

Does AI Respect Patient Preferences? An Ethical and Academic Inquiry into Digital Health

Rasit Dinc

Rasit Dinc Digital Health & AI Research

Published: December 30, 2021 | AI Diagnostics

DOI: [10.5281/zenodo.17998078](https://doi.org/10.5281/zenodo.17998078)

Abstract

The integration of Artificial Intelligence AI into healthcare promises a new era of precision medicine, offering highly personalized diagnostics, prognostics...

The integration of Artificial Intelligence (AI) into healthcare promises a new era of precision medicine, offering highly personalized diagnostics, prognostics, and treatment recommendations. By analyzing vast datasets, AI systems can identify patterns and predict outcomes with a speed and accuracy that surpasses human capability. However, as AI moves from the laboratory to the bedside, a fundamental ethical question arises: **Does AI truly respect patient preferences and autonomy?** This inquiry is critical, as the core of ethical medical practice rests on the patient's right to self-determination.

The Foundation of Autonomy: Shared Decision-Making

The ethical bedrock of modern medicine is the principle of **patient autonomy**, which grants individuals the right to make informed decisions about their own healthcare. This principle is operationalized through **Shared Decision-Making (SDM)**, a collaborative process where clinicians and patients weigh the best available evidence against the patient's values and preferences to arrive at a treatment plan [1].

AI's role in this process is complex. On one hand, AI can enhance SDM by providing more accurate, individualized risk assessments and treatment options, thereby improving the quality of the "best available evidence." On the other hand, the very nature of algorithmic decision support can subtly shift the balance of power, potentially undermining the patient's central role in the decision-making process [2].

AI's Dual Role: Enhancing vs. Undermining Preferences

AI's potential to respect patient preferences is a study in duality. Its most promising application is the ability to predict individual preferences, often referred to as Personalized Preference Predictors (P4s). Through sophisticated data analysis, AI can create highly individualized treatment plans, theoretically **respecting the unique needs and preferences of each**

patient by anticipating their choices based on historical data and similar cases [3].

However, this enhancement is shadowed by significant ethical challenges, primarily the issue of **transparency** and the "black box" problem. When an AI system, particularly a deep learning model, arrives at a recommendation, the reasoning behind that recommendation can be opaque, even to the clinician. If a patient is unable to clearly understand *why* and *how* an AI algorithm reached a certain medical decision, their autonomy is compromised, as their consent cannot be fully informed [4]. Furthermore, studies have shown that patients may prefer AI-written responses but their satisfaction decreases when the AI source is disclosed, raising questions about trust and the perceived value of algorithmic input versus human judgment [5].

The challenge of balancing AI's predictive power with the patient's right to an informed, uncoerced choice is one of the most critical ethical debates in digital health today. For more in-depth analysis and expert commentary on the ethical governance of AI in healthcare, the resources available at www.rasitdinc.com provide essential professional insight.

The Transparency Imperative and Ethical Governance

To ensure AI respects patient preferences, the focus must shift toward the **transparency imperative**. The development of **Explainable AI (XAI)** is crucial, aiming to make algorithmic recommendations understandable to both patients and providers. XAI is not merely a technical requirement; it is an ethical necessity that builds trust and preserves the patient's ability to engage in meaningful SDM.

Beyond technical solutions, robust ethical governance is required. This includes developing clear regulatory frameworks that mandate transparency, accountability, and mechanisms for patients to challenge AI-driven recommendations. The goal is to ensure that AI acts as a sophisticated tool to *support* human decision-making, not a replacement for it. The ethical principle must remain that the AI's output is a recommendation, and the final decision—the ultimate expression of patient preference—rests with the patient and their human care team.

Beyond Prediction: A Call for Patient-Centered AI

The question of whether AI respects patient preferences does not have a simple yes or no answer. Currently, AI presents both a powerful opportunity to personalize care and a significant risk of depersonalizing it by obscuring the decision-making process. AI *can* respect preferences, but only if it is designed, implemented, and governed with **patient-centeredness** as its primary ethical mandate. This requires moving beyond mere prediction to prioritize interpretability, fairness, and the preservation of the human-to-human relationship that defines compassionate healthcare. The future of ethical digital health depends on our ability to integrate AI in a way that amplifies, rather than diminishes, the patient's voice.

References

- [1] MacIntyre, M. R. (2023). *Ethical considerations for the use of artificial intelligence in clinical decision-making*. International Journal of Medical Informatics. [URL: <https://www.sciencedirect.com/science/article/pii/S016517812300416X>] [2] Sauerbrei, A. (2023). *The impact of artificial intelligence on the person-centred care model and shared decision-making: a scoping review*. BMC Medical Informatics and Decision Making. [URL: <https://bmcmedinformdecismak.biomedcentral.com/articles/10.1186/s12911-023-02162-y>] [3] Alanzi, T. (2023). *Artificial Intelligence and Patient Autonomy in Obesity Management*. Cureus. [URL: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10757560/>] [4] Guerrero Quiñones, J. L. (2024). *Using artificial intelligence to enhance patient autonomy in healthcare decision-making*. AI & Society. [URL: <https://link.springer.com/article/10.1007/s00146-024-01956-6>] [5] Cavalier, J. S., et al. (2025). *Ethics in Patient Preferences for Artificial Intelligence-Drafted Responses to Electronic Messages*. JAMA Network Open*. [URL: <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2831219>]
-