

Critical Condition

Reimagining a strained system to better serve patients, providers, and consumers worldwide.

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Healthcare is at a crossroads, facing unprecedented challenges that demand immediate attention and innovative solutions. A deep dive into industry trends reveals several disruptive forces reshaping the healthcare delivery landscape. From a staggering shortage of physicians to the skyrocketing costs burdening consumers, these forces are transforming the way care is delivered and experienced. With the U.S. grappling with a projected shortage of up to 124,000 doctors by 2034 and rising healthcare costs pushing patients to delay essential treatments, the need for actionable strategies has never been more urgent.

As the sector contends with financial pressures and regulatory hurdles, healthcare leaders must navigate these turbulent waters to sustain growth and enhance patient care. The path forward involves embracing technological innovations and refining strategic approaches to meet these escalating demands.

Based on research and insights from global executives across the healthcare industry, the top five disruptive forces are:

H **Healthcare's Numbers Problem**

According to the World Health Organization, the world could face a shortfall of around 10 million healthcare workers by 2030, with the greatest challenges in low- and middle-income countries. This shortage is driven by burnout, underinvestment, and the growing healthcare demands exacerbated by an aging population and the COVID-19 pandemic.

The International Council of Nurses has even declared the global nursing shortage a

"health emergency," calling for immediate investment to stabilize the nursing workforce, which has been severely affected by the pandemic and ongoing stress.

In the U.S., the estimated 30,000 physicians entering the workforce annually will be insufficient to meet the rising demand for healthcare services, according to research by *Becker's Hospital Review*. This shortage is compounded by the number of doctors retiring, reducing their clinical hours, or leaving the profession each year. Between 2021 and 2022 alone, approximately 71,309 physicians exited the workforce.

These disruptions in supply come at a time when the populations are both growing and aging, placing immense pressure on an already stretched healthcare workforce. As the demand for healthcare services increases, so does the need for healthcare providers, including advanced practice providers (APPs).

However, the pool of available doctors, APPs, nurses, therapists, and technicians remains limited. Consequently, the U.S. alone is projected to face a shortage of between 37,800 and 124,000 primary care and specialist physicians by 2034.

An aging population has significantly increased the demand for healthcare services, further straining the system. This increased demand is likely to impact the quality of care, as the shortage of healthcare professionals may lead to the hiring of individuals who lack adequate training or experience, potentially resulting in poorer patient outcomes.

A recent study by Robert Half found that 89% of healthcare managers are struggling to recruit new talent, exacerbating the existing workforce shortages. A poll conducted by the Kaiser Family Foundation and

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A New Reality

The global augmented and virtual reality market in healthcare are expected to reach \$11.3B (USD) by 2030, at a projected CAGR of 16.8% from 2024 to 2030, according to a report by Grand View Research.

The *Washington Post* revealed that about 30% of healthcare workers have contemplated leaving the profession, with 60% citing pandemic-related stress as a factor affecting their mental health. This widespread burnout, compounded by ongoing COVID-19 surges, has led to severe staffing shortages in hospitals across the country.

The emotional health and well-being of staff remain major challenges, as noted by the American Hospital Association's American Organization for Nursing Leadership survey. Moreover, staffing shortages have led to rising wages, forcing hospitals to invest heavily in recruiting and retaining staff. This financial strain is pushing many hospitals to operate at a loss, further complicating the challenges posed by the shortage of healthcare professionals.

2 Skyrocketing Costs for Consumers

Rising healthcare costs will continue to be one of the most pressing challenges facing the industry over the next five years. In 2023, global healthcare expenditures grew by

nearly 6%, up from 5.2% in 2022, driven by aging populations, increased prevalence of chronic diseases, and the demand for new treatments and technologies. This financial burden is not limited to one country but is a growing concern across regions such as Europe and Asia-Pacific.

In the U.S., research from The Peterson Center on Healthcare indicates that healthcare expenses for households have consistently increased each year since 2000. These rising costs have significant consequences for individuals and the broader economy, particularly in the form of financial strain on consumers.

Financial strain on consumers is one of the most direct consequences of skyrocketing healthcare costs. Surging medical bills can leave individuals in difficult financial situations, causing them to struggle to cover essential expenses like rent, utilities, and groceries. This financial burden often leads to financial instability and stress, which can negatively impact a person's overall well-being.

The high cost of healthcare also forces many people to make tough choices about

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In the U.S. alone, the estimated 30,000 physicians entering the workforce annually will be insufficient to meet the rising demand for healthcare services.

their health. Delayed medical treatment is a common result, as individuals frequently postpone or forgo necessary care due to concerns about affordability. A recent survey found that 9% of adults in the U.S. delayed or did not receive essential medical treatment because of cost concerns. This can cause health problems to worsen over time, leading to more expensive treatments and even higher healthcare costs down the road.

3 Financial Challenges Plague Providers

Over the next five years, healthcare providers around the world are expected to face significant financial challenges that could hinder their ability to deliver high-quality care. These challenges stem from rising operational costs, complex reimbursement systems, and evolving regulations that place added pressure on healthcare systems.

One of the primary issues is the financial strain on providers, who are dealing with increasing costs and declining revenues. According to Fitch Ratings, nonprofit hospitals are likely to continue experiencing labor shortages and margin pressures. This financial strain limits providers' ability to invest in necessary equipment, upgrade facilities, or hire sufficient staff, all of which can negatively affect the quality of care they provide.

In the U.S., recent policy changes by the Centers for Medicare & Medicaid Services (CMS) have added to this burden. CMS introduced final rules for the 2024 Medicare Physician Fee Schedule, which includes a 1.25% reduction in payment rates. While some changes, such as the introduction of a new add-on code for complex care in primary settings, aim to improve care delivery, they also have financial repercussions for healthcare providers already struggling with tight margins.

Globally, many healthcare systems are also focusing on addressing health equity. CMS is leading efforts in the U.S. by expanding access to services like mental health care, substance use disorder treatment, and dental care for cancer patients. These changes aim to improve care quality and ensure that vulnerable populations receive the support they need. However, the financial strain can sometimes limit providers' ability to fully implement

these programs.

4 Increased Demand for Personalized Care

The healthcare industry is seeing a rising demand for personalized care, largely driven by the increasing consumerism in healthcare. Patients today are more informed and empowered, using readily available online medical information to actively seek healthcare solutions tailored to their individual needs and preferences. This shift has significantly changed patient behavior and expectations, leading to a focus on more individualized approaches to treatment.

However, providing personalized care comes with its own set of challenges. One major issue is the complexity of treatment. Personalized care often requires a more detailed approach to diagnosis and treatment, as healthcare providers must dedicate additional time and resources to understanding each patient's unique health profile. This can include genetic testing, lifestyle assessments, and other factors that influence individual treatment plans, making the process more intricate compared to traditional care.

In addition, the need for personalized care places a heavy emphasis on data management. Providers must securely manage large volumes of patient data to tailor treatments effectively. Ensuring the proper storage, privacy, and security of this sensitive information, while also complying with regulations like HIPAA, is essential to protect patient privacy and maintain trust in the healthcare system.

The growing demand for personalized care also brings challenges in resource allocation. With more patients seeking customized treatment options, healthcare providers may face a strain on resources such as medical staff, diagnostic tools, and specialized treatments. This can lead to difficulties in effectively distributing these resources to meet the needs of all patients.

Lastly, costs and affordability present a significant concern. While personalized care can lead to better patient outcomes, it can be expensive, raising questions about how to make these treatments accessible to all patients. Ensuring that everyone, regardless of their financial situation, can benefit from personalized care is a crucial challenge that healthcare providers and policymakers must

5 Regulatory Headwinds Are Strengthening

The regulatory landscape in healthcare is continuously evolving worldwide, and the next few years will present significant challenges for providers across various regions. Healthcare systems around the globe are grappling with increasingly complex compliance requirements, demanding substantial financial and administrative resources. As new laws and regulations emerge, providers face the challenge of adapting to these changes, which can have a profound impact on their operations and financial stability.

One of the major challenges is the increasing compliance burden. Healthcare providers must adapt to new regulations while ensuring they remain in line with existing ones. This can be time-consuming and costly, requiring a significant investment in administrative staff and resources. The complexity of these requirements places a strain on healthcare systems, making it harder to focus on patient care.

Another pressing issue is data privacy and security. With the global increase in healthcare digitization, regulators are introducing stricter requirements to protect patient data. From the GDPR in Europe to new data security laws in Asia, healthcare providers are required to invest heavily in cybersecurity infrastructure.

Additionally, evolving legislation and reforms aimed at improving healthcare transparency and reducing costs are being introduced in many regions. For instance, countries such as Japan and Germany have implemented new regulations focused on pricing transparency and cost containment. However, the long-term impact of these reforms on healthcare compliance remains uncertain. In many emerging markets, ongoing reforms are compounded by infrastructure gaps, making it difficult for providers to meet both national and international regulatory standards.

6.5%

In Europe, per capita healthcare expenditures are expected to increase significantly. On average, EU countries will increase spending by 6.5% per year until 2030. AI will play an important role in trying to keep the increase in expenditures as low as possible.

Balancing the demands of compliance, financial stability, and operational efficiency will be essential for practitioners committed to delivering high-quality patient care.

Critical Success Factors

In a 1984 Sloan Management Review article titled, “An Assessment of Critical Success Factors,” A.C. Boynton and R.W. Zmud wrote:

“Critical success factors [CSFs] are those few things that must go well to ensure success for a manager or an organization, and therefore, they represent those managerial or enterprise areas that must be given special and continual attention to bring about high performance. CSFs include issues vital to an organization’s current operating activities and to its future success.”

For healthcare executives and enterprises to survive—and thrive—over the next five years, capitalizing on the following critical success factors will be key:

Prioritize Flexibility

To overcome the global healthcare industry’s critical worker shortage, healthcare organizations should consider adopting various strategies to address these workforce issues and ensure long-term sustainability. One critical success factor is enhancing working conditions and benefits. Healthcare providers can improve the retention of current professionals and attract new talent by offering better work environments.

This includes increasing salaries, providing flexible work arrangements, and creating opportunities for career growth. By making the field more appealing, these improvements encourage healthcare professionals to stay in their roles and reduce turnover. For example, countries like Canada have implemented higher wages and more flexible scheduling to retain healthcare workers, which has shown positive results in reducing burnout and improving job satisfaction.



Another important factor is adopting flexible staffing models. To widen the candidate pool, healthcare organizations are introducing more adaptable staffing options. These can include part-time, temporary, or shared positions, which are especially beneficial for individuals unable to commit to full-time roles. Offering these flexible options helps tap into a more diverse workforce, including parents, students, and semi-retired professionals. By adjusting staffing structures, healthcare organizations can reduce the impact of worker shortages while maintaining the quality of care.

Additionally, integrating technology plays a crucial role in addressing the healthcare workforce shortage. Automation of routine tasks, electronic health record systems, and telemedicine can help reduce the workload of healthcare professionals. By streamlining administrative processes, technology allows doctors and nurses to dedicate more time to patient care, improving efficiency. For example, telemedicine has grown in popularity worldwide, enabling providers to reach more patients without requiring additional staff.

Together, these strategies—improving working conditions, adopting flexible staffing models, and integrating technology—are essential for tackling the global healthcare worker shortage and ensuring that healthcare systems can continue to meet the needs of patients.

Relieving Pain in Consumers Pockets

As discussed, skyrocketing healthcare costs have become a significant burden for consumers, but advancements in healthcare technology offer promising solutions.

These innovations not only improve patient outcomes but also help reduce the financial strain by minimizing the need for costly medical interventions and optimizing healthcare delivery.

One key strategy is the implementation of Health Information Technology (HIT), specifically the use of Electronic Health Records (EHRs). EHRs have been proven to reduce outpatient care costs.

A study led by Julia Adler-Milstein, published in the *Annals of Internal Medicine*, found that EHRs can decrease outpatient care costs by approximately 3%

Brain Drain

The World Health Organization estimates that there is a global shortage of 4.3 million health professionals, resulting in lower-quality care, constrained doctor-patient interactions, increased consultation costs, and overworked providers.

after analyzing data over four years across nine communities. By improving access to patient histories and streamlining data, EHRs make healthcare delivery more efficient. This reduces unnecessary tests, lowers the risk of medical errors, and ultimately cuts down on overall healthcare expenses.

Another effective solution is the use of patient management platforms, which integrate seamlessly with EHRs, allowing healthcare providers to synchronize patient data with scheduling and telemedicine features. This streamlined approach enables healthcare teams to deliver more efficient care by reducing administrative burdens and improving coordination between services. By using these platforms, healthcare providers can improve resource allocation, reduce wait times for patients, and prevent costly delays in care. Additionally, these platforms help mitigate burnout among healthcare professionals by automating routine tasks and improving workflow efficiency. Together, these technological innovations—EHRs and patient management platforms—represent critical success factors in addressing the rising costs of healthcare. By adopting these strategies, healthcare providers can offer more affordable care while ensuring patients receive timely, high-quality treatments.

An RX for Lower Operating Costs

Several technology-driven solutions could help reduce expenses on global healthcare providers and streamline operations. As mentioned, electronic health record systems can simplify administrative tasks by reducing redundant data entry and eliminating the need for paper records, which saves both time and money. Additionally, healthcare providers like

hospitals and ambulatory surgical centers that meet quality reporting requirements are set to receive a 3.1% increase in payment rates in 2024, providing some financial relief. This underscores how technology can directly impact cost savings while improving operational efficiency.

Another effective strategy is the use of cloud storage solutions. HIPAA-compliant cloud storage has revolutionized the way healthcare providers store and access data. By moving from costly in-house storage to secure, efficient cloud solutions, organizations can reduce maintenance expenses while ensuring data remains easily accessible across the organization. Online patient management platforms are another critical tool for cutting costs. These platforms simplify the collection of pre-visit information through HIPAA-compliant digital intake forms, reducing paper waste and clutter. Medical staff can securely access patient information from any device, which improves workflow efficiency and reduces the time spent on manual tasks.

Additionally, healthcare automation tools are enhancing efficiency by automating tasks like appointment scheduling, check-ins, and payment reminders. These tools not only reduce errors but also save time, freeing up staff to focus on more complex tasks. Automated patient self-scheduling and reminders have proven particularly effective in reducing administrative burdens and lowering costs.

Finally, the rise of telemedicine offers significant cost savings. By allowing doctors to consult with patients remotely, telemedicine reduces the need for physical office space, utilities, and administrative staffing, making it a powerful tool for lowering operational costs without sacrificing care quality.

3.46

The annual percentage the U.S. healthcare market is expected to grow from 2024 to 2029, resulting in a market volume of \$1.79 trillion.

Embrace AI and Data Analytics

To meet the growing demand for personalized care in the global healthcare industry, providers should consider leveraging technology to offer tailored care while improving overall patient outcomes.

One of the most significant advancements is the use of remote patient monitoring. This technology allows healthcare providers to track patients' vital health data outside of traditional clinical settings, enabling continuous care. Devices like wearable sensors monitor factors such as heart rate, blood pressure, and glucose levels in real time, allowing healthcare teams to intervene promptly when needed. It is estimated that around 75% of healthcare facilities in the U.S. will have adopted remote patient monitoring by the end of 2024, and its global use is expected to expand as demand for personalized care rises.

Another effective tool for delivering personalized care is the growing use of mobile apps. These applications empower patients to take control of their health by tracking their progress, receiving real-time feedback, and accessing customized health advice. Whether managing chronic conditions or focusing on wellness, mobile apps enable patients to actively participate in their care, which is crucial for personalized treatment plans.

Data analytics and AI are also transforming personalized healthcare. By analyzing large volumes of patient data, AI helps healthcare providers develop individualized treatment plans, predict health outcomes, and tailor interventions to each patient's unique needs. This data-driven approach allows for more accurate diagnoses and treatments, improving overall patient care.

Compliance as a Competitive Advantage

As regulatory challenges continue to grow, healthcare providers around the world are adopting strategies to address these regulatory headwinds and ensure they remain compliant with evolving laws and policies. To navigate these complexities, providers are taking several key steps to maintain operational stability and avoid costly penalties.

One critical tactic is the formation of compliance committees or task forces. These groups are responsible for monitoring regulatory changes, assessing their impact on the organization, and developing strategies to ensure compliance. By promoting communication across departments, compliance committees help organizations stay agile, allowing them to respond quickly and effectively to new rules and regulations.

Additionally, many healthcare organizations are implementing regular compliance audits and monitoring. These proactive steps help identify potential regulatory issues before they escalate, allowing providers to address them early on. Internal audits not only prevent legal consequences but also safeguard corporate reputation by demonstrating a commitment to ethical practices and patient safety.

Take Five

As healthcare faces a future marked by unprecedented challenges, the next five years will demand bold, innovative strategies from industry leaders. To thrive in this evolving landscape, healthcare providers must prioritize flexibility, embrace technology, and enhance their operational efficiency. Critical success factors such as improving working conditions, adopting flexible staffing models, leveraging AI, and utilizing advanced health information systems are key to overcoming these obstacles. Meanwhile, solutions like telemedicine, cloud storage, and patient management platforms offer ways to streamline care and reduce costs without compromising quality.

By capitalizing on these innovations and remaining adaptable to regulatory changes, healthcare providers can turn disruption into growth opportunities. The ability to respond proactively to these forces will determine which organizations lead the charge in reshaping global healthcare. The road ahead is challenging, but with the right strategies in place, the industry can not only survive but thrive, delivering higher quality care to patients worldwide. **IQ**

HIPAA-compliant cloud storage has revolutionized the way healthcare providers store and access data. By moving from costly in-house storage to secure, efficient cloud solutions, organizations can reduce maintenance expenses while ensuring data remains easily accessible across the organization.

EXECUTIVE PERSPECTIVE: HEALTHCARE INDUSTRY

As an accomplished global quality and regulatory executive with over 20 years of healthcare industry experience, Jennifer Paine is known for her ability to accelerate regulatory approval and provide options to business partners to achieve their business goals—while maintaining compliance with required regulations. As chief quality officer at Johnson & Johnson, she is responsible for leading the company’s worldwide quality and compliance (Q&C) function. Ms. Paine has received numerous awards and recognitions throughout her career, and was named board president in 2018 for the Central New Jersey chapter of the Healthcare Businesswomen’s Association. In 2017, she was named to the prestigious “Women to Watch in MedTech” list published by *Becker’s Hospital Review*. She holds a Regulatory Affairs Certification from the U.S. Regulatory Affairs Professional Society and a Regulatory Affairs Dual Certificate in Medical Devices and Pharmaceuticals.



JENNIFER PAINE
Chief Quality Officer
Johnson & Johnson

IQ: What are the top challenges in healthcare that pharmaceutical and medical technology enterprises—particularly those who are addressing the toughest health challenges by developing innovative medicines and solutions, such as Johnson & Johnson—must contend with over the next five years, and why?

Ms. Paine: Over the next five years, companies like Johnson & Johnson will be facing some big challenges and exciting opportunities as the healthcare industry continues to evolve. The ones that first come to mind for me include digital

transformation, geopolitical complexity, and the changing nature of the healthcare solutions themselves.

Starting with digital transformation, although the transition to digital isn’t new, the pace of the transition and its pervasiveness in all our ways of working continues to drive change at unprecedented levels. Our digitally interconnected world demands that we adapt swiftly, which can be a challenge in a heavily regulated industry that serves patients globally. The relentless progress in technology and innovation

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necessitates commitment to invest in robust systems, efficient processes, and people with the digital and change management skills needed to keep up. It is crucial that we continually invest in our workforce, equipping them with the necessary skills and expertise to harness these technologies effectively and foster groundbreaking advancements in patient care. But it’s not just about embracing new tools and techniques; regulations are also evolving as technology advances. While we must ensure our compliance with these increasingly complex regulations, especially in areas like cybersecurity, artificial intelligence and data privacy, we also want to embrace the opportunity to partner with regulators to help shape those regulations to help them achieve the intended outcomes without stifling innovation.

Next, I think that companies, especially large multinational companies like Johnson & Johnson, must navigate the complexities of operating in a globally interconnected world. The geopolitical landscape is always changing and has been extremely dynamic in recent years. That poses unique challenges for pharmaceutical and medical technology companies like us. Tensions between markets we serve can result in policies that change our operating models and process and can threaten to disrupt product supply.

Our strategies must adapt, in a compliant manner, so we can continue to bring our life-saving products to patients all around the world, even through challenging situations. Anticipating and responding to geopolitical uncertainty isn’t an easy task, but it’s one we’re fully committed to.

The complexity of care delivery is another challenge we’re tackling head-on. The very nature of the healthcare solutions being developed is changing as we see the convergence of pharmaceuticals, biologics, and medical technology. In the development and delivery of solutions to patients, we are seeing more use of advanced technology, more use of advanced therapeutics, all of which come with new sets of requirements and challenges to navigate. From complex supply chains to regulatory compliance and data integrity, there’s a lot to consider. We’re working hard to make it simpler for healthcare providers and patients to access

and safely use these innovative products and solutions. It’s all about delivering the best care in the simplest way possible.

And maybe one additional challenge that underlies all of this is ensuring we continually recruit, develop and retain the right talent. It’s crucial to our success. We find ourselves competing with tech companies as well as healthcare companies for the same people, especially as it relates to highly specific scientific areas. As healthcare continues to evolve and transform, we need leaders and a workforce that can drive innovation and adapt to these changes.

We’re focused on preparing our people for the rapid pace of change, ensuring they have the skills and knowledge to embrace new opportunities as they arise, and for the resilience to manage through the complexity and challenges that stand between us and our ability to transform health for humanity.

Companies that invest in their people, adapt their strategies, simplify care delivery, and nurture talent, will not only survive but thrive in the ever-evolving healthcare industry.

IQ: Since transitioning to the chief quality officer role in 2023, what has been your strategy for leading Johnson & Johnson’s Q&C function in order to ensure high-quality products reach customers and patients worldwide?

Ms. Paine: My strategy for leading our quality and compliance function is centered around several key principles. Before being named chief quality officer, I was the head of global regulatory affairs for Johnson & Johnson MedTech. As I stepped into my enterprise role—responsible for quality and compliance for both Johnson & Johnson MedTech and Johnson & Johnson Innovative Medicine—I was very deliberate about listening to and understanding the capabilities of the organization so I could identify opportunities for improvement and build on our existing strengths. I think this is important for any leader transitioning into a new role.

An important step is helping the team envision an ideal future state, something we can create together, so I’ve been working with my leadership to strategically align our efforts in support of achieving our company’s commitment to profoundly impact health

for humanity. This involves being honest about opportunities where improvement is needed and also empowering teams (and individuals) to develop solutions to create that future state. I place a strong emphasis on fostering a culture of continuous learning and development as well as on building a diverse talent pipeline, identifying future leaders within the organization, ensuring their growth and success in alignment with our long-term objectives.

I also challenge the organization to find ways to streamline our processes and make work easier without compromising the quality of our products and services. That includes taking a simplified approach, removing barriers and unnecessary complexities so our teams can deliver high-quality products and services without being hindered by unnecessary burdens.

IQ: As a follow-up, is Johnson & Johnson adapting or evolving any facets of its corporate strategy to better anticipate, manage, or mitigate any growing existential risks on the horizon over the next five years?

Ms. Paine: We are definitely looking at our approach to risk management very differently than in the past. The interplay of risks across sectors, business, and regions requires a more cross-functional approach that embraces more coordinated approaches to risk identification and management.

We are enhancing our enterprise risk management capabilities to build muscle beyond functional areas or geographies, ensuring that risks are identified and managed holistically. As I just mentioned, the complexities of operating in a globally interconnected world presents many risks to our ability to deliver products to patients, no matter where they are in the world.

We are also working to simplify and streamline the way we manage risk, using

AI and machine learning where appropriate. By adopting a more proactive stance, and automating where it makes sense, we aim to stay ahead of issues and develop pragmatic solutions that address potential risks before they escalate. In the past two years, we have made significant progress in improving visibility into risks across the enterprise. We have leveraged enterprise risk management to identify risks earlier in the product lifecycle, enabling us to take timely actions to mitigate their impact. By constantly evolving our risk management practices, we aim to build robust systems, processes and most importantly, culture, that allows us to anticipate, manage, and mitigate risks effectively.

IQ: From your vantagepoint, what are the most promising, game-changing opportunities for enterprise growth within the greater healthcare industry over the next five years—including both within the U.S. and internationally?

Ms. Paine: To me, what's most exciting is the amazing scientific advancements that are opening up new ways of treating diseases. AI and data science, robotics, gene therapy and leveraging genetic information to create personalized pathways for treatment, including the possibility of intercepting disease is now within our reach.

This scientific progress has the potential to revolutionize healthcare by delivering personalized and targeted therapies. As research and development continue to progress, more fruitful solutions are being discovered, and options for treatment are expanding. The potential to cure previously untreatable diseases is becoming more advanced, offering new hope for patients.

The integration of technology into healthcare also has the potential to improve patient outcomes, enhance operational

efficiencies, and ultimately expand access and efficiencies. Embracing technology and leveraging it effectively will be essential for healthcare enterprises to seize this opportunity for growth.

IQ: From a leadership perspective, what attributes will be required of healthcare executives in the pharmaceutical, biotechnology, and medical technology space to ensure their organizations survive and thrive over the next five years?

Ms. Paine: The first, and most important attribute, that I emphasize to my leaders, is that we are ALL business leaders - regardless of whether we sit in a functional area such as quality and compliance. I strongly believe that every leader in the company—regulatory, compliance, legal, supply chain etc—must become differentiators to our business, enabling AND driving compliant growth.

It is no longer acceptable for a leader to solely bring their subject matter expertise to the table. They must show up as a business leader who understands the broader impact of their decisions and actions on the organization, and who understands how to leverage their expertise to create opportunity, not just manage risk. This requires a deep understanding of how their functional area aligns with and contributes to the overall business strategy.

Leaders also need to learn how to adapt to engaging people in a more geographically diverse and virtual environment than in the past. Building connections, fostering a culture of collaboration, and finding innovative approaches to effectively communicate is harder in an organization where most people are not in the same building, time zone, or geography. New skills will be needed to maintain a shared understanding of the priorities you are driving within the organization.

This ability to identify and prioritize the most impactful work is also a critical leadership skill. With the rapidly changing healthcare landscape and an abundance of competing demands, leaders must focus their teams on the largest value-added priorities, bringing a strategic mindset and

the capability to make informed decisions that align with the organization's overall goals and objectives. This includes blocking out distractions and allocating resources to initiatives that will have the greatest positive impact on the organization's success.

Finally, leaders need to define the future state and ensure the right people are in place to execute the organization's vision. They must provide a clear and compelling vision of where the organization is heading and inspire their teams to work towards that vision.

IQ: What other recommendations or insights would you offer global healthcare leaders in order to ensure their success over the next five years?

Ms. Paine: Avoiding burnout is essential, especially given the challenges we face as leaders. I thought it might be useful to share what I intentionally do to make my work and personal lives coexist. Some may think of this as work-life balance but I'm not sure you can always balance work and life, but you have to intentionally manage them because it doesn't happen on its own.

Most importantly, you must set clear boundaries. Work has a way of filling up all available space, so it's important to establish limits. I've learned that if I don't set boundaries, work creeps into every aspect of my life before I even realize what's happening. That's why I'm intentional about mapping out my vacation days, holidays, and trips for the following year each December. By doing this, I make sure to prioritize time to relax and recharge.

But this isn't just about long vacations—it's also about finding small moments of recovery every day, week, month, and year. While vacations provide much-needed rest, they don't fuel me for an entire year. Personally, I enjoy doing puzzles with my mom on Saturdays, baking cakes for my kids, and even attempting gardening (even though I'm not very good at it!). These fun activities give me something to look forward to and provide the fuel I need to perform at my best in both my professional and personal life. **IQ**

"It is no longer acceptable for a leader to solely bring their subject matter expertise to the table. They must show up as a business leader who understands the broader impact of their decisions and actions on the organization, and who understands how to leverage their expertise to create opportunity, not just manage risk."

—Jennifer Paine
SVP & Chief
Quality Officer,
Johnson & Johnson

EXECUTIVE PERSPECTIVE: HEALTHCARE DELIVERY

Bradley C. Leibovich, M.D., serves as medical director of the Center for Digital Health at Mayo Clinic in Rochester, Minnesota. He joined the staff of Mayo Clinic in 2001 and is the David C. Utz, M.D., Professor of Urology. Dr. Leibovich's clinical areas of interest include renal cancer, upper tract urothelial carcinoma, and testicular cancer and has authored over 300 peer-reviewed journal articles. His awards and honors include the Andrew C. Novick Award through the Kidney Cancer Association, in recognition of significant contributions in urology for the treatment of renal cell carcinoma. At Mayo Clinic, Dr. Leibovich has been recognized with multiple awards for service in education and clinical activities including the Distinguished Mayo Clinician Award. He is engaged in many educational activities, including teaching at oncology conferences, developing curriculum for the Department of Urology at Mayo Clinic, and providing mentorship for Mayo Clinic residents and fellows.



DR. BRADLEY LEIBOVICH
David C. Utz, M.D., Professor of Urology & Medical Director, Center for Digital Health
Mayo Clinic

IQ: From your perspective, what are the biggest challenges you anticipate facing in the next five years?

Dr. Leibovich: One major challenge is workforce shortages across various medical domains—from physicians to technicians operating machines. Burnout is a significant factor contributing to this shortage, creating a vicious cycle where fewer people join the industry, further exacerbating the problem. Another challenge is the growing volume of information that medical professionals

need to process, coupled with increasing regulatory burdens. The systems designed to help manage this information have not kept pace with these demands. Additionally, the fragmentation of the healthcare system and the continued reduction in reimbursement rates make it difficult to maintain quality care, putting further pressure on both providers and patients.

IQ: Given these challenges, how are organizations adapting to support their teams and maintain quality care?

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Dr. Leibovich: Organizations are focusing on reducing stress and burnout by providing support to ease the clerical workload and minimize long hours. Some are offering better benefits, like improved paid time off and parental leave, and adopting flexible work arrangements, including remote work options. The goal is to align people with the mission of healthcare—to care for others—beyond just financial incentives. Encouraging a return to the altruistic reasons for entering the field and improving overall quality of life for staff can help address the challenges.

IQ: What existential threats are most concerning in the healthcare space, such as aging populations or insurance challenges?

Dr. Leibovich: The most pressing existential threat is our reliance on reactive care for chronic and acute conditions. As the population ages and healthcare costs rise, the burden of expensive treatments and technologies becomes unsustainable. We need to shift focus from reactive, costly treatments to proactive, preventive care. Investing in early intervention and population health could alleviate long-term costs and improve outcomes. However, the transition will be challenging and requires significant changes in how we approach healthcare.

IQ: What will it take to shift from a reactive to a proactive healthcare model?

Dr. Leibovich: Shifting to a proactive model requires a multi-faceted approach, including better education, eliminating incentives for unhealthy behaviors, and improving access to healthy options. Addressing issues like food accessibility, pollution, and inadequate insurance coverage for preventive measures is crucial. This shift will involve economic, social, and educational reforms, as well as creating incentives for positive health behaviors while removing those that encourage unhealthy ones.

IQ: What growth opportunities exist for the healthcare industry to improve quality of care and practitioner satisfaction?

Dr. Leibovich: Growth should focus on enhancing efficiency and effectiveness without increasing the volume of interventions. Leveraging technology to make routine healthcare management easier and more integrated can improve patient outcomes and reduce the strain on practitioners. For serious conditions, personalized care and advanced technology can minimize the burden on patients and the healthcare system. Embracing tech innovations similar to those in other industries could simplify and improve healthcare delivery.

IQ: Is the healthcare industry already on this trajectory of leveraging technology for proactive care?

Dr. Leibovich: Yes, the industry is moving in this direction. Many medical centers and tech companies are working on integrating technology to enhance care delivery. Non-traditional healthcare providers like Amazon, Walmart, and startups are entering the field, offering new models for care that could reduce overall costs and improve accessibility.

IQ: What qualities will future healthcare leaders need to drive these changes?

Dr. Leibovich: Future leaders must be innovative, willing to invest in new approaches, and able to learn from other industries. They need to understand their organization's core competencies and how to leverage them effectively. Leaders must also be prepared for the possibility of multiple failures as they experiment with new solutions. Emphasizing innovation, targeted investment, and a broad perspective on best practices from other sectors will be key to making meaningful improvements in healthcare. **IQ**

“The fragmentation of the healthcare system and the continued reduction in reimbursement rates make it difficult to maintain quality care, putting further pressure on both providers and patients.”

—Dr. Bradley Leibovich
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