

Evaluating the Behavioral Attitudes towards Human and AI-Integrated Healthcare Tools

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Dear Editor,

I am writing to highlight the significant findings of a recent study conducted at a university hospital in Western Ireland. Our audit focuses on the current perceptions and expectations of healthcare professionals and patients regarding AI's role in healthcare. In a time when AI's influence in healthcare is rapidly growing, understanding these perspectives is essential for developing healthcare strategies that are both technologically innovative and centered on human needs.

Our audit included an in-depth survey of 80 participants, age ranging from 18 to 90 years (average 43.34 years). The objective was to assess their contentment with current healthcare services and their views on the potential incorporation of AI. The findings were quite enlightening: there was a notable satisfaction with the existing human healthcare services, especially in diagnosis and treatment areas. Yet, there was also a considerable intrigue in AI, fuelled by expectations of enhanced diagnostic accuracy, efficiency in service provision, and shorter waiting times. However, these optimistic views were counterbalanced by apprehensions about data privacy and the diminishing human element in patient care.

These results indicate a nuanced mix of enthusiasm and caution regarding AI's role in healthcare. While there was a general optimism about AI's ability to improve healthcare services, concerns about medical data security and reduced human interaction were prevalent. This highlights the importance of adopting a balanced approach to AI integration—one that supplements, rather than replaces, human elements in healthcare. It suggests a potential complementary role for AI, enhancing rather than overriding human healthcare services.

Additionally, the study points out the importance of transparent communication about AI's potential and limitations in healthcare settings. The community's careful optimism, along with high satisfaction levels with the current human-centric healthcare, indicates a future where AI could substantially augment healthcare services. However, this will only be possible by

addressing concerns around data privacy and preserving personal interactions in healthcare. The study emphasizes the need for effective communication, education about AI, and stringent data protection measures.

In summary, this study provides insightful observations on the community's readiness for integrating AI in healthcare. It underscores AI's potential in improving patient care and operational efficiencies, weighed against the necessity of addressing data privacy issues and preserving the human aspect of healthcare. Successfully addressing these concerns will be crucial in ensuring a seamless integration of AI into healthcare systems, thus enriching patient care while maintaining the core values of healthcare practice.

Declaration of conflicts of interest:

None declared.

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References:

1. Topol EJ. High-performance medicine: the convergence of human and artificial intelligence. *Nature Medicine*. 2019;25(1):44-56.
2. Baig MN, Kearns SR, Shannon FJ, Devitt A. Ten inventions that shaped modern orthopedics. *Cureus*. 2021 Jan 20;13(1):e12819. doi: 10.7759/cureus.12819. PMID: 33628685; PMCID: PMC7894968.
3. Grote T, Berens P. On the ethics of algorithmic decision-making in healthcare. *Journal of Medical Ethics*. 2020;46(3):205-211.
4. Murphy EP, Fenelon C, Murphy F, Baig MN, Murphy RP, Diack M, Leonard M. Does Google™ have the answers? The internet-based information on pelvic and acetabular fractures. *Cureus*. 2019 Oct 21;11(10):e5952. doi: 10.7759/cureus.5952. PMID: 31799093; PMCID: PMC6863587.