

Artificial Intelligence Is Transforming Health & Benefits

October 2023

By The Insights & Innovation Lab for People Solutions



Artificial intelligence (AI) has tremendous potential to transform business processes, and it will have a dramatic impact on the future of work. The business case for using AI technologies in health and benefits is slowly emerging based on the potential to create enhanced analytics, drive administrative efficiencies, and improve employee and clinician decision-making.

In this article, we will explore several potential use cases for various types of AI technologies that Lockton is paying attention to, including:

MEMBER ENGAGEMENT

Increasing personalization and targeting communications

ENHANCED ANALYTICS



Predictive and prescriptive analytics that help employers identify high-value opportunities and prioritize actions

HEALTHCARE DELIVERY

Supporting timely triage, diagnosis, and treatment and enabling better employee decision-making



ADMINISTRATIVE EFFICIENCIES

Simplifying tasks and automating routine processes

TO BETTER UNDERSTAND THE APPLICATION OF AI IN HEALTH

AND BENEFITS, we start with some fundamental questions about whether this technology is truly intelligence or just a probabilistic machine making predictions about the next most likely action. On the one hand, while generative AI tools have been trained to pass the U.S. medical license exam, further evaluation shows a higher tendency for response errors that could lead to patient harm. On that basis, generative AI cannot take the place of clinician judgment and, in that sense, is not truly intelligence. However, other researchers have shown that AI can increase accuracy in diagnosing patients through its ability to analyze complex data and make predictions. In addition, AI can be used to develop predictive and prescriptive analytics that will help employers identify and solve for their biggest cost issues.



As a probabilistic machine, this technology may be best at improving member engagement by personalizing and simplifying support to improve employee benefits navigation and helping employees make better decisions about their health. Research indicates that less than half of employees understand their benefits and more than two-thirds have challenges when it comes to accessing and scheduling care. In addition, physicians lack the tools to help patients with healthcare navigation and decision-making. Al technology can further enhance the clinicians' knowledge base to free up time to better understand their patients' unique needs and circumstances. Considering how healthcare systems are currently struggling with high administration costs and labor shortages, this could be a welcome solution.

Consumers, meanwhile, are increasingly looking for flexible, 24/7 care anywhere services. To efficiently meet that demand, generative AI chatbots may be trained in ways that deliver real-time support for employees in need. As employees embrace virtual solutions, the distinction between asynchronous texting and chatbots will blur. For employers, it's important to recognize that virtual care has taken a long time to gain a foothold, with adoption accelerated by the COVID-19 pandemic. In the same way, generative AI-enabled chatbots in healthcare may still have a long road to gaining consumer trust and acceptance. Ultimately, the future of generative AI in health and benefits will depend on the system's ability to use technology that creates a more efficient, timely, and highly personalized experience for clinicians and patients.

In this era of big data, employers need increased transparency and access to real-time data analytics to drive decisions about how to manage their plans. As the healthcare industry moves from fee-for-service payments to a value-based approach to care delivery, the need for data multiplies. Enhanced data analytics can help employers optimize plan spend by targeting needs within their population, conducting proactive payment integrity reviews, and spotlighting emerging cost trends, for example. For leading-edge employers that can integrate human capital data and healthcare data, prescriptive analytics can enable decision-makers to model multiple "what if" scenarios to assess the impact of choosing one action over another and make better decisions to optimize their plans.



Creating administrative efficiencies in healthcare

The U.S. spends nearly \$4 trillion on healthcare annually, and administrative costs account for <u>up to 30%</u> of this figure. Clinicians spend significant time on administrative work, including entering data into electronic medical records and jumping through hoops with insurance companies for prior authorizations and billing issues, along with countless other tasks. Given this burden, it's no wonder that physicians typically spend less than seven minutes speaking to each patient about their symptoms and far less time truly understanding their unique needs. AI can help simplify this complexity and potentially drive down costs.

For example, AI can be used to improve the health plan prior authorization (PA) process. For some specific procedures, a physician must seek permission from an insurance company before scheduling a patient's visit. Physicians and their staff spend almost two full business days each week on PAs, and often patients, payors, and providers get involved when approvals do not go smoothly. Generative AI can mine electronic health records (EHRs) for necessary data and provide evidence-based recommendations about the benefits of a provider-requested treatment option. While providers will still review the information and make the final call, AI can help reduce the time required for each PA.

In a different way, health plans are also using technology to automate some of their decision processes related to claims adjudication. This has come with increased scrutiny around automated denials of care, and several insurance companies are currently being sued because of their use of automated denials without clinician involvement. The insurance company involved in the lawsuit stated that the technology in question does not use artificial intelligence to review claims and these auto-adjudicated decisions are intended to screen out commonly excluded services to align provider billing with standard medical policy determinations. However, there is concern from some patients and providers about the lack of oversight regarding coverage and payment determinations. Ultimately, the question of how AI can promote greater efficiencies will depend on how the technology is trained and the roles within healthcare that it will be designed to augment.

Al also has tremendous potential to support patients and doctors to improve diagnosis and treatment options. For example, AI tools are being trained to read MRIs and other advanced diagnostic imaging studies to increase the quality of the report and enhance clinician decision-making. In the future, enhancements in AI-enabled diagnostics, combined with clinical documentation within EHRs and increased collaboration between health plans and health systems in adopting AI technologies, could lead to streamlined processes. This could drive administrative efficiencies in healthcare and ultimately reduce systemwide costs.

Increasing adoption & member engagement

As we consider consumers' readiness for using AI for health and benefits decisions, we can look to the consumer adoption curve for virtual care. While virtual care has been around for decades, consumer adoption did not take off until the pandemic. Pre-pandemic utilization was only around 1%, but by 2022, it jumped to <u>more than 14%</u>, according to McKinsey. Therefore, we can't expect consumers to willingly adopt a new technology to support clinical decision-making without some other catalyzing event.

Patients place tremendous trust in their clinicians' judgment and value interpersonal contact when making decisions about their health. Yet, when the pandemic made virtual care essential, utilization spiked and continued to remain elevated among specific consumer groups and within specialties such as mental health. As society reopened, we saw patients return en masse to in-person clinician interactions for most other services.

One important question, however, remains: Will patients trust the recommendations they receive from AI tools as much as they trust their doctors' advice?



Increasingly, patients are concerned about access to care, and reports about the growing shortage of primary care and behavioral health providers highlight the gap between supply and demand for services. We have grown accustomed to next-day deliveries, streaming content, and other types of always-on, 24/7 services, and healthcare will surely need to follow. With no end in sight to the supply side challenges of educating and training new clinicians, AI technologies will become increasingly necessary to balance the demand for services.

At the same time, consumers are more likely to use digital health and remote monitoring devices as they become more comfortable with receiving healthcare services at home. Health systems and health plans are launching remote patient monitoring platforms and devices along with at-home testing and technology to deliver more convenience and meet the demands of consumers. As a result, health systems and health plans will need to create efficiencies through technology to keep pace with consumer demand for services.

One important question, however, remains: Will patients trust the recommendations they receive from AI tools as much as they trust their doctors' advice? Much has been made about a recent article in JAMA that tested the ability of an AI-enabled chatbot to provide accurate and empathetic answers to patient questions. In fact, the research showed that the chatbot was more empathetic than the clinician's responses to the same questions. Even so, recent consumer research shows that 80% of respondents would still prefer to receive advice from a medical professional for decisions like prescribing medications or when to go to an emergency room.





Building trust through transparency

Until recently, AI was known by researchers and scientists but out of reach for most people. But hundreds of millions of people now have easy access to tools like ChatGPT, which is helping the masses slowly become more comfortable working with AI technology. More and more AI technologies have also been validated by clinical trials, which add to the body of evidence for their use in healthcare. In addition, the ACA Transparency in Coverage Rule has made more data on healthcare prices available, thus increasing access to critical information to help employers manage their plans. Given provider staffing shortages and the potential for AI tools to increase productivity and drive efficiency in healthcare, we may not be able to meet patient demand in the future without AI. Ultimately, however, our ability to achieve these gains through AI will be limited by the pace of adoption by employers, patients, and providers.

To increase trust, we need more transparency about data sources as well as how and where AI tools are being applied. This may require increased regulations and external auditing of the process, including evaluating source data and relevant applications to mitigate any potential for bias. Further research is needed to inform the regulatory framework and increase our understanding of the security, privacy, and compliance aspects of any new tools or technology.



UNCOMMONLY INDEPENDENT