels (for example, call centers and onboarding). Multidirectional, real-time data sharing paired with efforts by payers to educate and enable brokers would allow the integrated distribution unit to optimally attract and retain members in a lower-growth environment.

Know each member and personalize engagement. Knowing members as individuals is becoming crucial to meeting their shopping preferences, implementing best-fit engagement channels, managing disease states, ensuring access to quality care, and supporting evolving care needs.

Although payers have vast repositories of data, their databases (for example, for customer-relationship-management and care-management tracking) have traditionally been siloed. Payers have also typically defaulted to standard reporting and struggled to perform ad hoc analytical queries to understand the full scope of member engagement. And they have relied extensively on third-party Stars vendors who engage in sporadic calling campaigns to engage members in their healthcare journeys.

Instead, payers could consider differentiating themselves in their engagement with members by meeting the standards set by leading retail

and e-commerce players. This might entail establishing a singular view of each member over the span of their Medicare journey and using unique member identifiers to track data points and touchpoints across channels such as brokers, care managers, and physicians. With a holistic view of each member at their fingertips, customer service representatives could provide better support. Payers could develop AI-enabled predictive capabilities to provide personalized engagement plans and smart interventions. Ultimately, this improved transparency could unleash a ripple effect of better care, improved health outcomes, and an elevated experience for each member.

Convene and enable a redefined care-delivery landscape. The payer's role in the care domain has expanded over time from utilization management to care management and, increasingly, care delivery. Some payers are carving out a leadership role as a convener of a care delivery ecosystem (encompassing the set of care models, physicians, capabilities, and services that surround a patient) while leaving care provisioning to clinicians. They are investing in enablement partnerships and acquisitions while working hand in hand with physicians to improve outcomes for Medicare members in meaningful risk-sharing arrangements.

Payers could accelerate this trend by assessing the clinical needs of their membership and mapping them to the care delivery landscape in their geography. For example, payers that have members with substantial clinical needs (for example, large populations with chronic kidney disease or special-needs plans for chronic conditions) might invest in or partner with specialists or advanced in-home care providers. Payers with a large rural population could consider supplementing their care delivery footprint to address care gaps (for example, through virtual-care models).

Many payers would benefit from simultaneously pursuing multiple strategies, particularly as acuity in the Medicare population accelerates. Important considerations include aligning their incentives with those of physicians and patients and protecting physician independence in clinical decision making.

Payers could also use member data and conduct advanced analytics to match members with effective care models and enable physicians to deliver the highest quality of care.

A mature care-delivery ecosystem would meet all members where they are through a combination of value-based care models (with physicians who can deliver against them), next-generation models (for example, rural-focused care), in-home primary and specialty care, and advanced care models.

Reimagine the product portfolio in line with MA membership needs. Payers often grapple with variable economics across the product portfolio. Newer members are typically enrolled in the most generous products with, for example, expansive dental and vision benefits, flex cards that cover not only over-the-counter medications but also food and wellness, and Part B givebacks (in which payers cover a set monthly amount toward a member's premium).

These newer products are also the most economically challenging for payers. But although they would struggle to sustainably offer, for example, a $100 Part B giveback benefit, legacy members paying higher premiums (at least for now) effectively subsidize these offerings, resulting in an overall profitable membership mix. This trend, encouraged by many distribution partners, is unsustainable for payers, as evidenced by a number of previously high-growth MA plans that are now retrenching, rolling back benefits, and potentially causing meaningful disruptions in healthcare for tens of thousands of members.

The trend also doesn't bode well for members as they age and their needs evolve. While members are relatively young and healthy, preferred provider organization (PPO) plans with $0 premiums and rich supplemental benefits but lighter core medical benefits can be a fit. These members, unconcerned with a higher maximum out-of-pocket cost, see supplemental benefits flowing directly to their personal bottom line—an especially appealing proposition at a time of high inflation and broader economic uncertainty. However, as the MA membership skews older, likely correlating

with increasing medical needs, plans with richer medical benefits and lower maximum out-of-pocket costs may make more sense.

Payers can start now to evolve their product offerings and messaging to serve these members, including by rationalizing the supplemental benefit portfolio and reinvesting in core medical benefits that matter most to members' health. In parallel, they can devise ways to counsel members to ensure they are continuously enrolled in the right plan for their needs, perhaps over decades.

Given members' increasing proclivity to shop, a proactive stance by payers will be rewarded. Payers could consider strategically engaging brokers, for example, to enable intrapayer plan movements. Although some payers and distributors have already begun to do this on an ad hoc basis (by, for example, proactively moving members to plans within their portfolios that have better Star ratings), taking a more strategic approach could help retain members within the payer's ecosystem.

The MA market has been on an upward trajectory for years, with a continual stream of investor dollars chasing double-digit growth rates annually, enabling a thriving ecosystem of payers, care delivery partners, and services and technology companies. The variety of disruptions emerging, however, means that the winning strategies of the past five years are unlikely to be sufficient to meet members' evolving needs and preferences. Success in the future will be determined by bold moves made now.

Gabe Isaacson is an associate partner in McKinsey's Pittsburgh office, where **Cara Repasky** is a partner; **Dan Jamieson** is a partner in the Chicago office, where **Emily Pender** is a consultant; and **Sonja Pedersen-Green** is an associate partner in the Minneapolis office.

[1] Neha Patel and Shubham Singhal, "What to expect in US healthcare in 2023 and beyond," McKinsey, January 9, 2023.
[2] *2023 annual report of the Boards of Trustees of the federal Hospital Insurance and federal Supplementary Medical Insurance trust funds*, Centers for Medicare & Medicaid Services (CMS), March 31, 2023.
[3] For example, MA penetration in Michigan is about 59 percent and in Wyoming is about 13 percent. For more, see "MA State/County Penetration 2023-06," CMS, June 2023.
[4] McKinsey analysis of US Census data.
[5] McKinsey analysis of 2021 Medicare fee-for-service data.
[6] This rate excludes the CMS-estimated 4.4 percent rate increase from MA risk score trend.
[7] The 1.12 percent effective rate decrease equates to a roughly $4.7 billion loss in payment to MA plans, or about $150 per member considering 2023 MA membership. For more, see "Fact sheet: 2021 Medicare Advantage and Part D rate announcement," CMS, March 31, 2023.
[8] *Report to the Congress: Medicare payment policy*, Medicare Payment Advisory Commission, March 2022.
[9] "Fact sheet: 2021 Medicare Advantage and Part D rate announcement," March 31, 2023.
[10] "Medicare Advantage Risk Adjustment Data Validation final rule (CMS-4185-F2)," CMS, January 30, 2023; McKinsey analysis of historical audit results.
[11] "Fact sheet: 2021 Medicare Advantage and Part D rate announcement," March 31, 2023.
[12] "2023 Medicare Advantage and Part D Star ratings," CMS, October 6, 2022; "Fact sheet – 2022 Part C and D Star ratings," CMS, October 8, 2021.
[13] "2024 Medicare Advantage and Part D final rule (CMS-4201-F)," CMS, April 5, 2023.
[14] *Medicare program; contract year 2024 policy and technical changes to the Medicare Advantage program, Medicare Prescription Drug Benefit program, Medicare cost plan program, Medicare Parts A, B, C, and D overpayment provisions of the Affordable Care Act and Programs of All-Inclusive Care for the Elderly; health information technology standards and implement specifications*, Federal Register, December 27, 2022.
[15] Adam J. Fein, *The 2023 economic report on U.S. pharmacies and pharmacy benefit managers, Drug Channels Institute, March 2023; 2022 annual report of the Boards of Trustees of the federal Hospital Insurance and federal Supplementary Medical Insurance trust funds*, CMS, June 2, 2022.
[16] Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818, 2022.
[17] Gabe Isaacson, Marina Ivanenko, and Cara Repasky, "Digital engagement now typifies the Medicare Advantage experience," McKinsey, March 9, 2023.
[18] McKinsey analysis of earnings reports for SelectQuote (about 617,000 beneficiaries in 2022), eHealth (about 322,000 in 2022), and GoHealth (about 830,000 in 2022). Triangulated with expert interviews for private and broader market (more than 400,000 beneficiaries in 2022).
[19] "Digital engagement," March 9, 2023.
[20] Phil Ellenberg et al., "Medicare Advantage organizations financial results for 2021," Milliman, December 1, 2022.
[21] Zero-based budgeting means building a budget from scratch with no carry-over spending allocated.
[22] "Digital engagement," March 9, 2023.

How stakeholders are responding

40

Investing in the new era of value-based care

Zahy Abou-Atme, Rob Alterman, Gunjan Khanna, and Edward Levine

Recent trends appear to make a case for investing in value-based care. Here's why value-based models now show both the potential and propensity for growth.

50

Driving growth through consumer centricity in healthcare

Jessica Buchter, Jenny Cordina, and Mark Lee

Providing consumers with the experiences they increasingly expect and demand at every stage of the healthcare journey could substantially improve care and cost outcomes.

60

Bolstering health system supply chain resilience to reduce risk

Eric Bishop, Brianne Bowen, Sabriya Karim, Margarita Protopappa-Sieke, and William Weinstein

How health systems could enhance their ability to withstand supply shocks and deliver quality care in ordinary times and when crises strike.

Investing in the new era of value-based care

Zahy Abou-Atme, Rob Alterman, Gunjan Khanna, and Edward Levine

December 16, 2022

Recent trends appear to make a case for investing in value-based care. Here's why value-based models now show both the potential and propensity for growth.

Value-based care has evolved into a healthcare landscape of its own, with a wide range of organizations contributing to systematic changes that improve quality of care and outcomes while better controlling costs. Providers specializing in value-based care have become attractive to investors because of the distinctive quality of care that they can provide and the investable opportunity they present, with a diversity of risk levels and business models. By building on a decade of increasing value-based payment adoption—combined with enhanced value-based capabilities across payers, providers, employers, and other healthcare stakeholders—continued traction in the value-based care market could lead to a valuation of $1 trillion in enterprise value for payers, providers, and investors.[1]

Value-based care is emerging as a distinct healthcare landscape

Stakeholders in the healthcare community define value-based care differently. The Health Care Payment Learning and Action Network (LAN) includes performance, reporting, and even infrastructure in its first step of value-based care, while others note that these models fall short of delivering value (in quality or affordability) because they don't remedy the problems of fee-for-service healthcare.[2]

In this article, we take a more expansive definition of the value-based care landscape and include all care models that align provider incentives to quality or care cost-reduction. Though we recognize that improvements in care quality will vary considerably across models, based on our experience working with a wide range of providers, we assume savings ranges from a low of 3 percent in more limited quality-based models to a high of 20 percent in high-touch primary care groups taking fully capitated risk on Medicare Advantage members.

Value-based care investment quadrupled during the pandemic

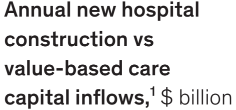
Private capital inflows to value-based care companies increased more than fourfold from 2019 to 2021, while new hospital construction—a proxy for investment in legacy-care delivery models—held flat. While these are distinct forms of investment—with private equity seeking returns on enterprise value and construction debt funding seeking safer opportunities for more modest returns—it's noteworthy that private-capital inflows in value-based care assets rose from 6 percent of the capital investment in hospitals to nearly 30 percent within two years, as illustrated in Exhibit 1.[3]

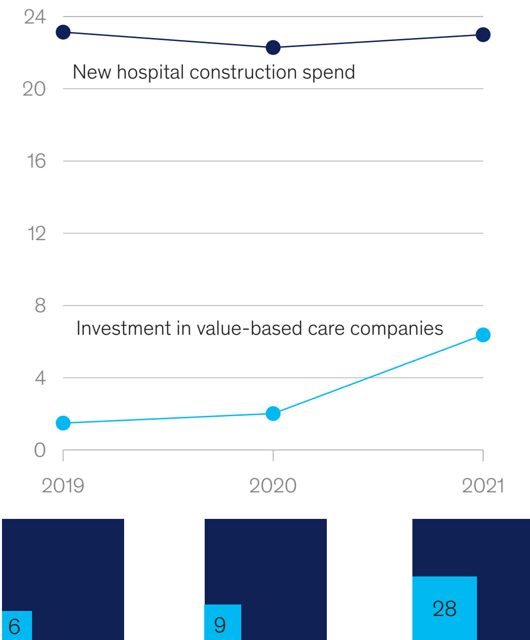
The future potential of value-based care

Given the momentum we see behind value-based care investment, it's worth examining recent trends to understand the ways in which this landscape could potentially evolve. In

Exhibit 1

Value-based care investment inflows have grown faster than capital expenditures on new hospital construction.





Value-based care capital inflows as a share of new hospital construction spend, %

[1]Annual, not net of realized investments.
Source: Dodge Data and Analytics; PitchBook; McKinsey analysis

McKinsey & Company

imagining the value-based care landscape five years from now, the following scenarios seem possible—and not at all mutually exclusive:

— *Scenario 1: Value-based care growth will continue to accelerate.* Growth in value-based care has accelerated from creating approximately $500 billion in enterprise value today and may be on track to reach $1 trillion as the landscape matures (see Exhibit 2 and sidebar, "Our approach to estimating this $1 trillion opportunity"). Based on our research, this would likely be driven by a rising number of lives in all value-based care arrangements of 10–15 percent, with growth rates for lives in full or partially capitated contracts well above that (potentially 20–30 percent). Improved medical-cost-management performance from providers in value-based contracts—becoming more critical in the face of potential increases in medical-cost inflation[4]—could further support enterprise value creation, and the cumulative impact of these tailwinds may suggest positive downstream effects on patient health outcomes as well. In fact, some of the largest value-based care performance reviews have found that they correspond to improved outcomes, increased preventative care, and improved patient satisfaction.[5]

— *Scenario 2: A handful of national platforms could take the lead, with sharp competition among them.* Platforms could include integrated primary care, managed-services organizations (MSOs), and specialty-based care. While vertical integration may accelerate, these platforms may not necessarily be "walled garden" silos: a degree of collaborative interoperability will likely be necessary, potentially enabled by platforms specializing in a variety of patient populations.

Our approach to estimating this $1 trillion opportunity

To arrive at the $1 trillion enterprise value estimate, consider the following:

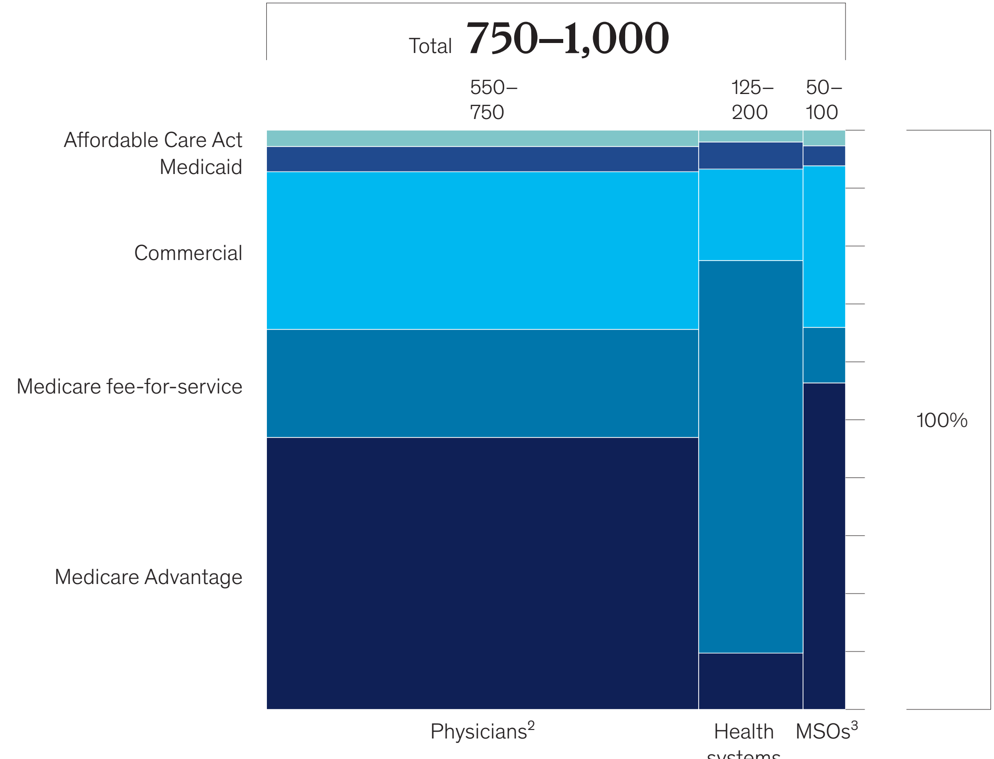
- Approximately 160 million total lives are in value-based care. According to McKinsey analysis, this represents an aggregated and triangulated view that draws on payer financial statements, publications, and press releases; Centers for Medicare & Medicaid Services data for Medicare and Medicaid; state regulatory agency publications; and extended discussions with internal and external healthcare leaders.
- There is a total medical spend for these lives at approximately $1.6–1.7 trillion, based on national spending levels.[1]
- There is 3–20 percent savings of medical spend, varying across lines of business and value-based payment models, our analysis found.
- There is a valuation of 12-fold to 15-fold on earnings before interest, taxes, depreciation, and amortization (EBITDA) applied to a 50 percent assumed margin on the generated savings, assuming the other 50 percent is required operational expenses for the provider to deliver the incremental services and preventative care necessary to realize these aggregate savings, according to our analysis. Review of public research and industry perspectives[2] suggests that valuations can vary widely based on secular and asset-specific factors but are often 12-fold to 15-fold EBITDA for at-scale physician platforms. We therefore assume this range in this analysis.

[1] Per member, per year spend calculations are from Centers for Medicare & Medicaid Services and commercial claims data sets (namely Truven).
[2] Sarah Pringle, "Skin in the game: OMERS readies sale of Forefront Dermatology," PE Hub, June 30, 2021; Claire Rychlewski, "How much is your doctor worth? Investors are trying to decide," *Forbes*, January 10, 2020.

Exhibit 2

Total valuations of value-based care assets could reach $1 trillion.

2027 enterprise value of the margin from value-based care adoption,[1] $ billion



[1]Assumes ~160 million lives in value-based care models accounting for $1.6 trillion–1.7 trillion in medical spending, with medical-cost savings ranging from 3–20% based on level of risk, of which 50% is realized as profit margin with a 12–15× valuation multiple applied.
[2]Primary care providers and specialty providers.
[3]Management services organizations and technology.

McKinsey & Company

- *Scenario 3: Distinctive operational capabilities could become prerequisites for successful value-based care providers.* Distinctive operational, clinical, and analytical capabilities could increasingly become prerequisites for successful value-based care providers. These capabilities could range from new technology to the prediction of membership changes and points in between.
- *Scenario 4: Specialists may begin to adopt value-based care.* Specialists appear to accelerate adoption of value-based care models as part of increasingly effective and scalable value-based care platforms. These models are already emerging in specialties like nephrology and oncology.

Scenario 1: Value-based care growth will continue to accelerate

In our experience, adoption of value-based care has accelerated in recent years, and this trend could continue in the coming years as payers, employers, and the government embrace these models.[6] For example, last year the Center for Medicare and Medicaid Innovation issued an ambitious goal to shift 100 percent of Medicare beneficiaries into an accountable-care relationship by 2030,[7] which we recently analyzed.[8]

Ultimately, our research suggests that the number of patients treated by physicians within the value-based care landscape could roughly double in the next five years, growing approximately 15 percent per annum.

Increased physician appetite for value-based models lies at the heart of this acceleration, but within the national community of one million licensed (if not necessarily working) physicians,[9] value-based care adoption remains uneven. Not all primary care providers find value-based models readily accessible, and in our experience, pockets of the market (notably those at institutions that focus on quaternary care rather than primary care) lag behind in adoption. Such physicians, particularly those affiliated with more academically oriented institutions, may require more peer-reviewed research (lacking today) before altering their practice models.[10] Nevertheless, some recent data suggest that the number of patients aligned with a primary care provider in a value-based care arrangement is increasing—and the associated outcomes are better than those in fee-for-service arrangements.[11]

These successes could power further growth, as physicians taking note of improved outcomes and other benefits become more interested in adopting value-based models. Growth could become disproportionately driven by the adoption of meaningful risk (full and partial cap) as these models mature. Our research suggests that the upward trend in the number of people receiving care in value-based models should continue across lines of business (Exhibit 3). This is one of the primary factors powering the growth in enterprise value associated with the value-based care landscape, potentially leading to a $1 trillion cumulative valuation.

Scenario 2: A handful of national platforms could take the lead, with sharp competition among them

A look at mature markets across the country may shed some light on where the risk-bearing provider market is heading. In Southern California, where health maintenance organization (HMO) approaches using independent physician associations and employed risk-bearing providers have been around for two decades, a consolidation of lives over the past five years has been driven by acquisitions, attractive offers to physicians, and member behaviors (Exhibit 4). Southern California may be unique in its value-based care adoption, but as more emergent markets in Florida and elsewhere catch up, their providers have displayed a similar acquisition strategy.[12]

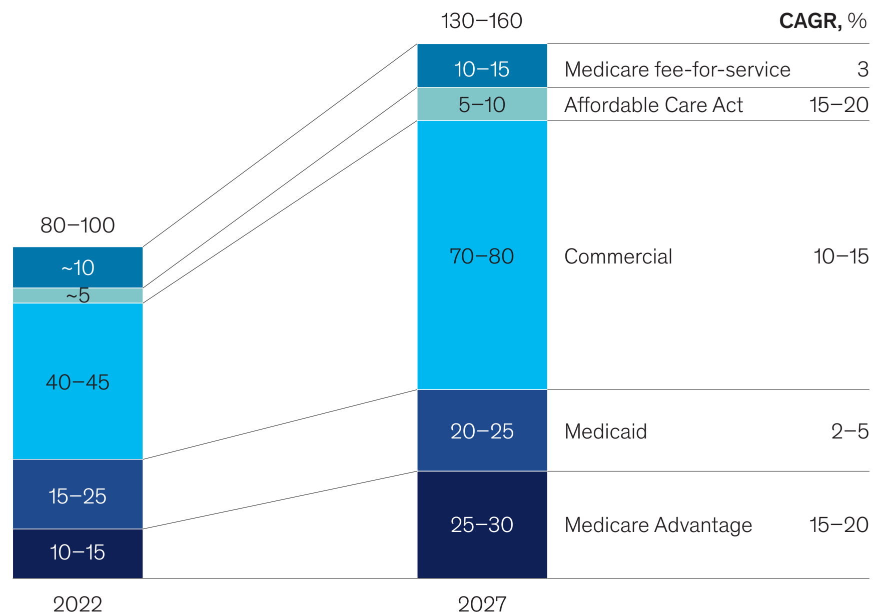
Based on data from Definitive Healthcare and the California Department of Managed Health Care, we estimate that 90 percent of Southern California's commercial and Medicare lives are in value-based contracts, as well as nearly 50 percent of its Medicaid lives, making this one of the more mature markets nationally.

In the next five years, mature markets such as Florida and California will likely see increased competition among provider groups to further

Exhibit 3

Value-based care models are expected to grow across all lines of business.

Lives in all value-based care models,[1] million lives



[1]Includes pay-for-performance or quality to full capitation.

McKinsey & Company

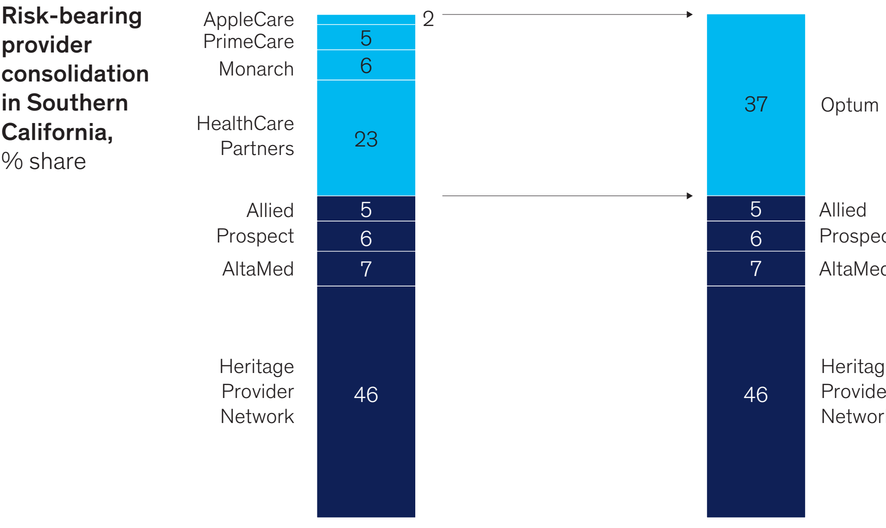
improve performance via more operationally and clinically complex levers. Successful providers will likely establish a strong presence with payers looking to delegate their growing memberships.

We have taken an expansive definition of value-based care in this article and included pay-for-quality, pay-for-performance, and similar models. Our experience suggests that private investment has focused on assets that take material financial risk on medical-cost management. This typically includes different types of physician groups, MSOs, independent physician associations, or other care delivery models, but has largely excluded hospitals and health systems in primarily pay-for-performance or pay-for-quality models. Through that lens, we observe investor interest primarily concentrated in three types:

— *Risk-bearing primary care groups* enter value-based care contracts with payers with an aim to take over the accountable care within capitated payments, either on professional and physician services or on a member's entire cost of care. In our experience, these providers often offer a higher-touch care model for a smaller patient panel than is typically seen in fee-for-service primary care. They spend more time with a smaller panel of patients than their fee-for-service peers, and they focus extensively on preventive care, condition management, and addressing patients' social determinants of health. The past two to three years have seen a rise of at-scale risk-bearing groups with high valuations. They offer a proven investment rationale for sponsors—recent corrections in public valuations notwithstanding—with clear levers for growth, operational improvement, and multiple exit opportunities.

Exhibit 4

Consolidation of management services organization networks has accelerated in Southern California.



Source: Definitive Healthcare

McKinsey & Company

— *Value-based care MSOs* have developed a compelling value proposition for independent primary- and specialty-care groups by facilitating the transition to risk through a combination of off-the-shelf tools and accompanying wraparound services, including payer contracting and practice transformation support. Successful MSOs can gain rapid scale when entering a new market, aggregating physicians and payer membership and quickly standing up risk-bearing entities or accountable-care organizations to take collective risk.

— *Risk-bearing specialty groups,* while currently less prevalent than their primary care counterparts, are increasingly carving out medical-cost risk in value-based models tied to their specific procedures and conditions. Adoption varies considerably across specialties: orthopedics and nephrology were among the earliest adopters, and traction is emerging in cardiology (more on nephrology below). These groups can ultimately participate in a wide range of risk models, from episodic bundles to specialist subcapitation models that offer an analogue for global or population-level risk.

Scenario 3: Distinctive operational capabilities could become prerequisites for successful value-based care providers

As the market for value-based care providers has matured, public markets have driven market capitalization down substantially relative to the S&P 500 index, but with better results for those companies that have proven the ability to at least break even. Exhibit 5 shows trends over time.

Scrutiny may rise as investors become increasingly discerning about providers' operational sophistication; providers that realize material savings will likely have clear and comprehensive clinical pathways that cover

their members' needs and a well-disciplined clinical staff immersed in a common approach to care delivery supported by analytical insights. Training clinicians in these models often takes time, which can influence the balance between the growth and operational performance of value-based care organizations. Further, the operational foresight necessary to weather a pandemic or other force majeures is expected to become increasingly important.

That said, market watchers might reasonably propose an array of factors that make this analysis imperfect—rebounding utilization in the third year of the COVID-19 pandemic, market volatility from interest rate changes and attendant investor speculation, and public market skepticism of special-purpose acquisition company valuations chief among them. The divergence in enterprise valuations may create consolidation opportunities that accelerate the emergence of the national platforms relevant to investors, as detailed above.

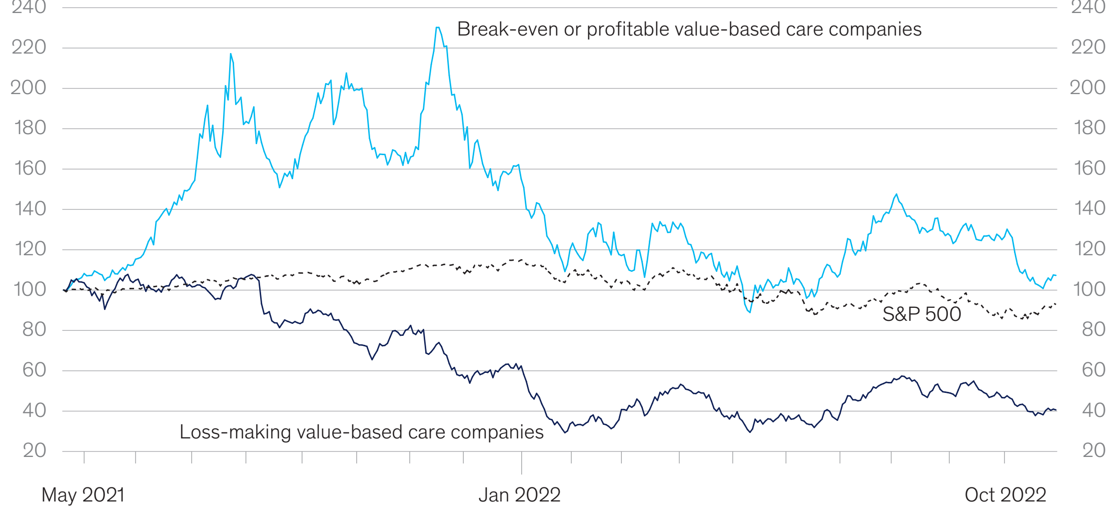
With a variety of value-based care platforms, dormant value may be achieved from foundational "blocking and tackling" in analytics applications. In our view, predictive and truly advanced analytics, including AI and machine learning,[13] hold substantial promise, but they may not be prerequisites for success in medical-cost management. This reflects both the complexity of the data and the enormity of the analytics challenge—past efforts to predict utilization (particularly emergency department and hospital inpatient utilization) have yielded few actionable insights. But there may be other opportunities for the application of value-additive advanced analytics[14] in predicting membership changes; providers may succeed in identifying drivers of patient churn and apply these to their own data on a forward-looking basis, developing mitigating interventions accordingly.[15]

The path to value creation is likely to rest on analytics, standardized clinical practices and operational workflows, and a package of

Exhibit 5

Trends in the valuation spread between high and low performers in value-based care emerged as the market for these companies matured.

Stock prices of public value-based care players vs S&P 500, index (April 2021 = 100)



Source: S&P Global

McKinsey & Company

member and physician services designed to reduce medical costs by avoiding unnecessary (or unnecessarily high-cost) practices. From our experience working with with value-based care providers, mature markets may be entering a transition in which the low-hanging fruit in operational and clinical performance improvement has largely been picked, as evidenced by the publicly reported performance of provider groups (Exhibit 6).[16] This next wave of impact requires material capability building; many providers have already begun investing.

Scenario 4: Specialists may begin to adopt value-based care

Value-based care models have grown more intermittently among specialists than they have among primary care providers in recent years.[17] Across specialties, there has been a fundamental shift away from a predominantly utilization-management approach to specialty spend to one that aims to use analytics, care coordination, provider integration, and patient engagement to address avoidable spend more holistically. Two main models seem to be emerging:

— *The subcapitation model* has been focused on specialties with high value at stake, predictable condition incidence, and clear value-creation levers under specialist control (for example, oncology care pathway choice, initiation of dialysis). In these models, specialty-specific spend is delegated to the risk-bearing entity, usually a benefit-management/care-management platform or a provider network. Either the payer or a primary care risk group can delegate this spend. Oncology, for example, has seen increased penetration of these models,[18] especially in markets where the presence of primary care risk delegation is high, with the risk bearers generating medical cost savings mainly through the close management of specialty drug spend and the redirection of infusion to the highest-value clinically appropriate site of care.

— *Episode-based model* adoption is higher among specialties with a higher prevalence of expensive, clearly defined episodes.

Exhibit 6

Successful value-based care providers will increasingly need to look into more innovative levers to maintain value.

Sources of value for successful value-based care providers, and total cost-of-care savings, Medicare Advantage example, %

Low-hanging fruit 3–8	The harder stuff 3–6	Future innovations 3–5
• Improve risk-coding accuracy to capture health status	• Predict health risk status	• Leverage digital twin capabilities to identify required interventions to tackle future health issues
• Reduce out-migration of in-network care to out-of-network providers	• Manage use and mix of diagnostic testing, drugs for pharmacy, and procedures (surgical vs noninvasive)	• Reduce preventable injuries, falls, etc, at home using remote patient-monitoring
• Improve adherence of referrals to high-quality providers	• Reduce variable costs within specialties, and collaborate on scheduling and comanagement to increase patient access	• Reduce preventable exacerbations
	• Shift to lower cost, efficient sites of care: select discharges from senior nursing facility to home, outpatient surgery to ambulatory surgery center, low-acuity medical admits to observation, emergency department visits to primary care physician	• Reduce potentially avoidable hospital readmissions
	• Improve performance on Healthcare Effectiveness Data and Information Set, Centers for Medicare & Medicaid Services Star ratings measures, and in commercial-quality programs	• Reduce medically unnecessary inpatient admissions from emergency department

McKinsey & Company

Orthopedics, with its high-cost, highly "episodic" joint-replacement procedures, is perhaps the most notable example,[19] but there is growing adoption in women's health (for end-to-end maternity journeys), cardiology, and oncology.

Nephrology has seen the most accelerated adoption of value-based care models in recent years, supported by Centers for Medicare & Medicaid Services programs and rules (for example, coverage of end-stage renal disease [ESRD], launch of Kidney Care Choices), but this has occurred through structures that more closely resemble those of primary care. In emerging nephrology models, risk bearers assume the risks for the total cost of care (versus specialty-spend only) for members with chronic kidney disease or ESRD.[20] Current reimbursement rates, cost-savings potential, and multiyear ownership of the patient journey make the model economically and operationally viable for nephrology. These value-based models are in relatively early stages of development, but we observe that nephrology providers adopting them report substantial reductions in hospital admissions, readmissions, and dialysis crashes, as well as widespread adoption of in-home dialysis, both improving outcomes and reducing the cost of care delivery. There are other specialties (for example, oncology and some segments of cardiology) for which the economics could be similarly feasible.

Overall, diverse risk-sharing models continue to grow in specialty care. Exhibit 7 lists some of our expectations by specialty. Episodic and condition-based capitation models should thrive as they continue to propel improved medical cost performance, as should specialty subcapitation models. Enabling and accelerating this trend, specialty provider MSOs are developing (or integrating with) specialty benefit-management solutions to take on more

Exhibit 7

Value-based care adoption is highest in primary care but other specialties see meaningful and growing traction.

Value-based care (VBC) adoption by medical specialty,[1] nonexhaustive

HIGH ADOPTION ◄——► LOW ADOPTION

Specialty	**Primary care**	**Nephrology**	**Oncology**	**Orthopedics**	**Women's health**	**Cardio-vascular**	**Behavioral health**
Description	Enables primary care to act as the "quarterback" and take full responsibility for patient health	Enables nephrologists to succeed in CMS[4] and MA VBC[5] focused on reducing CKD/ESRD[6] costs	Enables oncologists to prescribe an appropriate drug for the patient while maximizing practice margin from prescription	Large spend area with significant employer focus and increase in penetration of episodes	Pregnancy episodes particularly in Medicaid and increasingly commercial	Large spend area, particularly in MA, driving high inpatient and emergency department utilization; site-of-care shift for procedures	Episode-based models for facilities with more innovative approaches involving PCPs on integration of BH[8]/physical health
Applicable CMMI model	Primary care first, MSSP,[2] ACO REACH[3]	Kidney care choices, ESRD treatment choices	Oncology care model, enhancing oncology model	Comprehensive care for joint replacement, BPCI[7]	n/a	BPCI	n/a

[1]Proportion of money in specialty at risk. [2]Medicare Shared Savings Program. [3]Accountable care organization Realizing Equity, Access, and Community Health (REACH) model. [4]Centers for Medicare & Medicaid Services. [5]Medicare Advantage value-based care. [6]Chronic kidney disease/end-stage renal disease. [7]Bundled Payments for Care Improvement initiative. [8]Behavioral health.
Source: Centers for Medicare & Medicaid Services Alternative Payment Models program data; expert interviews and discussions with payer and provider senior executives

McKinsey & Company

population-level risk. Investors could capture this value by acquiring practices, MSOs, or both. In each scenario, strong secular growth tailwinds across most geographies may bolster the investment thesis.

Investors may continue to look to value-based care for strong growth. With double-digit growth in the penetration of value-based care models, value-based care could continue to present a strong investment thesis—the "$1 trillion prize" in enterprise value that McKinsey described almost ten years ago.[21]

These models hint at the possibility that by incentivizing improved patient outcomes and healthcare equity, value-based care players across the value chain (and the sponsors who back them) could continue to make gains. Competition will likely require operational effectiveness and differentiation, but whatever the approach may be, value-based care is a reality[22] with potential benefits for everyone from patients to clinicians to investors.

Zahy Abou-Atme is a partner in McKinsey's New York office, **Rob Alterman** is an associate partner in the Philadelphia office, **Gunjan Khanna** is a senior partner in the Pittsburgh office, and **Edward Levine, MD,** is a senior partner in the Bay Area office.

The authors wish to thank Vamsee Gurram, Amit Kunte, Isaac Swaiman, and others for their contributions to this article.

---

[1] Assumes approximately 160 million lives in value-based care models, accounting for $1.6 trillion to $1.7 trillion in medical spending, with medical cost savings ranging from 3–20 percent based on level of risk, of which 50 percent is realized as profit margin with a 12-fold to 15-fold valuation multiple applied.
[2] "Why 'pay for performance' hasn't worked," Center for Healthcare Quality & Payment Reform, accessed December 2022; David Raths, "Current, ex-MedPAC chairs ask: Is value-based care juice worth the squeeze?," Healthcare Innovation, October 1, 2020.
[3] PitchBook private equity and venture capital transaction data, accessed in spring 2022; McKinsey value-based care expertise.
[4] Addie Fleron, Aneesh Krishna, and Shubham Singhal, "The gathering storm: The transformative impact of inflation on the healthcare sector," McKinsey, September 19, 2022.
[5] *Value-based care report: Physician progress and patient outcomes based on calendar year 2020 data*, Humana, 2021; "Physicians provide higher quality care under set monthly payments instead of being paid per service, UnitedHealth Group study shows," UnitedHealth Group, August 11, 2020.
[6] The McKinsey value-based care market model includes insights from more than 50 expert interviews, published third-party data (for example, payer value-based care reporting, payer financial filings), and publicly available data from government sources (Centers for Medicare & Medicaid Services, California Department of Managed Healthcare).
[7] *Driving health system transformation: A strategy for the CMS Innovation Center's second decade*, Centers for Medicare & Medicaid Services, October 2021.
[8] Zahy Abou-Atme, Stephanie Carlton, and Isaac Swaiman, "Looking ahead to the next decade of accountability for care delivery," McKinsey, November 9, 2022.
[9] Katie Arnhart et al., "FSMB census of licensed physicians in the United States, 2020," *Journal of Medical Regulation*, July 2021, Volume 107, Issue 2.
[10] Yomi Ajao and Andrew M. Snyder, "Making value-based care more attractive to AMCs," *Academic Health Focus*, The Governance Institute, August 2021; Meg Bryant, "Academic medical centers face headwinds in shift to value-based care, Moody's says," Healthcare Dive, April 1, 2019.
[11] *Value-based care report*, 2021.
[12] "Cano Health acquires University Health Care for $600 million and increases 2021 adjusted EBITDA guidance to over $100 Million," Cano Health, June 14, 2021; "Cano Health acquires Doctor's Medical Center for $300 million and updates guidance for 2021 and 2022," Cano Health, July 7, 2021; "Oak Street Health acquires virtual specialty care provider RubiconMD," Oak Street Health, October 21, 2021.
[13] Solveigh Hieronimus, Jonathan Jenkins, and Angela Spatharou, "Transforming healthcare with AI: The impact on the workforce and organizations," McKinsey, March 10, 2020.
[14] Ankur Agrawal, Karl Kellner, Jay Krishnan, and Prashanth Reddy, "How healthcare services and technology companies can boost productivity with data and analytics," McKinsey, January 29, 2021.
[15] Scott Dresden et al., "Predicting avoidable emergency department visits using the NHAMCS dataset." *AMIA Annual Symposium Proceedings Archive*, May 23, 2022.
[16] "Investor & Analyst Day Presentation," Cano Health, March 4, 2021; Marlow Hernandez, "Redefining primary care to transform healthcare," Cano Health, 2022 Investor Day presentation, June 7, 2022; "J.P. Morgan 2022 Virtual Healthcare Conference," CareMax, January 13, 2022.
[17] "How providers can best confront the reality of value-based care," McKinsey, April 17, 2019.
[18] "COA letter to CMS and CMMI requesting extension of OCM," Community Oncology Alliance, November 15, 2021; "Investor Presentation," Oncology Institute of Hope and Innovation, November 2022.
[19] *CMS Comprehensive Care for Joint Replacement Model: Performance year 4 evaluation report - Fourth annual repor*t, Lewin Group, September 2021.
[20] Gaurav Jain and Daniel E. Weiner, "Value-based care in nephrology: The Kidney Care Choices model and other reforms," *Kidney360*, October 2021, Volume 2, Issue 10.
[21] Tom Latkovic, "Claiming the $1 trillion prize in US health care," McKinsey, September 1, 2013.
[22] "How providers can best confront the reality of value-based care," McKinsey, April 17, 2019.

Driving growth through consumer centricity in healthcare

Jessica Buchter, Jenny Cordina, and Mark Lee

March 14, 2023

Providing consumers with the experiences they increasingly expect and demand at every stage of the healthcare journey could substantially improve care and cost outcomes.

Rising consumer centricity in the United States is an inexorable force that's shaking up virtually all consumer-facing industries. Far from being immune to its effects, the healthcare industry is confronting an imperative not only to meet the evolving demands and expectations of consumers across the end-to-end healthcare journey but also to mirror the experiences consumers commonly enjoy when engaging with other sectors. Our research reveals that consumers are placing a higher priority on their wellness than in the past, while expressing continued frustration with the healthcare system.[1] Meanwhile, incumbent health systems face a host of vexing challenges, including record inflation, supply chain disruptions, persistent workforce shortages, and the growing presence of new tech-enabled disruptors.[2]

Making the changes needed to become more consumer-centric is incredibly difficult for healthcare companies, given core industry dynamics and a rapidly evolving care and coverage landscape. However, a large majority of industry executives acknowledge its importance. Ninety percent of surveyed healthcare provider executives and 100 percent of surveyed chief marketing officers identified healthcare consumerism as a top priority for their companies.[3]

To achieve their consumerism objectives, healthcare incumbents are looking at retail, tech, and other consumer sectors for inspiration to develop innovative solutions to well-known healthcare pain points across the end-to-end healthcare journey and to build trust-based and enduring consumer relationships.

This article discusses the steps along the healthcare journey and the adverse consequences that result when consumers defer care because of poor healthcare experiences. It also discusses the role of disruptors, reimagines several healthcare steps, and offers considerations for incumbent healthcare companies to deliver a better consumer experience and, by extension, improve outcomes and reduce costs.

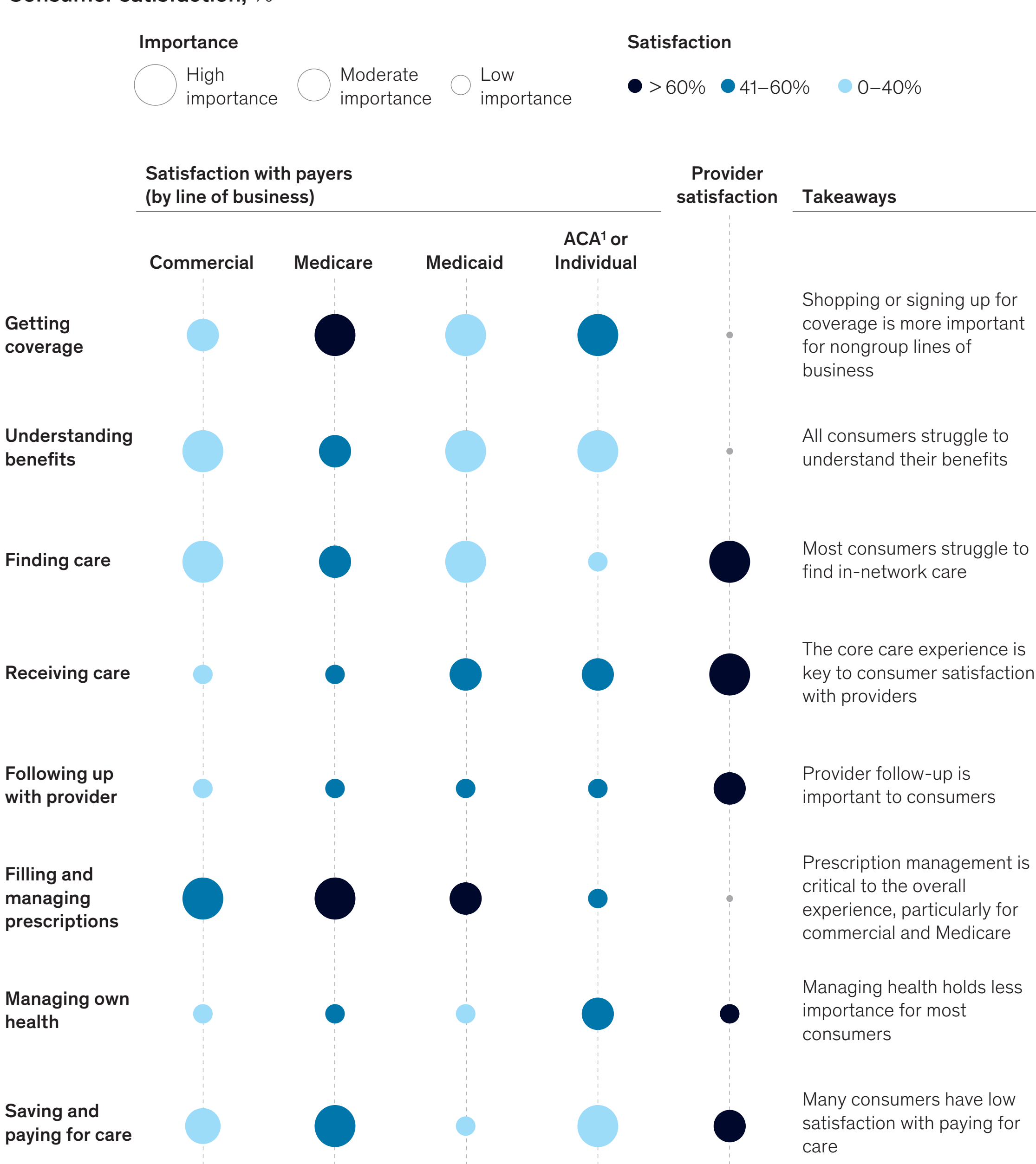
Eight discrete journeys define the end-to-end consumer healthcare experience

Consumers have no shortage of pain points that healthcare payers and providers could address to better meet their needs. But reimagining healthcare through a consumer lens starts with understanding that consumers have widely divergent experiences with healthcare and attach different levels of importance and satisfaction to the eight steps they take along the healthcare journey (Exhibit 1). Even for a single step, such as getting insurance coverage or finding care, consumer perceptions of importance and satisfaction vary widely. For example, shopping and signing up for coverage is more important for consumers with noncommercial coverage than for those with commercial coverage. Medicare and Medicaid members attach equivalent levels of importance to the experience of getting coverage, but

Exhibit 1

Consumers attach high importance to—but also express widespread dissatisfaction with—four steps in the eight-step healthcare journey.

Consumer satisfaction, %



Note: This exhibit reflects the results of a range of survey questions that evaluate consumer experience along the end-to-end healthcare journey.
[1]Affordable Care Act.
Source: McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022

McKinsey & Company

Medicare members are far more satisfied with that experience.[4] Given these differences, it is critical to understand consumer needs at a granular level and to contextualize their experiences.

Overall, consumers indicate that four healthcare journeys—getting coverage, understanding benefits, finding care, and saving and paying for care—are of high importance yet deeply unsatisfying. Notably, all of these journeys take place either before or after consumers actually receive care from providers.

Care deferral has serious consequences for consumers and health systems

Given the challenges of navigating today's healthcare journeys, it is no wonder that nearly a quarter of US consumers have reported deferring healthcare.[5] Applying consumer-oriented solutions to common pain points could encourage more consumers to receive the care they need with care teams they trust.

Care deferrers by the numbers

Some populations—specifically the middle-aged, immigrants,[6] urban residents, households with children, and those unsatisfied with their primary care physicians—reported more than others that they have deferred care.[7] Consumers who reported they have deferred care suffer more than their care-seeking peers from existing health issues or mental-health challenges: approximately 80 percent reported chronic conditions.[8] Furthermore, consumers who have deferred care reported receiving less routine preventive care, including flu vaccinations (23 percent among deferrers versus 32 percent among nondeferrers) and annual wellness visits (19 percent versus 31 percent). They also reported deferring care for a range of health needs, including dental (33 percent), vision (18 percent), and specialist care (17 percent).[9]

Health system emergency departments are disproportionately affected

Consumers who defer care have a substantial impact on emergency department (ED) and urgent-care use. Thirteen percent of care deferrers reported an emergency room visit, and 16 percent reported using urgent care—as compared with 11 percent and 9 percent, respectively, for nondeferrers (Exhibit 2).[10] Furthermore, more than one-third of care deferrers who visited an ED or urgent-care site in the previous 12 months reported five or more visits during that time; only 10 percent of those who do not defer care reported equivalent frequency of use.[11]

Emergency and urgent-care sites also tend to have lower patient experience scores compared to other sites of care, including up to ten percentage points lower in satisfaction rates compared with primary care. Thus, patients who defer care are most often engaging with the least satisfying and most costly care sites when they ultimately seek care. Negative experiences simply reinforce the cycle of care deferral.[12]

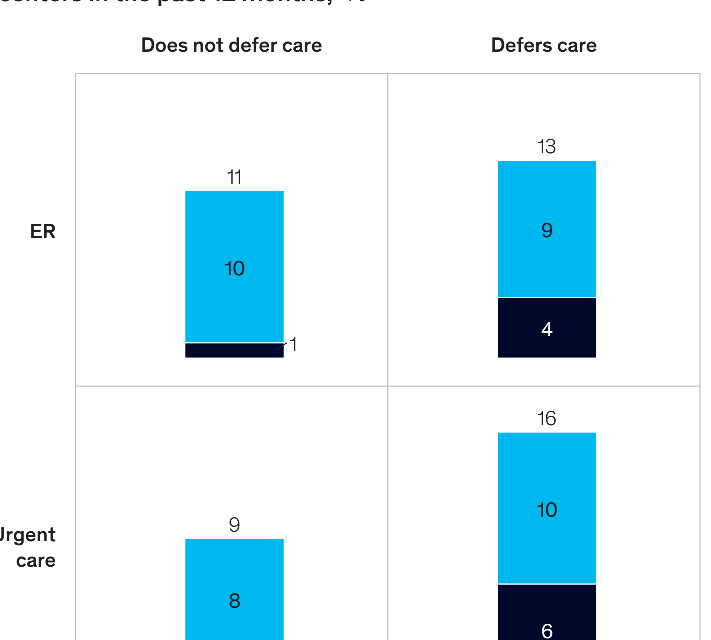
Finally, each year, approximately $8.3 billion is spent in the United States on emergency care that could be provided in another care setting.[13] The largest driver of avoidable emergency-care spending is unnecessary ED use for mental illness ($4.6 billion) and hypertension ($2.3 billion).[14]

Applying consumer-oriented solutions to common pain points could encourage more consumers to receive the care they need with care teams they trust.

Exhibit 2

Consumers who defer care report regularly using emergency rooms and urgent-care centers when seeking care—more than nondeferrers do.

< 5 visits
5 or more visits



[1]Question: How many times have you personally used the following healthcare services? ("Emergency room" respondents split by those who deferred vs those who did not); Q: How many times have you personally used the following healthcare services in the past 12 months, as an in-person appointment, an online or video visit with a physician (telemedicine), or a telephone (voice call) appointment? [Emergency-room visit; Urgent-care visit].
Source: McKinsey 2021 Consumer Health Insights COVID-19 Wave 5 Survey, June 14, 2021; McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022; McKinsey 2022 Physician Survey

McKinsey & Company

Care deferrers have poorer outcomes at higher cost

Health outcomes and costs are worse for consumers who defer care. Sixty percent of surveyed clinicians indicated that deferred care led to an increase in complications, 30 percent reported an increase in mortality, and 55 percent noted an increase in self-medicating and forgoing necessary prescriptions.[15]

Fifty percent of surveyed clinicians also indicated that site-of-care costs are higher for care deferrers,[16] mainly due to higher use of emergency or urgent care.

An improved experience can better engage consumers who are delaying care and lead to better outcomes and reduced costs. For example, the saving and paying for care journey has a particular impact on deferred care, with more than one-third of deferrers citing cost as their primary barrier.[17] Consumer-centric journeys (including those that improve the transparency of healthcare costs; help consumers navigate to the highest-quality, lowest-cost care options; and provide care navigation to those at highest risk) could help to address this cost-of-care barrier and lead to better outcomes for consumers and the health system.[18]

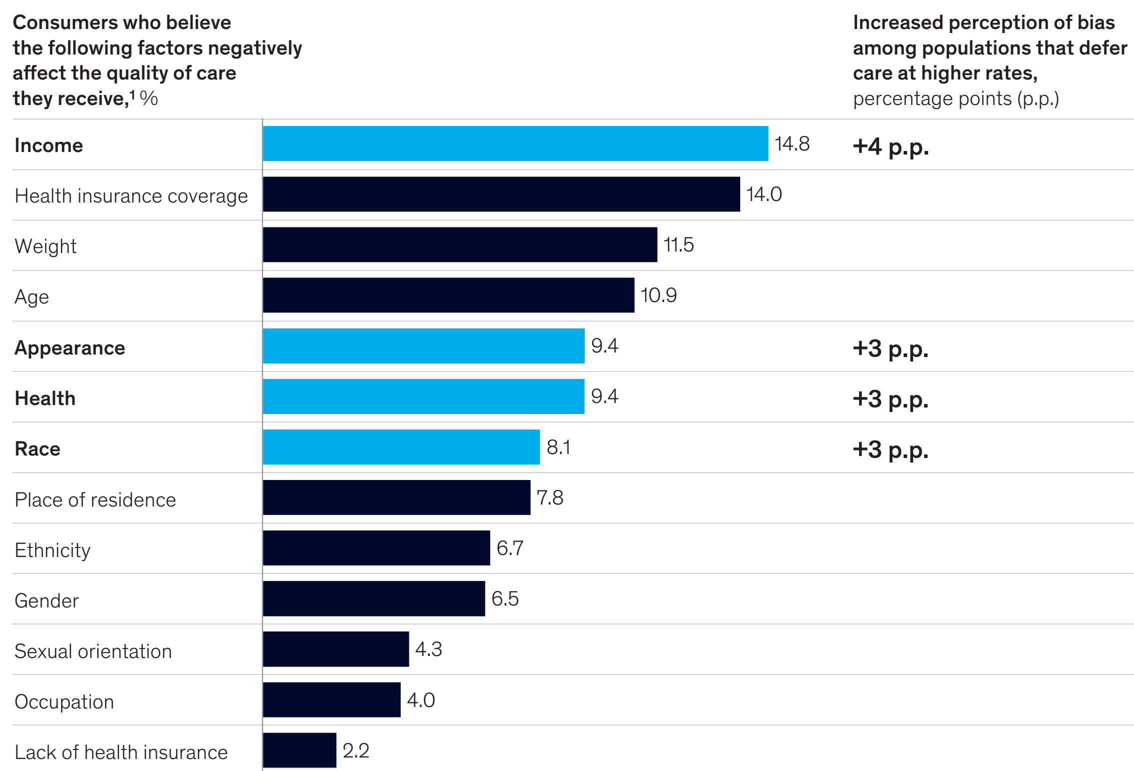
Likewise, bolstering consumer trust in the healthcare system could encourage more consumers to seek needed care. Many

consumers believe that the health system does not support their care needs, and they perceive that the quality of their healthcare is negatively affected by their personal attributes, including income, insurance coverage, weight, and age, among other factors (Exhibit 3). Specifically, some consumers feel that, because of who they are, they are misunderstood (21 percent of consumers report that their providers do not listen to them or understand their needs), disrespected (22 percent of consumers report feeling treated with less respect than other patients), or victims of bias (28 percent report that they feel healthcare providers have made assumptions about them that influenced how they were treated).[19] Addressing those concerns could help build trust-based relationships that could encourage consumers to get the care they need.

Building deeper trust-based relationships involves looking across the full range of healthcare participants. Most consumers view a broad range of care professionals as part of their care team, and a material number are continuing to turn to digital care. For example, 50 percent of polled consumers are interested in virtual behavioral healthcare.[20] For populations that defer care, building this trust will mean going beyond traditional care channels.

Exhibit 3

Populations who defer care report believing at higher rates than nondeferrers that the health system is biased against consumers of certain demographics.



[1]Question: Do you believe any of the following NEGATIVELY affects the quality of care you receive from your healthcare providers (eg, doctors, nurses)?
Source: McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022

McKinsey & Company

Reimagining the end-to-end healthcare journey

Addressing consumers' evolving expectations is difficult and often requires reimagining traditional healthcare journey offerings (Exhibit 4).

In the not-so-distant future, we can envision a dramatically healthier population, empowered to make better decisions, with more convenient, affordable, and timely access to the care they need and want. Healthcare companies could enjoy improved performance through more affordable products, higher-quality care and experiences, an increase in consumers served, and more consumer loyalty to their improved brands.

Addressing consumer pain points can unlock better outcomes: satisfied consumers report deferring care ten percentage points less, getting routine care 14 percentage points more, and using inpatient care 13 percentage points less than unsatisfied consumers.[21] Ultimately, consumer health improves. Additionally, more-engaged consumers report staying with their current insurer and provider and paying their bills.[22]

Innovators are already starting to show the way as they seek to understand consumer pain points, address them at scale, and communicate their proposed solutions directly to consumers, often before consumers typically seek care. This creates the potential to disrupt some healthcare incumbents and the traditional healthcare journey. Other incumbents and disruptors have been able to deliver distinctive experiences at scale that better support patients and drive

Exhibit 4

Consumer sentiment across care journeys reveals opportunities for experience-oriented solutions.

Consumer sentiments	Experience-oriented solutions
I feel sick but can't afford the time or money to get care.	High-quality, affordable, and convenient care, easily accessible to consumers through the channel of their choice
I can't take it anymore and need to go to the emergency room.	Consumers actively seeking care early before health issues escalate
I hate being at the hospital and forget my follow-up instructions after leaving.	Positive care experiences that drive satisfaction and empower consumers to follow their care plan
I don't understand my bills, and no one can help me.	Up-front cost transparency and financial support programs that prevent surprise costs after care
I'm sick again but don't want to go back to that hospital.	Longitudinal relationships with care teams and clinicians fostering continuity of care across episodes
I can't afford this; why do I even pay for insurance?	Consumers seeing payers as a partner in gaining access to high-quality, affordable care

Source: McKinsey 2021 Consumer Health Insights COVID-19 Wave 5 Survey, June 14, 2021; McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022

McKinsey & Company

value for the health system. Consider these case studies:

Transparent healthcare billing. Nearly all consumers rate the payment experience as a key factor in deciding whether to return to a provider, according to one industry leader. More than one-third of consumers are unsatisfied with the lack of alignment between their bill and the explanation of benefits.[23] Industry innovators have improved the billing journey by providing cost transparency before and after visits and by using payer–provider integration to create a frictionless and customized payment process (Exhibit 5). One industry leader reported that fostering radical cost transparency and payment simplicity led to an 88 percent patient satisfaction rating and a 30 percent average lift in patient payments.[24]

Consumers empowered and engaged in managing their wellness. According to one industry leader, personalized, at-home care plans offered via digital tools can more easily connect consumers with the care they need and can address access concerns by supporting the 3.6 million individuals who struggle to secure transportation to in-person medical care.[25] Easily accessible preventive wellness programs, in which patients are connected to a personal health coach, can engage consumers early and often in their care journey and reduce

Exhibit 5

For patients, a transparent billing process is fair and easy, and does not add undue stress to their minds or their wallets.

Before the visit

Personalized interactions over patient's preferred channel (eg, clinical patient portals, digital apps, or login-free web pages) leading up to the appointment to streamline administrative tasks, provide cost transparency, and give the option to pay early

"It's easy for me to set up an appointment with my physician, and I know what to expect to pay for my visit."

During the visit

Check-in time is 55 seconds, on average, for repeat visitors

Customer is billed with an explanation for any difference between the estimate and final balance in the bill

"My doctor's office values my time and provides me with the appropriate care."

After the visit

Delivers a consolidated experience by unifying bills and EOBs,[1] with real-time deductible status and HSA[2] or FSA[3] balances

Uses machine learning to anticipate and answer plan design and benefits questions

"I am not inundated with bills and feel in control of my healthcare finances. More important, I understand what I'm paying for."

[1]Explanations of benefits.
[2]Health savings account.
[3]Flexible spending account.
Source: McKinsey analysis

McKinsey & Company

the likelihood of future surgical interventions and the seeking out of emergency care. In one case study, nearly three-quarters of the patients enrolled in a company's comprehensive musculoskeletal wellness program completed the program, with more than half of participants experiencing a reduction in pain (Exhibit 6).[26]

Incumbent healthcare companies have an opportunity to redefine the consumer experience

Healthcare companies can consider taking action on multiple fronts to improve consumers' experience with healthcare systems:

Define a common purpose, and deeply commit to serving consumers' needs. Unsurprisingly, consumers regularly point to consumer-focused companies in other sectors as setting an example for healthcare companies. Consumers want healthcare that includes personalized offerings and services, value-based pricing, and an elevated experience—all from distinctive, high-quality brands.

Understand consumers. Today, healthcare consumers need a healthcare system that helps them get the care they need from care providers they trust, with the goal of supporting their health as a whole. Although the specifics

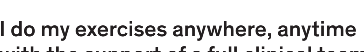
Exhibit 6

The ideal personalized at-home wellness program helps patients stay on track and feel supported throughout.

I sign up to improve my health and musculoskeletal issues

Individuals are connected to their own personal health coach, participate in a customizable prevention program, and receive education to maintain an active lifestyle and avoid injury

"I can change the way my body reacts to pain and stress by changing the way I think and react to it."



I do my exercises anywhere, anytime with the support of a full clinical team

Patients complete a digital clinic that goes beyond digital physical therapy, including a full clinical care team on one digital app offering personalized programs and one-on-one sessions to drive consumer engagement

"It's even better than traditional physical therapy. I'm amazed at how much psychotherapy is also included. I've taken away lots of lessons on positive thinking and deep breathing."

I finish the program, reducing the pain and likelihood of surgery

A unique clinical-care model drives high levels of adherence and program completions, leading to better outcomes (eg, pain reduction, reduced likelihood of surgery, and lasting behavior change)

"I really appreciate having a coach on this journey. Although I know it's important, it's easy to make up excuses and not follow through. With the program, accountability is huge because someone is watching."

Source: McKinsey analysis

McKinsey & Company

vary widely by consumer segments, certain design pillars can provide a foundation on which healthcare companies can build to satisfy these needs. These pillars include providing access to convenient, affordable, and equitable care; transparently sharing information; and providing incentives that support consumers' active and ongoing engagement in their health.

Consumers today seem to be particularly receptive to engaging with the healthcare system. Nearly half of consumers are prioritizing their overall wellness more now than before the COVID-19 pandemic, although two-thirds also indicate that their wellness has either declined or remained the same in the past three years.[27] Among consumers who place a very high or moderately high priority on wellness, more than 80 percent report prioritizing better health overall, better sleep, nutrition, mindfulness, and fitness.[28] Moreover, consumers look to the healthcare system to meet these needs: more than 40 percent of consumers want support from clinicians to reach their health, sleep, and nutrition goals, while the share of consumers seeking support from other sources is nearly half that.[29]

Focus on what matters, and measure it. With a deeper understanding of consumers' needs and expectations, healthcare companies can then focus on what matters most to consumers. Importantly, this is highly dependent on the population segment and the overall context of their healthcare experiences. Although fully understanding consumers requires targeted research and deep insights, healthcare companies can consider addressing several key trends.

First, as described earlier, consumers want easy access to affordable and convenient care. Those who are satisfied with their access to necessary care report lower rates of care deferral, higher rates of engaging in routine care, and lower rates of receiving inpatient care than those who are unsatisfied.[30] Second, consumers want meaningful, trust-based relationships with their care teams. Six times more consumers with longitudinal-care-team relationships and care continuity report engaging with their primary care physician for future health needs.[31] Third, consumers want holistic support for their overall wellness and are prioritizing health and wellness more now than they did three years ago.[32]

Disrupt internally. Rather than waiting for others to define solutions, incumbents can consider making necessary changes themselves. The pace of innovation in healthcare may continue to increase, fueled by strong private-equity and venture capital investment focused primarily on healthcare technology and consumers. Based on McKinsey analysis, there were more than six times as many tech-focused healthcare deals in 2021 as in 2014, and consumer-related profit pools are expected to be among the highest growth areas in the industry (with a 10 percent increase in growth by 2025). Broadly, private-equity and venture capital deal growth within healthcare services outpaces the US industry average (29 percent growth in the healthcare sector versus 2 percent average growth across industries), according to our analysis.

Healthcare companies can use iterative, test-and-learn design thinking to rapidly identify and act on opportunities to improve the consumer experience. Consumer-centric healthcare companies drive more than twice the revenue growth as companies in the same industry with lower patient satisfaction scores. Importantly, companies that lead in consumer experience rebounded from the COVID-19 pandemic stronger than companies that deprioritized consumer experiences, with consumers returning to trusted brands, according to our analysis.

Healthcare companies have an opportunity to take the lead in transforming the healthcare journey and, in doing so, could unlock material value for consumers and the overall healthcare system. They can start with a clear and strong consumer-centric aspiration that is grounded in empathy and then can pursue available opportunities at every point of the end-to-end consumer journey. For example, consumers want better health and wellness, but many are not achieving their goals. Some groups disproportionately face barriers to care access; many also feel unsupported by the health

system. Beyond a clear aspiration, meaningful transformation also requires a deep understanding of—and intentional focus on—the outcomes that matter most to consumers, which can act as a North Star to guide the design of the healthcare journeys of the future.

The time to act is now. Rapid innovation is already transforming the healthcare consumer experience, and the pace of disruption could increase, fueled by accelerating investment from private-equity and venture capital companies. The whole industry has an opportunity to embrace this change, seek to deeply understand the healthcare consumer, and lead the way in designing the healthcare experience of the future.

Jessica Buchter is an associate partner in McKinsey's Philadelphia office, **Jenny Cordina** is a partner in the Detroit office, and **Mark Lee** is a consultant in the Minneapolis office.

[1] McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[2] "The gathering storm in US healthcare," McKinsey, October 8, 2022.
[3] 2022 McKinsey Healthcare Provider C-Suite Survey.
[4] McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[5] McKinsey 2021 Consumer Health Insights COVID-19 Wave 5 Survey, June 14, 2021.
[6] Ibid.
[7] McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[8] Ibid.
[9] McKinsey 2021 Consumer Health Insights COVID-19 Wave 5 Survey, June 14, 2021.
[10] Ibid.
[11] Ibid.
[12] Ibid; McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[13] Rich Daly, "Preventable ED use costs $8.3 billion annually: Analysis," Healthcare Financial Management Association, February 11, 2019.
[14] Ibid.
[15] McKinsey 2022 Physician Survey.
[16] Ibid.
[17] McKinsey 2021 Consumer Health Insights COVID-19 Wave 5 Survey, June 14, 2021.
[18] Ibid.
[19] McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[20] Ibid.
[21] McKinsey 2021 Consumer Health Insights COVID-19 Wave 5 Survey, June 14, 2021; McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[22] McKinsey Consumer Health Insights 2021 Provider CX and 2019 CX Payer Surveys.
[23] "2021 healthcare consumer experience study," Cedar, accessed February 2, 2023.
[24] Ibid.
[25] "State of MSK 2022: Trends impacting musculoskeletal care in America," Hinge Health, 2022.
[26] Vibhu Agarwal et al., "Digital care for chronic musculoskeletal pain: 10,000 participant longitudinal cohort study," *Journal of Medical Internet Research*, May 2020, Volume 22, Number 5.
[27] McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[28] Ibid.
[29] Ibid.
[30] McKinsey 2021 Consumer Health Insights COVID-19 Wave 5 Survey, June 14, 2021; McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.
[31] McKinsey Consumer Health Insights 2021 Provider CX Survey.
[32] McKinsey 2022 Consumer Health Insights COVID-19 Wave 1 Survey, March 25, 2022.

Bolstering health system supply chain resilience to reduce risk

Eric Bishop, Brianne Bowen, Sabriya Karim, Margarita Protopappa-Sieke, and William Weinstein

July 11, 2023

How health systems could enhance their ability to withstand supply shocks and deliver quality care in ordinary times and when crises strike.

The COVID-19 pandemic exposed vulnerabilities in US health system supply chains. Persistent and elevated supply shortages (compared with before the pandemic), coupled with economic uncertainty and growing inflation, have highlighted that this may be an opportune time for health systems to improve their supply chain resilience.

Although health systems are accustomed to dealing with supply shortages, many were ill-equipped to respond to the magnitude of supply shocks when the pandemic struck. For example, almost overnight, personal protective equipment (PPE)—including N95 masks, latex gloves, face shields, eye masks, and gowns—was depleted. To quickly restock essential PPE, many health systems bypassed their standard procurement practices. They purchased from suppliers or resellers without their typical level of vetting, guaranteed future purchase volumes, or paid significantly higher prices. These actions sometimes resulted in overstocking, receiving supplies that did not meet quality standards, or not receiving a product at all.

Although the pandemic and associated supply chain disruptions are abating, health systems continue to face shortages of some critical medical and surgical supplies. Health systems are now shifting their focus from managing acute, pandemic-related shortages to creating more resilient, efficient, and economically viable approaches to procurement for the long term. This article explores the characteristics of health system supply chains and describes four actions health systems can consider to bolster resilience and mitigate supply chain risk.

Increasingly complex health system supply chains

Even under normal circumstances, managing a healthcare supply chain is a complex endeavor. A regional health system could purchase anywhere from 30,000 to 60,000 unique SKUs annually for clinical supplies.[1] These SKUs are sourced under numerous contracts from medical-supply and pharmaceutical distributors and manufacturers globally.

A set of interlocking supply-side dynamics is currently compounding the complexity, including the following:

— macroeconomic factors such as inflation and the threat of recession

— a streamlined supply base optimized for cost, which may cause downstream challenges if disruptions occur (such as shutting down a singular plant manufacturing certain supplies)

— logistical disruptions to supply, for example, due to labor challenges in shipping

— geopolitical factors that limit access to raw and finished materials

— an increase in disruptive weather events such as hurricanes and earthquakes

In the meantime, health systems must also be prepared for persistent demand-side threats such as a potential pandemic or another global health crisis, a regional health emergency, or a mass-casualty event of any origin.

Health systems that fail to adequately plan for future supply shocks could be unable to provide proper care to patients and incur substantial reputational, financial, and other risks. Caught short of critical supplies, health system leaders could face difficult challenges, including providing care of lesser quality or at higher risk, canceling certain types of care, or paying substantially more from alternate vendors for the same or equivalent supplies. Supply shortages also place pressure on an already stressed workforce, affecting employee engagement, mental health, and job satisfaction. Supply chain and pharmacy leaders may need to devote considerable time and effort to find alternatives, and clinicians may lack the supplies they need to properly do their jobs in the meantime.

It isn't possible for health systems to fully insulate themselves from all future supply shocks, given their unpredictability and varying levels of severity. But leaders could learn from their experiences during the pandemic and align strategies to minimize risk and bolster resilience going forward. Crucial to the effort will be striking the right balance between overinvesting and underinvesting in preparedness based on analysis of the potential risks—particularly in an environment of constrained margins.

Actions that may help develop a more resilient supply chain

Health systems have worked to confront the challenges of the COVID-19 pandemic; now, they have an opportunity to not only refine their pandemic response but also prepare for a broader set of potential shocks. Based on our experience working with health systems and their suppliers, health system leaders can consider four initiatives to help their supply chains better withstand future shocks. These are extending visibility into the supply chain; exploring product-specific strategies; developing relevant protocols, capabilities, and governance; and optimizing costs.

Extend visibility into the supply chain

A critical way to enhance resilience is to extend visibility internally and externally into the supply chain, with the aim of detecting potential upcoming supply chain shocks earlier and having a more accurate sense of the organization's own inventory of affected items.

Internally. Within a health system, supplies are stored in warehouses, stock rooms, closets, and other locations across multiple care settings. The COVID-19 pandemic highlighted the lack of visibility into inventory quantity and location. Although it would be cost-prohibitive for most health systems to implement sophisticated inventory-tracking systems for all clinical and nonclinical supplies, such as those commonly used by consumer-packaged-goods companies or retailers, leaders could consider developing (or acquiring) a set of tools to increase visibility into inventory levels (for example, RFID[2] bar-coding for select critical and high-cost supplies). As a starting point, some health systems are consolidating available inventory data across all locations and systems (IT and manual), exploring extensions to existing inventory systems, and developing dashboards that show this full-system perspective and provide insights based on analytics. These steps can help health systems better understand which SKUs they have on hand, what quantities they have, and where SKUs are located. Some systems are then layering demand forecasts on top of this inventory visibility to anticipate potential shortages and mount a response.

Externally. Health systems could reach out to their group purchasing organizations (GPOs)[3] and distributors to explore ways to improve upstream visibility into supply chains and identify potential disruptions before they are felt. Some health systems have, for example, written provisions into contracts that provide daily visibility into distributors' own SKU-level inventory levels across all distribution centers, including days of inventory on hand and the expected length of supply disruptions. This allows health systems to better plan their

ordering strategies to ensure adequate stock is on hand for a given supply or anticipate a shortage and take action to prevent it.

Because of their size, resources, and breadth of operations, GPOs and distributors typically can identify potential supply shocks earlier than their health system partners can. They have access not only to data and purchasing trends from across a wide set of health systems but also to data feeds and direct contact with manufacturers. Additionally, GPOs and distributors typically have more insight into manufacturers' industrial base and risk profile, with some having employees on the ground in countries where the goods are manufactured, further enhancing their visibility. As a result, they are often more able than health systems to identify precursors to shortages. Additionally, health systems that have strong relationships directly with manufacturers have started to explore data-sharing partnerships with similar aims and results.

A regular cadence of check-ins with upstream partners combined with a framework for information sharing can provide supply chain managers with a more detailed understanding of the supply base and potential vulnerabilities, as can advances to automate portions of this collaboration (for example, with proactive alerts rather than phone calls). Going one step further, convening an alliance of health systems, as some systems have done, can allow member organizations to collaborate on a list of critical supplies and share metrics as a way of becoming aware of shortages sooner, helping the alliance be more responsive to potential shocks.

Explore product-specific strategies

Health systems could also explore product-specific strategies to help circumvent disruptions and mitigate potential supply shocks.

Identify the most critical items. Because supply chain leaders cannot invest equally to boost resilience across all supply categories, they could start by working with their clinicians, emergency preparedness team, GPOs, and distributors to identify the most critical items—often those that are essential to operations and also at a high risk of disruption that results in shortages. Among the most important criteria in deciding criticality is whether the absence of a product would be life-threatening to patients. Other criteria could include the availability of substitutes, frequency of use, and potential effect on revenue if a shortage occurs. Some health systems implement a simple categorization of critical items (for example, high, medium, and low), while others use a more granular scoring system (such as a nine-point scale).

Devise mitigation actions for critical items. Next, health systems could take a variety of mitigation actions for the most critical items. Demand management protocols are one important mitigation action, identifying clinically responsible ways to reduce consumption of critical supplies while minimizing adverse effects on safety or quality of care. For example, ordinarily, and early in the pandemic, health systems treated N95 masks as single-use supplies. After reviewing the utilization protocols and working with staff who specialize in infection prevention, health systems established new protocols that allowed masks to be reused or reprocessed, helping health systems better manage demand surges during the pandemic.[4] For each critical item, the supply chain function could continue partnering with clinicians to proactively identify product alternatives and develop clearly defined guidelines for use in normal times and during a crisis.

Work proactively to avoid shocks. Although the effects of supply shocks can be mitigated, taking proactive steps to avoid shocks could further reduce the risk of needing to go without critical products. One step that proved to be instrumental during the height of the pandemic was stockpiling products that were at greatest risk of shortage. Deciding when to use this strategy entails navigating trade-offs between supply chain resilience and increased inventory cost, but doing so could help delay or avoid some shortages.

In addition to stockpiling specific products, many supply chain leaders are also revisiting supplier strategies to help reduce disruptions. For example, health systems are working with their GPO and suppliers to shift from a sole-source

contract to a multisource contract for a set of select supplies, particularly in medical and surgical commodities, although doing so may have an effect on negotiated prices. They may also work with distributors to sequester stock within their warehouses, especially for that health system to access as needed. When making these decisions, some systems are prioritizing adding, or expanding their reliance on, manufacturers who are onshore or nearshore.

Develop protocols, capabilities, and governance

Health systems could also consider taking actions to develop the tools, capabilities, and governance required to strengthen crisis preparedness. Even the most proactive health system cannot prepare for all potential crises, so it is important to put in place a framework and team that can be mobilized quickly when supply chain shocks or surges in demand occur. In addition, while other resilience tactics may have limited impact depending on the type and magnitude of supply chain shock the system experiences, effective governance supports supply chain resilience regardless of the challenge (see sidebar "Creating a structured approach to health system supply chain preparedness: A case study").

Some ideas and proven techniques can help with the difficult task of preparing for potential supply chain disruptions:

Assemble a resilience team. Proactive preparedness begins with ensuring that the right people are in place across the health system. Some health systems have at least one person within supply chain fully dedicated to resilience efforts, with more organizations looking to hire additional full-time-equivalent personnel into these roles.[5]

Health systems may benefit from establishing a small, centralized team to explore potential scenarios and responses and quickly mobilize predefined subteams, aligned with a set of products or a service line, to act if a supply shock occurs. These cross-functional subteams could include representatives from relevant clinical and nonclinical areas—for example, physicians, nursing leadership, supply chain, and emergency preparedness—to ensure a

Creating a structured approach to health system supply chain preparedness: A case study

After Hurricane Katrina, a large national health system realized it needed to be more proactive in responding to crises. As such, it took a three-part, structured approach to improving its preparedness:

Establishing a centralized emergency response center: A multidisciplinary group of more than 150 leaders is in place and can be activated in the event of a variety of types of crises.

Installing and maintaining protocols and practices: The center has established protocols to be implemented before, during, and after a crisis strikes. This includes having in place contracts with relevant suppliers and ensuring emergency equipment is ready for use.

Using data and technology to continually monitor risks: The health system implemented a data science platform that helps identify potential risks early and evaluates in real time the effects of that risk on patient populations at each care site.

By having the right governance, structures, and decision-making capabilities in place, this health system has been able to make decisions (such as clinically acceptable substitutions) more rapidly when faced with supply chain disruptions, including those that occurred during the height of the COVID-19 pandemic.

clinically led process that brings in other required areas of expertise as needed to inform planning and decision making. Each team would need clear processes, decision rights, and escalation protocols in place to facilitate a speedy response in the face of a crisis, when speed is of the essence. For example, a higher-performing health system with a cross-functional resilience team took an average of four to five days to align on a decision (for example, product alternatives during a shortage), while others took about two weeks to align. These timeline differences are meaningful in a crisis situation, and COVID-19 highlighted the need to streamline and expedite governance for both minor and major disruptions, balancing informed expertise with the ability to move quickly.

Use scenario planning to develop response plans. Once these teams are established, health systems could begin developing response plans based on potential crisis scenarios—such as diverse types of pandemics, bioterrorism events, or natural disasters—defined by the emergency preparedness team, with plans including detailed actions for the central teams and subteams. Health systems could then pressure-test their response plans through a series of tabletop exercises designed to simulate each potential risk and identify ways to improve risk response and coordination.

Develop a communications strategy. Last, health systems could develop a clear, organization-wide communication strategy related to the various

Questions to help kick-start the supply chain resilience conversation

Leaders of health systems and supply chains can collaborate to identify key focus areas. Asking the right questions is a crucial part of this discussion.

People and partnerships:

— How clear are the roles and responsibilities between supply chain and clinical teams to develop a clinically supported process to make supply decisions?

— How cross-functional is your crisis management team? How clear are the decision rights, and how does information cascade to other business functions?

— Do you have any standing agreements in place to partner with other hospitals to coordinate crisis management (such as patient transfer and transportation) and share resources (such as access to suppliers, personnel, and medical equipment)?

— Do you have any standing agreements in place with suppliers or group purchasing organizations to identify crises and create action plans to mitigate risk more proactively?

Processes:

— What steps have you taken to proactively review supplies to identify potential risks related to your supplier footprint (such as geographic dispersion, geopolitical risk, or climate risk)?

— Can you describe the escalation and communication process between facilities and system supply chain?

— To identify areas for improvement and further development, what stress tests have you conducted and what analysis have you performed regarding crisis response simulation outputs?

— Have you updated your internal processes and risk mitigation strategies (for example, supplier contract terms and demand management protocols) based on crisis response simulation outputs?

— How often do you revisit your crisis preparedness plans and decisions? Are you set up to sustain these processes and plans in between crises?

— Have you developed a clear action plan with defined milestones in response to potential scenario impacts?

Tools:

— What processes are in place to track and manage supply purchases and inventory centrally? How are you using data to optimize purchasing and inventory management?

— Which monitoring tools have you implemented to help identify potential disruptions on an ongoing basis to provide early warning?

potential crises. This strategy, developed by leaders in the communication function, could include cascading messages that are consistent across threat types and delivered in a timely fashion to relevant stakeholders, including staff, patients, and the community. Communications can include details related to the nature and source of the supply disruption, the group involved in responding, the steps being taken to alleviate the challenge, and the best sense of the timeline to resolution.

Optimize costs

Organizations could consider addressing costs to help increase financial resilience. Crises often strain organizations financially and can be followed by economic uncertainty; ensuring that the health system is financially healthy can help guarantee that there is a sufficient financial cushion to withstand future shocks. Organizations can look at approaches to ensure the cost base is optimized and prepared to weather a potential downturn. Examples of these interventions can be found in a previous McKinsey article, "Optimizing health system supply chain performance."[6] No amount of preparation can fully insulate a system from risk, so creating a healthy, lean cost base prior to a shock can further help drive resilience.

Support the effort

Health system executives can support the effort to build a resilient supply chain by first boosting their understanding of their health system's current state. A discussion with supply chain leaders can help them identify key areas to focus on in the short term (see sidebar "Questions to help kick-start the supply chain resilience conversation").

Health systems operate in an increasingly complex environment, and the supply chain function is no exception. We have seen these complexities and the resulting challenges play out in real time over the past three years. The four steps described above could help create a more resilient and agile supply chain organization in the near term. However, the journey to resilience is ongoing and will likely take years to mature. Resilience has become an imperative for health systems; to best enable systems and their caregivers to deliver care effectively and efficiently, this imperative requires continued focus beyond the COVID-19 pandemic.

Eric Bishop is a consultant in McKinsey's Southern California office, **Brianne Bowen** is an associate partner in the Seattle office, **Sabriya Karim** is a consultant in the Toronto office, **Margarita Protopappa-Sieke** is a senior expert in the Cologne office, and **William Weinstein** is a partner in the Chicago office.

[1] Calculated based on health systems that range from $5 billion to more than $20 billion in net patient service revenue; the exact number is dependent on system size and scope of services, such as nonacute footprint and number of retail pharmacy sites.
[2] Radio-frequency identification (RFID) uses electromagnetic fields to automatically identify and track tags attached to supplies.
[3] A GPO is an entity created to leverage the purchasing power of a group of organizations to obtain discounts from suppliers based on the collective buying power of GPO members.
[4] Ahmed Abdul Azim, Preeti Mehrotra, and Christina Yen, "From single to multiuse: A brief review of N95 respirator decontamination strategies," *Infection Control Today*, March 26, 2021, Volume 25, Number 3.
[5] McKinsey survey of 26 individual leaders of academic medical centers and healthcare supply organizations.
[6] Brianne Bowen, Borja Carol Galceran, Sabriya Karim, and William Weinstein, "Optimizing health system supply chain performance," McKinsey, August 23, 2022.

Innovate to thrive

68

Tackling healthcare's biggest burdens with generative AI

Shashank Bhasker, Damien Bruce, Jessica Lamb, and George Stein

Disparate sources of unstructured data, which abound in healthcare, are now assets to power generative AI. Here's how private payers and healthcare systems can use the technology to deliver care.

74

Leadership rundown: How US healthcare leaders are scaling innovation and transformation

Shubham Singhal and Drew Ungerman

Healthcare organizations are exploring ways to use data, analytics, and AI to drive and scale innovation and transformation.

Tackling healthcare's biggest burdens with generative AI

Shashank Bhasker, Damien Bruce, Jessica Lamb, and George Stein

July 10, 2023

Disparate sources of unstructured data, which abound in healthcare, are now assets to power generative AI. Here's how private payers and healthcare systems can use the technology to deliver care.

December 2023 update

It has been just more than one year since generative AI (gen AI) became a common term. Since then, many healthcare organizations have been exploring what the technology can do. As we highlighted in the article below, which we wrote and published earlier this year, there are use cases for gen AI in every domain and function in healthcare. Organizations have been testing those use cases to see how much value they could create.

In addition, the emergence of gen AI has spurred a broader conversation about the application of all AI approaches, including gen AI, across the industry. For example, in health insurance, payers that take advantage of the full suite of AI technology available today to reimagine their business processes could potentially obtain gross savings of 13 to 25 percent in administrative costs and 5 to 11 percent in medical costs.

In addition to those highlighted in our article, several gen AI applications have been receiving much attention more recently. These include hyperpersonalization, which facilitates customized outreach to individual members and patients; modernization of infrastructure and applications (for example, converting code written in old, hard-to-maintain programming languages into Python); and record drafting, most notably the combination of ambient listening and gen AI to create first drafts of visit summaries and other documentation that would otherwise take a lot of administrative time.

Gen AI could offer healthcare organizations not only savings opportunities but also benefits for patients, members, and clinicians. But as we laid out in our article, healthcare organizations have to overcome several challenges to capture the value of gen AI. Foremost is how to carry out a change management program that encourages employees to adopt new approaches and processes as well as offers them incentives to take advantage of this nascent technology.

At a convention center in Chicago in April, tens of thousands of attendees watched as a new gen AI technology, enabled by GPT-4, modeled how a healthcare clinician might use new platforms to turn a patient interaction into clinician notes in seconds.

Here's how it works: a clinician records a patient visit using the AI platform's mobile app. The platform adds the patient's information in real time, identifying any gaps and prompting the clinician to fill them in, effectively turning the dictation into a structured note with conversational language. Once the visit ends, clinician reviews, on a computer, the AI-generated notes, which they can edit by voice or by typing, and submits them to the patient's electronic health record (EHR).

That near-instantaneous process makes the manual and time-consuming note-taking and administrative work that a clinician must complete for every patient interaction look archaic by comparison.

Gen AI technology relies on deep-learning algorithms to create new content such as text, audio, code, and more. It can take unstructured data sets—information that has not been organized according to a preset model, making it difficult to analyze—and analyze them, representing a potential breakthrough for healthcare operations, which are rich in unstructured data such as clinical notes, diagnostic images, medical charts, and recordings. These unstructured data sets can be used independently or combined with large, structured data sets, such as insurance claims.

Like clinician documentation, several cases for gen AI in healthcare are emerging, to a mix of excitement and apprehension by technologists and healthcare professionals alike. Although healthcare businesses have used AI technology for years—adverse-event prediction and operating-room scheduling optimization are two examples—gen AI represents a meaningful new tool that can help unlock a piece of the unrealized $1 trillion of improvement potential present in the industry. It can do so by automating tedious and error-prone operational work, bringing years of clinical data to a clinician's fingertips in seconds, and by modernizing health systems infrastructure.

To realize that potential value, healthcare executives should begin thinking about how to integrate these models into their existing analytics and AI road maps—and the risks in doing so. In healthcare, those risks could be dangerous: patient healthcare information is particularly sensitive, making data security paramount. And, given the frequency with which gen AI produces incorrect responses, healthcare practitioner facilitation and monitoring, what's known as having a "human in the loop," will be required to ensure that any suggestions are beneficial to patients. As the regulatory and legal framework governing the use of this technology takes shape, the protection of safe use will fall on users.

In this article, we outline the emerging gen AI use cases for private payers, hospitals, and physician groups. Many healthcare organizations are more likely to start with applying gen AI to administrative and operational use cases, given their relative feasibility and lower risk. Over time, once they have more experience and confidence in the technology, these organizations may start to use gen AI with clinical applications.

Even with all the precautions that applying gen AI to the healthcare industry necessitates, the possibilities are potentially too big for healthcare organizations to sit it out. Here's how private payers and healthcare providers can begin.

Use of gen AI by private payers, hospitals, and physician groups

In the near term, insurance executives, hospital administrators, and physician group operators may be able to apply gen AI technology across the value chain. Such uses range from continuity of care to network and market insights to value-based care (see sidebar, "Potential uses of generative AI in healthcare").

Private payers

Consumers are demanding more personalized and convenient services from their health insurance. At the same time, private payers face increasing competitive pressure and rising healthcare costs. Gen AI can help private payers' operations perform more efficiently while also providing better service to patients and customers.

While many operations—such as managing relationships with healthcare systems—require a human touch, those processes can still be supplemented by gen AI technology. Core administrative and corporate functions and member and provider interactions involve sifting through logs and data, which is a time-consuming, manual task. Gen AI can automatically and immediately summarize this data regardless of the volume, freeing up time for people to address more complex needs.

Member services offer many ways for gen AI to improve the quality and efficiency of interactions. For example, many member inquiries relate to benefits, which require

Potential uses of generative AI in healthcare

Note: Any content synthesized or summarized by generative AI (gen AI) must have human-in-the-loop involvement and undergo rigorous risk and compliance review.

Private payers:

— *Healthcare management:* synthesize clinical notes for care managers; synthesize medical and referral information; generate care plans and summaries for members

— *Member services:* create custom coverage summaries for specific benefits questions (online and via call-center contacts); generate call scripts and other content for outbound nonclinical communications; deploy adaptive chatbots and smart routing to help answer service questions for members and providers; suggest clinicians based on parameters (for example, coverage, location, preferences, conditions)

— *Provider relationship management:* compare plan/product features and networks; generate standard communications (for example, welcome letters, reports, new-member needs, claim denials); summarize gaps in provider directories (for example, update open panel); generate reports and observations for providers and vendors on performance and gap closures

— *Corporate functions:* generate HR self-serve functions (for example, first-line interactions/responses, onboarding videos); synthesize requests for proposals (RFPs) and generate responses; draft vendor communications; automate accounting by extracting relevant numbers; generate reports in standard format; internally summarize updated risk/legal processes as regulation changes; provide large-scale coverage updates for policyholders as regulations change; expedite redetermination processes with enhanced recurring eligibility screening summaries; generate reports and KPIs across functions

— *Claims management:* generate summaries of manual and denied claims issues and sources to determine solutions; aggregate information for complex claims to reduce processing time; autogenerate summaries and outcomes for prior authorization requests; draft responses to appeals and grievances inquiries

— *Marketing and sales:* analyze consumer distribution to develop personalized plans /products; analyze customer feedback by summarizing and extracting themes from online text/images; improve sales support/chatbots to help potential members understand coverage options and choose plans accordingly; create "first draft" materials and product overviews for brokers by product and line of business (LOB), employers, and Affordable Care Act and Medicare Advantage members (within guidelines and needed reviews)

Hospitals and physician groups:

— *Continuity of care:* summarize discharge information and follow-up needs for post-acute care; generate care summaries for referrals; synthesize specialist notes for primary-care physician team

an insurance specialist to manually confirm the scope of a member's plan. With gen AI, digital resources and call-center specialists can quickly pull relevant information from across dozens of plan types and files. Resolution of claims denials, another time-consuming process that often causes member dissatisfaction, can be sped up and improved through gen AI. Gen AI models can summarize denial letters, consolidate denial codes, highlight relevant denial reasons, and contextualize and provide next steps for denials management, although all of this would still need to be conducted under human supervision.

Gen AI–enabled technology could also streamline health insurance prior authorization and claims processing, two time-intensive and costly tasks for private payers. (On average, it takes ten days to verify prior authorization.) These products could convert unstructured data into structured data and provide near-real-time benefits verification, including an

- *Quality and safety:* synthesize and recommend tailored risk considerations for patients based on their medical history and existing medical literature

- *Value-based care:* improve documentation accuracy and leverage structured and unstructured data to create patient education videos, images, and summaries; draft standard value-based care and carve out contracts based on market characteristics

- *Network and market insights*: autogenerate provider segmentation summaries by specialty; summarize market performance and comparisons based on external resources and data

- *Reimbursement:* develop prior authorization documentation for payers; generate a list of current conditions and potential codes based on voice, electronic medical records (EMRs), text, and other data; create care management summaries identifying coding errors across claims; automate coding and checks based on physician notes

- *Clinical operations:* generate post-visit summaries and instructions; generate and synthesize care coordination notes, changes in EMRs, dictations, and messages; generate workflow materials and schedules for processes and locations; create educational materials on disease identification and management; develop personalized training journeys for clinicians across types and synthesize requirements of programs

- *Corporate functions:* IT (develop code, assist cybersecurity test-case generation and quality assurance); procurement (draft RFPs, contracts, generate reports and KPIs, draft vendor communications, create purchase orders based on supply levels); talent (assist hiring, generate offer letters and packets, create customized standard operating procedures, create education for new hires, customize onboarding, develop chatbots to address IT and HR questions); finance (generate financial reports); other (generate reports for legal, compliance, and regulatory departments)

- *Clinical analytics:* leverage conversational language to obtain analytics insights; use AI-assisted coding to automate repetitive tasks or generate new code

- *Consumer:* analyze customer feedback by summarizing and extracting themes from online text/images; create personalized care instructions, videos, visuals, and communications; improve chatbots for member servicing of nonclinical topics; autogenerate notifications and outbound communications

accurate calculation of out-of-pocket costs using healthcare providers' contracted rates, patients' exact benefits, and more.

Hospitals and physician groups

Within hospitals and physician groups, gen AI technology has the potential to affect everything from continuity of care to clinical operations and contracting to corporate functions.

Consider a hospital's corporate functions. Back-office work and administrative functions, such as finance and staffing, provide the foundations on which a hospital system runs. But they often operate in silos, relying on manual inputs across fragmented systems that may not allow for easy data sharing or synthesis.

Gen AI has the potential to use unstructured purchasing and accounts payable data and, through gen AI chatbots, address common hospital employee IT and HR questions, all of which could improve employee experience

and reduce time and money spent on hospital administrative costs.

Clinical operations are another area ripe for the potential efficiencies that gen AI may bring. Today, hospital providers and administrative staff are required to complete dozens of forms per patient, not to mention post-visit notes, employee shift notes, and other administrative tasks that take up hours of time and can contribute to hospital employee burnout. Physician groups also contend with the burdens of this administrative work.

Gen AI could—with clinician oversight—potentially generate discharge summaries or instructions in a patient's native language to better ensure understanding; synthesize care coordination notes or shift-hand-off notes; and create checklists, lab summaries from physician rounds, and clinical orders in real time. Gen AI's ability to generate and synthesize language could also improve how EHRs work. EHRs allow providers to access and update patient information but typically require manual inputs and are subject to human error. Gen AI is being actively tested by hospitals and physician groups across everything from prepopulating visit summaries in the EHR to suggesting changes to documentation and providing relevant research for decision support. Some health systems have already integrated this system into their operations as part of pilot programs.

Bringing gen AI to healthcare

Applying gen AI to healthcare businesses could help transform the industry, but only after leaders take inventory of their own operations, talent, and technological capabilities. In doing so, healthcare leaders could consider taking the following actions.

Evaluate the landscape

The first step for healthcare executives seeking to bring gen AI to their organizations is to determine how the technology might best serve them. To determine the applications that are most relevant to an organization, executives could create a group of cross-functional leaders—including, but not limited to, those who oversee data and technology—to determine the value that gen AI (and AI more broadly) could bring to their respective divisions. Doing so could help organizations avoid an ad hoc or piecemeal approach to applying gen AI, which would be inefficient and ineffective. These use cases, once prioritized, should be integrated into the organization's broader AI road map.

Size up the data

Extracting the greatest value from the gen AI opportunity will require broad, high-quality data sets. Because of this, healthcare leaders should begin thinking about how they ca=n improve their data's fidelity and accuracy through strategic partnerships—with providers, payers, or technology vendors—and interoperability investments.

Leaders must also assess their AI tech stack—including the applications, models, APIs, and other tech infrastructure they currently use—to determine where their technological capabilities will need to be augmented to leverage large language models at scale. Investing in the AI tech stack now will help organizations add more uses for gen AI later.

To train gen AI models, organizations should also ensure that they are processing data within secure firewalls. Organization leaders may choose to outsource various parts of their tech stack after evaluating their own internal capabilities.

Address risks and bias

For private payers, hospitals, and physician groups, there are several potentially costly risks associated with using gen AI, particularly as the technology evolves.

Members' and patients' personally identifiable information must be protected—a level of security that open-source gen AI tools may not provide. Gen AI may also potentially use this information to improve the training of its models. If the data sets from which a gen AI–powered platform are based on an overindex of certain patient populations, then a patient care plan that the platform generates may be biased, leaving patients with inaccurate, unhelpful, or potentially harmful information. And integrating gen AI platforms with other hospital systems, such as billing systems, may lead to inefficiencies and erroneous expenses if done incorrectly. Given the potential for gen AI to come up with potentially inaccurate answers, it will remain critical to keep a human in the loop.

To weigh the value of gen AI applications in healthcare against the risks, leaders should create risk and legal frameworks that govern the use of

gen AI in their organizations. Data security, bias and fairness, and regulatory compliance and accountability should all be considered as part of these frameworks.

Organizations that can implement gen AI quickly are likely to be in the best position to see benefits, whether in the form of better efficiency or improved outcomes and experience.

Invest in people and partnerships

Bringing gen AI to healthcare organizations will affect not only how work is done but by whom it is done. Healthcare professionals will see their roles evolve as the technology helps streamline some of their work. A human-in-the-loop approach, therefore, will be critical: even though many processes may fundamentally change, and how someone does their work may look different, people will still be critical to all areas touched by gen AI.

To help bring these changes to healthcare, organizations must learn how to use gen AI platforms, evaluate recommendations, and intervene when the inevitable errors occur. In other words, AI should augment operations rather than replace them. Healthcare organizations may need to provide learning resources and guidelines to upskill employees. And within hospitals and physician group settings—where burnout is already high—leaders should find ways to make gen AI–powered applications as easy as possible for frontline staff to use, without adding to their workloads or taking time away from patients.

While some healthcare organizations may choose to build out their own gen AI capabilities or products, the majority will likely need to form strategic partnerships with technology firms. Before picking a partner, leaders should consider their potential partner's adherence to regulatory compliance requirements, such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States; data privacy and security; and whether the healthcare organization's data will be used to inform future foundational models. There may also be the potential for private payers and healthcare providers to partner with other organizations that also have rich data sets, to improve gen AI outputs for everyone.

Gen AI has the potential to reimagine much of the healthcare industry in ways that we have not seen to date with previously available technologies. Once gen AI matures, it could also converge with other emerging technologies, such as virtual and augmented reality or other forms of AI, to transform healthcare delivery. For example, a healthcare provider could license its likeness and voice to create a branded visual avatar with whom patients could interact. Or a physician could check, against the full corpus of a patient's history, how their approach for that patient aligns (or deviates) from other similar patients who have experienced positive outcomes. These ideas may seem distant, but they have real potential in the near term as gen AI advances.

But first, private payer, hospital, and physician group leaders should prioritize the responsible and safe use of this technology. Protecting patient privacy, creating the conditions for equitable clinical outcomes, and improving the experience of healthcare providers are all top goals. Getting started today is the first step in achieving them.

Shashank Bhasker is an associate partner in McKinsey's Chicago office; **Damien Bruce** is a senior partner in the Melbourne office; and **Jessica Lamb** is a partner in the New Jersey office, where **George Stein** is an associate partner.

The authors wish to thank Shubham Banerjee, Sanjiv Baxi, Adam Broitman, David Bueno, Sameer Chowdhary, Jenny Cordina, Jack Eastburn, Pranay Gupta, Omar Kattan, Jay Krishnan, Meredith Lapointe, Jung Paik, Aldo Rosales, Gaurang Satjia, John Schultz, Sriram Sekar, William Weinstein, Luke Yancy, and Delphine Zurkiya for their contributions to this article.

Leadership rundown: How US healthcare leaders are scaling innovation and transformation

Shubham Singhal and Drew Ungerman

October 19, 2023

Healthcare organizations are exploring ways to use data, analytics, and AI to drive and scale innovation and transformation.

McKinsey recently gathered a group of healthcare leaders to discuss the outlook for the industry. The following is a summary of some of their remarks focused on their leadership lessons and the actions they are taking.

The importance of harnessing technology

"Technological change is one of three developments forcing structural change in healthcare. The others are changes in payment models, including value-based models, and the push for equity." Bruce Broussard, president and chief executive officer of Humana, continued: "Technology is going to facilitate changes that give consumers more choices in channels."

Tina Freese Decker, president and CEO of Corewell Health, agreed that there will be more focus on the use of technology, especially AI, that can provide care anywhere, especially where the patient wants it. "The question is where is AI going to go? There is so much potential, and we have to make sure that we use it smartly, securely, and safely. But I think we need to make sure it's embedded into everything," Decker said. "I do think we have to have the conversations about what we're trying to accomplish and bring people along so that we actually build something that's better." For example, "Appointment scheduling is a challenge for all of us. We all have our own measures about how much online or self-service scheduling we are doing. We're moving through the process, and it's up to about 20 percent. It's still slow, and we have to change that, because our consumers expect it to be much easier. I expect AI will help us with that."

AI will be a game changer in healthcare, the participants emphasized. David Holmberg, president and CEO of Highmark Health, recalled that, "For those of us who were in leadership positions for Y2K, there was a big spend running up to that. Then when the internet really took off, there was a big spend. I think what's going to happen with AI will dwarf both of them. I think technology will absolutely make a dramatic difference. That's why people are worried about scale—these investments are big. In our case, we've spent $1.5 billion building a technology platform, and we're constantly changing it and evolving it."

Some of the participants said they see AI as a way to save money and empower clinicians and administrative staff.

But Holmberg pointed out that the transition is not without risk and will need careful management. "The opportunity and the speed at which things are going to change," he said, "is going to be dramatic, and it's going to be really important for all of us to have the right governance in place, because we do have to

get it right. We are in the business that's life and death, and there's going to be risk to this." But with AI, Holmberg said, "we're going to have the opportunity to accelerate the elimination and automation of a whole bunch of stuff. And it's going to be critical that organizations have the capability and the understanding of what to do with it."

"Think of the power of generative AI to take out a bunch of manual work that we do on both the payer side and the provider side," said Martha Wofford, president and chief executive officer of Blue Cross and Blue Shield of Rhode Island. "It feels like we are on the precipice of unlocking a ton of savings and value."

AI is more about improving employee performance than rationalizing staff, said Sonny Goyal, senior vice president, diversified business group, and chief strategy officer, Blue Cross and Blue Shield of North Carolina. "We have to be really thoughtful about how we use AI—and how quickly we go at it, and how we prioritize where we test things. But I don't think about AI as how many jobs I can cut. I actually think about AI as how I turn a person into a superhuman, how I put more data, more insights, at their fingertips, whether they're in a call center, or anywhere in the organization, [to enable them] to be better informed and help our members in a better way. Obviously, there's some things we have to be careful of, that we don't put the wrong data in front of them, the wrong insights in front of them, that can drive a great experience into a bad one."

The panelists also noted the opportunities afforded by the increased use of data and analytics in healthcare. "There's so much opportunity for us to use data and analytics to better understand our members, to create very narrow, small segments, to deliver personalized care," said Wofford. "We're not there yet, but I do feel like in the last few months, with the breakthrough with ChatGPT, it's so encouraging to think about what we can actually do with data and analytics. So I think that dream of actually delivering care that an individual values, and all the support and all of the help navigating to get to that care—which we don't do a very good job of now—I feel like we're really on the cusp."

Go beyond pilots to scale

Obtaining scale in a new service line is key to value creation, the participants noted. Scale offers the ability to spread fixed costs and gain expertise and benefit from knowledge transfer with partners while providing new opportunities to develop and test technology, said Tom Jackiewicz, president of the University of Chicago Health System. As an example, Jackiewicz cited the benefits of knowledge exchange in his organization's partnership with another healthcare system. "It's been really helpful for us, because they run hospitals much more efficiently than we do. There are some infrastructure things that they've done that I have been very impressed with."

The participants also discussed the importance of M&A in scaling. Corewell Health's Freese

Obtaining scale in a new service line is key to value creation, the participants noted.

Decker offered several suggestions for successful M&A: "Be really clear about what you want to accomplish. Just getting bigger isn't a strategy. It needs to be that you're doing it to get to affordability, or simplicity, or equity, or providing exceptional care." She also stressed the importance of being willing to "over-communicate and over-listen, make decisions and move on, learn to be comfortable with tension, and move fast."

M&A is not the only way to achieve scale, the speakers emphasized, noting that even the biggest players can't do everything.

"I think partnerships come in all different forms," said Bill Rutherford, chief financial officer and executive vice president of HCA Healthcare. "It doesn't have to be purely just an equity partnership. But you're seeking accelerated solutions. We've got clinical affiliations that are decades in the making. So I think it's just important for an organization to be open for ways to achieve whatever strategic objective you have."

"We are doubling down on our core business, but we're expanding into other markets, including more outpatient, ambulatory surgery, and capturing commercial payer mix," said Dr. Philip Ozuah, president and chief executive officer of Montefiore Einstein. "But it's also [about] partnering with others across the continuum of care. Having scale allows us to run experiments and to test out different models of care, different models of efficiency. Incrementalism is a failure. We have to be bold and go faster."

Warner Thomas, president and chief executive officer of Sutter Health, concurred. "Scale allows you to improve upon capabilities, invest in them in a different way," he said, "or maybe you join with another system that has those capabilities. So you get an alignment of capability, not just size. This idea of combining is not just around size, it's around the capabilities that you bring to the table."

But growth, whether through M&A or partnerships, must be approached carefully, the participants said. "We have three criteria when we think about whether to grow," said Highmark's Holmberg. "Is there a compelling reason to grow? Do we have the financial capability to grow? Do we have the guts to grow?"

"There are a lot of shiny objects," said Brian Kane, president of Aetna. "There are a lot of things [that] come across your desk that seem really, really interesting and that you really want to fund. I think it goes back to what are the strategic objectives of your company. What are your real operational and strategic

Improving productivity is top of mind for healthcare leaders, given labor shortages in the sector, inflation, and utilization increases post-COVID-19 pandemic.

priorities, and [how can you make] sure the investments you fund are truly aligned with that? It's constantly asking that question, 'Why are we doing this?' We have alternative uses of capital—and frankly, it's not just capital, it's time. Management bandwidth is as important, or probably more important, frankly, than capital."

Improve productivity to transform care

Improving productivity is top of mind for healthcare leaders, given labor shortages in the sector, inflation, and utilization increases post-COVID-19 pandemic. Participants offered their take on how to both improve productivity and the patient's care experience. Some emphasized the role of clinicians in these efforts and the importance of gaining their trust.

For Chicago Health System's Jackiewicz, the guiding principle of productivity improvement initiatives is how to make clinicians' lives better. "One of the things I noticed right away is our clinicians feel overwhelmed with responsibilities. Whether it's nurses, pharmacists, or our physicians, too much has been layered on their daily lives," he said. "EMR [electronic medical records] was really a burden. They felt like every time there was any kind of need or new administrative detail, everybody said, 'Work harder, work faster.' When we tackled length of stay, we did it differently.

"I said, 'I don't want to ask the doctors for anything until we're at the end of this process.' I realized 80 percent of our work was hospital operational opportunities, while 20 percent was work with the faculty. We began by colocating patients. To deal with the pressures in the ED [emergency department], we were putting patients throughout the hospital. For hospital service and general medicine, colocation saved the [clinicians] an hour a day.

"Next, we added 40 percent more care coordinators. We revised their jobs and helped move patients through the system more efficiently. Weekend services were our next challenge. We weren't doing echos, interventional radiology, and other testing on weekends, so we beefed up those services. After all that was done, then we went back and looked at consult time.

"The clinicians had observed how the hospital was invested in improving their lives, so they were much more open to working together on consult times. All of this work happened in relatively rapid succession. It's amazing how quickly we've brought down length of stay."

Sutter's Thomas said he focused on simplification and length of stay: "We have to make our organizations easier to work in and to use. So we've looked at simplification. How do we take the amount of time that our physicians and nurses spend in the system and can we reduce that between 20 and 30 percent over the next 24 months?

"Sometimes length of stay is looked at as a money issue," he said. "I look at it as a way to service more patients—because we turned down 10,000 transfers last year for patients we couldn't take care of. I think people get more inspired by that and can rally around those types of things."

Montefiore used a three-pronged approach to productivity improvement, said Dr. Ozuah. "First was, explain the why. Second, fix broken processes. And third, embrace technology."

"We sat with the doctors and we looked at the wait times of patients trying to get in to see them. That doesn't make any of the doctors happy, that there is a wait and there's poor access. So that was the why."

Then, he said, there was "the amount of time that's spent on low-value tasks. So we took suggestions from the doctors and the clinicians and implemented and tackled those. Then finally, technology, moving as quickly as we could to automation and digitization. We're not all there yet, but it's a focus."

The structural change ahead in the sector comprises who does the work and where does the work get done, said Humana's Broussard. "The work will move more toward generalists,

including nurses and certified nursing assistants. Care will move to more convenient settings, all the way to the home."

Ben Breier, a partner and head of US private equity health and life at the private equity firm Partners Group, discussed the importance of efficiency. "We have to keep finding more efficient ways to be able to provide the kind of core services that our customers—healthcare patients—need, and we have to do it in a more cost effective way," he said. "We've all been saying this for a long time, and there's lots of innovation and strategies that are out there, whether it's alternative sites, home, or telehealth, or the evolution of precision medicine. It certainly has a lot to do with data analytics: the deployment of technology into healthcare capabilities to do things at a lower cost. So we are looking across the healthcare spectrum to find ways in which we can deploy capital."

Unlock silos through better integration

A big source of concern for the healthcare leaders was how to better integrate their organizations' service lines for the benefit of their patients. No one claimed to have gotten it right yet. They also emphasized the value of partnerships to acquire additional capabilities.

"The key to success of a capital-light model is not just the ability to own an asset or to synthetically contract with one," said Humana's Broussard. The issue is "how do we integrate across business lines so that the customer isn't the integrator; the system is the integrator." He continued, "Integration is ultimately what a scalable organization should strive for in service to members and patients. Integration can lead to higher patient satisfaction, better outcomes, and ultimately higher profits."

Change, said Highmark's Holmberg, always presents opportunities. "An integrated system offers the chance to take advantage of those opportunities. Finding like-minded partners, who have the same values, who believe in what you believe in, and are willing to share the success and the risk, will be critical for all of us. But it's going to take a public–private partnership to solve the big issues."

"What we really need to do is transform how people experience care in our state," said Blue Cross and Blue Shield of Rhode Island's Wofford. "Right now they struggle to get access to primary care and behavioral healthcare. How do we use our position to transform the experience of care delivery? We can't sit back and just stay in our traditional payer lane. We want thriving providers in our market, and so we are absolutely ready to invest with them, in the capabilities that are going to help them do super well."

Some of the insurers emphasized clinical and financial data sharing as a form of integration between payers and providers. Said Blue Cross and Blue Shield of North Carolina's Goyal: "I look forward to the time when we can continue to drive more and more data sharing in a safe way, in an appropriate way, obviously, but in a safe way that actually helps improve upon the experiences that our members get and improves upon the care that they all get."

Respond with agility and speed to a fast-evolving market

Several participants reflected on the organizational changes required to respond to the fast-evolving healthcare marketplace and business-model innovation.

"It is really hard to build innovative, new startups within a large company," said Aetna's Kane. "It is really, really hard because people are used to operating at scale. They know what they do. They're really good at what they do. But when it comes to thinking out of the box and creating the right incentive structure and the right equity structure, it's really hard. Being able to use your balance sheet to effectively, synthetically, create that and still be able to benefit from it as a large company can be really, really powerful."

Others also addressed the cultural aspect of innovation. "The biggest challenge to innovation is us," said Holmberg. "Five years from now, we

will be a much more nimble organization and even more willing to take on risk."

HCA's Rutherford highlighted an organizational approach to encouraging innovation. "We have what we call a special-assets group in healthcare innovation to invest in those companies that have a great idea or product, maybe not fully developed, maybe not in practice, and it is cool to see those grow."

Added Blue Shield and Blue Cross of North Carolina's Sonny Goyal: "Three forces in particular are influencing the future of care in North Carolina: provider consolidation, interesting technologies such as AI, and inflation." In response to that, "we have tried to develop an agile mindset. This means constantly challenging ourselves, and thinking differently about how we approach things, constantly reevaluating our organizational structure, constantly looking for ways to streamline decision making, the ways it will help us handle all these different forces faster than we have over the past 90 years."

Shubham Singhal is a senior partner in McKinsey's Detroit office and a global leader of McKinsey's Social, Healthcare, and Public Entities (SHaPE) sectors. **Drew Ungerman** is a senior partner in the Dallas office and leads McKinsey's Healthcare Practice globally.

The authors wish to thank Naman Bansal and Alec McLeod for their contributions to this article.

McKinsey Health Institute

The McKinsey Health Institute (MHI) is an enduring, non-profit-generating entity within the firm. It was founded on the conviction that, over the next decade, humanity could add as much as 45 billion extra years of higher-quality life (roughly six years per person on average—and substantially more in some countries and populations). MHI's mission is to catalyze the actions needed across continents, sectors, and communities to realize this possibility.

82

Reframing employee health: Moving beyond burnout to holistic health

Jacqueline Brassey, Brad Herbig, Barbara Jeffery, and Drew Ungerman

A new McKinsey Health Institute survey across 30 countries offers insights into how organizations can help create a workplace that prioritizes physical, mental, social, and spiritual health.

99

Gen Z mental health: The impact of tech and social media

Erica Coe, Andrew Doy, Kana Enomoto, and Cheryl Healy

A new McKinsey Health Institute survey finds that Gen Z's social media engagement can feel negative but can also help with finding mental health support and connectivity.

Reframing employee health: Moving beyond burnout to holistic health

Jacqueline Brassey, Brad Herbig, Barbara Jeffery, and Drew Ungerman

November 2, 2023

A new McKinsey Health Institute survey across 30 countries offers insights into how organizations can help create a workplace that prioritizes physical, mental, social, and spiritual health.

At a glance

— *Holistic health encompasses physical, mental, social, and spiritual health.* The McKinsey Health Institute's 2023 survey of more than 30,000 employees across 30 countries found that employees who had positive work experiences reported better holistic health, are more innovative at work, and have improved job performance.

— *For employees, good holistic health is most strongly predicted by workplace enablers, while burnout is strongly predicted by workplace demands.* Providing enablers alone will not mitigate burnout, and addressing demands alone will not improve holistic health. A complementary approach is needed.

— *Organizational, team, job, and individual interventions that address demands and enablers can boost employee holistic health.* These may include flexible working policies, leadership trainings, job crafting and redesign, and digital programs on workplace health.

For most adults, the majority of waking daily life is spent at work. That offers employers an opportunity to influence their employees' physical, mental, social, and spiritual health.

To support the move to better health, the McKinsey Health Institute (MHI), along with other organizations such as the World Health Organization (WHO), are highlighting a more modern way to view health beyond illness and its absence.[1] Embracing the concept of holistic health—an integrated view of an individual's mental, physical, spiritual, and social functioning[2]—is a vital step toward "adding years to life and life to years" across continents, sectors, and communities.

Previous research from MHI has focused on how modifiable drivers of health can lead to healthier, longer lives. The majority of these—ranging from quality of sleep to time spent in nature—sit outside of the traditional healthcare system, and many of these drivers could benefit from employer support. MHI's new survey of 30,000 employees across 30 countries explores how employees perceive their health and how workplace factors may act as demands upon or enablers to mental, physical, spiritual, and social health.

The reasons to act go beyond improving health. Recent McKinsey research finds that employee disengagement and attrition—more common among workers with lower well-being—could cost a median-size S&P company between $228 million and $355 million a year in lost productivity.[3] Research by MHI and Business in the Community showed that the UK economic value of improved employee well-being could be between £130 billion to £370 billion per year or from 6 to 17 percent of the United Kingdom's

GDP. That's the equivalent of £4,000 to £12,000 per UK employee.[4]

In the MHI Holistic Health framework and research model,[5] we demonstrate the additional value of measuring holistic health over and above other popular health-related outcomes such as burnout or other well-being-related outcomes such as engagement or happiness. The insights presented in this article are vital for organizations determining where to start when aiming to improve employee health and how to enable them to start considering, measuring, and improving holistic health.

The majority of employees report positive overall holistic health

We found that more than half of employees across 30 countries reported positive overall holistic health[6]—but there are substantial variations between countries, with the lowest overall percentage of positive scores in Japan (25 percent)[7] and the highest percentage of positive scores in Türkiye (78 percent). Among respondents, the largest proportion of positive scores was for physical health at 70 percent, and approximately two-thirds of global employees reported positive scores on mental and social health. The lowest proportion of positive scores were on spiritual health, at 58 percent.

When looking at demographic differences and nuances, those aged 18 to 24 had the lowest holistic-health scores. This complements previous MHI work on the challenges facing Gen Z. For companies, size matters: respondents in larger companies (more than 250 employees) had higher holistic-health scores than those in smaller companies. Within role, managers had the highest holistic-health scores, while all other workers reported lower holistic health. Further, there are similar levels of good holistic health across the industries surveyed (Exhibit 1).

At a country-specific level, factors such as burnout symptoms, emotional impairment, or cognitive impairment vary. However, one common finding is a lack of energy: more than a third of respondents in 29 of the surveyed countries reported exhaustion. Comparatively, only three countries had a third or more respondents reporting mental distance or reluctance to work (Exhibit 2).

Understanding demands and enablers for employees

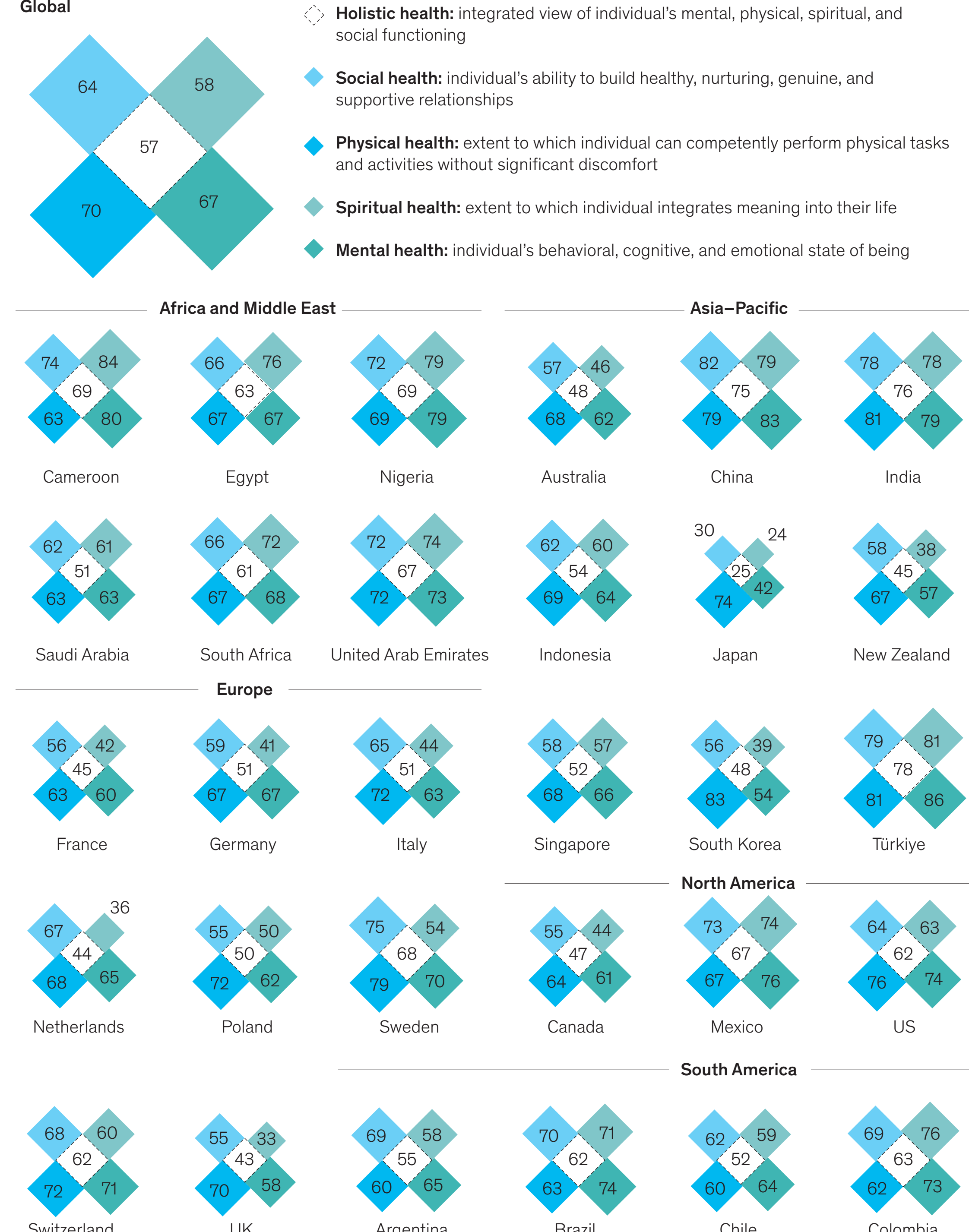
In this survey, MHI explored a wide set of *demands*, which are workplace factors that require sustained cognitive, physical and/or emotional effort, and *enablers*, which can offset job demands.[8] Demands can be thought of as challenges in the workplace, and enablers

The insights presented in this article are vital for organizations determining where to start when aiming to improve employee health.

Exhibit 1

Although the global level of good holistic health is around 60 percent, levels of good mental, physical, social, and spiritual health vary by country.

Reported good health, by health dimension,[1] % of respondents



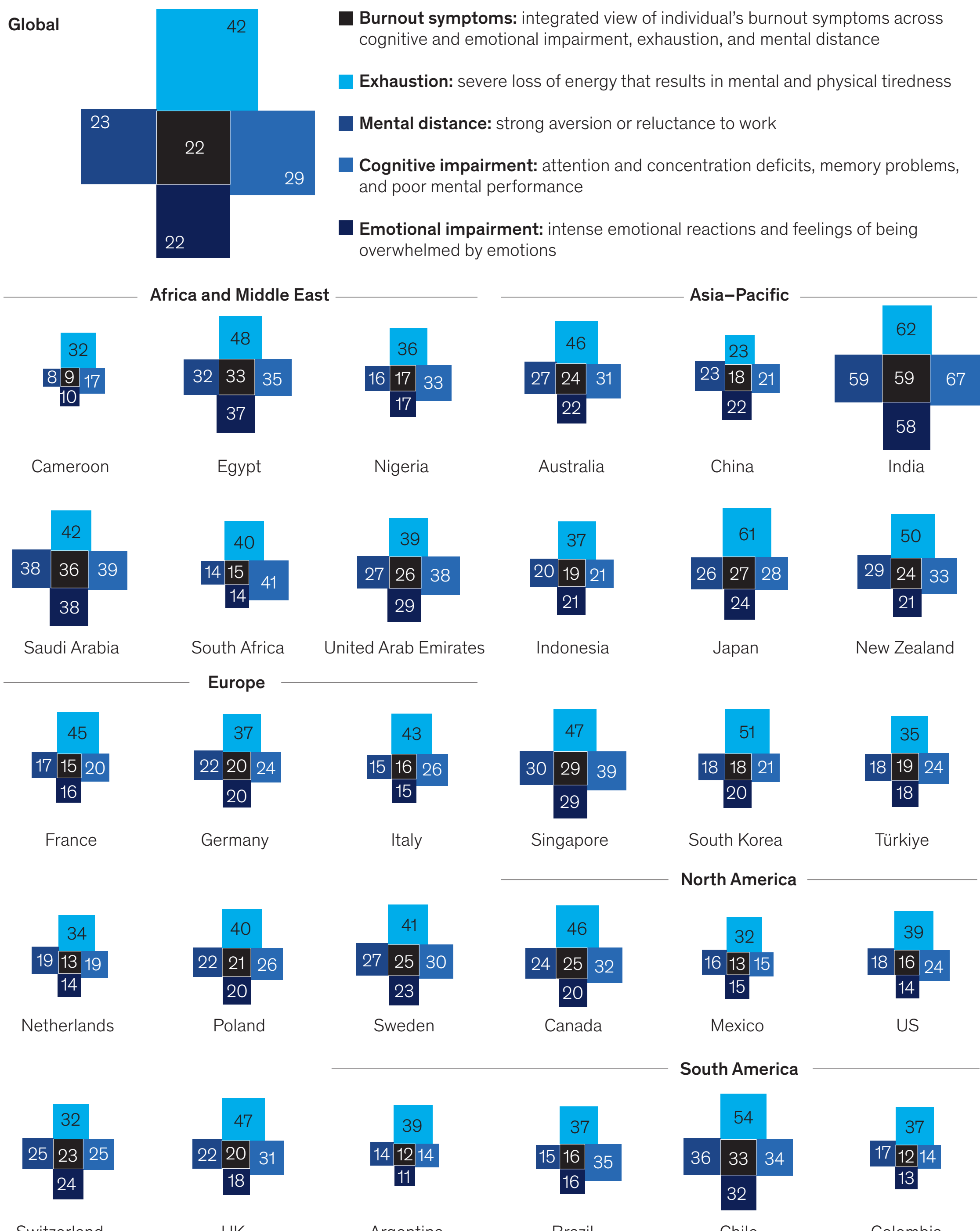
[1]Data on mental, physical, social, and spiritual health represent percentage of respondents scoring average of ≥4 (scale of 1–5) on items for each dimension. Data on holistic health represent percentage of respondents scoring average of ≥4 across all 4 dimensions.
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

Exhibit 2

Although the global level of burnout is around 20 percent, cognitive and emotional impairment, exhaustion, and mental distance vary by country.

Reported experience of burnout symptoms, by symptom dimension,[1] % of respondents



[1]Data on cognitive impairment, emotional impairment, exhaustion, and mental distance represent percentage of respondents scoring average of ≥3 (scale of 1–5) on items for each dimension. Data on burnout symptoms represent percentage of respondents scoring average of ≥3 across all 4 dimensions.
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

What we measured

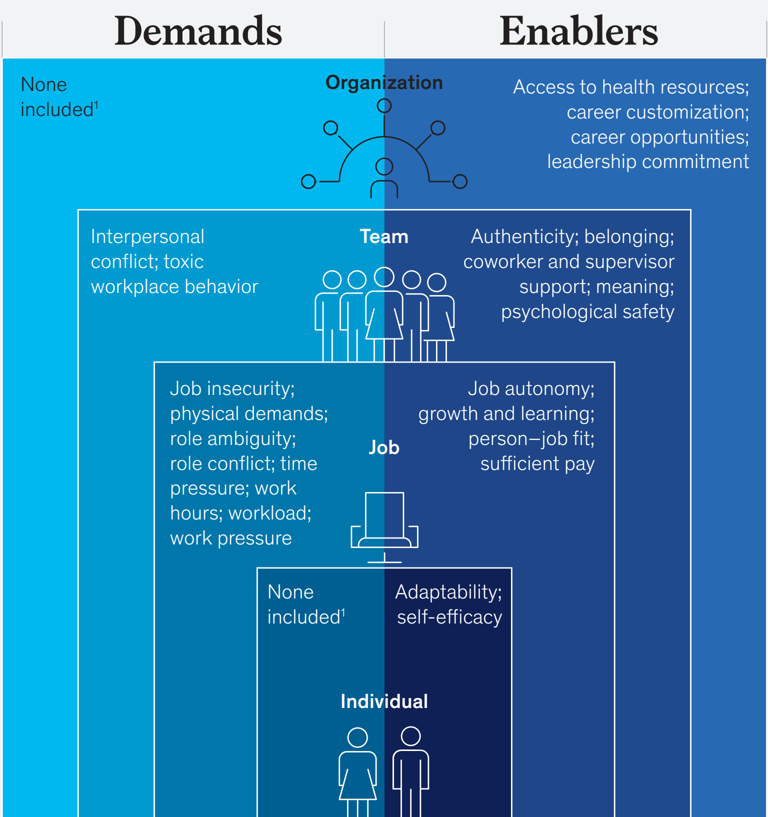
From April to June 2023, the McKinsey Health Institute conducted a global survey of more than 30,000 employees in 30 countries (Argentina, Australia, Brazil, Cameroon, Canada, Chile, China, Colombia, Egypt, France, Germany, India, Indonesia, Italy, Japan, Mexico, the Netherlands, New Zealand, Nigeria, Poland, Saudi Arabia, Singapore, South Africa, South Korea, Sweden, Switzerland, Türkiye, the United Arab Emirates, the United Kingdom, and the United States). The dimensions assessed in our survey included toxic workplace behavior, interpersonal conflict, workload, work hours, time pressure, work pressure, physical demands, role conflict, role ambiguity, job insecurity, access to health resources, leadership commitment, career opportunities, career customization, psychological safety, supervisor support, coworker support, authenticity, belonging, meaning, job autonomy, remuneration, person–job fit, learning, and growth. Individual self-efficacy and adaptability were also assessed (exhibit).

The role of these dimensions were tested to determine whether they were associated with several health-related outcomes (holistic health, burnout symptoms, depression symptoms, distress symptoms, anxiety symptoms, sleep hours, sleep satisfaction, happiness at work, loneliness at work, financial instability) and several work-related outcomes (work engagement, organizational advocacy, job satisfaction, work–life balance, intent to leave, absenteeism health, absenteeism caregiving, task performance, presenteeism, and innovative work behaviors).

Exhibit

Workplace factors can affect health- and work-related outcomes.

What we measured



Health-related outcomes: holistic health; burnout symptoms; depression symptoms; distress symptoms; anxiety symptoms; sleep hours; sleep satisfaction; happiness at work; loneliness at work; financial instability

Work-related outcomes: work engagement; organizational advocacy; job satisfaction; work–life balance; intent to leave; absenteeism because of health; absenteeism because of caregiving; task performance; “presenteeism”; innovative work behaviors

[1]While demands at this level can be measured, McKinsey Health Institute research model prioritized what employers have the most ability to change.
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

help to effectively offset challenges, allowing employees to move forward and experience positive growth and development.

Our research model explores how these demands and enablers influence several work-related and health-related outcomes (see sidebar "What we measured"). Building on previous research, we now consider a vital new aspect: the relationship between demands, enablers, and an employee's holistic health.

The MHI model predicted a large proportion of the variance in holistic health, at 49 percent, well exceeding traditional research models' predictions regarding variance in outcomes.[9] The higher the explained variance, the better positioned the model is to be able to reliably predict differences between employees' outcomes. Interestingly, we find that as scores on one subdimension of health increase, scores on *all* subdimensions of health rise.

Enablers—aspects of work that provide positive energy such as meaningful work and psychological safety—explain the most variance in holistic health. Those who find meaning in their work and feel they can raise new ideas or objections with their coworkers are more likely to feel they are in better health across all four dimensions (Exhibit 3).

Holistic health also offers insight into workforce performance. For example, employees with good holistic health are more likely to indicate that they are innovative at work, have better work performance, and experience better work–life balance.

When examining burnout symptoms, demands—such as toxic workplace behavior, role ambiguity, or role conflict—are seven times more predictive than enablers are.

Team-, job-, and individual-level drivers affect holistic health (Exhibit 4). This means that workers who have confidence in their ability to do good work, are adaptable during changing working conditions, and feel as though they belong to a community at work have improved holistic health.

Team- and job-level drivers affect burnout symptoms. This means that workers who are excluded, bullied, or receive demeaning remarks from colleagues or who are unclear on what is expected of them at work have higher burnout symptoms.

The relationship between holistic health and outcomes

Holistic health uniquely contributes to the prediction of several work-related outcomes, over and above related concepts such as burnout symptoms, engagement, and happiness at work. This highlights that the underlying components of health, while correlated with other workplace measures, are not equivalent to engagement or happiness at work.[10]

Holistic health is a strong measure of how an employee can sustain growth over time, which contributes to positive workplace performance. Having employees with strong holistic health has implications beyond short-term business performance. Community engagement beyond work is one example: when employees are suffering from poor holistic health, they are likely unable to help their communities. Relatedly, they may create a strain on health services through delaying care. This also could have implications for the role employers play in their communities—and for cities that are trying to foster good physical health and grow societal participation and purpose-driven initiatives among residents. Furthermore, employees who have strong holistic health may want to—and are better able to—work longer, which will be important for how employers approach an aging workforce.

How burnout symptoms factor into health

Consistent with our previous research on burnout, we found that 22 percent[11] of employees are experiencing burnout symptoms at work across the 30 countries included in our study, although there are substantial variances between countries. Cameroon respondents reported the lowest rates of burnout symptoms (9 percent), and India respondents reported the highest rates of burnout symptoms (59 percent).[12] When exploring demographic

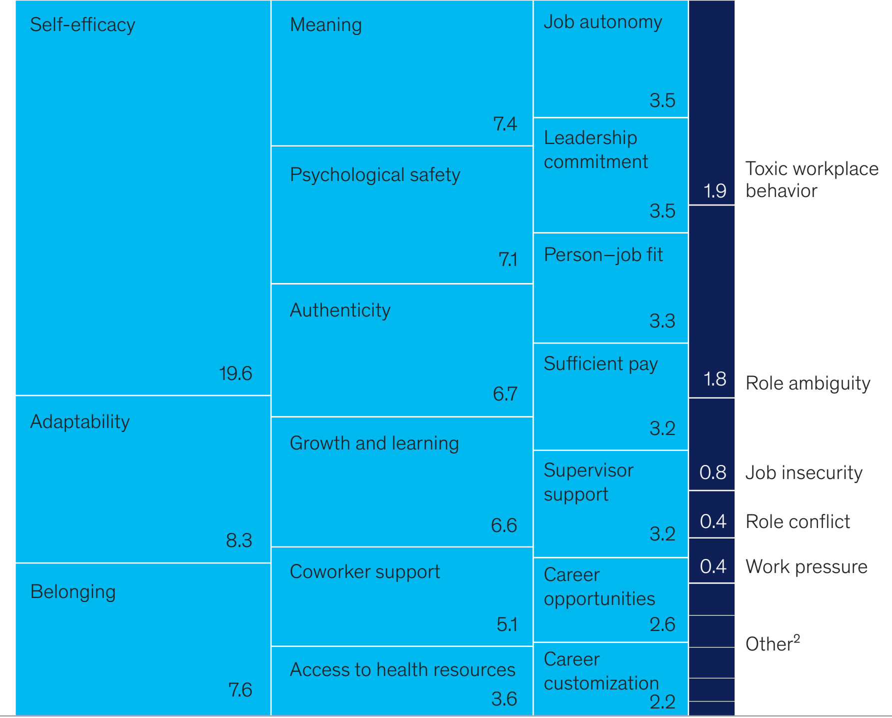
Exhibit 3

Holistic health

In a model of holistic health, enablers are 14 times more predictive than demands are.

Enabler 93.5 | Demand 6.5

Enablers and demands predicting holistic health,[1] % share

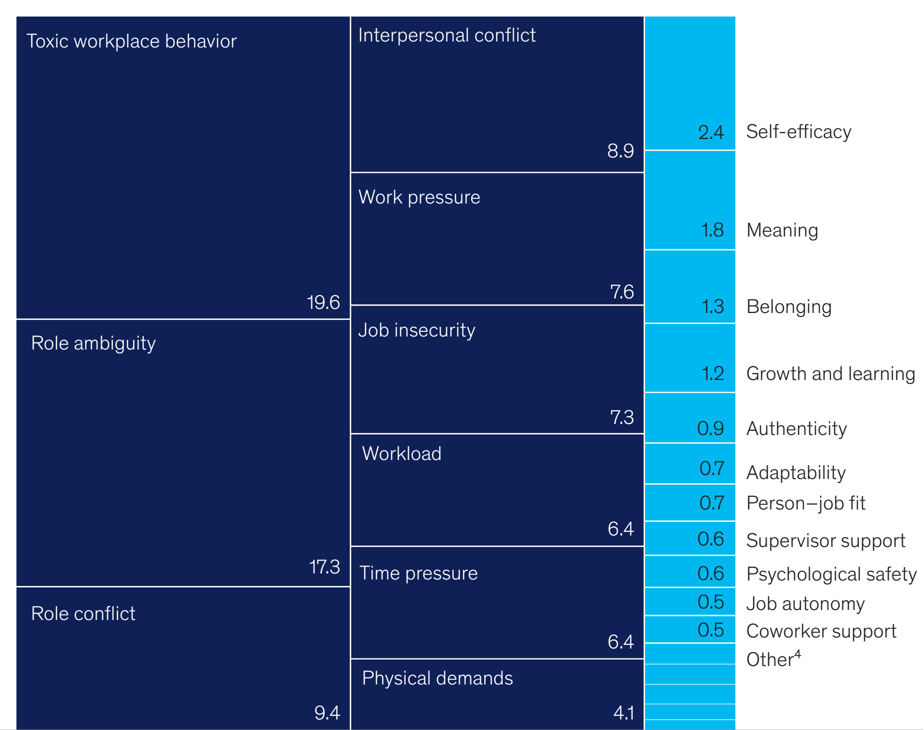


Burnout symptoms

In a model of burnout symptoms, demands are seven times more predictive than enablers are.

Enabler 13.0 | Demand 87.0

Demands and enablers predicting burnout symptoms,[3] % share



Note: Shares based on McKinsey Health Institute research model. Figures may not sum to listed totals, because of rounding.
[1]Explained variance in holistic health is 49%.
[2]Interpersonal conflict (0.3%), physical demands (0.3%), time pressure (0.3%), workload (0.2%), and work hours (0.1%).
[3]Explained variance in burnout symptoms is 69%. Work hours are not a significant demand (0.2%).
[4]Access to health resources (0.4%), career opportunities (0.4%), leadership commitment (0.4%), sufficient pay (0.3%), and career customization (0.2%).
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

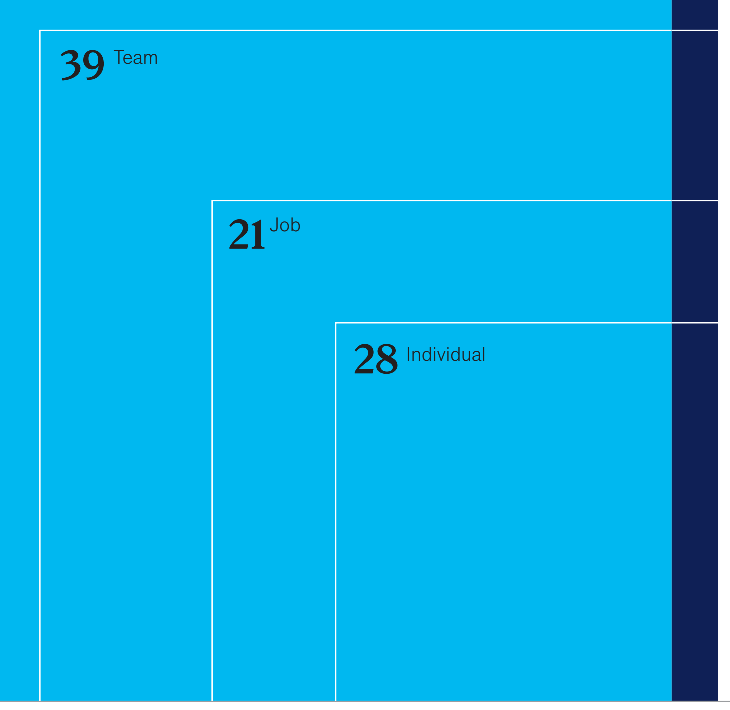
Exhibit 4

Holistic health

Holistic health is mostly driven by individual, job, and team enablers.

Enabler Demand

Enablers and demands of holistic health,[1] by level, % share

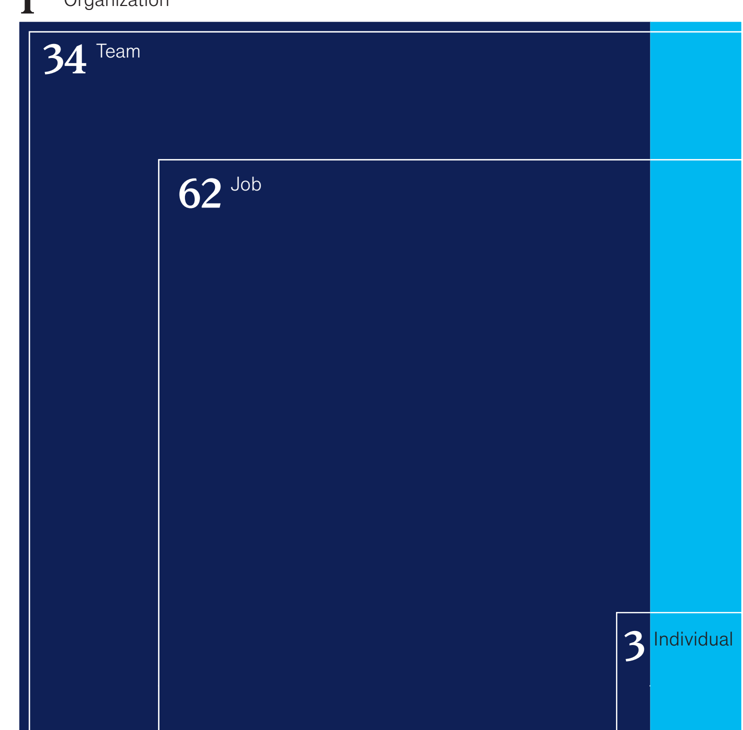


Burnout symptoms

Burnout symptoms are driven almost entirely by team and job demands.

Enabler Demand

Demands and enablers of burnout symptoms,[2] by level, % share



Note: Shares based on McKinsey Health Institute research model.
[1]Explained variance in holistic health is 49%.
[2]Explained variance in burnout symptoms is 69%.
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

differences on burnout, we find younger workers aged 18 to 24, employees from smaller companies, and all workers who are nonmanagers report higher burnout symptoms.

Our survey findings underscore a critical pattern: demands—aspects of work that require energy such as dealing with toxic behaviors or role ambiguity—explain the most variance in burnout symptoms.[13] But burnout is only the starting point: employers have a critical role to play in addressing a range of negative (mental) health outcomes at work beyond burnout.

It's time to reframe how we think about employee health. Employers need to support the health of *all* employees—supporting those in ill health, taking preventative measures to avoid negative health outcomes, and actively building a work environment where more employees have positive holistic health.

Improving holistic health and burnout together

MHI explored how workers across our global sample were faring on both holistic health and burnout symptoms in the 30 countries we surveyed (Exhibit 5). The presence of positive holistic health doesn't mean absence of burnout symptoms. They are negatively correlated but aren't two opposite sides of the same spectrum. Burnout and holistic health can coexist.[14]

At the global level, we found approximately half of employees (49 percent) are "faring well"—well functioning across the dimensions of holistic health and *simultaneously* experiencing low rates of burnout symptoms. However, an average of 9 percent of employees are "stretching"—well functioning across the dimensions of holistic health and simultaneously experiencing high rates of burnout symptoms. Almost a third of employees are "managing"—experiencing suboptimal functioning across the dimensions of holistic health and experiencing low rates of burnout symptoms. The group struggling the most are those employees who are "drowning"—experiencing suboptimal functioning across the dimensions of holistic health and high rates of burnout symptoms. Exhibit 5 shows the percentage of employees that can be improved by simultaneously addressing demands and building enablers for employees. We call this the opportunity gap.[15]

Looking at holistic health and burnout symptoms together could help employers in different sectors better differentiate the true drivers of outcomes. For example, physicians, nurses, teachers, and others in the social or healthcare sectors often report finding meaning in their work, yet often also report high rates of burnout symptoms and consideration of leaving their jobs.[16]

Driving organizational, team, and individual action—where to start?

We uncovered drivers that are most strongly associated with positive and negative employee health outcomes. Our research insights suggest a set of actions addressing the workplace demands that fuel poor health and those that build up the workplace enablers to help employees thrive.

Workplace factors at the individual, team, and job levels have the strongest influence on holistic health. In our model, workplace factors at the individual level predict 28 percent of differences between employees on holistic health, while those at the job level predict 21 percent, team level 39 percent, and the organization level 12 percent.[17]

Comparatively, when looking at employees on burnout symptoms, in our model, workplace factors at the individual level predict 3 percent of differences between employees on burnout, while those at the job level predict 62 percent, team level predict 32 percent, and the organization level predict 1 percent. Ninety-four percent of the explained variance is driven by factors at the job and team levels.

Employees who find their work meaningful more often report having better holistic health, even when they tolerate toxic workplace behaviors. But there is a limit. While holistic health can be maintained in a highly toxic work environment if an employee finds their work meaningful, meaningful work doesn't protect against burnout symptoms in highly toxic environments (Exhibit 6). Furthermore, when employees experience toxic behavior at work,

Exhibit 5

Simultaneously addressing burnout symptoms and holistic health could help employees across the spectrum of health.

Opportunity gap in addressing burnout symptoms and holistic health, % of respondents

Country	Managing	Faring well	Drowning	Stretching
Cameroon 35	27	64	4	4
Egypt 51	18	49	19	14
Nigeria 39	22	60	9	8
Australia 57	33	43	18	6
China 33	15	67	9	9
India 72	13	29	11	48
Saudi Arabia 61	25	39	24	12
South Africa 42	28	57	9	5
United Arab Emirates 47	21	52	12	14
Indonesia 51	33	49	12	6
Japan 77	51	22	23	3
New Zealand 61	37	38	16	8
France 58	43	42	10	5
Germany 53	32	48	16	5
Italy 53	38	47	10	5
Singapore 59	30	40	16	13
South Korea 55	38	44	12	5
Turkey 33	15	67	7	11
Netherlands 57	44	42	10	3
Poland 55	33	45	17	5
Sweden 42	18	57	13	11
Canada 59	34	41	18	7
Mexico 40	27	60	6	7
US 44	28	56	8	8
Switzerland 46	23	54	14	9
UK 60	40	40	17	3
Argentina 48	36	52	8	4
Brazil 43	28	56	9	6
Chile 56	23	43	24	9
Colombia 41	29	60	8	4

Note: Figures may not sum to 100%, because of rounding.
[1]Data represent percentage of respondents scoring average of ≥3 (scale of 1–5) across all 4 dimensions of burnout symptoms (cognitive impairment, emotional impairment, exhaustion, and mental distance).
[2]Data represent percentage of respondents scoring average of ≥4 (scale of 1–5) across all 4 dimensions of health (mental, physical, social, and spiritual).
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

Exhibit 6

Meaningful work buffers the effect of toxic workplace behavior on holistic health but isn't sufficient to stop burnout symptoms in a toxic environment.

Reported good holistic health and high burnout symptoms, by work meaningfulness, % share

Reported low levels of toxic workplace behavior / Reported high levels of toxic workplace behavior

Good holistic health[1]

	Low toxic workplace behavior	High toxic workplace behavior
Very meaningful work	92	85
Less meaningful work	26	8

High burnout symptoms[2]

	Low toxic workplace behavior	High toxic workplace behavior
Very meaningful work	2	64
Less meaningful work	14	57

Note: "Low" refers to bottom 25% of respondents; "high" and "good" refer to top 25% of respondents.
[1]Statistically significant relationship between experiencing toxic workplace behavior and holistic health, moderated by meaningful work.
[2]Statistically significant relationship between experiencing toxic workplace behavior and burnout symptoms, moderated by meaningful work.
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

their holistic health scores are 7 percent lower and they report a 62 percent higher rate of burnout symptoms.

In simple terms, if employers want to improve holistic health, they need interventions at all four levels (individual, job, team, and organization). If employers want to reduce immediate negative outcomes such as burnout, then focusing interventions at the job and team levels are the best place to start.

Consider an employee who may be described as "rolling with the punches" or "able to handle what we throw at her." Those can manifest as self-efficacy and affective adaptability, both of which are the top two drivers of holistic health—meaning they are unique workplace factors that can improve holistic health in a targeted way. When employees have self-efficacy, they feel confident they can deal efficiently with unexpected events or handle unforeseen situations thanks to their resourcefulness. They feel they can remain calm when facing difficulty because they can rely on their coping abilities.

Employees with adaptability can stay relaxed even if they must change plans, get energy from unexpected changes, enjoy it when their situation changes, and enjoy unexpected events. It should be no surprise that when challenges or uncertainty arise, these employees fare better in terms of health—an effect also seen in our previous research on burnout.[18] Employees with self-efficacy or adaptability skills report better holistic health, regardless of which demands they face (for example, high role ambiguity), perhaps because they are more

capable of transforming challenging situations into opportunities. These are trainable skills that can be developed.[19]

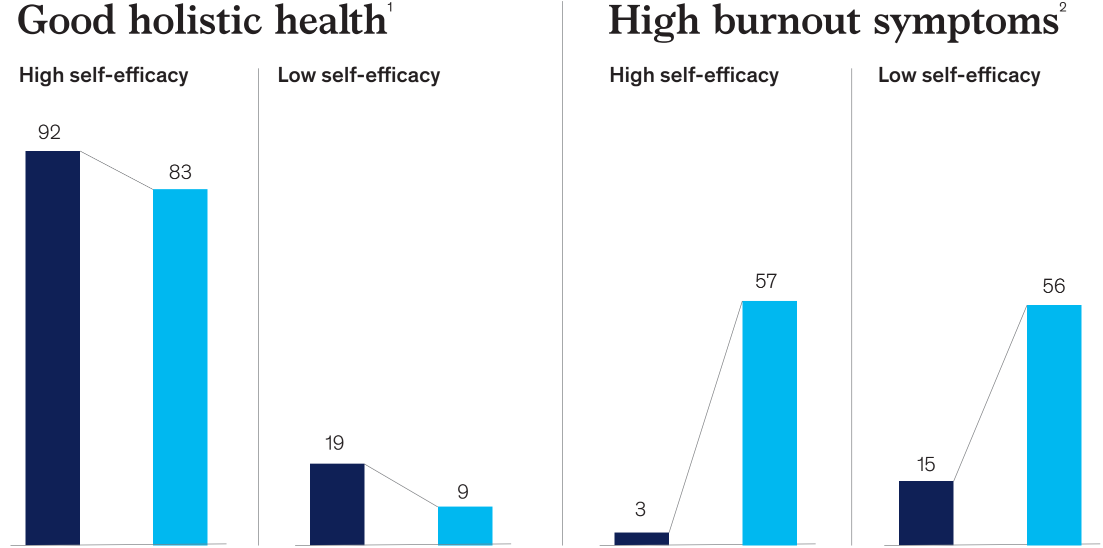
While self-efficacy can help maintain an employee's overall sense of holistic health in a stressful environment, there is, again, a limit to which one can protect their health in these situations. While confidence in one's ability to perform can protect their sense of holistic health, it doesn't protect them against experiencing burnout symptoms in highly stressful environments (Exhibit 7). These findings suggest the best place for organizations to start may be addressing demands and building enablers for employees at both the team and job levels simultaneously.

It's important to note that *some* ebb and flow of demands and enablers within an organization is inevitable. When committing to long-term change, it's reasonable that organizations will undergo some episodic demands: for example, a seasonal rush at a retailer may create more short-term demands in an organization. Other organizations may have challenging teammates on temporary assignments. The MHI Holistic Health framework[20] takes this into account, exploring how multiple levels of influence can encourage positive action around employee health and well-being—organizational, team, job, and individual—and emphasizes how overweighting on only reducing demands or building enablers, over the long run, can affect employee health.[21] (For more on understanding work location and employee health, see sidebar "Does work location influence health outcomes?")

Exhibit 7

Self-efficacy buffers the effect of role ambiguity at work on holistic health but isn't sufficient to stop burnout symptoms in an ambiguous environment.

Reported good holistic health and high burnout symptoms, by self-efficacy at work, % share



Note: "Low" refers to bottom 25% of respondents; "high" and "good" refer to top 25% of respondents.
[1]Statistically significant relationship between role ambiguity at work and holistic health, moderated by self-efficacy.
[2]Statistically significant relationship between role ambiguity at work and burnout symptoms, moderated by self-efficacy.
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

Does work location influence health outcomes?

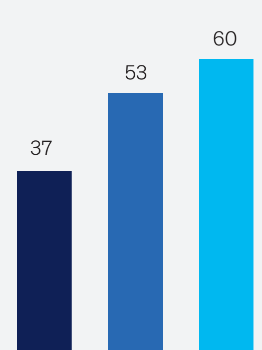
Our research indicates that when employees are working in their preferred work locations, they have better holistic health, lower burnout symptoms, and are more innovative at work. As the size of this gap between where they're *currently* working and where they *ideally* want to be working increases, these effects are stronger, with larger gaps indicating lower health and innovation for employees (exhibit).

Exhibit

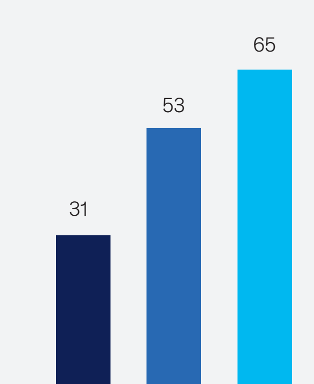
Respondents in ideal work locations report more positive holistic health, more innovative work behaviors, and lower burnout symptoms than peers do.

Reported outcome, by work location,
% share

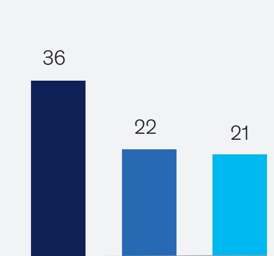
- 100% in-person work; ideal is 100% remote work
- Hybrid or 100% in-person work; ideal is more remote work
- In ideal work location



Highly innovative work behaviors[2]



High burnout symptoms[3]



[1]Data represent percentage of respondents scoring average of ≥4 (scale of 1–5) across all 4 dimensions of health (mental, physical, social, and spiritual).
[2]Data represent percentage of respondents rating themselves in top 25%.
[3]Data represent percentage of respondents scoring average of ≥3 (scale of 1–5) across all 4 dimensions of burnout symptoms (cognitive impairment, emotional impairment, exhaustion, and mental distance).
Source: McKinsey Health Institute Employee Holistic Health Survey, 30,392 participants at all levels of the organization, Apr–Jun 2023

McKinsey & Company

Employers must commit to supporting employees to move from ill health to positive holistic health

In this article, MHI has presented a compelling case for organizations to reduce employee burnout symptoms and increase holistic health. Our research suggests team- and job-level demands and enablers are the place to start for improving employee health within an organization (see sidebar "Designing interventions to improve holistic health"). As employers develop strategies to fuel employee health and well-being, beyond focusing only on addressing poor mental health amid a challenging macroeconomic environment, it may be useful to examine how to support health at four different levels within an organization:

— *Organization:* Organizational-level resources are often needed to support team-, job-,

and individual-level interventions—and investment in holistic health must be supported by executives to have an effect. For example, interventions that encourage team members to act positively toward each other may fail if an organizational culture and performance system normalizes mistreating colleagues.

Second, job redesign starts from the top—while managers can help employees in job crafting and shaping, organizations that have policies that don't support rotations or lateral mobility within an organization can undermine the effects of such interventions. Finally, while jobs should be designed with adequate compensation and benefits in mind, organizations are ultimately responsible for funding and delivering on these employee benefits.

Some examples of organizational-level actions include enrolling in living wage programs, pledging to ensure base pay is sufficient for all employees to cover their basic needs,[22] offering financial programs in which employees can receive part of their pay prior to payday, providing access to remote medical care, or offering additional support or leave time for parents and caregivers.

— *Team:* Our research highlights the important role team dynamics play in health and well-being—often the responsibility of managers and team leads. Team leaders should be trained appropriately and enabled to create healthier workplaces. In turn, they should then be held accountable for the ways they interact with others on their team and within the organization and the way their team members interact with each other, and they must intervene when employees treat each other negatively.

Interventions that promote positive behaviors and limit negative ones can help to build a team and organizational climate that promotes holistic health. Such interventions include but are not limited to manager trainings on creating psychologically safe environments and conflict resolution skills,[23] implementing anonymous HR reporting systems,[24] and incorporating confidential upward feedback on leadership behaviors and team well-being as input for performance reviews and promotions.[25]

— *Job:* Job redesign or fine-tuning for sustainable work is one of the most direct ways to reduce demands at the job level, where organizations rearrange tasks with the goal of helping employees maintain their efficiency and health over time. This is often led by or facilitated from the top.

A broad range of additional interventions can help organizations set sustainable working norms. These include setting maximum working hours (per day, per week),[26] limiting work communications to certain hours of the day, and providing multiple start times or self-scheduling options for shift workers. For example, Shopify recently canceled all recurring meetings of three or more people in their organization as a reset to ensure intentionality of recurring meetings and to make time for focused work.[27]

Another consideration for job design is whether those in certain roles are provided with adequate pay and benefits to cover their basic needs. Our research shows that those who can't meet their basic needs with their pay feel more financially insecure and less holistically healthy than those who feel they are sufficiently paid. Employers may also examine what is covered for employees by health insurance, either public or private, and what requires out-of-pocket expenses.

— *Individual:* Our research shows that having meaningful work is one of the key drivers for holistic health. Organizations can support their employees to find meaning in their work by being mission-driven, integrating their purpose into their business strategy and throughout the whole organization. Patagonia, for instance, focuses on hiring employees who are excited about the mission of "Patagonia is in business to save our home planet."[28]

Designing interventions to improve holistic health

Improving holistic health at work can start with the following interventions:

— *Understand the current state of holistic health in your organization.* Establish a baseline for employee health and well-being, including identifying specific opportunity areas, before investing in targeted initiatives. This will ensure that the impact of your investments can be measured and that you are focusing on the areas producing real results. This can be done using existing surveys if they are scientifically sound. The McKinsey Health Institute's (MHI's) Employee Mental Health and Well-being assessment (available on our Employee Health Platform) is one option which is fully psychometrically validated and free of charge to deploy.

— *Develop a comprehensive intervention strategy.* Ensure that your organization invests in interventions that *proactively address demands* before employee health and well-being become an issue, and *provide reactive support* once they have already taken a negative turn. For example, offering additional days of leave for colleagues experiencing mental health emergencies can be helpful, but it does nothing to avoid the escalation of mental health challenges in the first place—especially if those challenges are aggravated by workplace factors.

Interventions should also target *all levels of the organization*, with a focus on teams as the primary body that influences workplace experience. Many companies overindex on interventions targeting individual employees, putting additional responsibility on them to manage their holistic health on top of existing workplace demands. For example, providing employees with access to a meditation app is a valid intervention to support mental health, but it doesn't address structural issues in the workplace or within team dynamics that may compromise it in the first place.

— *Implement and track your intervention strategy.* Start with a pilot group to test an intervention's effectiveness before committing to a full-scale rollout. We recommend using the same survey used to baseline the organization to retest the pilot group a few months after deploying the intervention. This allows you to clearly measure the intervention's impact on the opportunity areas identified through the baseline assessment before deciding if it's worth rolling out to the rest of the organization. It's critical to track how your organization performs against clear outcomes over time to monitor improvement and justify your organization's continued investment in your intervention strategy. Choose a senior level leader with accountability to deliver the intervention (preferably someone other than the chief human resource officer) to link your intervention strategy to the business and support successful implementation.

— *Ensure holistic health is part of how your organization defines success.* Once employee health is a part of your organization's value proposition, it should be backed by measures to ensure the organization stays accountable. This can take the form of management KPIs, nonfinancial reporting, or internal incentive structures. For example, management incentives and career development should be aligned with the holistic health outcomes of their teams. Likewise, leaders should model the organization's values and working norms to support lasting change. All leaders should be able to communicate why and how they are embracing a modern understanding of health to convince employees they are truly "walking the talk." This requires substantial investment and patience to see the results, as well as buy-in from leaders. However, our research indicates real long-term value regarding employee work-related outcomes. Research also indicates financial outperformance for companies prioritizing employee well-being.[1]

[1] Jan-Emmanuel De Neve, Micah Kaats, and George Ward, *Workplace wellbeing and firm performance*, University of Oxford Wellbeing Research Centre working paper, number 2304, May 12, 2023.

Involving employees in customizing their roles and careers—for example, through job crafting—has also been found a strong way to motivate, build capabilities, and help employees find meaning in the work they do. Other examples are capability training to help develop self-confidence and adaptability skills. Last but not least: middle managers of today and tomorrow will have an increasing pivotal role for business success,[29] helping them get better equipped for the new world of work—including as people leaders—is not only nonnegotiable, it will also support fostering a supportive growth culture that builds employees' holistic health.

Employers have more power for positive outcomes than they know

Enabling a healthy workforce is no longer a luxury but rather a strategic imperative for organizations to navigate turbulent times in an ever more complex society. To seize the opportunities presented by employee health and well-being, employers must recognize their role. By agreeing to create workplaces where employees can thrive, organizations can prioritize holistic health as an important outcome that potentially aligns with an organization's broader environmental, social, and governance (ESG) framework. Employers can take action by understanding how demands and enablers affect employees at various levels: organizational, team, job, and individual. As ESG metrics are increasingly used by investors as a decision measure for where to allocate their capital, we expect more research that could link employee well-being to financial performance.[30]

To truly understand what moves the needle on employee health, organizations should take a systemic approach to employee health that considers demands and enablers of employees, but also how they can design interventions at the organizational, team, job, and individual levels. For organizations, it's no longer enough to consider employee health a soft metric. Rather, executives should consider employee health a part of leading by example, showing how better health and better business practices can allow everyone to flourish.

Jacqueline Brassey is a coleader of the McKinsey Health Institute (MHI) and a senior knowledge expert in McKinsey's Luxembourg office, **Brad Herbig** is an MHI coleader and an associate partner in the Philadelphia office, **Barbara Jeffery** is an MHI coleader and a partner in the London office, and **Drew Ungerman** is an MHI coleader and a senior partner in the Dallas office.

The authors wish to thank Alistair Carmichael, Erica Coe, Hans de Witte, Kana Enomoto, Arne Gast, Katy George, Renata Giarola, Roxy Merkand, Hannah Mirman, Kim Rubenstein, Izzy Savage, Wilmar Schaufeli, Gretchen Scheidler, Ralf Schwarzer, Curtis Stecyk, Berend Terluin, Karen van Dam, Marieke van Hoffen, and Arjen van Witteloostuijn for their contributions to this article.

[1] *Adding years to life and life to years*, McKinsey, March 29, 2022; A 2022 MHI survey on global health perspectives found that more than 40 percent of respondents who reported having a disease still perceived their health as good or very good, while more than 20 percent of those who reported no disease said they were in fair, poor, or very poor health.

[2] Previous work from MHI has defined each dimension of health in detail. For more details, see *Adding years to life and life to years*. Using this definition means that we emphasize "functioning." For example: well-functioning from a mental health perspective means that respondents agree or fully agree with the statement, "I feel in a positive cognitive, behavioral, and emotional state of being" or for spiritual health, "I feel a connection to something larger than myself (for example a community, a calling, or a faith/God").

[3] Aaron De Smet, Marino Mugayar-Baldocchi, Angelika Reich, and Bill Schaninger, "Some employees are destroying value. Others are building it. Do you know the difference?," *McKinsey Quarterly*, September 11, 2023.

[4] "Prioritise people: Unlock the value of a thriving workforce," Business in the Community, April 24, 2023.

[5] Grounded in contemporary academic research, expanded with new concepts and psychometrically validated.

[6] With positive holistic health we report the percentage of respondents that rated a 4 or higher, on average, for each subdimension (mental, physical, social, and spiritual health) and for the overall holistic health percentage, this average of 4 or higher was consistent across all subdimensions for the respondents reported. Hence the overall number can be lower than the averages of all other dimensions separately. We used a 5-point Likert scale, where 1 = fully disagree, 3 = neither disagree nor agree, and 5 = fully agree.

[7] As with all cross-cultural research, differences in scores across countries can be driven by: 1) true differences between countries on variables of interest along with 2) differences between countries due to artifacts such as within-country response styles or context-driven stigma. As an example, in our current survey, we observed lower scores across *many* variables of interest in Japan compared with other countries. When reviewing cross-cultural findings, we recommend the reader considers the cultural context of the country and region.

[8] Arnold B. Bakker, Evangelia Demerouti, and Ana Sanz-Vergel, "Job demands–resources theory: Ten years later," *Annual Review of Organizational Psychology & Organizational Behavior*, February 2023, Volume 10, Issue 1; In this article, we are building on the job demands–resources theory, but we have used more reader-friendly terms that better resonate with the audience. Where we describe "demands" we are referring to the term "demands," and for "enablers" we refer to "resources" as used in academic literature.

[9] Peterson K. Ozili, "The acceptable R-square in empirical modelling for social science research," *Social Research Methodology and Publishing Results*, January 2023. We are aware, however, that common method variance (using the same survey instrument to measure drivers and predictors) inflates results as well. Our research clarifies associations and correlations but does not confirm causality.

[10] This was also confirmed in our psychometrical tests, factor analysis, and model confirmation. For completeness' sake: Pearson's correlation between holistic health and employee engagement in our study was 0.46, and with happiness at work it was 0.50. In our predictive models with work-related outcomes such as innovative behavior and work–life balance, we found that holistic health predicted unique variance over and above employee engagement and happiness.

[11] This value represents the percentage of respondents scoring an average of more than 3 (on a scale of 1–5) across all four dimensions of burnout symptoms (cognitive impairment, emotional impairment, exhaustion, and mental distance) on the Burnout Assessment Tool.

[12] As mentioned previously, results need to be interpreted in relevant cultural context.

[13] In total, our model predicts 69 percent of the variance in burnout symptoms.

[14] Holistic health is negatively correlated with burnout symptoms, Pearson's $r = -0.33$.

[15] But again, these outcomes are also influenced by cultural differences in survey responses.

[16] Gretchen Berlin, Ani Bilazarian, Joyce Change, and Stephanie Hammer, "Reimagining the nursing workload: Finding time to close the workforce gap," McKinsey, May 26, 2023; Jake Bryant, Samvitha Ram, Doug Scott, and Claire Williams, "K–12 teachers are quitting. What would make them stay?," McKinsey, March 2, 2023.

[17] To clarify: job and organization-level demands and enablers are often tackled at the organizational level; the fact that organization-level impact is lower in our model has multiple reasons: (a) we look at the outcomes through the lens of the employee and expect more proximal demands and enablers to have a more direct effect on a proximal outcome; (b) we expect organizational-level demands and enablers to possibly have a more indirect effect or to be mediated by more proximal factors; (c) therefore, we focused our model primarily at team, job, and individual levels to find the most direct impact. For more, see Emily Field, Bryan Hancock, and Bill Schaninger, "Middle managers are the heart of your company," *McKinsey Quarterly*, July 17, 2023.

[18] "Addressing employee burnout: Are you solving the right problem?," McKinsey, May 27, 2022.

[19] Jacqueline Brassey et al., "Emotional flexibility and general self-efficacy: A pilot training intervention study with knowledge workers," *PLoS One*, October 14, 2020, Volume 15, Issue 10; Jacqueline Brassey, Aaron De Smet, and Michiel Kruyt, *Deliberate Calm: How to Learn and Lead in a Volatile World*, New York, NY: HarperCollins, 2022.

[20] Grounded in contemporary academic research, expanded with new concepts and psychometrically validated.

[21] Organizational effects include actions from the company/senior leaders; team-level effects include actions from managers/peers; job-level effects include aspects of an employee's job; individual-level effects include characteristics of the employees themselves.

[22] Living wage programs exist across different countries, including Canada, the United Kingdom, and the United States.

[23] For example, Sempra provides psychological safety training to all employees alongside respect and antiharassment modules, while Capgemini implemented dispute resolution training for HR and managers.

[24] For example, Ford Foundation provides a 24/7 EthicsPoint hotline to anonymously report concerns, complaints, or misconduct.

[25] For example, McKinsey employs an upward feedback tool at the end of projects to ensure that leaders uphold healthy work practices.

[26] This standard is sometimes is also driven or initiated by national policies and local labor laws.

[27] Kaz Nejatian, "Shopify exec: This is what happened when we canceled all meetings," *Fast Company*, May 16, 2023.

[28] Nell Derick Debevoise, "Why Patagonia gets 9,000 applications for an opportunity to join their team," *Forbes*, February 25, 2020; Yvon Chouinard, "Earth is now our only shareholder," Patagonia, accessed October 2023.

[29] "Middle managers are the heart of your company," July 17, 2023.

[30] Alex Edmans, "The link between job satisfaction and firm value, with implications for corporate social responsibility," *Academy of Management Perspectives*, November 2012, Volume 26, Issue 4.

Gen Z mental health: The impact of tech and social media

Erica Coe, Andrew Doy, Kana Enomoto, and Cheryl Healy

April 28, 2023

A new McKinsey Health Institute survey finds that Gen Z's social media engagement can feel negative but can also help with finding mental health support and connectivity.

Much like many relationships a person might have between ages 18 and 24, the relationship a young person has with social media can be complicated. No matter where they live, respondents in a new global survey said social media usage can lead to a fear of missing out (FOMO) or poor body image, but it also can help with social connections and self-expression.

McKinsey Health Institute's (MHI's) 2022 Global Gen Z Survey asked more than 42,000 respondents in 26 countries across continents questions based on the four dimensions of health: mental, physical, social, and spiritual.[1] MHI then analyzed differences and similarities across generations and countries, with a hope of informing the broader dialogue around Gen Z mental health.

Gen Zers, on average, are more likely than other generations to cite negative feelings about social media.[2] They are also more likely to report having poor mental health. But correlation is not causation, and our data indicates that the relationship between social media use and mental health is complex. One surprise: Older generations' engagement with these platforms is on par with Gen Zers. For example, baby boomers in eight of the 26 countries surveyed report spending as much time on social media as Gen Zers, with millennials being the most likely to post. And while negative impacts of social media were reported across cohorts, positive effects were even more common—more than 50 percent of all groups cited self-expression and social connectivity as positives from social media.

There are also signs that technology provides access to supportive mental health resources for younger people. Gen Z respondents are more likely than other generations to use digital wellness apps and digital mental health programs.[3] Additionally, respondents indicate that certain aspects of social media use can benefit their mental health, such as using social media for self-expression. Young refugees and asylum seekers are among those most likely to cite social media as a tool to stay connected and decrease loneliness.

In the six insights below, MHI delves deeper into the ways in which mental health, technology, and social media intersect for our respondents (see sidebar "Methodology" for further detail). This survey covered additional topics such as climate change and spiritual health (for selected insights, see sidebars "Climate change is a concern for many respondents" and "Gen Z and spiritual health: Insights").

Methodology

To gain a better understanding of Gen Z in comparison with other generations, the McKinsey Health Institute conducted an internet-based survey in May 2022 in ten European countries (France, Germany, Italy, the Netherlands, Poland, Spain, Sweden, Switzerland, Türkiye, and the United Kingdom), with approximately 1,000 completes per country (including around 600 Gen Z). In August 2022, an additional 1,600 completes per country (including 600 Gen Z) were collected from 16 mostly non-European countries (Argentina, Australia, Brazil, China, Egypt, India, Indonesia, Ireland, Japan, Mexico, Nigeria, Saudi Arabia, South Africa, the United Arab Emirates, the United States, Vietnam). In total, the survey collected responses from 42,083 people, including 16,824 Gen Z individuals (mostly 18–24-year-olds and including a negligible minority of 13–17-year-old non-European respondents), 13,080 millennials (25–40 years old), 6,937 Gen Xers (41–56 years old), 5,119 baby boomers (57–75 years old), and 123 from the Silent Generation (76–93 years old).

Within each country, the survey applied weights to match the distribution of age cohorts, gender, and share of population with tertiary education in the sample to the country's national census. The sample was drawn from populations with access to the internet, which made the samples more representative of Gen Z respondents, in which nearly all individuals with access to the internet are active technology users; however, for other generations, this is less likely to be the case. This analysis reflects self-reported results in 2022.

Considerations for cross-generational surveys
The survey focused on how respondents—mainly Gen Z—were feeling at the time they were surveyed. Therefore, we cannot determine whether differences in answers between age cohorts are caused by an intrinsic change in attitudes and behaviors or are merely induced by age differences: it is possible that Gen Z will eventually think and behave like millennials, Gen X, or baby boomers, when they reach those ages.

Considerations for surveys conducted online
The survey was conducted online. Therefore, it may not accurately reflect the behaviors or attitudes of individuals who do not have reliable online access. This can be particularly significant in various aspects of life, given that the internet can have a profound impact on the information we access and how we process it.

Considerations for cross-country surveys
Cross-country, sociocultural differences can impact perceptions, scale usage, and affect other factors that may influence responses. However, we cannot automatically conclude that these differences are objective. For instance, the variations in answers on an agreement scale may be due to the respondent's inclination to agree or disagree and their propensity to choose extreme answers such as "strongly disagree" or "strongly agree."

Although we relied on cultural experts and youth reviewers to ensure equivalence of meanings across languages during translations, some observed differences across countries may still be induced by the translations.

To measure country differences, we computed country averages and used them to calculate simple averages across countries. By doing so, we treated each country equally, regardless of its population size.

More than 50 percent of all groups cited self-expression and social connectivity as positives from social media.

Gen Z respondents report challenges with health across most dimensions

Although many individuals around the world are struggling with their health, there are meaningful differences within groups (Exhibit 1).

Globally, one in seven baby boomers say their mental health has declined over the past three years, compared with one in four Gen Z respondents. Female Gen Zers were almost twice as likely to report poor mental health when compared with their male counterparts (21 percent versus 13 percent, respectively).

In most surveyed countries, a higher proportion of Gen Z respondents said their mental health was poor or very poor when compared with other dimensions of health (16 percent in Gen Z and 7 percent for baby boomers). However, in China, Egypt, Nigeria, Saudi Arabia, the United Arab Emirates, and Vietnam, Gen Z respondents reported that they struggled most with their social health. Overall, mental health experiences varied by region, with Gen Z participants in Saudi Arabia, Egypt, and Nigeria rating their mental health as "very good" with the highest frequencies.

While Gen Z tends to report worse mental health, the underlying cause is not clear. There are several age-specific factors that may impact Gen Z's mental health independent of their generational cohort, including developmental stage, level of engagement with healthcare, and familial or societal attitudes.

Almost everyone is using social media, but in different ways

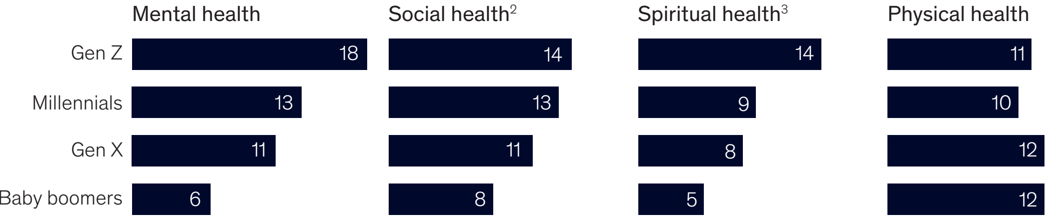
More than 75 percent of respondents in all age groups said they use and check social media sites at least ten minutes a day (Exhibit 2).

Younger generations tend to engage with social media regularly, in both active and passive ways. Almost half of both millennial and Gen Z respondents check social media multiple times a day. Over one-third of Gen Z respondents say they spend more than two hours each day on social media sites; however, millennials are the most active social media users, with 32 percent stating they post either daily or multiple times a day.

Exhibit 1

A higher share of Gen Z survey respondents report poor mental, social, and spiritual health compared with other generations.

Share of respondents reporting their health as 'poor' or 'very poor' by dimension of health,[1] %



Note: Gen Z oversample; weighted by gender, age, and socioeconomics; dates fielded: May 5–June 27, 2022, for France, Germany, Italy, Netherlands, Poland, Spain, Switzerland, Türkiye, and UK; and Aug 26–Nov 2, 2022, for other countries.

[1]Question: Please rate your health across the following dimensions: social, mental, spiritual, physical. Respondents who answered "very good," "good," or "neutral" are not shown.

[2]Social health represents an individual's ability to build healthy, nurturing, genuine, and supportive relationships. People in good social health have the capacity to form meaningful connections with others, to both receive and provide social support.

[3]Spiritual health enables people to integrate meaning in their lives. Spiritually healthy people have a strong sense of purpose. They feel a broad sense of connection to something larger than themselves, whether to a community, a calling, or to a form of divinity. We note that strong spiritual health does not necessarily imply the adoption of religious beliefs, in general, or any specific dogma.

Source: McKinsey Health Institute Global Gen Z Survey (2022) (n = 41,960)

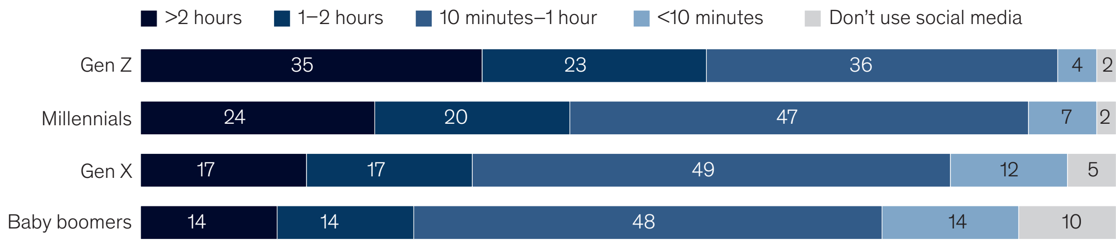
McKinsey & Company

Exhibit 2

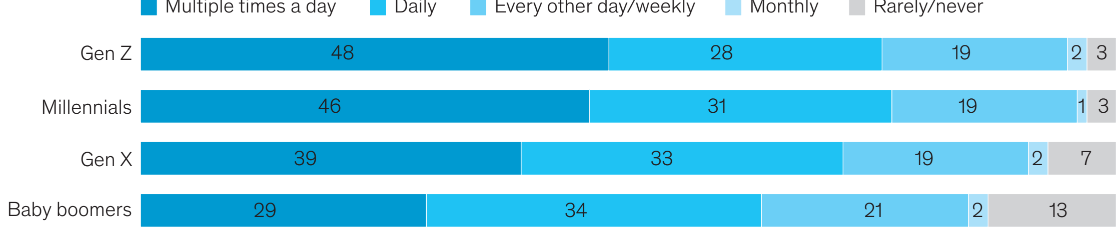
Everybody uses social media, but most Gen Z respondents spend at least one hour a day.

Social media habits by generation

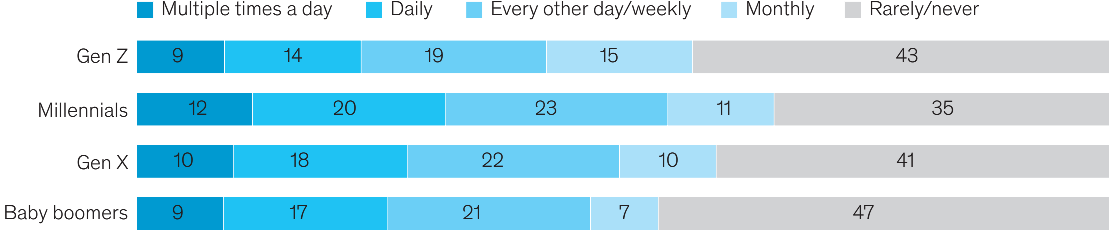
Time spent on social media daily,[1] % of respondents (n = 41,960)



Social media check-in frequency,[2] % of respondents who use social media (n = 40,684)



Social media posting frequency,[3] % of respondents who use social media (n = 40,684)



Note: Figures may not sum to 100%, because of rounding.
[1]Question: How much time, on average, do you spend on social media (not including messaging apps) each day?
[2]Question: How often do you check in on your social media accounts (not including messaging apps)?
[3]Question: How often do you post on your social media accounts (not including messaging apps)?
Source: McKinsey Health Institute Global Gen Z Survey (2022)

McKinsey & Company

Whether less active social media use by Gen Z respondents could be related to greater caution and self-awareness among youth, reluctance to commit, or more comfort with passive social media use remains up for debate. Studies have shown that passive social media use (for example, scrolling) could be linked to declines in subjective well-being over time.[4]

Gen Zers and millennials are more likely than other generations to say social media affects their mental health

Studies of young adults and their social media use have shown an inverse relationship between screen time and psychological well-being,[5] with higher utilization associated with poorer

While around one-third of respondents across cohorts report positive impacts of social media on mental health, generations differ in reported negative impacts.

well-being. Other research indicates the nature of the relationship individuals have with social media can have a greater impact on their mental health than time spent.[6]

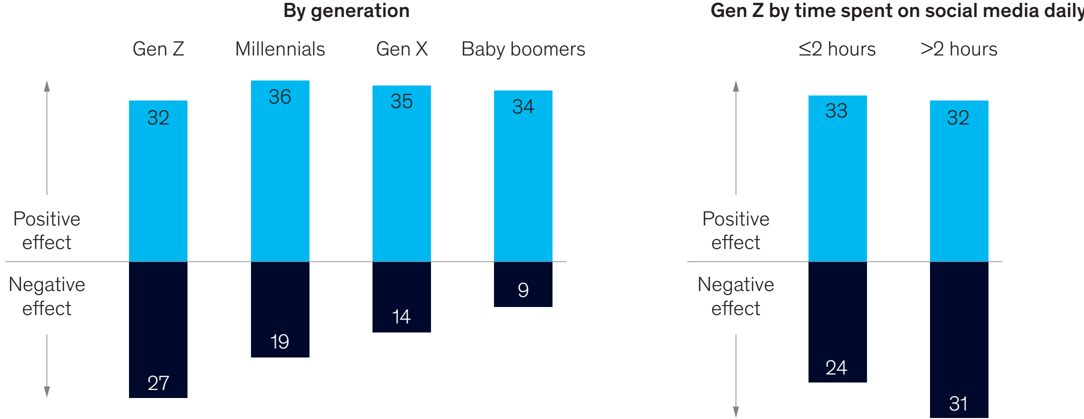
Our findings show a nuanced relationship between social media use and mental health (Exhibit 3). While around one-third of respondents across cohorts report positive impacts of social media on mental health, generations differ in reported negative impacts.

Negative effects seem to be greatest for younger generations, with particularly pronounced impacts for Gen Zers who spend more than two hours a day on social media and Gen Zers with poor mental health. Gen Z respondents from Europe and Oceania were most likely to report negative impacts from social media, and respondents from Asia were least likely (32 percent and 19 percent, respectively).[7]

Exhibit 3

While social media and tech have a consistent positive impact across all age cohorts, the negative impact increases substantially for younger ages.

Reported impact of technology and social media on mental health,[1] % of respondents



[1]Question: How strongly do the following factors affect your mental health? Shown are the answers for "Technology and social media"; respondents who answered "does not affect my mental health" or "don't know/not applicable" are not shown.
Source: McKinsey Health Institute Global Gen Z Survey (2022) (n = 41,960)

McKinsey & Company

While the positive impact stays comparable, older generations report fewer negative effects

All generational cohorts in the survey said that social media use had the most positive impact on self-expression and social connectivity (Exhibit 4). Self-reported refugees and asylum seekers cite higher levels of positive impact than others across all aspects.

Across generations, there are more positive than negative impacts reported by respondents; however, the reported negative impact is higher for Gen Z. Respondents from high-income countries (as defined by World Bank) were twice as likely to report a negative impact of social media on their lives than respondents from lower-middle-income countries (13 percent compared with 7 percent).

When compared with their male counterparts, a higher proportion of female Gen Zers said social media had a negative impact on FOMO (32 percent versus 22 percent), body image (32 percent versus 16 percent), and self-confidence (24 percent versus 13 percent).

Positive aspects of technology may include increased access to health resources

Across generations, more than one in four respondents report using digital wellness apps as compared with one out of five using digital mental health programs (28 percent compared with 19 percent, respectively) (Exhibit 5). Fifty percent more Gen Z respondents reported using digital mental health programs than Gen X or baby boomers (22 percent for Gen Z versus 15 percent for Gen X and baby boomers).

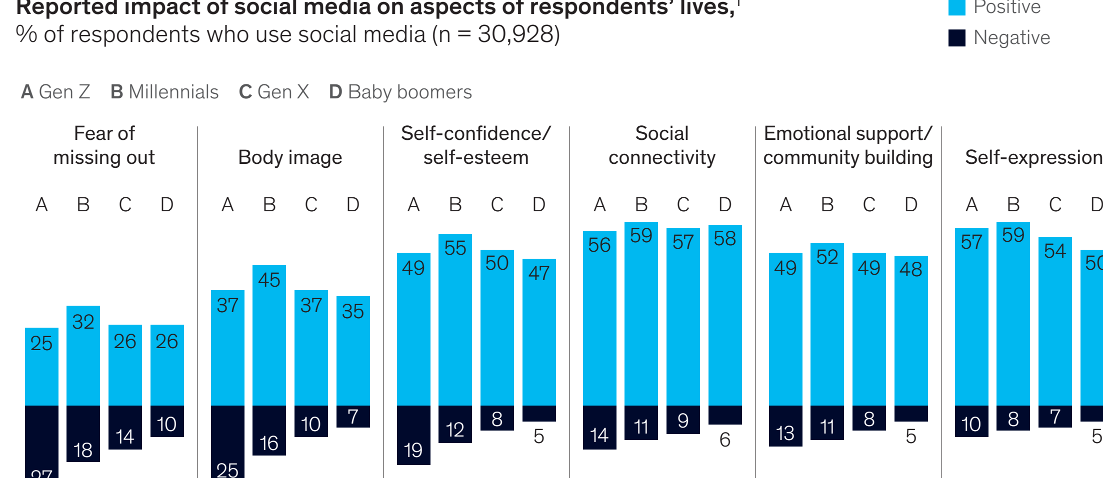
Among those respondents who report using digital mental health programs, most Gen Zers say they would likely keep using them (65 percent); other generations are even more committed, with 74 percent reporting that they would likely continue to use the programs. Four out of five respondents across all generations report that these programs benefit their mental health.

While evaluation of outcomes and effectiveness requires continued study, digital health resources may play an important role in supporting mental health globally, especially

Exhibit 4

Respondents' assessment of the impact of social media ranges substantially depending on the dimension.

Reported impact of social media on aspects of respondents' lives,[1]
% of respondents who use social media (n = 30,928)



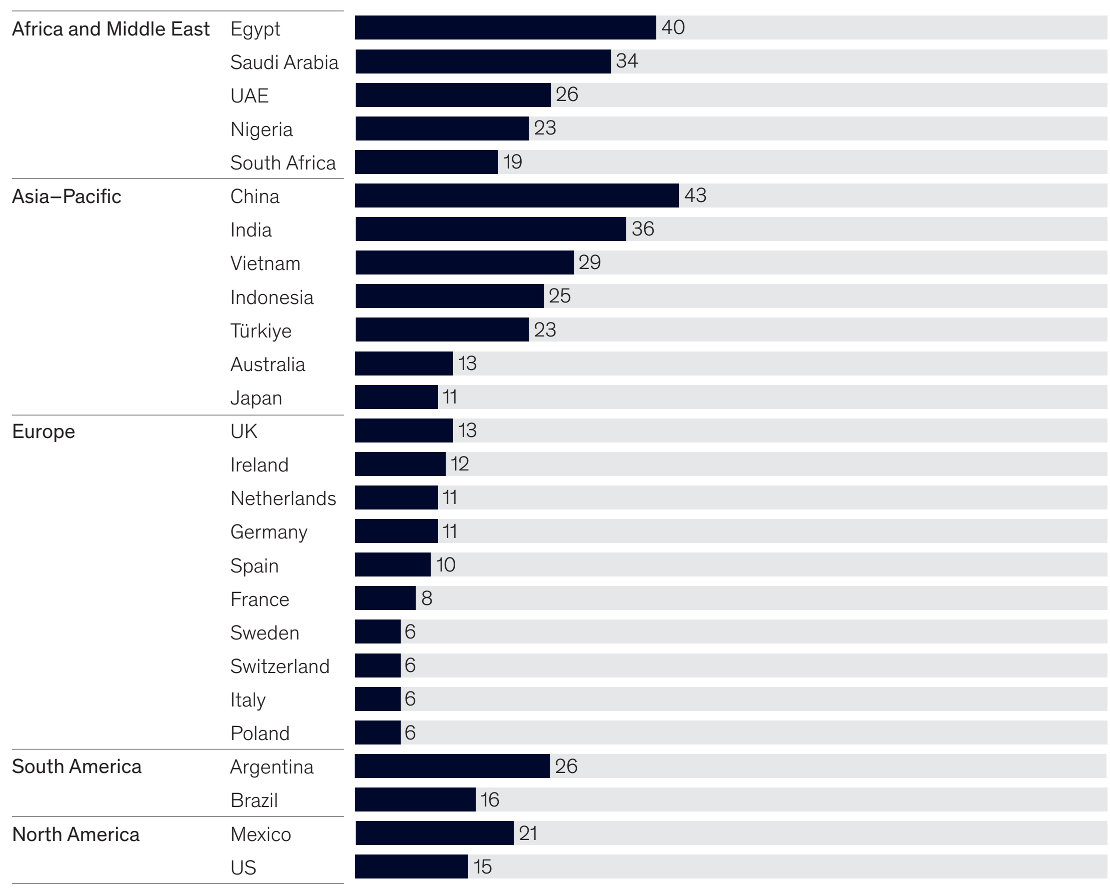
Note: Gen Z oversample (covers ages 13–24); weighted by gender, age, and socioeconomics; dates fielded: Aug 26–Nov 2, 2022, for Argentina, Australia, Brazil, China, Egypt, India, Indonesia, Ireland, Japan, Mexico, Nigeria, Saudi Arabia, South Africa, UAE, US, and Vietnam.
[1]Respondents who answered "no effect" are not shown.
Source: McKinsey Health Institute Global Gen Z Survey (2022)

McKinsey & Company

Exhibit 5

Respondents' use of digital mental-health programs varies widely.

Reported use of digital mental-health programs in the past 12 months, % of respondents (n = 41,960)



Source: McKinsey Health Institute Global Gen Z Survey (2022)

McKinsey & Company

when in-person resources are limited or geographically inaccessible. For certain populations, digital health resources could be the preferred method of obtaining support.

Most find help on their own or by referral

Thirty-four percent of Gen Z respondents who use digital mental health programs and apps say they found them on their own (Exhibit 6). This proportion increases to approximately 50 percent in Brazil, Indonesia, Mexico, and South Africa. In other countries, primary care physicians and healthcare payers (insurance plans) were listed as primary access points to digital mental health programs.

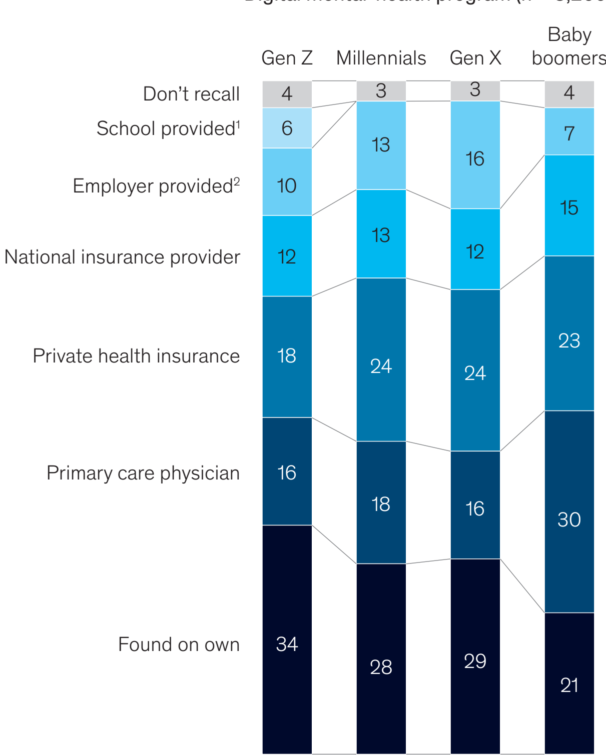
No matter the geography, employers have growing opportunities to promote workplace well-being and ensure employees have access to the evidence-based mental health resources they need.

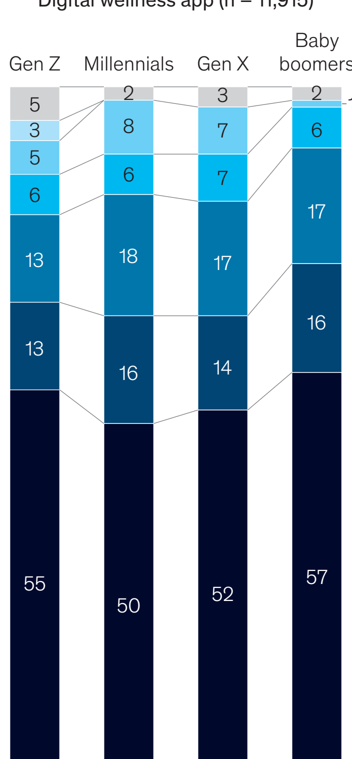
At least a third of respondents in most countries and generational cohorts said physical, mental, social, and spiritual health resources were important or very important in choosing an employer, and Gen Z gave particular weight to

Exhibit 6

While respondents find digital wellness apps mostly on their own, referrals remain important for digital mental-health programs.

Source of access to digital mental-health programs and digital wellness apps,
% of respondents who accessed service in past 12 months





Note: Figures may not sum to 100%, because of rounding.
[1]Option only suggested to respondents who answered that they were students to the question: "What is your current employment status?"
[2]Option only suggested to respondents who answered that they were working to the question: "What is your current employment status?"
Source: McKinsey Health Institute Gen Z Brain Health Survey, 2022

McKinsey & Company

mental health resources. Given that Gen Z is a growing percentage of the workforce, and that few Gen Z respondents cited employers as a primary access point for help, there may be room for employers to further engage around mental health in the future.

Technology and social media can be a part of the solution

Social media and technology, while part of the broader dialogue around youth mental health, can be powerful tools in promoting well-being and offering scaled mental health support. For example, developers might consider embedding algorithms that make it easier for youth expressing psychological distress to find support groups, crisis hotlines, or emergency mental health services. Additionally, digital mental health companies could consider partnering with virtual and community-based providers to connect people with high-acuity needs to timely and culturally-appropriate crisis services.

Around the world, communities are struggling to provide young people with someone to call, someone to respond, or a safe place to get help

Climate change is a concern for many respondents

Climate change appears to be a major concern across generations: in the McKinsey Health Institute 2022 Global Gen Z Survey, more than half of respondents across all age groups reported feeling highly distressed when asked about climate change, with females reporting a higher percentage compared with males. Many Gen Z respondents reported experiencing stress, sadness, anger, and frustration due to climate change and its related disasters. More than 50 percent of total respondents expressed fear and anxiety about the future, with Gen Z demonstrating greater concern than other generations. More than 50 percent of all respondents agree or strongly agree that "government leaders and companies have failed to take care of the planet."

This fear is not purely existential about the fate of the world or "eco-anxiety," but instead is often rooted in specific environmental risks that may impact their direct day-to-day livelihoods. When asked about which statements related to climate change resonated with them, 33 percent agree or strongly agree that climate change poses a threat to their family's physical or financial security. Individuals with self-reported poor mental health are more likely to feel affected by climate change, with 67 percent of Gen Z in this group stating that the future is "frightening" when looking at climate change, compared with 47 percent of Gen Z with neutral or good mental health. This may also relate to a fear of climate-related disruption (for example, for access to care and existing supports).

Given the complex and multifaceted nature of mental health and climate change threats and related disruptions, there are no simple answers to the challenges they pose. There is an opportunity for further understanding of how experiences and attitudes around climate change may be influenced by political and ecological factors. However, in order to help young people navigate these issues, healthcare providers, educators, and parents can take a proactive approach by exploring these topics through targeted questioning and solution-oriented discussions. By encouraging young people to think critically about mental health and climate change, the focus can become empowerment and active role-playing to promote personal well-being, climate resilience, and the health of the planet.

Social media and technology can be powerful tools in promoting well-being and offering scaled mental health support.

Gen Z and spiritual health: Insights

According to the McKinsey Health Institute 2022 Global Gen Z survey, those between the ages of 18 and 24 report poorer spiritual health than older generations, with Gen Z respondents almost three times more likely than baby boomers to report poor or very poor spiritual health.

Spiritual health enables people to integrate meaning in their lives. Spiritually healthy people have a strong sense of purpose. While people who are experiencing poor mental health could have good spiritual health, or vice versa, Gen Z individuals who experienced poor mental health were five times more likely to report poor spiritual health than those with neutral or good mental health.

Responses varied widely by country, both in terms of overall ratings of spiritual health and in respondents' perceived importance of spiritual health. For example, there was a 48-point range across countries in respondents indicating that spiritual health was "extremely important" to them. While 8 percent of total respondents in the Netherlands said spiritual health was "extremely important" to them, 56 percent of total respondents in Brazil said the same. Respondents in higher-income countries were half as likely to indicate spiritual health is "extremely important" to them versus lower-middle-income countries (23 percent versus 43 percent).

Respondents in Africa and South America were most likely to report that spiritual health was extremely important to them (46 percent and 41 percent, respectively); respondents in Europe were least likely (18 percent).

Given these data, it's clear that spiritual health matters to young people around the world, and there may be important links to overall well-being. People seeking to support the mental health and psychological resilience of young people may want to inquire about how they are finding purpose in their homes, families, and at work.

during mental health, substance use, and/or suicidal crises. The availability of crisis supports globally is varied, with the majority of countries having no national suicide or mental health crisis line. In addition, communities in every geography lack adequate community mental health services infrastructure to respond to the volume of crises young people experience each year, instead relying on schools, emergency rooms, hospitals, law enforcement, or families to bridge a gap that could save lives and livelihoods. Dispatching specially trained mobile teams or providing a safe place to go in crisis is even more rare—a gap that technology could bridge.

Collaboration between technology companies, mental health professionals, educators, employers, policy makers, and the wider community is necessary. By prioritizing mental health and utilizing technology in a positive way, young people are more likely to achieve and sustain better health. Other strategies that could be considered include using social media to build supportive online communities for affinity groups and promoting youth leaders to create and disseminate content that promotes mental health.[8] Researchers and companies can explore evidence-based strategies such as mental health promotion and mindfulness programs to mitigate the negative effects of social media and to help young people use social media as a platform for authentic self-expression.[9]

A "precision prevention" approach to talking with young people about the role of technology

in their lives may help create a more informed, supportive, and healthful environment. By providing parents, educators, and healthcare professionals with these tools, they can become actively engaged in promoting the health of Gen Z and beyond. While addressing these issues may seem overwhelming, it is essential that stakeholders work together to help improve the mental health of young people.

Erica Coe is a coleader at the McKinsey Health Institute (MHI) and a partner in McKinsey's Atlanta office. **Kana Enomoto** is a coleader at MHI and an associate partner in the Washington, DC, office, where **Andrew Doy** is a consultant and **Cheryl Healy** is an associate partner.

The authors wish to thank Nicolas Abi-Chacra, Lea Arora, Victoria Bennett, Abby Bloomfield, Ulrike Deetjen, Alexandru Degeratu, Martin Dewhurst, Joseph Jung, Abhishek Mahajan, Roxanne Sabbag, Emma Summerton, Pooja Tatwawadi, and Oliver Walker for their contributions to this article. They also wish to thank MHI geographical leaders Alistair Carmichael, Andira Putri, and Shriya Sethi. They also wish to thank the European Society for Child and Adolescent Psychiatry (ESCAP) affiliates and Orygen for providing their local expertise and helping shape the MHI Global Gen Z Survey (2022). They also wish to thank Megan Jones Bell, Murali Doraiswamy, Sharon Hoover, Roberta Katz, Shekhar Saxena, and Anil Thapliyal for their contributions.

[1] Participants were surveyed on the following nine key topics: overall health and well-being, mental health in the workplace, spiritual health and religion, social determinants of health, social media and digital health services, mental health service utilization, mental health among students, attitudes toward mental health, and global current events. As with all surveys, these data reflect a moment in time and MHI makes no long-term approximations about how these results will trend over time.

[2] Social media is defined here as apps to connect, potentially broadly, with other users. It does not include direct messaging apps.

[3] Digital wellness apps are defined as consumer-driven digital applications that aim to reduce stress, improve well-being and productivity, and address nonclinical conditions for consumers, focusing on topics such as meditation, sleep tracking, cognitive behavioral therapy, and fitness. Digital mental health programs are telehealth programs that offer remote appointments with a healthcare provider (for example, physician, therapist), either over video or phone.

[4] Philippe Verduyn et al., "Passive Facebook usage undermines affective well-being: Experimental and longitudinal evidence," *Journal of Experimental Psychology*: General, 2015, Volume 144, Number 2.

[5] Jean Twenge et al., "Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study," *Preventive Medicine Reports*, 2018, Volume 12.

[6] Mesfin A. Bekalu, Rachel F. McCloud, and K. Viswanath, "Association of social media use with social well-being, positive mental health, and self-rated health: Disentangling routine use from emotional connection to use," *Health Education & Behavior*, 2019, Volume 46, Number 2.

[7] Participants were requested to rank 13 factors, including technology and social media, on how they perceive their impact on mental health. There is the possibility for varying interpretation of what classifies as negative or positive effects. Differences across generations and regions could be influenced in part by social media algorithms.

[8] Mizuko Ito, Candice Odgers, and Stephen Schueller, *Social media and youth wellbeing: What we know and where we could go*, Connected Learning Alliance, June 2020.

[9] Julia Brailovskaia and Jürgen Margraf, "Positive mental health and mindfulness as protective factors against addictive social media use during the COVID-19 outbreak," *PLOS One*, 2022, Volume 17, Number 11.

Appendix

The gathering storm in US healthcare

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.

Exhibit 1

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

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

	1970	1982	1990	2002	2009
	7.6	7.9	6.0	6.5	5.5
Fiscal intervention	1971 President Nixon's executive order forced freeze of health-care prices and wages	1983 Introduction of Medicare diagnosis-related group payment system	1997 Balanced Budget Act enacted, introducing sustainable growth rate	2005 Medicaid modifi-cations included in Deficit Reduc-tion Act	2010 Medicare pro-ductivity cuts in Affordable Care Act 2011 Medicare seques-tration 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

McKinsey & Company

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 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.

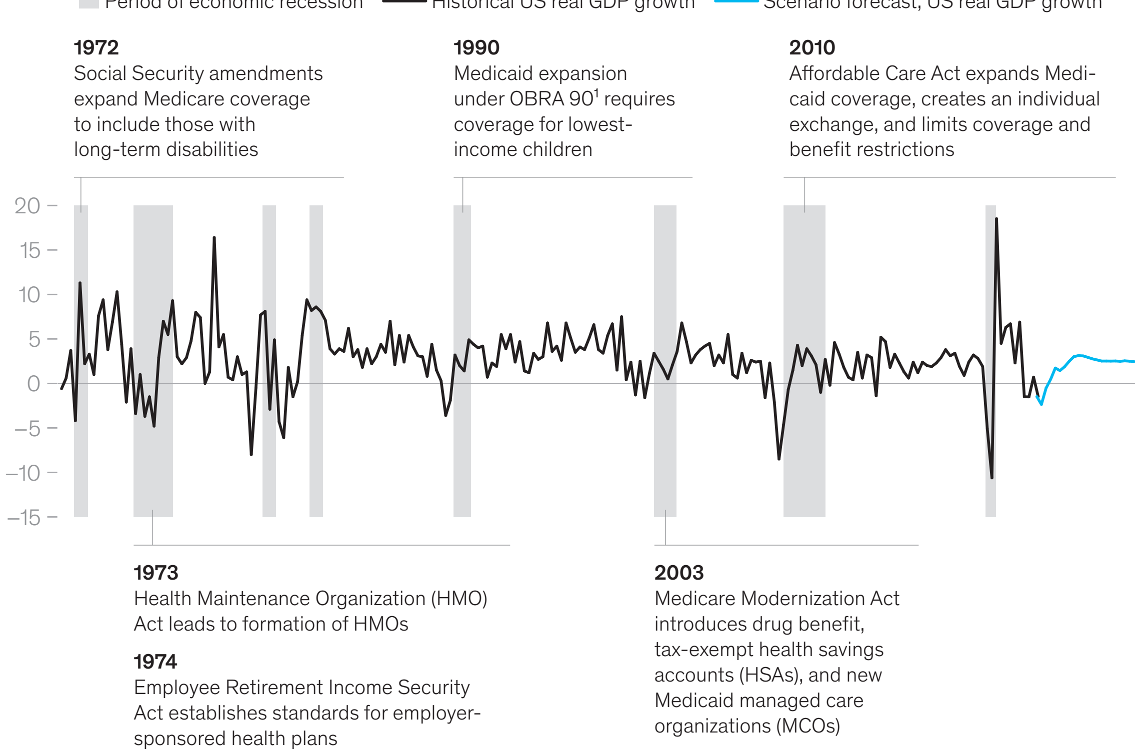
Employers have continued to shift the cost of healthcare to employees. For example, 18 percent of employees were enrolled in high-deductible health plans in 2013.[4] In 2021, 40 percent of employees were enrolled in these health plans.[5] In addition, in 2019, the average family contribution to coverage 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

Exhibit 2

Regulatory changes have frequently followed economic recessions.

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

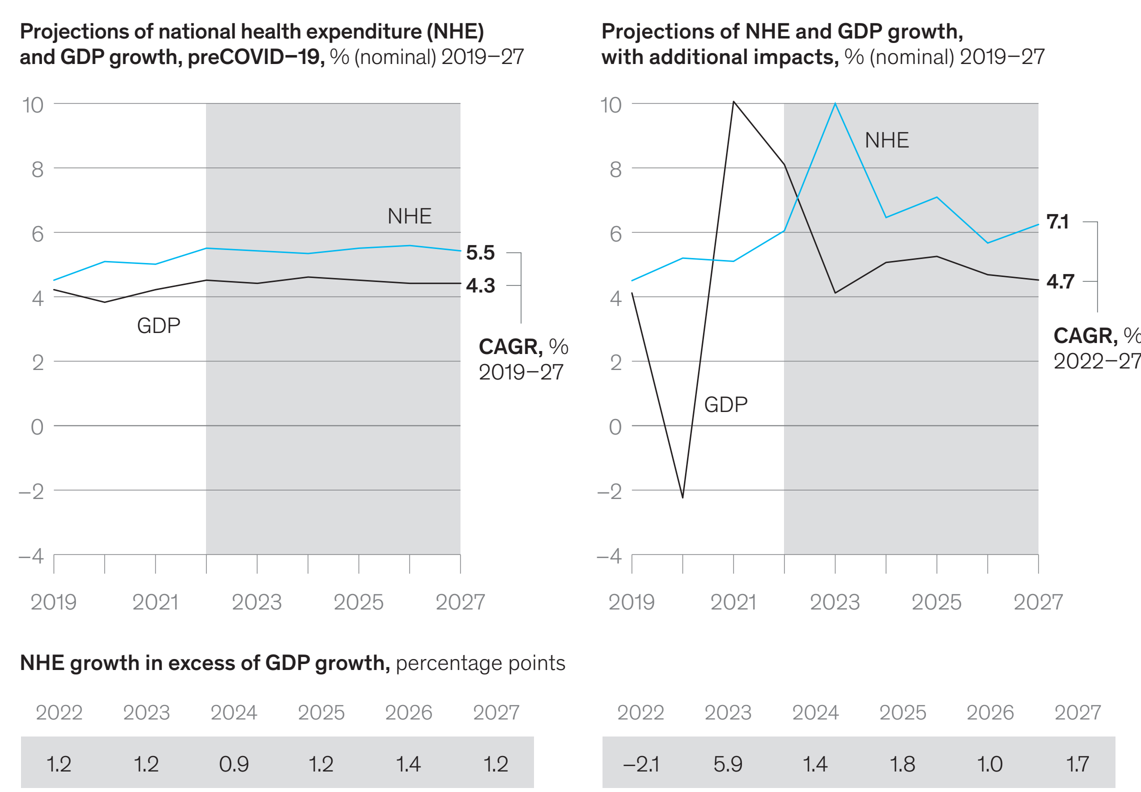


[1]Omnibus Budget Reconciliation Act of 1990.
Source: National Bureau of Economic Research; US Bureau of Economic Analysis; US Bureau of Labor Statistics; McKinsey Global Institute

McKinsey & Company

Exhibit 3

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



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

McKinsey & Company

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 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 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 sizable. 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 for leaders to reorder the healthcare industry" outlines the approach industry leaders could adopt to capture these improvements.

Addie Fleron is an associate partner in McKinsey's Chicago office, and **Shubham Singhal** is a senior partner in the Detroit office.

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

---

[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-19 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.

Copyright © 2023 McKinsey & Company. All rights reserved.

Published by McKinsey & Company, 500 Woodward Avenue,
Suite 2850, Detroit, MI 48226.

McKinsey on healthcare: Innovate to thrive meets the Forest
Stewardship Council (FSC) chain of custody standards.

The paper used in **McKinsey on healthcare: Innovate to thrive**
is certified as being produced in an environmentally responsible,
socially beneficial, and economically viable way.

Printed in the United States of America.

McKinsey Healthcare Practice
December 2023
Copyright © 2023 McKinsey & Company. All rights reserved.
www.McKinsey.com

@McKinsey
@McKinsey