Futureproofing access to care

Insights from healthcare leaders

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Introduction: Futureproofing access to care

Access to quality healthcare has always been a challenge, and the pandemic made it clear just how big that challenge can be. With millions of people facing barriers to timely care, the need for better solutions became urgent. Virtual care stepped in as a lifeline during this time—and it's proven to be more than just a short-term fix. It's now a key part of making healthcare more accessible and ready for the future.

By using technology like remote exams, AI-driven tools, and telemedicine, virtual care is helping to close gaps in access, improve patient outcomes, and lower costs. These tools aren't just making it easier to get care—they're changing how care works, making it more efficient and focused on what patients need.

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This eBook brings together ideas and real-world examples from healthcare leaders who spoke in a recent webinar about the future of virtual care. Their experiences and strategies show how digital health is transforming access to care and making the system better for everyone.

In the sections ahead, we'll explore how virtual care is reshaping healthcare, tackling workforce challenges, and reaching underserved communities. These innovations are helping ensure that quality care is available to more people—creating a stronger, more sustainable system that's ready for the future.

Healthcare leaders featured in this eBook:

Rima Shah, MD
Chief Medical Officer/SVP
Ambulatory and Population Health

Corewell Health

Alvin F. Wells, MD
Midwest Region Director
Department of Rheumatology

AdvocateAurora Health

Stephanie Lewis
Sr. Director Enterprise Telehealth
Ambulatory Post Acute Services

ORLANDO HEALTH

1 The role of digital health in futureproofing care delivery

The way healthcare is delivered is changing fast, and digital health is leading the charge. Telemedicine, monitoring tools, and AI are becoming essential in solving some of the biggest challenges in healthcare. They help streamline processes, reduce delays, and make care more accessible—changes that benefit both patients and providers.

Today's patients aren't willing to wait months for an appointment or travel long distances for care when other services they use can be accessed from home or from local hubs. They expect timely solutions, and digital health makes that possible. As Dr. Alvin Wells, Midwest Region Director for the Department of Rheumatology at Advocate Aurora Health, explained during the webinar, "If organizations and private practice doctors are not implementing digital health, unfortunately, they're going to be left behind. Our patients are demanding ready access—not in six months, but today."

The impact goes beyond just faster appointments. Digital health also drives innovation in diagnostics, treatments, and care models. AI, for example, can help analyze data and support clinical decisions, leading to better outcomes. But as Stephanie Lewis, Senior Director of Enterprise Ambulatory Post Acute Services at Orlando Health, pointed out, "Digital health solutions must also address inequities and remove biases in AI-powered tools." These advancements need to be built with everyone in mind to ensure they don't unintentionally widen existing gaps in care.

Digital technology is also helping to tackle some of the healthcare system's toughest challenges, like workforce

> " Digital technology is one solution to address workforce challenges, improve access, and prevent unnecessary hospitalizations."
>
> **Rima Shah, MD**
> Chief Medical Officer/SVP Ambulatory and Population Health at Corewell Health

shortages and high costs. Rima Shah, Chief Medical Officer/SVP of Ambulatory and Population Health at Corewell Health, summed it up well: "Healthcare is costly, and access is a pressing issue. Digital technology is one solution to address workforce challenges, improve access, and prevent unnecessary hospitalizations."

By integrating telemedicine, AI, and remote tools, healthcare systems are better equipped to meet rising demands and create more accessible, equitable care.

Digital health market revenue 2023 to 2034 (USD Billion)

Year	Revenue
2023	$296.86
2024	$335.51
2025	$379.44
2026	$428.94
2027	$484.38
2028	$546.17
2029	$614.76
2030	$690.72
2031	$774.59
2032	$867.01
2033	$968.63
2034	$1,080.21

Digital Health Market Outlook, Opportunities and Overview Report, Towards Healthcare, 2024.

2 Using AI and predictive analytics to improve outcomes

Artificial intelligence (AI) is becoming a powerful ally in healthcare, helping providers make better decisions and deliver care more efficiently. From predicting patient outcomes to streamlining administrative tasks, AI is reshaping how care is provided and ensuring it meets the needs of patients and providers alike.

One key area where AI is making an impact is in predictive analytics. By analyzing large sets of data, AI can identify patients at higher risk for complications and guide proactive interventions.

Stephanie Lewis highlighted this during the webinar, sharing an example from her work: "We use predictive analytics to target populations at high risk of readmissions. For example, AI alerts can initiate stroke protocols in real-time, improving outcomes." These tools allow providers to intervene earlier, which can save lives and reduce the cost of care.

Another important application of AI is in reducing administrative burdens for healthcare providers. By automating time-consuming tasks like documentation, AI helps reduce burnout and frees up providers to spend more time with their patients. Rima Shah noted, "AI tools help alleviate physician burnout by automating documentation. It lets providers spend more time with patients and improves work-life balance."

Beyond efficiency, AI-driven clinical decision support tools enhance diagnostic accuracy by identifying patterns or issues that may not be immediately apparent. This not only supports better outcomes but also strengthens the trust patients place in their care.

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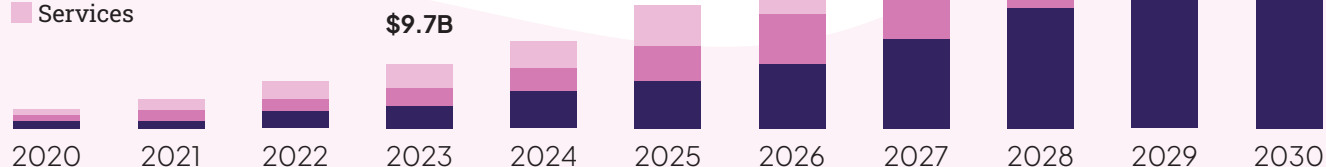>
> **Stephanie Lewis**
> Sr. Director Enterprise Telehealth Ambulatory Post Acute Services at Orlando Health

As healthcare systems continue to face challenges like staff shortages and rising costs, AI offers practical solutions that benefit both patients and providers. By integrating AI into care models, healthcare organizations can improve outcomes, increase efficiency, and reduce the strain on their teams.

U.S. AI healthcare market
Size, by component 2020-2030 (USD Billion)

- ■ Software solutions
- ■ Hardware
- ■ Services

35.8%
U.S. market CAGR, 2024-2030

$9.7B

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

AI In Healthcare Market Size, Share & Trends Analysis Report By Component (Hardware, Services), By Application, By End-use, By Technology, By Region, And Segment Forecasts, 2024 - 2030

3 Balancing cost-efficiency with quality care

As healthcare systems face mounting financial pressures, finding ways to reduce costs without compromising care quality is more important than ever. Virtual care is proving to be an effective way to meet this challenge, offering tools and technologies that streamline operations, free up resources, and ensure patients continue to receive high-quality care.

One way virtual care reduces costs is by enabling remote triage and monitoring. By managing patients proactively and remotely, healthcare providers can avoid unnecessary hospital visits and admissions. Stephanie Lewis shared an example from her organization: "Programs like remote patient monitoring for chronic disease management have shown a 50% reduction in hospitalizations for at-risk populations." These programs not only save money but also improve outcomes by keeping patients healthier at home.

Remote visits and triage also play a crucial role in reducing unnecessary visits to emergency departments (ED). By providing accessible, effective remote care, these virtual care solutions help divert non-emergency cases that would otherwise strain ED resources. Programs like TytoCare's Home Smart Clinic have demonstrated significant success in ED diversion, reducing these visits by up to 24% in some populations.

Labor constitutes largest percentage of hospital expenses

Labor: 60% — $839B
Drugs: 8% — $115B
Supplies: 13% — $181B
Other: 19% — $269B

Average expenses estimated by Strata Decision Technology median 2023 values across all hospital spending

Growth in total hospital employee compensation far outpaces inflation

BLS, annual average employee cost index, 2014 to 2023 for hospitals and CPI-U, 2014 to 2023

■ Inflation
■ Hospital employee compensation

28.7%   45.0%

2014 to 2023

AHA Report: America's Hospitals and Health Systems Continue to Face Escalating Operational Costs and Economic Pressures as They Care for Patients and Communities

Another cost-saving strategy is leveraging digital tools to address staffing shortages. Virtual care allows providers to hire remote staff for administrative tasks like prior authorizations, which helps optimize on-site resources. Dr. Alvin Wells explained, "By using digital tools, private practices and hospitals can hire remote staff from anywhere to handle administrative tasks like prior authorizations—this saves costs while increasing efficiency."
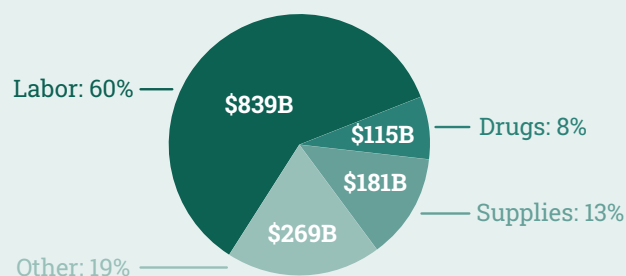
Digital innovations also allow providers to focus on high-value care by reducing time spent on routine tasks. This means that doctors and nurses can prioritize patients who need their expertise the most, improving both efficiency and care quality.

Balancing cost-efficiency with quality care is no small task, but virtual care offers a practical path forward. By using tools that reduce operational burdens and enhance patient management, healthcare systems can lower costs while continuing to deliver excellent care.

> "By using digital tools, private practices and hospitals can hire remote staff from anywhere to handle administrative tasks like prior authorizations—this saves costs while increasing efficiency."

Dr. Alvin Wells
Midwest Region Director
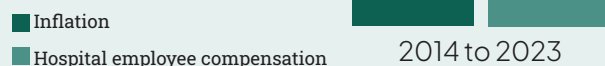Department of Rheumatology at
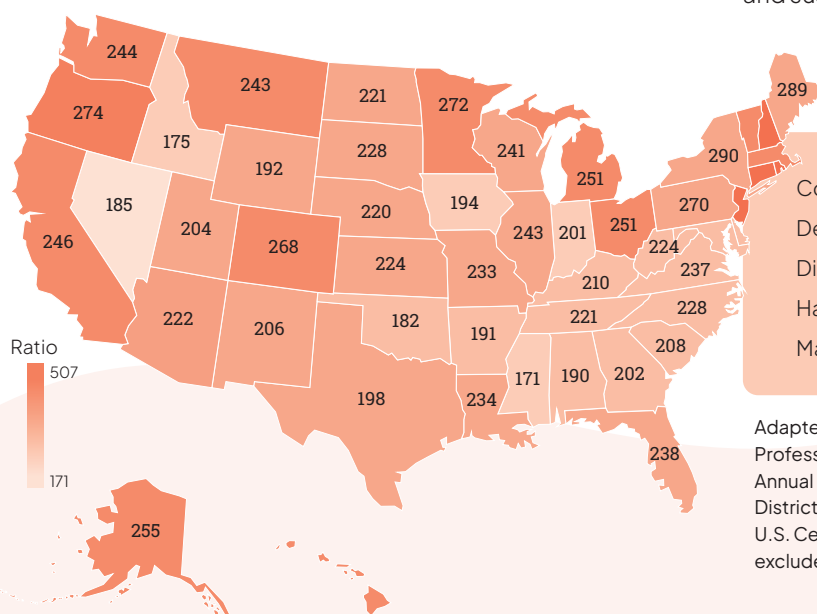Advocate Aurora Health

4 Strategies for addressing workforce challenges

Workforce shortages have long been a challenge in healthcare, and the problem has only worsened in recent years. Virtual care is emerging as a powerful way to bridge these gaps, ensuring that patients continue to receive care even when on-site staffing is limited. By using remote tools and innovative care models, healthcare systems can do more with less and support their existing teams.

One approach to addressing staffing shortages is using virtual clinics and remote triage. These tools allow providers to extend care without needing additional on-site staff. Rima Shah shared a successful example: "We used virtual tools to keep walk-in clinics open during staffing shortages. Patients could see providers located remotely rather than being redirected to emergency rooms." This solution not only maintained access but also reduced strain on emergency services.

Virtual care also makes it possible to prioritize staff time effectively, ensuring that providers focus on the patients who need them most. Dr. Alvin Wells highlighted the role of AI and digital tools in improving efficiency: "There's not a shortage of rheumatologists, but there's a shortage of efficiently using them. AI can triage patients and prioritize those who need urgent care."

> "We used virtual tools to keep walk-in clinics open during staffing shortages. Patients could see providers located remotely rather than being redirected to emergency rooms."

Rima Shah, MD
Chief Medical Officer/SVP Ambulatory and Population Health at Corewell Health

Another benefit of virtual care is its flexibility. Remote care models allow providers to tap into resources from across the country—or even globally—whether for administrative support or clinical expertise. This broadens the pool of available talent and alleviates pressure on local teams.

By rethinking how and where care is delivered, virtual care helps healthcare systems adapt to workforce challenges. It ensures that patients can access timely, high-quality care while giving providers the tools they need to work efficiently and sustainably.

Distribution of Patient Care Practicing Physicians per 100,000 Population by state, 2022

Ratio
507
171

Connecticut	302	Massachusetts	353
Delaware	226	New Hampshire	272
District of Columbia	507	New Jersey	263
Hawaii	260	Rhode Island	317
Maryland	300	Vermont	330

Adapted from the American Medical Association's (AMA) Physician Professional Data, 2022, and the state population estimates from the Annual Estimates of the Resident Population for the US, Regions, States, District of Colombia and Puerto Rico: April 1, 2020 to July 1, 2023, by the U.S. Census Bureau, 2022 (Source). Data includes both MDs and DOs and excludes residents. In 2022, there were 157,604 residents.

HRSA Health Workforce State of the U.S. Health Care Workforce, 2024.

5 Improving access to underserved communities

For many rural and underserved communities, access to healthcare remains a persistent challenge. Long travel times, limited local providers, and financial barriers often prevent patients from getting the care they need. Virtual care is changing that by breaking down these barriers and bringing quality healthcare directly to patients, whether at home or in their communities.

One of the biggest advantages of virtual care is its ability to reduce the need for travel. Patients in remote areas can now connect with specialists and primary care providers without leaving their communities. Stephanie Lewis shared a creative example: "In Orlando, we've provided telehealth kiosks in airports and convention centers to serve international and underserved visitors, offering immediate care." Solutions like these demonstrate how virtual care can be used in non-traditional settings to reach people where they are.

Virtual care also extends the reach of specialty care to underserved regions. Tools like e-consults and virtual ICUs allow specialists to support local providers remotely, ensuring that patients receive timely and expert care. As Rima Shah explained, "With virtual ICUs, we can deliver specialized care to regional hospitals, avoiding patient transfers and improving outcomes."

For patients who may struggle with access due to mobility issues or social determinants of health, virtual care offers a lifeline. Remote monitoring, telehealth appointments, and other virtual tools reduce the need for in-person visits, saving time and money while still delivering comprehensive care.

> "In Orlando, we've provided telehealth kiosks in airports and convention centers to serve international and underserved visitors, offering immediate care."
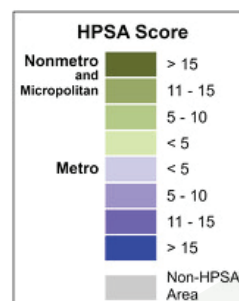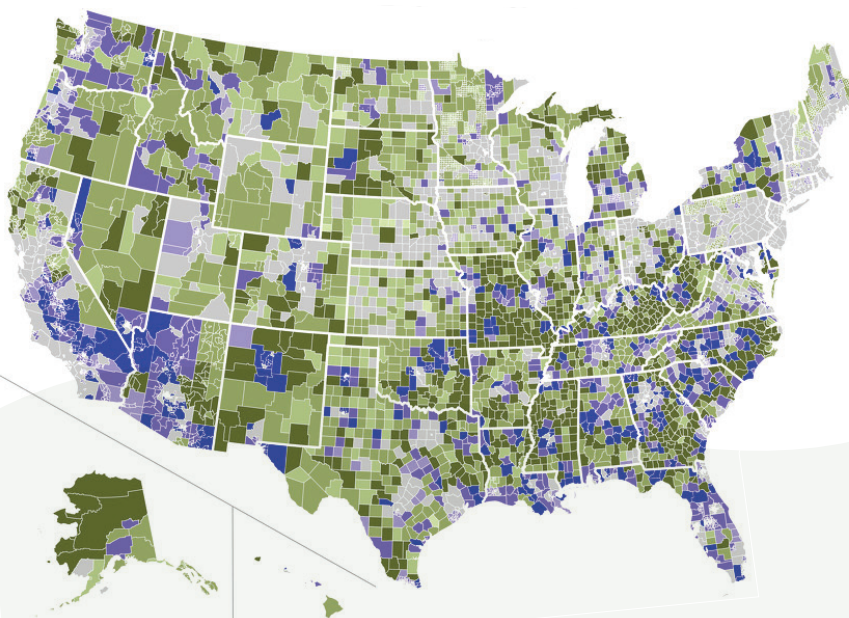
Stephanie Lewis
Sr. Director Enterprise Telehealth Ambulatory Post Acute Services at Orlando Health

Health professional shortage areas primary care

HPSA Score

Nonmetro and Micropolitan	
	> 15
	11 - 15
	5 - 10
	< 5

Metro	
	< 5
	5 - 10
	11 - 15
	> 15
	Non-HPSA Area

Alaska and Hawaii not to scale
HRSA scores HPSAs on a scale of a whole number (0–26 for primary care), with higher scores indicating greater need
Source(s): data.HRSA.gov, U.S. Department of Health and Human Services, October 2024

6 Futureproofing access to care through virtual care

The future of healthcare is about more than just adopting new technologies, it's about creating a system that is scalable, sustainable, and truly accessible for everyone. Virtual care sits at the center of this transformation, with the potential to reimagine how and where healthcare happens. By bringing together digital tools, hybrid care models, and strategic partnerships, healthcare systems can futureproof access to care while addressing challenges like cost, equity, and workforce shortages.

One of the biggest shifts on the horizon is the move toward hybrid care models. These approaches blend in-person and virtual care, ensuring patients get the best of both worlds. Routine visits, remote monitoring, and follow-ups can be handled virtually, freeing up clinics and hospitals for more complex cases. Dr. Alvin Wells underscored this during the webinar: "Digital tools can triage, diagnose, and manage care efficiently, addressing access challenges head-on."

Scalability will also depend on investments in infrastructure, like expanding broadband to underserved areas and ensuring interoperability between healthcare systems and technology platforms. Stephanie Lewis highlighted the importance of creating seamless systems: "Partnerships between healthcare organizations and technology providers are key to building a resilient healthcare system that prioritizes access."

Equally critical is making virtual care intuitive and equitable. The future of virtual care must meet the needs of diverse populations, from urban centers to rural communities, while remaining easy to use for both patients and providers. This requires a focus on user experience, cultural competency, and reducing barriers like digital literacy or technology costs.

Finally, ensuring sustainability means thinking long-term. Pilot programs can test innovative models on a smaller scale, gather insights, and evolve to meet broader needs. As Stephanie Lewis pointed out, "Piloting and refining virtual care programs is essential to futureproofing access to care."

Looking ahead, the promise of virtual care lies in its ability to transform healthcare into a system that is not only reactive but proactive—meeting patients where they are, tailoring solutions to their needs, and evolving to address future challenges. With the right investments, collaborations, and vision, virtual care will ensure that access to quality healthcare is a reality for all.

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Stephanie Lewis
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Dr. Alvin Wells
Midwest Region Director Department of Rheumatology at Advocate Aurora Health

About TytoCare

TytoCare is a virtual healthcare company that enables leading health plans and providers to deliver remote healthcare to the whole family through its Home Smart Clinic. Combining a cutting-edge, easy-to-use, FDA-cleared device with AI-powered guidance and diagnostic support, TytoCare's Home and Pro Smart Clinic solutions enable the whole family to conduct remote physical exams with a doctor, no matter where they are – at home, or in settings like school, the workplace, urgent care clinics, and more.

TytoCare serves over 250 major health systems and health plans in the U.S., Europe, Asia, Latin America, and the Middle East. For more information, visit us at tytocare.com.

www.tytocare.com