



Enhancing healthcare delivery with cloud solutions



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an evolving healthcare
environment



Healthcare delivery is evolving at an astounding pace. Legacy tools have become inadequate to address changing conditions and challenges. Patients and providers demand more personalized care along with quicker and easier access to their medical data, and in order to prevent cyberattacks and data theft, they expect the highest level of data security across all devices.

In order for technology investments to optimize healthcare delivery and increase efficiency, health organizations need to improve collaboration by bringing information, people, and processes together across the entire health ecosystem. Organizations that embrace innovation are most likely to see sustained improvements in performance and recognition as leaders in the healthcare space.



Microsoft Cloud for Healthcare

provides trusted and integrated capabilities that make it easier for health organizations to overcome challenges efficiently, adapt quickly, and move forward confidently.

One solution, many parts

The dynamic healthcare capabilities of our cloud solution unlock the power of:

Microsoft Azure

Microsoft 365

Microsoft Dynamics 365

Microsoft Power Platform

Microsoft Teams

And more!



Discover how Microsoft Cloud for Healthcare can enhance healthcare delivery

1

Four key actions
for enhancing
healthcare
delivery

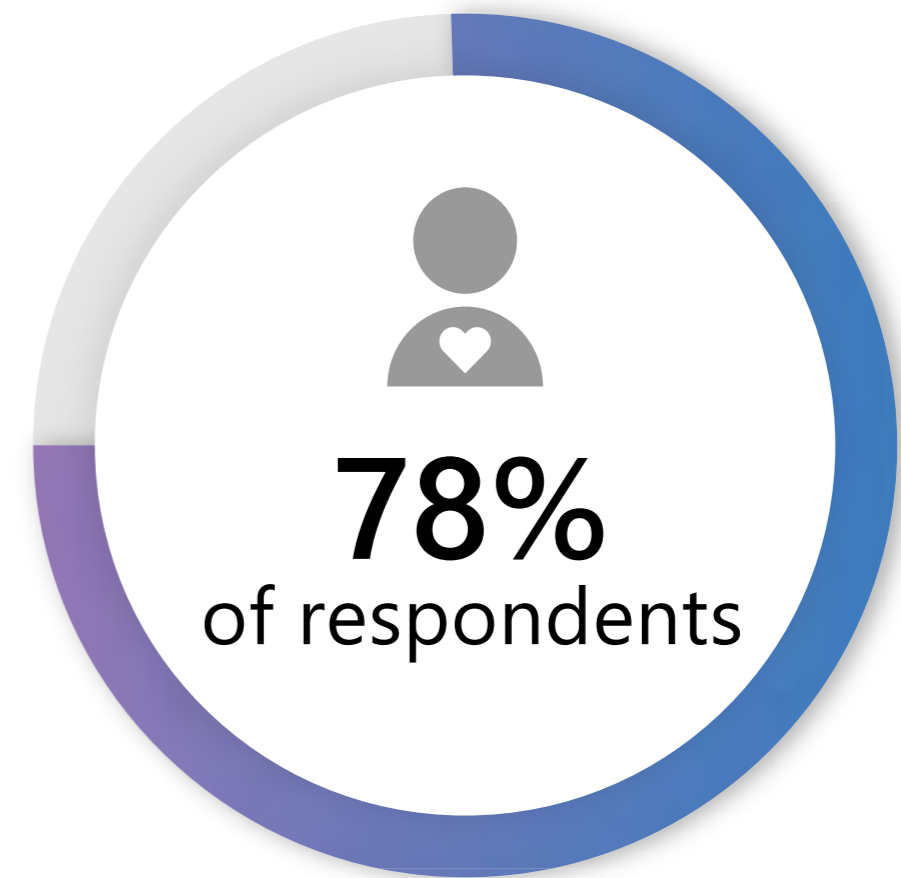


1 Empowering healthcare team collaboration

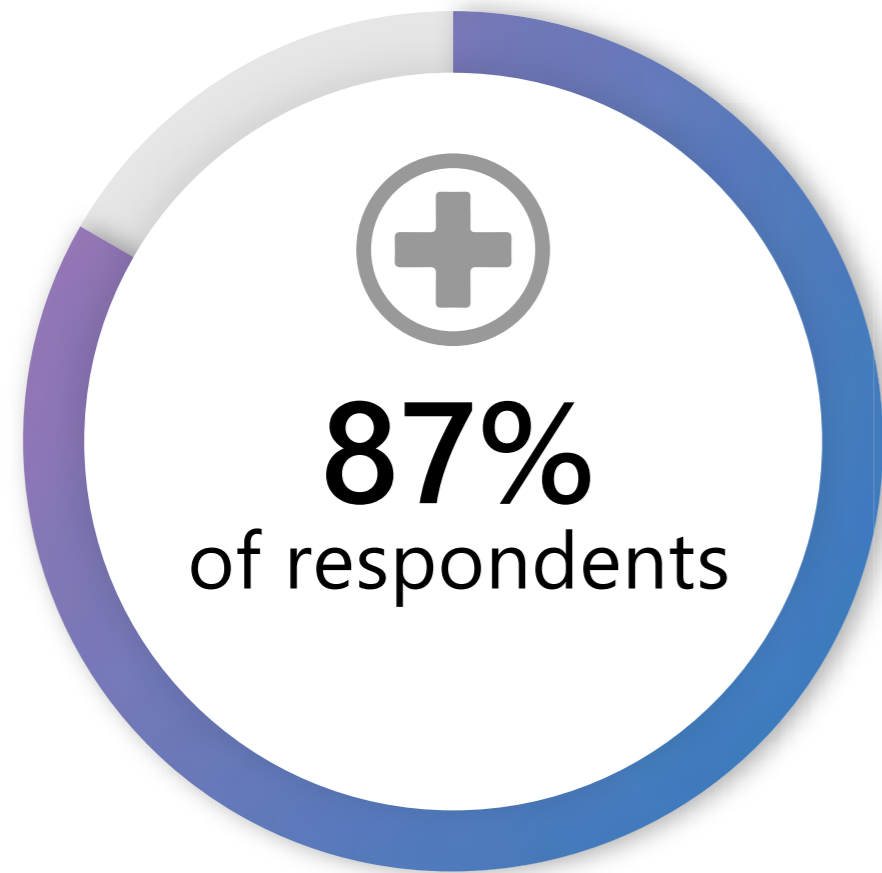
Using trusted cloud solutions, healthcare teams can accelerate their ability to coordinate care in a secure environment while saving time and money by simplifying complex workflows and maximizing collaboration. For example, clinicians' teams can securely maintain ongoing and persistent conversations, share documents, and coordinate vital resources about a given patient, healthcare topic, or issue, all in one place.

2 Elevating patient engagement

By enabling data to flow securely through every point of care, healthcare organizations can improve patient experiences and support better health outcomes. For example, healthcare organizations can enhance patient engagement through mobile apps, landing pages, secure patient portals, and contact centers. By extension, they can reach larger patient populations yet still deliver personalized healthcare management programs.



support CEOs of healthcare companies prioritizing the use of technology and connected medical devices to track and monitor individuals' health¹



believe that protecting patients' data should be a priority for healthcare company CEOs—placing privacy level with the need to invest in research and development¹

3 Improving clinical and operational insights

Connecting clinical and operational data across multiple systems of record can help healthcare organizations predict risk, improve care management, and mobilize medical strategies for ongoing quality improvement. For example, deploying AI-driven predictive analytics for data modeling and decision support can help reduce process latency, remove workflow redundancy, and lower the cost of care.

4 Protecting healthcare information

Patient trust is essential as healthcare organizations move clinical applications and data sets containing protected health information (PHI)—including patient demographics and treatment information—to the cloud securely. When data is shared across the health ecosystem, it expands the ways that health professionals and patients can access confidential information. Preserving patient trust is critical as healthcare organizations continue to evolve with the cloud.

Microsoft's holistic approach is designed to build this trust by employing a defense-in-depth security strategy and complying with applicable regulatory requirements, including offering Health Insurance Portability and Accountability Act (HIPAA) business associate agreements for our business cloud services, and helping protect the privacy of PHI and other data.

2

Staying ahead
in healthcare



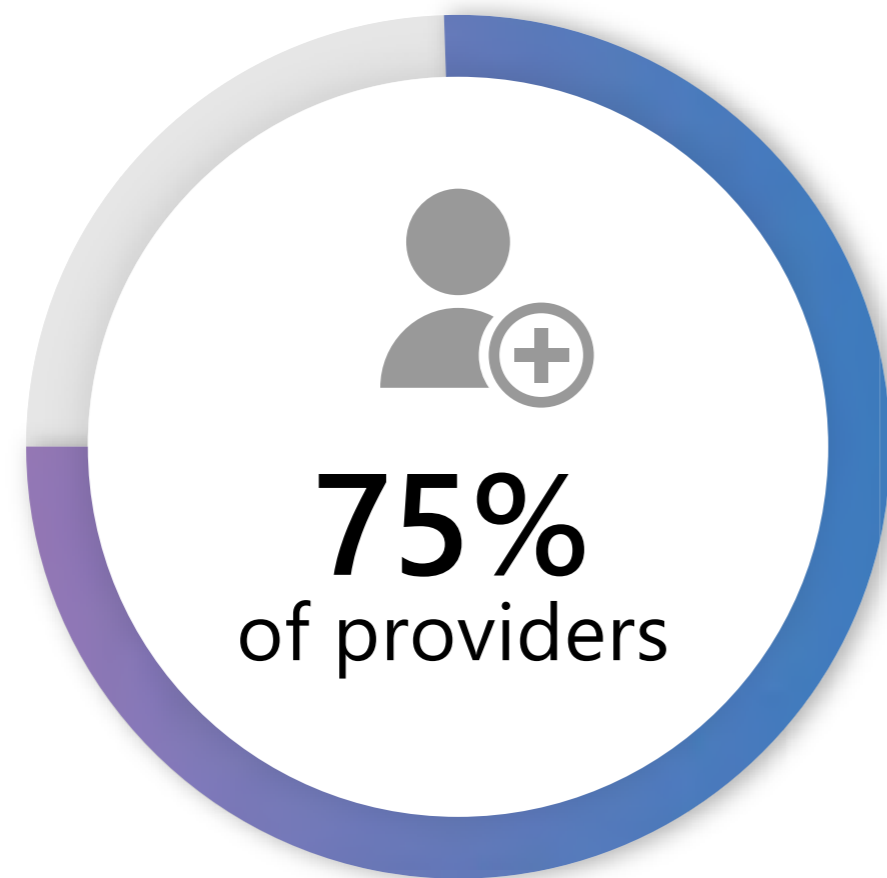
Uplevel your care strategies—more collaboration, better care

The healthcare industry has a growing and aging population as well as strains on resources and ever-increasing demands. Healthcare worker shortages, data security issues, and the need for cost savings are all top-of-mind. These challenges can be opportunities for improving patient care experiences and business outcomes.

Healthcare organizations need to empower teams with innovative tools in order to provide patients with the best possible care, while also focusing on putting privacy and security at the forefront.

With patients reliant on virtual health, remote patient monitoring, and omnichannel access, they expect personalized, insightful, and secure access to their medical data.





report that electronic health records (EHRs) allow them to deliver better patient care²

Healthcare organizations must move to a new level of patient care management, leveraging powerful cloud computing tools and choosing the right technology partner that can help deliver automation and efficiency to high-value workflows specifically designed for health data.

Care teams must be able to access the right information and coordinate with the right people. Using a single solution helps teams make faster decisions based on the massive amount of available information.

Connected care models require flexible and integrated tools that serve the way teams work, rather than disjointed tools that require them to compromise their workflows in unexpected ways.

By leveraging data insights, care teams can improve workflows, share patient information securely across teams, promote continuity of care, and drive better patient outcomes—while increasing process efficiencies.

A connected healthcare ecosystem—coordinating data, people, and processes

To advance improvements in healthcare delivery, organizations need to support collaboration, patient-centric approaches, and on-demand accessibility. Health organizations need to bridge the information gap and facilitate secure knowledge-sharing across health teams and between all parties, including care providers, payors, and facilities, as well as patients and their families.

Healthcare is evolving from its fragmented state and making remarkable improvements in management and coordination. By building, with the help of new technologies, integrated ecosystems—researchers, providers, payors, and regulators that can interact with patients, caregivers, and others on an individualized basis—healthcare can increasingly be delivered affordably, reliably, and at scale.





Newer technologies like mobile-first solutions, AI, and the Internet of Things are evolving into conventional solutions across the healthcare industry. As a result, healthcare leaders are pursuing all opportunities to connect data and unveil important insights while keeping compliance, privacy, and security top of mind.



Providing integrated, secure collaboration tools enables care teams to be part of a solution in an ever-changing healthcare landscape, helping them to be more responsive, data-driven, and customer-centric. A secure space that integrates data across clinical systems, apps, and EHRs can help your teams stay synchronized and ensures that teams can provide personalized, proactive care.

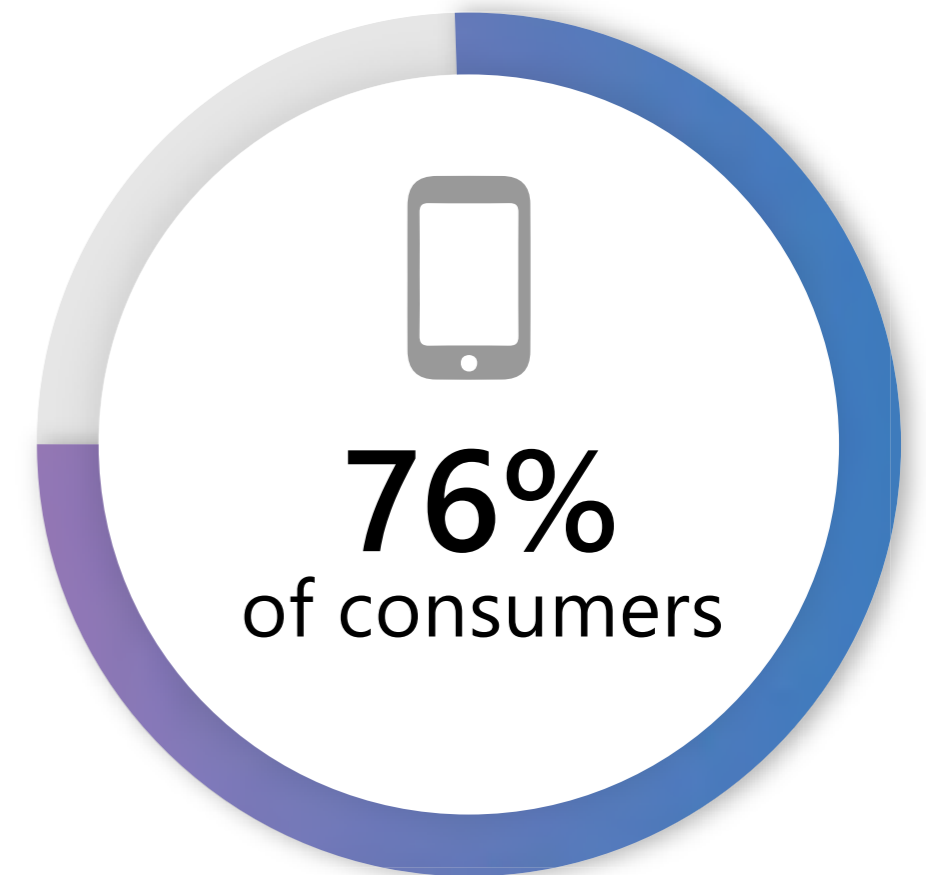




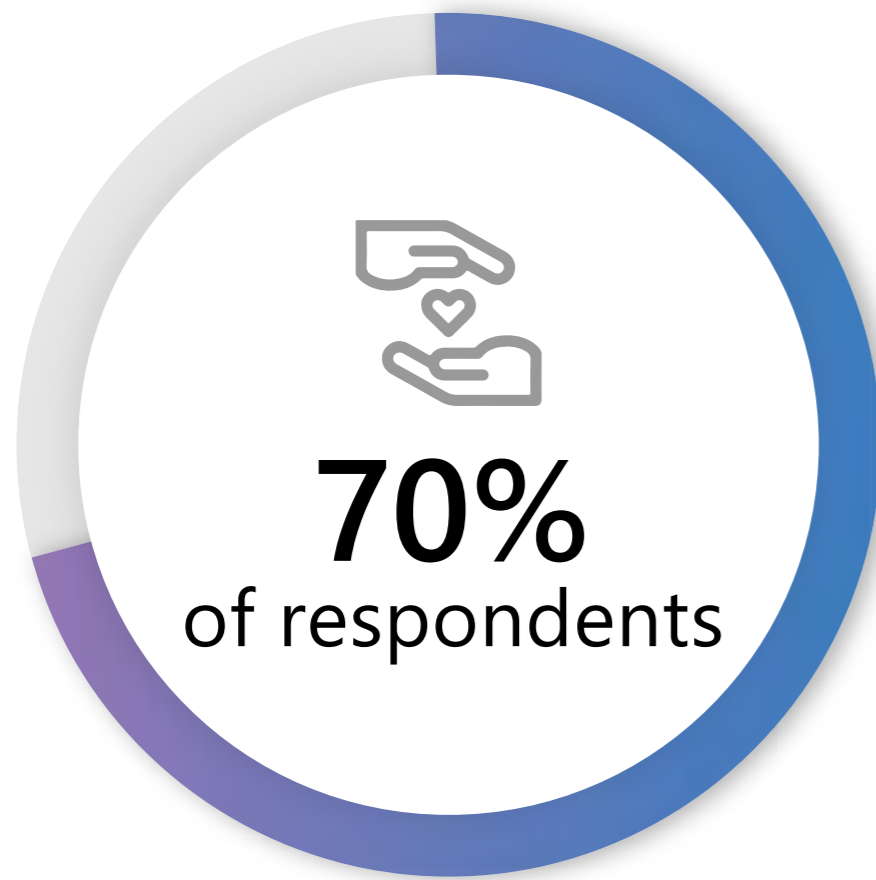
With the right technology solution, you can connect information from EHRs to contextual workflows and dispersed team members. The flow of information is improved by involving care teams, patients, and their families more closely in care decisions, while engaging the right care resources at the right time with minimal delays. Care teams can easily track, capture, and review medical histories, screenings, tests, appointments, and patient relationships across a range of communication channels, such as email or text messages.



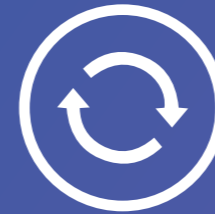
Familiar tools automate routine tasks and can be used from anywhere, increasing staff efficiency in managing expanding caseloads. Healthcare organizations can take advantage of the specialization of multidisciplinary teams and the surfacing of relevant insights to coordinate the activities of clinical personnel to deliver patient-centric care.



are satisfied with receiving medical care or advice via text message³



supported greater healthcare data sharing between the public and private sector¹



Healthcare demands a highly secure, compliant platform for instant messaging, voice and video calling, and social tools that can help sync care teams on patient cases—all without interrupting workflow.

With easy access to risk assessments and recommendations, providers and administrators can anticipate patient care needs and optimize staffing and medical supply orders to reduce costs—empowering your healthcare organization to deliver better experiences, better insights, and better care.

3

Streamlining
care delivery
with strategic
solutions



Care coordination in the digital era



Healthcare organizations need independent, convenient access to health data and peer input in order to deliver the best possible patient care. There is potential for improvement in patient outcomes when integrating data from wearable devices that monitor patient health, and healthcare organizations might better understand consumer needs by deploying advanced analytics based on AI. The possible benefits of coordinated and streamlined data range across the entire care continuum.



At the point of care, clinical best practices also require diligence in data security and compliance. The challenge for caregivers: compliance and proper data protection should not require clinicians to wait for data needed at the point of care.





The rapid expansion of available data, and the application of that data to support enhancements to clinical and non-clinical systems, is fostering the evolution of the way providers want and need to communicate. The reality in healthcare is that many factors—regulations, technology, workflow, and legacy IT systems among them—must come together to accelerate the adoption of new tools as part of evolving clinical practices, driving improvements in care quality and outcomes.

For example, analysis suggests that AI-enabled prior authorization can automate 50 to 75 percent of manual tasks, boosting efficiency, reducing costs, and freeing clinicians to focus on complex cases and actual care delivery and coordination.⁴



It is imperative that healthcare communications in the workplace be agile enough to make clinical decisions quickly and to better mirror the convenience of commonplace communication channels elsewhere. Healthcare teams facing real-time care decisions are forced to rely on unsecured workarounds to communicate with other providers or care teams. When employees use unsecured, consumer-based apps, security and patient privacy are jeopardized and healthcare organizations are at a higher risk of compliance violations.



Clinicians need to cut through the clutter of fragmented systems so they can spend more quality time with patients. The right solution can save time and money, improving patient outcomes. To coordinate care, organizations need solutions that can help them securely hand off patient information, reduce readmissions, decrease clinician burnout, and enhance financial sustainability.

4

Discovering
new healthcare
solutions





Addressing pain points

Solving healthcare's challenges starts with asking informed, targeted questions. How can we:

- ✓ Better connect and allow teams securely to collaborate throughout the healthcare system?
- ✓ Share information quickly and safely across the care continuum with the involved healthcare teams and patients?
- ✓ Streamline care team decision making and reduce process redundancy?



Improve team connection throughout the healthcare system

1 Start with these questions:

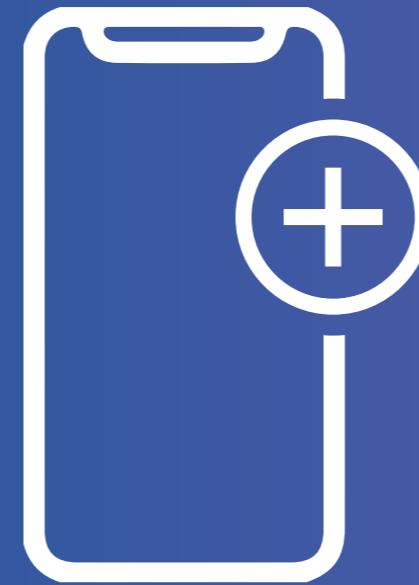
- Do you rely on disparate data systems that make it difficult to get a 360-degree view of patient data?
- Do your care teams use unsecure communication apps or tools as part of patient care because they're easier to use than your current enterprise communication tools?
- How can your clinicians share needed clinical information, such as imaging, with other care team members?
- Do your existing clinical systems equip clinicians to collaborate with their peers while securing and controlling personalized information?

2 Develop a plan

Empower individuals and healthcare professionals by combining information from patients, devices, and apps with existing clinical data and EHRs for a complete 360-degree view of patients' health journeys. Enable new modes of collaboration and communication to engage teams and patients and allow them to access the latest health information with a secure, resilient framework.

3 Execute your strategy

- Coordinate care across multiple providers using trusted, secure technology that integrates with contact centers, clinical systems, and EHRs, and enables care providers to collaborate and communicate about patients.
- Use a real-time communication platform, as well as centralized data with advanced analytics, to help determine best practices and tailor patient care.
- Deploy a priority notification function for hospitals that will ensure optimal clinical collaboration in an acute care environment. Attributes such as prioritization, alerting, tracking, and read notifications will help close the communication loop and enhance the user experience.



Consumer adoption has skyrocketed, from **11 percent of US consumers** using telehealth in 2019 to **46 percent of consumers** using telehealth to replace canceled healthcare visits just one year later.⁵



“Now our clinicians can look at all their communications and access all the information that they need about their patients with Microsoft Teams.”

—Dr. Vish Anantraman, Associate Vice President and Chief Technology Innovation Officer, Northwell Health

Securely and quickly share patient information

1 Start with these questions:

- Are you using fragmented communication tools that waste time and hinder care?
- Do your teams deal with urgent messages that require real-time responses?
- Do you have a system in place that can integrate data, clinical systems, apps, and electronic health records in a single location?
- Does your organization lack security protocols for consumer apps and personal devices?

2 Develop a plan

Give your teams a secure way to connect and share information quickly with messaging capabilities designed to meet the enhanced security and compliance requirements of the health industry. Your employees can share information quickly and securely through voice, video, chat, files, and more. Quickly send essential, urgent messages and get real-time responses without compromising security.

3 Execute your strategy

- Establish an integrated, comprehensive messaging platform that can bring together messages, files, voice and video calling, and meetings in one hub for teamwork.
- Leverage a solution that allows your team easily to ask questions, make notes, search for relevant content, and stay updated in a reliable, integrated, and secure manner.
- Discover new methods to remain up to date with real-time information, and manage various hospital operations like shift scheduling, safety processes, supplies, bed capacity, length of stay, and other critical operations.
- Create priority notifications for urgent messages that deliver repeated notices about critical information.
- Organize message delegation so that clinicians and staff can assign other recipients to receive their messages when they're not available.



62%

The number of Americans who expressed serious concern when they learned that federal privacy protections do not cover data stored on apps⁶

Healthcare organizations are now tasked with deploying the most secure technology to reassure consumers, who expect better protected data that is accessible through apps on their smartphones, as well as tablets and computers.

Streamline business processes to deliver care on tight budgets

1 Start with these questions:

- Do you think that patient and operational information is challenging to collect, increasing the cost of care?
- Do your care team members feel disconnected or disempowered, resulting in frustration and reduced business productivity?
- Do you think best practices are difficult to share across your organization?

2 Develop a plan

Healthcare organizations are prioritizing modernizing the workplace in order to help teams spend more of their time meaningfully interacting with patients and making informed decisions that improve care at a reduced cost.

By using one platform instead of disparate point solutions, you can save both time and money. Care teams can reduce the time spent on administrative tasks, eliminating redundant tests and procedures, and increasing the time dedicated to higher-value care delivery.

3 Execute your strategy

- Establish a platform that creates meaningful connections with all existing—and potential—healthcare processes.
- Capture data from every process, integrate that data with predictive insights, and deliver it with role-based workflows to improve processes and inform future care delivery. Using this approach, you can create proactive treatment and wellness plans while ensuring compliance and confidentiality.
- Reduce the time to retrieve and share clinical information between the patient and provider.



“We wanted a one-stop shop for clinicians, where they can do everything in Teams and write up the visit in our electronic patient records (EPRs). They’re familiar with the EPR, they’re familiar with Teams, so we can offer them a much more efficient use of their clinical time and a better experience for our patients as well.”

— Rebekah Davies, Digital Clinical Transformation Manager, NHS England and NHS Improvement

Improve care outcomes with coordination and virtual team huddles

1 Start with these questions:

- Is there a designated process or tool for critical communications within your organization's care continuum?
- Are your clinicians spending time chasing information and contacts?
- Can you take advantage of multidisciplinary teams and surface relevant insights?
- Do you think in-person care coordination meetings currently burn too much clinical time?

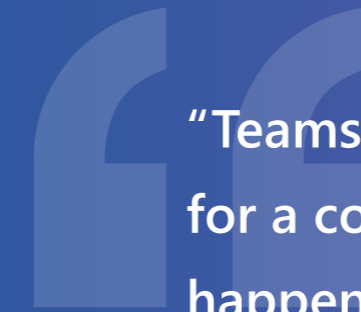
2 Develop a plan

Healthcare teams regularly sync on statuses, track issues and metrics, and build plans in meetings that are referred to as *huddles*. Digitizing huddles creates a single virtual location to interact as a team, helping providers stay in tune with their patients and improve the quality of care.

Healthcare organizations can help teams deliver patient-centric care by managing the activities of clinical personnel from a single, virtual space.

3 Execute your strategy

- Provide a canvas to design a virtual workspace where team members can efficiently collaborate using a variety of tools in a single platform.
- Enable health professionals to participate in huddles from any place and at any time, whether scheduled or impromptu, to communicate about patients in real time.
- Deploy best practices for using virtual huddles across the organization, identify patient care issues and potential causes, and share ideas across the health team, using natural conversations to better structure collaboration around quality, safety, and process improvement.
- Equip the team to see notes or watch recordings to share ideas and drive the continual improvement of care. Healthcare providers and care teams can coordinate quick reviews to check in with each other and share information, and teams can have frequent short briefings so that they can stay informed, review work, make plans, and move ahead rapidly.



“Teams really showed its mettle when we used it for a coordinated response to the COVID-19 crisis happening in our hospitals. There’s no doubt that Teams contributed to saving lives.”

— Dr. Douglas Corwin, Pulmonary and Critical Care Specialist, St. Luke’s University Health Network

Achieve team and patient goals by targeting care with advanced analytics

1 Start with these questions:

- What system do you use to collect data from care teams across the health network?
- Do you have a tool that can help you determine optimal treatments and verify research results?
- Is there a system in place to identify internal and external factors that influence patient outcomes?

2 Develop a plan

Maximize your positive healthcare outcomes through early interventions. Influence the delivery of care to a group of individuals who have similar healthcare needs, as opposed to evaluating and treating medical conditions one patient at a time.

3 Execute your strategy

- Create a system to better access case files, valuable population-level data, claim data, and comprehensive records of patient interactions—all in one centralized location.
- Use AI and advanced analytics capabilities proactively to identify at-risk segments of the population and reach out to potential treatment candidates.
- Detect discrepancies in data patterns and the quality of care delivered in different healthcare settings, identifying populations at a higher risk for suboptimal care.



5

Deploying
cloud
solutions



As innovations in healthcare quickly advance, care has become more intricate and specialized. Rapid change has accelerated shifts in consumer preferences and healthcare delivery models. Consumers, with a renewed focus on health and wellness—and with tighter budgets—have become more calculated about where they spend their money, as well as the experiences they expect from their care providers.

Healthcare systems are also struggling to overcome the impacts of clinician burnout and workforce shortages, which are driving significant challenges and budget ramifications. It's imperative that healthcare organizations rapidly adapt to meet the needs of both patients and their caregivers.



Overcoming challenges, finding solutions, and elevating healthcare delivery

Healthcare providers are meeting modern challenges by deploying resilient, innovative new care management tools and bolstering those efforts with Microsoft Cloud for Healthcare.

Many healthcare industry leaders and organizations face challenges in their efforts to monetize data, including:

- Poor data reliability
- Issues with data protection and privacy regulations
- Inability to protect and secure information adequately
- Lack of analytical talent

Microsoft Cloud for Healthcare drives positive changes to healthcare organizations in several areas:

- Cost reduction
- Accelerated machine learning development
- Improved data security and agility
- Deep data and AI analysis functionality for both structured and unstructured data

Understanding your community

Through population health analysis and reporting, you can help your healthcare organization transition from fee-for-service payments to value-based care while reducing costs and providing better care.

Microsoft Cloud for Healthcare features allow care managers to develop and follow through on care plan activities and goals, set timeline views of patient care plans, and improve workflow efficiency.

Delivering better experiences, insights, and care, Microsoft Cloud for Healthcare brings together trusted and integrated capabilities for providers that enhance patient engagement, empower health team collaboration, improve clinical and operational data insights, and enhance clinician experiences.



“We are now predicting which patients are at risk of stopping medicines and empowering their healthcare teams to reach out to them before they stop. We are doing other types of predictive analysis by understanding how particular clinics and staff members are performing, medical stock levels, and predicting what may happen and intervening before that happens.”

— Dr. John Sargent, Cofounder, BroadReach Group

The Microsoft Cloud for Healthcare advantage

Cloud technology enables organizations to:

Enhance patient engagement:
Deliver personalized experiences to engage patients in secure, individualized encounters through every point of care.

Empower health team collaboration: Connect and engage with, while efficiently managing, your healthcare workforce, using tools that help them provide the best possible care.



Improve clinical and operational insights: Leverage insights to improve patient care by connecting data from multiple sources and using predictive analytics for data modeling and identifying clinical trends.

Elevate clinician experiences:
Reduce time spent documenting patient encounters and alleviate provider burnout through AI-powered solutions that drive more personal and accessible healthcare.

6

Trusted partners
for an evolving
healthcare
environment



Microsoft provides solutions that focus on primary healthcare principles like enhancing patient engagement, empowering health team collaboration, improving clinical and operational insights, and enhancing clinician experiences—all while protecting health information.

Microsoft Cloud for Healthcare empowers healthcare organizations to engage proactively with patients and to deliver automation and efficiency to high-value workflows specifically designed for health data.



support CEOs of healthcare companies using technology and AI to help deliver better healthcare and better medicines¹

Partnering in this evolving healthcare environment requires rapid response, predictive capabilities, and continued innovation to help realize value faster, strengthening the resilience of organizations. As innovation evolves and transforms healthcare organizations, Microsoft's deep commitment to supporting healthcare organizations remains steadfast.

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