

AI Chatbots in Healthcare: Understanding Patient Mindsets and Effective Communication Strategies

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Abstract

AI chatbots are increasingly being deployed across healthcare systems to streamline patient communication, triage, and education. However, public perception remains deeply divided, ranging from optimism to skepticism to outright resistance. This paper uses the Mind Genomics platform, BimiLeap, and its AI tool, IdeaCoach, to identify three distinct mindsets about AI chatbot use in healthcare. We explore how these mindsets respond emotionally and cognitively to different types of AI messaging, and we provide physicians with concrete strategies for communicating with patients according to their underlying mindset. By personalizing these conversations, medical professionals can improve patient trust, optimize engagement, and reduce resistance to digital innovations.

Keywords: AI Chatbots, Mind Genomics, Personalized Messaging, physician-patient Interaction.

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Introduction

The healthcare industry continues to embrace artificial intelligence, particularly through AI chatbots that assist with routine communication, symptom triage, and post-care instructions [1]. Yet the rollout of such technology has been met with mixed reactions by the public. Some welcome speed and efficiency, while others worry about privacy, empathy, and the replacement of human interaction [2]. Medical professionals are often left in the middle—needing to explain these tools to patients while balancing empathy, credibility, and clarity [3]. This paper leverages a national study of over 100 respondents to uncover underlying mindsets about AI chatbots and recommends personalized messaging tactics for clinicians.

Three Distinct Mindsets

Our analysis revealed three psychological mindsets that shape public opinion toward AI chatbots in medicine:

Mindset 1—Enthusiasts: These individuals embrace AI as a time-saving tool. They see

chatbots as efficient assistants that reduce wait times and free doctors to handle complex care, and they often advocate for AI use in healthcare [1, 4, 5]. Enthusiasts view AI as a transformative force in improving healthcare efficiency and accessibility, emphasizing its potential to streamline administrative tasks and support clinical decision-making [5, 6].

Mindset 2—Skeptics: This group is cautiously open to AI but needs reassurance. They worry about reliability, data safety, and human oversight, and want transparency and control over its use [6-9]. Skeptics are concerned about the accuracy of AI-driven medical advice and the security of personal health data, often seeking clear evidence of safety and accountability before fully embracing AI technologies [4, 9].

Mindset 3—Traditionalists: Traditionalists believe healthcare should stay deeply human. They fear losing empathy to automation and resist change because they value the doctor-patient relationship and emotional connection

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[2, 3, 10-12]. This group prioritizes patient-centered care and the humanistic aspects of medicine, expressing concerns that AI could erode trust and emotional bonds critical to effective healthcare delivery [13-17].

Coaching the Medical Professional

A physician’s language can determine a patient’s willingness to use AI systems [6, 7, 10]. Explanations should be tailored to each mindset, recognizing their emotional starting points and cognitive filters [12, 13, 15]. Table 1 below shows an example of AI-generated phrases that clinicians can use, organized by the three patient mindsets.

Table 1: Clinician phrases by mindset

Mindset	Scenario	Effective Language to Use	Why It Works
Enthusiasts	Introducing a new AI chatbot in your clinic	“This tool helps you skip phone queues and get answers in seconds. It frees up our team to focus on more personal care.” [1, 4, 5]	Appeals to their appreciation of speed and efficiency [5, 6].
Skeptics	Recommending chatbot use for follow-up questions	“It’s optional, and everything is overseen by our team. You’ll always have the final say.” [6, 7, 9]	Respects their desire for human oversight and control [4, 9].
Traditionalists	Explaining why AI might handle appointment scheduling	“It’s just a tool to save time—our team is still here for you, always.” [3, 12, 14]	Preserves the feeling of human-centered care while softening automation [10, 11, 17].

The Growing Role of AI Chatbots in Healthcare

AI chatbots support triage, symptom checks, reminders, scheduling, and education—offering 24/7 access and reducing staff burden [1, 5, 7]. They provide patients with convenience, privacy, and fast information, and help expand access in underserved systems [2, 4, 6].

Yet successful integration requires more than technical optimization. Chatbots must be embedded in a framework of communication that feels trustworthy, respectful, and adaptable to individual patient preferences [8, 13, 15, 16]. This is where mindset-based messaging strategies offer their greatest value [3, 10, 12].

“Fly on the Wall” Conversations: Addressing AI Tension Through Mindset-Based Communication

AI can strengthen or strain patient trust [6, 9, 17]. Table 2 presents simulated doctor-patient conversations for each mindset, revealing both spoken concerns and private thoughts, followed by suggested physician responses to build reassurance [13, 15].

Table 2: Doctor–patient dialogues by mindset

Mindset	Patient (Says)	Patient (Thinks)	Doctor (Says)	Doctor (Thinks)	Suggested Clinician Reply
Enthusiast Generally positive about AI but may be impatient with traditional systems or overly optimistic [1, 4, 5]	“Honestly, I wish everything ran through AI. It’s faster and doesn’t mess things up like humans do.” [5]	“I’m tired of waiting. Why is healthcare still stuck in the past?” [4, 6]	“We use a chatbot for basics so we can focus on you.”	“This patient trusts tech more than people... I need to reset expectations.” [7]	“AI helps us move faster and catch routine issues early, and our team steps in when something needs a human touch. That balance keeps you safe and cared for.” [1, 5, 12]
Skeptic Open to AI but cautious, needing transparency and reassurance that humans are still in control [6, 7, 9]	“I don’t mind some AI, but who’s really making the decisions—your team or the machine?” [6, 7]	“I don’t want to be experimented on or ignored because of some algorithm.” [8, 9]	“We use AI to help spot things faster, but every important call is made by me or my colleagues.” [6, 9]	“This patient needs to know they’re not just a number in the system.” [10, 15]	“Think of AI as a second set of eyes—it flags patterns, but I’m always the one reviewing and deciding your care plan. You’re not just in the hands of a system.” [9, 12, 14]

Traditionalist Deeply value the human element in care and fear AI will erode empathy and connection [2, 3, 10, 11].	"I don't want to talk to a machine about my health. What happened to real care?" [3, 11]	"I feel like I'm being replaced or rushed out. Do they still care about me?" [2, 10, 12]	"We still do one-on-one care, but AI helps with background tasks like reminders or scheduling." [12, 16]	"This patient needs warmth and reassurance, not just facts." [13, 15, 17]	"AI will never replace our conversations. It just helps me spend more time with you by taking care of paperwork and reminders behind the scenes." [3, 12, 14]
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Discussion and Conclusions

These simulated conversations highlight how differently patients respond to AI based on their mindset. Enthusiasts seek speed and innovation, Skeptics want control and reassurance, and Traditionalists value personal connection. A single explanation will not work for everyone. By listening closely and adjusting their language, medical professionals can turn uncertainty into understanding and build stronger relationships around new technologies.

As AI chatbots become more common in healthcare, it is important to recognize that technology alone does not create better care. The way these tools are explained and introduced to patients plays a major role in whether they are accepted or resisted. People bring different emotions, beliefs, and experiences to these conversations. Some see AI as a helpful innovation while others feel unsure or cautious, and many worry about losing the human connection that makes healthcare feel personal.

Understanding these mindsets allows doctors and health professionals to speak to patients in a way that feels respectful and relevant. When communication is personalized, patients are more likely to feel seen and heard. They are also more open to using new tools that can help improve their care. This study shows that mindset-based strategies are not just helpful—they are necessary. They offer a clear path forward for combining medical innovation with human understanding, ensuring that trust remains at the center of care.

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