

# From data to patient-centered care:

## AI-driven digital modernization improves health outcomes

### Introduction

The healthcare landscape is undergoing a rapid transformation, driven by emerging technologies, changing regulations, and the need to improve outcomes. As federal agencies work to modernize healthcare delivery and improve the overall health of the American people, new innovations are poised to deliver quality, patient-centric services and experiences.

### Challenges of today's healthcare landscape

Federal health agencies comprise a complex ecosystem. The stakes are high, and federal health agency programs and services impact nearly everyone, making modernization of agency systems both challenging and impactful. "These systems span from battlefield medicine to retirement benefits, and from rural clinics to huge data ecosystems. If we can get this right, we can improve nearly 90% of Americans' lives," said Barbara Keating, managing director of Federal Health at Maximus. Healthcare agencies are swimming in vast amounts of data but struggle with outdated legacy systems and a lack of integration – significant barriers to effectively using the data. Integrating modern solutions to harness a more seamless exchange of health data can speed progress from research, to policy, to care, and ultimately to improved health at the population level.



## Cloud & AI technologies offer transformational impact for healthcare

“With cloud and AI together, we’re at a point where we can do things that were never possible before,” Keating said. For example, agencies looking to achieve real-time public health surveillance using AI are integrating platforms to detect anomalies in claims data and disease trends, and even predict readiness across military forces.

These technologies are also enhancing customer experience, which has the potential to significantly impact the healthcare space. Healthcare delivery involves many communication touchpoints between patients, caregivers, providers and staff. Advanced, secure, AI-powered platforms and solutions hold the key to modernizing the customer experience (CX) for all parties.

Cathy Muha, senior director of customer experience for Federal Health at Maximus, described four ways industry and government can prepare to support faster patient-centered healthcare modernization and better CX:

- 1** Invest in digital infrastructure that enables seamless integration of care across physical and virtual spaces.
- 2** Overlay customer experience and health literacy to improve patient engagement while tracking outcomes.
- 3** Focus on integrated care models to address specific conditions within the population.
- 4** Develop frameworks to support the adoption of AI while ensuring patient privacy and data security.

“When patients and caregivers have full information as well as access to continuity of care, that’s holistic health which leads down the line to improved outcomes,” Muha said. “Our goal is helping people live longer, fuller, healthier lives.” Automation and AI are simplifying tasks related to collecting, organizing and analyzing mass amounts of data. They bring the speed and clarity necessary to produce accurate, real-time insights and drive better evidence-based decision making. This not



only enhances individual patient experiences but can also result in population-level health improvements.

As Muha emphasized, AI is not a replacement for human connections that are so integral to healthcare. Instead, it can help relieve the burden of time-consuming administrative tasks, resulting in more time for those connections, and provide insights to strengthen patient-provider relationships.

From a security perspective, AI can help protect sensitive data while detecting fraud, waste and abuse. Centers for Medicare and Medicaid Services (CMS), for example, is currently using AI to flag suspicious billing patterns, and Keating said the next step will be using AI to catch and stop fraud before bills get paid. Such advancements have major financial implications for patients, providers, and the government as a whole, which **loses hundreds of billions annually** due to fraud.

### **Achieving patient-centered health care modernization**

“Across the government, technology-driven CX improvements are being built on a foundation of human-centered design. In the healthcare space, that narrows more specifically to patient-centered design,” Muha said. This means collecting information about patient experiences, such as patient satisfaction data or access to care, and using it to improve overall outcomes.

“Good health now goes way beyond that office visit or clinic visit and includes personalized online programs, health portals, the convenience of on-demand video visits with the care provider, online symptom management, virtual wellness programs – there’s a huge growth in these areas,” Muha said. By using Muha’s four recommendations as a framework, agencies can ensure positive patient experiences are at the center of that modernization.

**A modern digital infrastructure supports integration of care.**

Sophisticated CX solutions like **Maximus Total Experience Management (TXM)** are powered by AI and leverage industry-leading cloud services as well as advanced analytics to deliver seamless, personalized experiences



with omni-channel communication. FedRAMP authorization provides assurance that sensitive patient information will be kept private and secure throughout the care lifecycle. Integrating all visits, touchpoints and platforms within a connected human and digital care team will result in better care and improved health literacy. It largely boils down to making it easy for patients to be in control of their health, to access care, and to follow their care provider's recommendations.

**When customer experience and health literacy are prioritized, engagement and outcomes improve.**

This results in a unified picture of an individual's overall health, which can lead to greater personalization of care. Not all patients and populations have the same needs – for example, the transplant community has different and specific needs from the rest of the population.

**Integrated care models ensure all members of a patient's care team have complete knowledge of special concerns or conditions impacting that individual.**

"Having a single source of truth with everything connected makes it so much easier to provide better care," Muha said. "That's why there's a strategic shift toward intelligence-driven customer experience that is driving a much faster deployment of adaptive and proactive insights."

### **Driving compliant innovation**

Much of the emphasis on federal customer experience and patient-centered design is influenced by rising expectations based on interactions with private-sector service delivery. Industry partnerships are essential to introducing private-sector quality experiences to the public sector landscape, but innovation in government comes with unique guardrails. Keating highlighted the concept of "compliance-by-design." Rather than trying to fit a new solution into the regulatory box after development, industry partners should keep compliance at the forefront throughout the process, creating



something that is already compliant with government regulations. "Working with the government is co-innovation – participating in regulatory sandboxes," Keating said, or live testing environments described as safe spaces for testing "innovative products, services, business models and delivery mechanisms without immediately incurring all the normal regulatory consequences." These regulatory sandboxes "work in agile sprints using FedRAMP and authorized tools, and work with security teams alongside the product development and implementation cycles," Keating explained. "You have the R&D track for rapid experimentation and a regulatory track focused on

documentation, traceability and audit readiness. The entire process is done in tandem." Innovative technologies can only support progress if they are built on a foundation of robust compliance and cybersecurity.

Agencies can use this approach to ensure that AI is adopted within clear policies and frameworks that keep patient privacy and data security top of mind.

With the right processes in place, industry and government can work together to navigate the hurdles and guardrails that have previously slowed healthcare modernization. Ultimately, these advancements in technology are all aimed at a very human-centric goal: improving health outcomes for all.



Learn more about how Maximus can support federal healthcare modernization and enhance patient experiences.

