

GPT in Epic: Pilot Overview

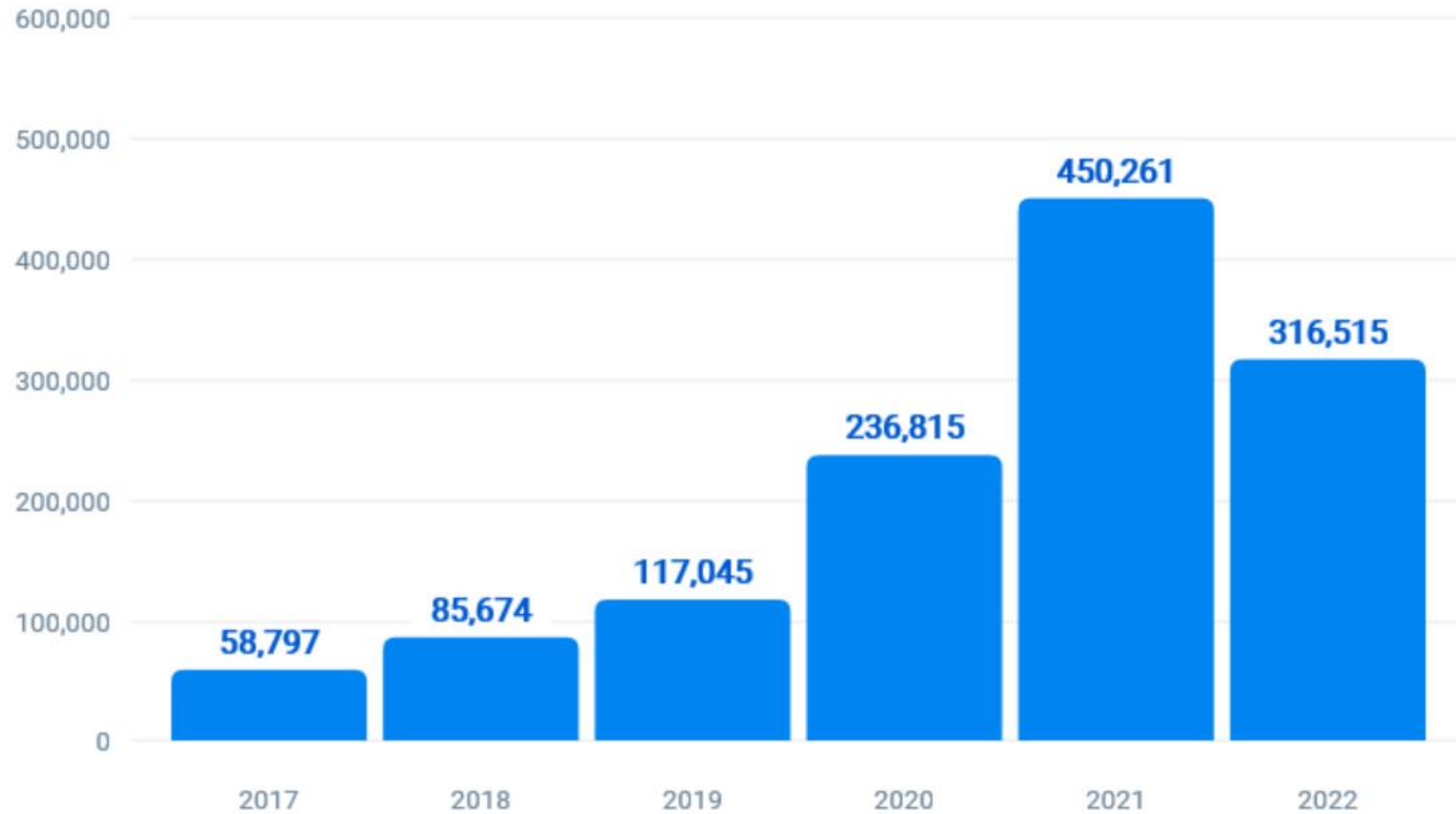
Marlene Millen, MD, Ambulatory Chief Medical Information Officer



Number of Patients sending MyChart Encounters



Between 1/1/2017 and 12/31/2022 by year



Solving a Real-World Problem



Special Reports > Exclusives
Are Doctors Drowning in Inbox Overload?
— The slow simmer of non-stop messaging boils over during the pandemic
by Sophie Putka, Enterprise & Investigative Writer, MedPage Today September 22, 2021

AMA | STEPSforward

EHR Inbox Management Tame Your EHR Inbox

Learning Objectives

1. Implement standard workflows for message routing
2. Decide which team members should be responsible
3. Create filters to separate inbox signal from noise

EHR/HEALTH IT, INFORMATION, PHYSICIANS

MyChart Messages the Wild West of Patient Communication

OCTOBER 2, 2021 BY BRYAN VARTABEDIAN · READING TIME: 6 MINUTES

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What physicians, patients think of charging for MyChart messages

Laura Dyrda (Twitter) - Friday, November 18th, 2022

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Cleveland Clinic's plan to charge for MyChart messages requiring clinician time and expertise has been met with mixed reviews from physicians and patients.

Cleveland Clinic began charging for messages requiring clinicians to make clinical assessments, medical decisions or medical history reviews that would take more than five minutes. The charges are often covered by insurers, but patients face up to \$50 charges without coverage.

Medicare patients without secondary insurance may see \$3 to \$8 fees, according to Cleveland Clinic. The new fees went into effect Nov. 17. Some physicians and patients support the charges while others argue it will limit access to care.

"I don't think that it's fair to be charged just for communication, especially with all the other things we already have to pay for," Kya Perry, a Cleveland Clinic patient, told public radio station WKSU. "It sounds silly to me that you would have to be charged to use an app."

Another patient, Brynna Fish, told cleveland.com she was initially annoyed by the charges but then realized she was getting the same information she would get during a billed telehealth visit.

"I'm asking a question related to my health or a medication and the doctor is answering me; it seems to me totally legitimate to bill," she said. "It's actually saving money because I don't have to make an appointment and go in and discuss this certain thing with the doctor."

JAMA Internal Medicine (accepted Feb, published April 2022)

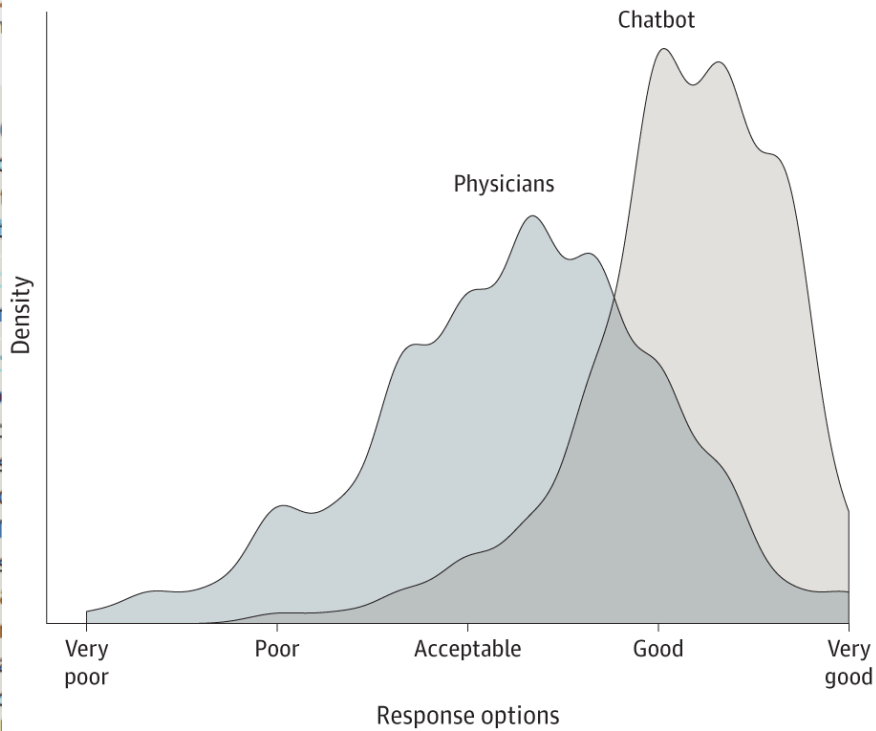


JAMA Internal Medicine | Original Investigation

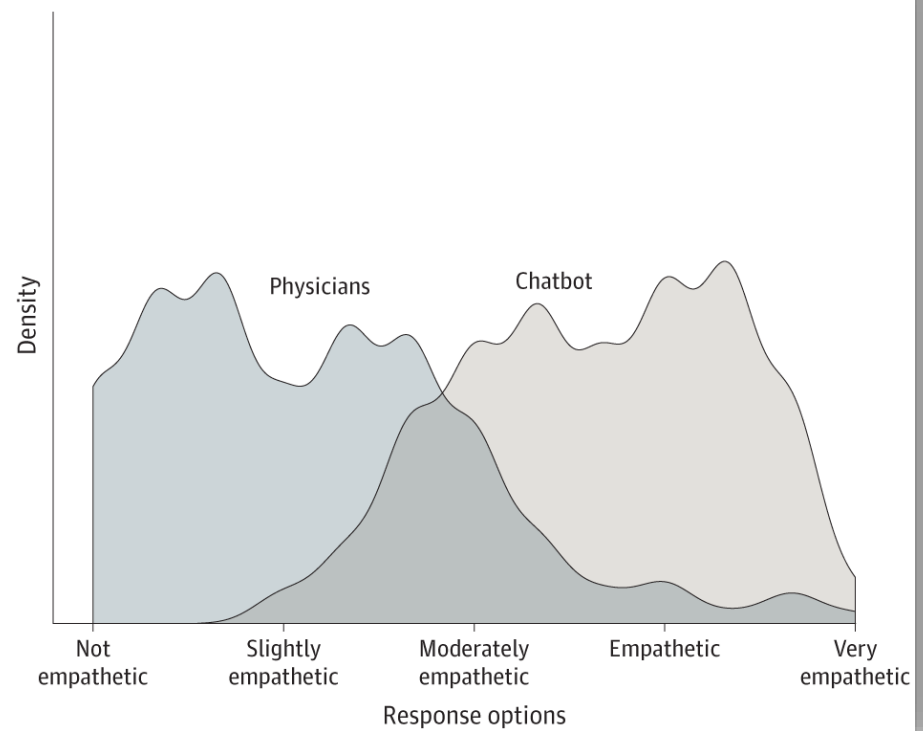
Comparing Physician and Artificial Intelligence Chatbot Responses to Patient Questions Posted to a Public Social Media Forum

John W. Ayers, PhD
Jessica B. Kelley, MD
Michael Hogarth, MD

A Quality ratings



B Empathy ratings



IMPORTANT
messages c
Artificial in
questions b
OBJECTIVE
2022, to pr
DESIGN, SET
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23, 2022. T
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bedside ma
empathetic
compared

UC San Diego Health GPT Epic Pilot live in production on April 14th Announced publicly April 17th

HEALTH TECH

HIMSS23: Epic taps Microsoft to integrate generative AI into EHRs with Stanford, UC San Diego as early adopters

By Heather Landi · Apr 17, 2023 11:00am

Microsoft Epic generative AI electronic health records (EHRs)

...with the patient at the heart



Modern Healthcare

NEWS DIGITAL HEALTH OPINION EVENTS & AWARDS MULTIMEDIA DATA CENTER

April 17, 2023 11:06 AM

Epic, Microsoft bring GPT-4 to EHRs

BROCK E.W. TURNER

TWEET SHARE SHARE


HEALTH TECH, SYN

Epic to Integrate GPT-4 into Its EHR Through Expanded Microsoft Partnership

Epic is welcoming generative AI's entrance into healthcare. The company is expanding its existing collaboration with Microsoft by integrating OpenAI services, such as GPT-4, into its EHR. The partners have already begun piloting OpenAI services at a few health systems, including UC San Diego Health, UW Health and Stanford Health Care.

By KATIE ADAMS

Post a comment / Apr 18, 2023 at 3:50 PM



MedCityNews

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By KATIE ADAMS

Post a comment / Apr 18, 2023 at 3:50 PM

Generated Draft Reply MyChart Pilot

What: MyChart Messages

Who: Pilot then trial with Physicians to see if helps with wellness

How: Using AI through Microsoft Azure to look at information in patients' chart and uses a prompt to generate a draft reply that requires editing prior to sending to patient.

When: Ongoing with 16 doctors- expansion date 6/26/23

Categories Of Responses

- Refills
- Results
- Paperwork
- General Questions

Generated Draft Reply

Pioneering Feature

What is this?

A draft reply is a first draft of a response to a patient's message created by a machine learning model. The provided text is not intended to diagnose, prescribe treatment, or serve as a substitute for clinical judgment; review and update the response before sending it to a patient.

✓ Accept

The screenshot displays a medical messaging interface. On the left is a navigation sidebar with categories like 'My Open Charts', 'My Open Encounters', and 'Staff Message'. The main area shows a list of messages with subjects like 'Blood Tests', 'Sleep Study', and 'Rash'. A patient's message is selected, showing a question about blood test results. A 'Generated Draft Reply' is shown, providing a response about the results and scheduling a CT scan. The interface includes a 'Pioneering Feature' label and a 'Start with Draft' button.

Subject	Status	Date	Time
Blood Tests	Pend	03/09/2023	2:46 PM
Sleep Study	Read	03/01/2023	1:28 PM
Rash	Read	03/01/2023	1:24 PM
Tiredness	Read	03/01/2023	1:24 PM
Coughing	Read	03/01/2023	1:24 PM
Work Letter	Pend	03/01/2023	1:23 PM
Sore Throat	Read	03/01/2023	1:22 PM
Results	Read	03/01/2023	1:21 PM
Question	Read	03/01/2023	1:21 PM
Quick Question	Read	03/01/2023	1:20 PM
Next Visit	Read	03/01/2023	1:20 PM
Asthma	Read	03/01/2023	1:19 PM

PCP: Drew Walker, MD
Primary Cvg: None

Generated Draft Reply Pioneering Feature

Hello Barbara,

Your CBC with Auto Diff result from 3/7/2023 is within the normal range and does not indicate any cause for concern. Your provider will contact you if any further action is needed. Your results are available for viewing in MyChart, under the "Test Results" tab.

If you have any further questions or concerns, please do not hesitate to contact us.

Best regards,

[Learn more](#) [Start with Draft](#) [Start Blank Reply](#)

Did you find the draft reply helpful?

This was helpful This was not helpful

Blood Tests (Newest Message First)

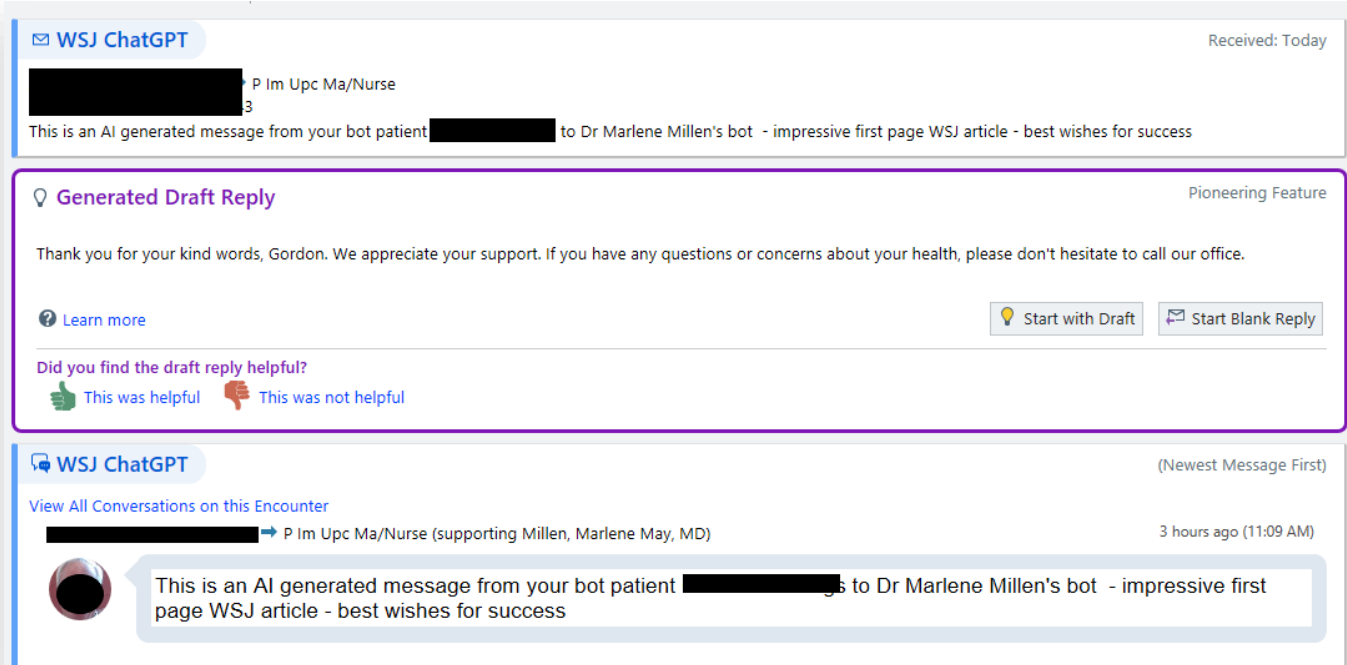
→ P Mychart Messaging Pool (supporting You) 21 hours ago (2:55 PM)

Hi Dr Walker,
Regarding my blood test results: Do I need to be concerned about my RBC, Hematocrit, Hemoglobin numbers being high? It seems they have been creeping up over time so I am concerned what this means and if it's heart related.

I've scheduled my CT Calcium Score for next week, but keep worrying about these results.

Thanks!

Early Results - Examples



Early Results - Anecdotes

- Working better for PCP's than for specialists
- Sign off signature automated based on who is sending reply rather than who received it
- Request for a template for messages that do not meet criteria to help speed up reply
- Patients are receptive – We include a line in each generated reply:

“This message was automatically generated and edited by @me@”

@me@ brings in who is editing and sending the message

Next Steps

- GPT4 start date June 15
- Pilot expansion to primary care June 27, 2023 with trial to see outcomes in time and burnout
- Continue to get feedback from providers, patients
- AI governance in patient care
- Cost for the Review of the patient data through Microsoft