

3 game-changing cloud strategies transforming healthcare

How moving to the cloud drives innovation



Emerging challenges create opportunities for transformation

Emerging challenges—from increasing patient expectations to aging populations, from cybersecurity threats to healthcare worker shortages—demand healthcare organizations adapt quickly, while continuing to provide quality care to patients. Although the challenges are unique to providers, payors, and pharmaceuticals, the opportunities for solutions are similar.

Moving to a patient-centric approach

Digital transformation enables healthcare organizations to shift from a reactive, disconnected, and cyclical process—where patients get sick, see the doctor, receive treatment, and recover—to a continuous, connected, and collaborative approach—where data from the cloud can be shared among care providers, payors, and patients to deliver intelligent, personalized, and preventative care.

Cloud platforms can accelerate this transition by uniting disparate data systems into flexible, compliant, and scalable solutions. These innovations empower healthcare organizations to leverage cloud, data, and AI technologies to drive transformation and deliver a more patient-centered approach to health.



The first step: migrate data to modernize your data estate

No matter where you are in your digital transformation journey, moving your data to the cloud helps unlock the intelligence that comes from a connected data estate while building a foundation for other initiatives—as in the examples in this e-book.

Migrating your data to Microsoft Azure:

- Accommodates hybrid environments (on-premises and cloud).
- Lets you migrate data on your terms, at your pace.
- Helps you strengthen your security posture and streamline compliance processes.

[Learn more >](#)

Let's look at how having data in the cloud and cloud-driven technologies can help healthcare organizations address emerging industry challenges by migrating to the cloud.



Providers deliver connected care and exceed patient expectations

Delivering quality healthcare becomes even more challenging for providers when there is a global shortage in workers. Patients, who live in a connected world with unprecedented access to medical information, expect more from providers. How will providers respond to the intensifying healthcare delivery environment?

With their data stored in a cloud platform, providers can more easily generate AI-powered insights to deliver better patient care by:

- **Connecting providers and patients:** connectivity means providers can reach and support patients with flexibility using a variety of devices and exceed patient expectations by communicating via chat and email.
- **Enabling remote monitoring:** wearable technology can transmit patient data online, so providers can monitor patient progress remotely and identify risks with the help of AI insights.
- **Coordinating care while maintaining compliance:** with secure and compliant data, providers can more easily coordinate with other facilities for more effective care delivery.

By developing a modern data estate, providers deliver better care with universal digital connectivity, omnichannel patient experiences, personalization at scale, and AI-driven solutions.

Mount Sinai boosted collaboration between more than 10,000 providers to improve care with Microsoft Azure. In doing so, it will transform the state's Medicaid system by shifting compensation to a more patient-outcome-based model.



By 2030, providers will suffer from a projected shortage of 14 million workers worldwide.¹



A series of applications developed and hosted in Azure are allowing us to improve care coordination and chronic-disease management, which ultimately helps to improve population health.²

Deepesh Chandra,
IT Director,
Mount Sinai PPS (DSRIP)



Payors give members universal access to their health information

Payors have their own specific challenges that can be addressed by moving to the cloud. In one year, payors in the US spent about \$6.5 billion on 16 million extra hospital days due to infections that patients contracted in the hospital. Most people who cancel their insurance do so because of poor customer satisfaction, and poor chronic disease management causes increased readmission costs.

Migrating to the cloud can alleviate challenges like these by:

- **Giving patients access to data to improve member service:** self-service, secure portals centralize key health information for patients. They see which providers are in their network, receive relevant health alerts, access benefits and claims data, and get information to proactively maintain their well-being.

- **Delivering AI-driven customer service:** chatbot technology enables members to get answers quickly, which helps payors build brand loyalty through improved customer service.
- **Offering telemedicine:** providing care remotely via telemedicine lowers operational costs, opens up additional treatment options, and reduces unnecessary hospital stays. Not to mention providing a convenient option for patients receiving care.

Payors can leverage a modern data estate to give members anytime, anywhere access to their health information and help meet patient expectations.



With 24/7, cloud-based access to performance data from multiple areas of the healthcare system, our customers can optimize equipment use, control costs, and help enhance patient care and satisfaction.⁴

Neil Jordan,
*General Manager, Worldwide Health,
GE Healthcare*



Pharmaceuticals and life sciences monitor treatment effectiveness and engage customers

A new era of value-driven healthcare demands that drug manufacturers provide personalized, patient-centric treatments. With patents only lasting 15 years, businesses are rethinking investments in drug research and focusing on more tailored treatments to drive down costs. Patients demand real-world evidence to prove treatments are effective, requiring pharmaceuticals to focus on transparency and building trust, while maintaining strict regulatory compliance.

Migrating to the cloud creates value for pharmaceutical companies by:

- **Tracking treatment effectiveness:** by connecting to patient data, a patient's treatment compliance can be monitored to evaluate drug effectiveness and inform improvements.
- **Using machine learning insights to run more efficient trials:** data analytics generated from AI and machine learning give researchers quick access to key insights. Fast and frequent iterations in drug development result in quicker refinements during trials.
- **Automating laboratories:** cloud technologies streamline manual laboratory processes and speed up the time to market of new drugs.

By leveraging a modern data estate, pharmaceutical companies can optimize internal processes and improve patient outcomes.



Using Azure has dramatically accelerated both our acquisition time and our new product development time. We've been able to shut down older, inefficient datacenters and focus more resources on developing great software. This is one factor that moves us ahead in a very competitive market.⁵

Peter Tomlison,
Director of IS, Technology Operations,
Allscripts

Migrate the way you want with Microsoft Azure

Whether you decide to tackle cloud migration yourself or need assistance, Microsoft can guide you in developing your modern data estate.

Azure's flexible, hybrid cloud migration enables you to move data at your own pace, when it makes the most sense for your business. No matter which way you choose to migrate, you'll receive Azure's consistent, secure experience. Rest assured, Azure is protected with end-to-end security and compliance, backed by Microsoft.

Do it yourself

Get started by conducting an assessment of your data estate using the TCO (total cost of ownership) calculator. You'll identify priority areas that need to be modernized and have the information you need to start migrating to Azure on your own.

[Assess Azure migration cost savings with the TCO calculator](#) >

[Access all the tools and resources you need to migrate at your own pace](#) >

[Learn how to optimize your cloud data](#) >

Get assistance with your migration

Microsoft's FastTrack for Azure provides direct assistance from Azure engineering to help you get started and ensure successful migration. You'll get assistance to address gaps and add on digital transformation functionality for your business.

[Engage Microsoft FastTrack for Azure](#) >

[For managed service providers or systems integrators, find a Microsoft partner](#) >

¹ World Health Organization, [Global Strategy on Human Resources for Health. Workforce 2030](#), 2014.

² Microsoft Customer Stories, [Mount Sinai boosts collaboration between more than 10,000 providers to improve care with Microsoft Azure](#), 2017.

³ World Health Organization, [Health-care Associate Infections Fact Sheet](#).

⁴ Microsoft Customer Stories, [GE Healthcare delivers core customer solutions on the Microsoft Cloud](#), 2019.

⁵ Microsoft Customer Stories, [The Allscripts prescription for agility: lift and shift to the cloud](#), 2018.