

AI Use Cases for Healthcare

Using AI to drive impact across the healthcare journey

Healthcare organizations have faced a range of challenges in recent years, between staff shortages, burnout, and operational inefficiencies. In a field where people are the core of the work, providers have a unique opportunity to use generative AI to keep the people—patients and care teams—front and center.

According to IDC, generative AI usage jumped from [55% in 2023 to 75% in 2024](#), and businesses are realizing its

value, too: for every \$1* spent on generative AI projects, the healthcare industry generates an average of [3.3x ROI](#). That's because the technology frees up teams to focus on engaging with patients and providing exceptional care instead of managing administrative burden.

* \$ refers to the US dollar (USD).
Source: IDC, sponsored by Microsoft, "2024 Business Opportunity of AI," IDC #US52699124, November 2024.



STREAMLINE

workflows and care documentation

With ambient and voice-enabled AI solutions, providers can automate tasks like clinical documentation, surfacing information, and automating tasks to help alleviate the administrative burden on clinicians. Because these solutions can automatically capture the full patient story—and scale across care settings, languages, and devices—that frees up clinicians to worry less about capturing notes and focus more on building patient relationships.

Business outcomes

- Reduced documentation time
- Improved clinician experience
- Accuracy of clinical documentation

Solutions

- [Microsoft Dragon Copilot](#)



BUILD

a more engaging patient journey

Providers can empower patients to take an active role in their health journeys through AI-enhanced tools, where they can easily access health information, schedule appointments, and communicate with their care team. By digitally meeting patients where they are, providers can deliver more efficient care and drive better health outcomes.

Business outcomes

- Higher patient retention rates
- Improved patient satisfaction scores
- Boosted patient loyalty and profitability

Solutions

- [Healthcare agent service in Microsoft Copilot Studio](#) (public preview)

Success stories

- [Kry](#)
- [Providence](#)



ACCELERATE

clinical report creation

With generative AI, clinicians—like radiologists—can automatically draft impressions and recommendations, cutting down the time it takes to create reports. Not only does this reduce stress on clinicians, but it can also improve the quality of the reports: by leveraging AI models, radiologists can analyze multimodal data for more comprehensive insights, improving diagnostic accuracy and speed.

Business outcomes

- Faster report turnaround time
- Higher radiologist job satisfaction
- Improved patient care and health outcomes

Solutions

- [PowerScribe Smart Impression](#)
- [Healthcare AI models](#)

Success stories

- [Paige.AI](#)
- [Quantum Radiology](#)



ENHANCE

the care team experience

Generative AI helps reduce administrative burden—and the risk of burnout—for healthcare teams in their day-to-day work. From appointment scheduling and documentation to data analysis, clinical and non-clinical teams alike can use AI to save time on tedious tasks so they can focus more on caring for patients.

Business outcomes

- Higher operational efficiency
- Increased team engagement
- Improved patient satisfaction and health outcomes

Solutions

- [Microsoft 365 Copilot](#)

Success stories

- [Teladoc Health](#)
- [Barnsley Hospital](#)



GENERATE

insights from unified healthcare data

By unifying hybrid and multi-cloud data estates with AI, providers can democratize and transform their analytics at scale. And as they uncover deeper insights, they can identify care gaps faster for early intervention, develop more tailored care plans, improve the accuracy of diagnoses, and allocate hospital resources more effectively.

Business outcomes

- Better patient health outcomes
- Optimized resource utilization
- Higher quality data

Solutions

- [Microsoft Fabric](#)
- [Healthcare data solutions in Microsoft Fabric](#)
- [Copilot for Power BI](#)

Success stories

- [Shriner's Childrens](#)
- [Canary Speech](#)



For a deeper dive into how other industries are using AI, explore the [AI Use Cases for Business Leaders e-book](#). Ready to kick-start your own AI transformation and deliver more meaningful outcomes?

Get started with Microsoft Cloud for Healthcare