Microsoft

AI and Healthcare

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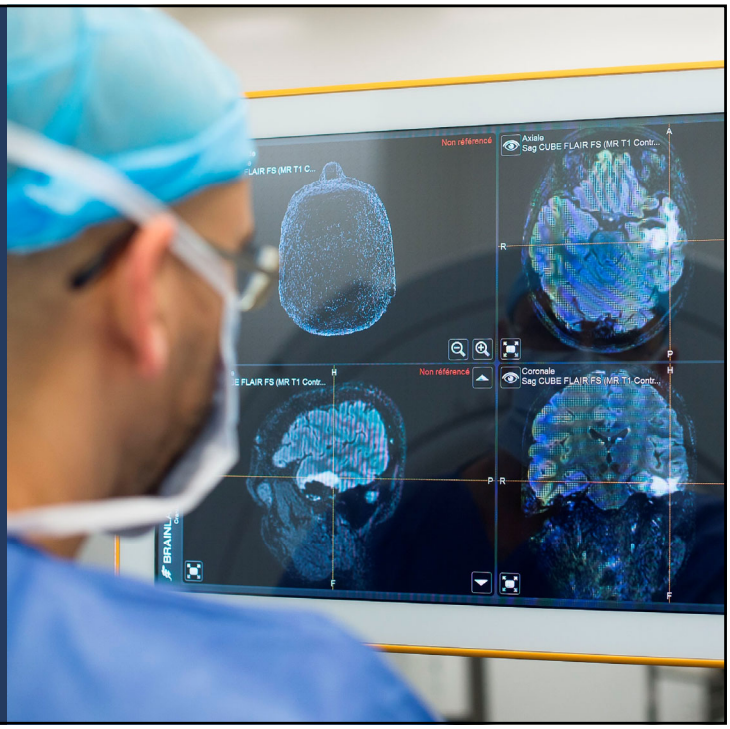

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...helping to solve some of healthcare's biggest challenges

Optimized Cloud & AI platform delivering unmatched clinical and financial outcomes to the healthcare industry – Helping our clients be the best place to **Provide Care** and Receive Care while **Improving Financial Integrity** and **Supporting Clinical Research**

Improve **Access to Care** and **Clinician Experience**

Enhance the **Patient Experience**

Drive **Better Clinical Outcomes** through the early detection and **personalized treatment** of disease

Lower the Cost of healthcare while optimizing **Appropriate Reimbursement**

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With a few notable exceptions, most generative AI technologies have existed for several years...

2015–2020

Compute used to train these models increased by 6 orders of magnitude surpassing human performance benchmarks in many areas

2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024

2017

A landmark Google Research paper describes transformers

2018–2019

Google open-sourced BERT (Bidirectional Encoder Representations from Transformers) adopted in its search algorithm

2022–present

Compute is better, faster, cheaper. Game changing apps as platform layer are solidifying. Access trends to free and open source

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Remember: The model is NOT the application

The large language model is a type of artificial intelligence model that can recognize, summarize, translate, predict and generate text and other forms of content based on knowledge gained from massive datasets.

It is not an application in itself, but rather a tool that can be used to create applications for various purposes such as search engines, natural language processing, healthcare, robotics, and code generation.

Characteristics of companies that win with AI

Leader-led transformation

Maximized use of data

Willingness to change

What can leaders do… to better understand AI and the potential application of AI?

The costs of a broken system

ADMINISTRATIVE BURDEN

50% of clinicians' time is spent on documentation.

3-5% revenue loss due to insufficient documentation.

BURNOUT AND PHYSICIAN SHORTAGE

40-60% physicians are experiencing burnout, costing the industry **$4.6B** a year.

The Health & Human Services predicts a shortage of **90,000** physicians by 2025.

SUBOPTIMAL PATIENT EXPERIENCE

It takes **26 days** on average to get an appointment.

75% of patients wish their healthcare experience was more personalized and **61%** would visit their doctor more if it was·

POOR FINANCIAL PERFORMANCE

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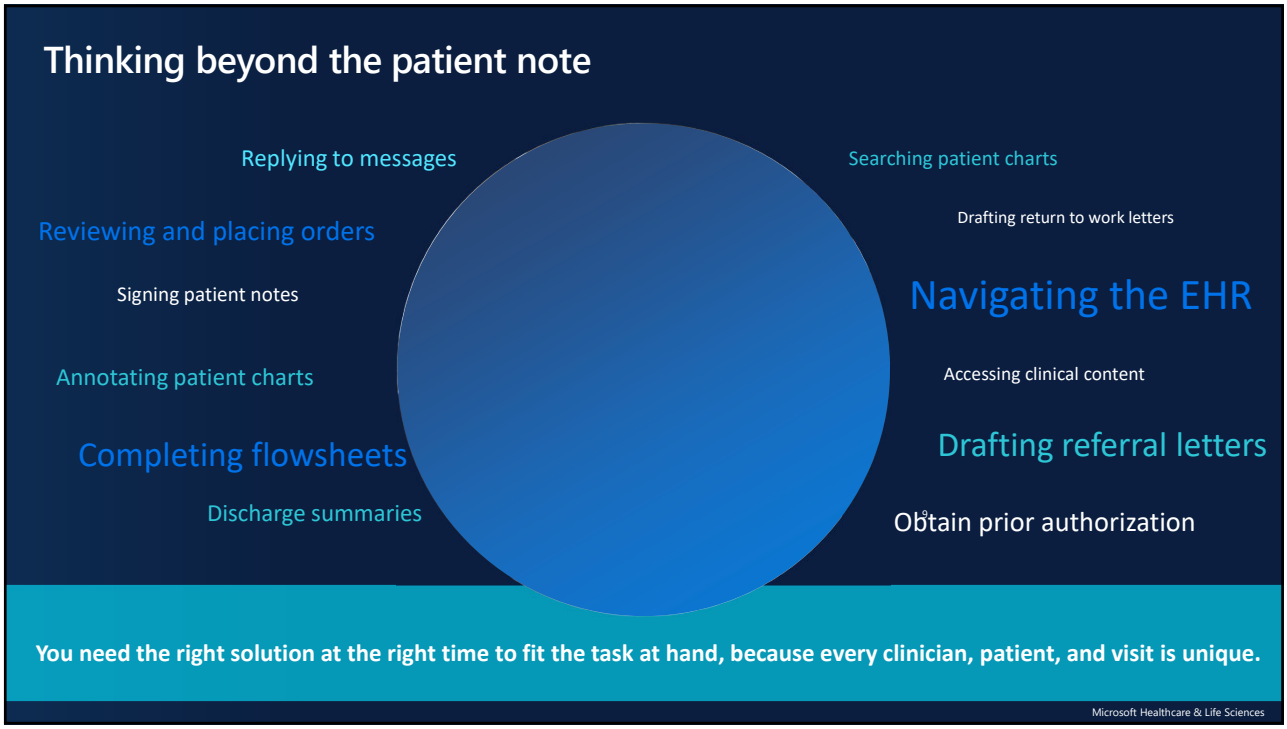
The best outcomes rely on:

- Automating repetitive, time-consuming tasks with AI
- Empowering clinicians to document virtually anywhere and personalize AI-generated content
- Helping clinicians navigate the systems they use every day and efficiently retrieve information

Supported by a reliable, secure infrastructure that's always available


Thinking beyond the patient note
Replying to messages
Reviewing and placing orders
Signing patient notes
Annotating patient charts
Completing flowsheets
Discharge summaries
Searching patient charts
Drafting return to work letters
Navigating the EHR
Accessing clinical content
Drafting referral letters
Obtain prior authorization
You need the right solution at the right time to fit the task at hand, because every clinician, patient, and visit is unique.
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Real-world outcomes delivered at scale

7 MIN ↓
saved per encounter and **50% less time** spent on documentation[1]

5 ↑
additional appts added on average per clinic day[2]

3 of 4 ↑
physicians state documentation quality improves[3]

85% ↑
of patients say their physician is more personable and conversational[4] and **82%** say they spend less time on the computer[5]

70% ↓
reduction in burnout and fatigue and **28% less time** spent on after hours documentation[6]

40% ↑
increase in first-time approval for prior authorizations[7]

100M ↓
fewer clicks per day saves thousands of hours[8]

$100-500k ↑
incremental revenue potential per provider, per year[9] (varies by specialty)

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Staying aligned with the evolving patchwork of AI regulations

"…Consider legislation that both supports further deployment of AI on health care and implements appropriate guardrails and safety measures to protect patients, as patients must be front and center in any legislative efforts on health care and AI.

This includes consumer protection, preventing fraud and abuse, and promoting the usage of accurate and representative data…"

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The anatomy of the Responsible AI Standard

Principles > Which **enduring values** guide our responsible AI work?

Goals > What are the **outcomes** that we need to secure?

Requirements > What are the **steps we must take** to secure the Goals?

Tools and Practices > Which **aids** can help us meet the Requirements?

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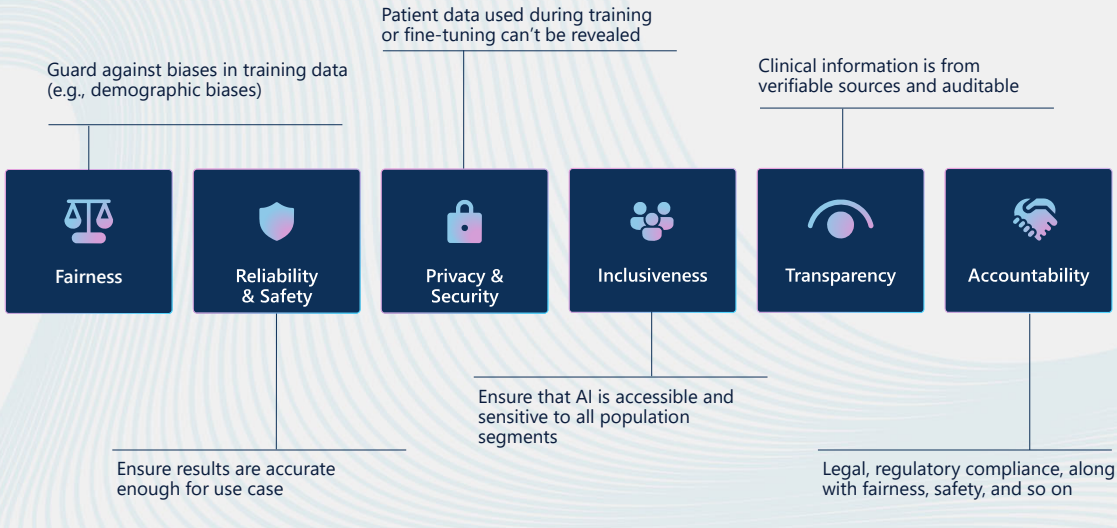
Responsible AI



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Thank you

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