

AI integration in nursing practice: striking a balance between technology and the human touch

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The advent of artificial intelligence (AI) marks a transformative era in the landscape of health care, promising unprecedented advancements in clinical decision-making and patient outcomes. In nursing, where human interaction and compassionate care are foundational, the integration of AI poses both opportunities and challenges. As nurses navigate this technological revolution, it becomes increasingly crucial to strike a delicate balance between leveraging AI's capabilities and preserving the human touch that characterises nursing care.

Regulatory frameworks

To effectively manage AI's integration in nursing, the Nursing and Midwifery Council (NMC) (2023) has emphasised the need for robust regulatory frameworks and enhanced expertise. This aligns with the Regulatory Horizons Council's (2022) call for comprehensive regulatory strategies tailored to AI as a Medical Device (AIaMD), ensuring these technologies are not only effective but also safe and equitable in their deployment.

Benefits of AI

In the UK, AI health technologies are increasingly recognised as pivotal in meeting rising healthcare demands and improving service efficiency, as outlined in initiatives such as the *NHS Long Term Plan* (NHS England, 2019). The advent of AI in nursing brings forth a wave of innovation, enhancing diagnostic accuracy, streamlining administrative tasks, and facilitating personalised patient care – all positive aspects of AI that are recognised by UK clinicians (Fazakarley et al, 2023). Indeed, AI-powered systems can analyse vast amounts of patient data swiftly, identify patterns that may not be

apparent to human eyes, and offer evidence-based recommendations for treatment. For example, predictive analytics can assist nurses in anticipating patient deterioration, allowing for more proactive interventions that improve patient safety and outcomes.

Moreover, AI enhances efficiency in healthcare delivery, optimising nurses' workloads by reducing time-consuming tasks such as documentation. This enables nurses to focus more on direct patient care, spending valuable time creating a rapport with patients, developing therapeutic relationships, and addressing holistic needs beyond clinical symptoms.

Drawbacks of AI

Amid general AI advancements in health care and, more specifically, in nursing practice, concerns arise about the potential erosion of the human touch in care and decision-making (Lammons et al, 2023). Nursing is fundamentally a human-centred profession that values empathy, compassion and the ability to connect with others with authenticity. The introduction of AI, with its emphasis on data-driven decision-making and algorithmic precision, raises questions about whether it can truly replicate or enhance these aspects of care.

The relationship between nurses and patients is built on trust and empathy, qualities that are inherently human. Patients often seek reassurance, emotional support, and the comfort of knowing that their concerns are actively listened to and understood.

Although AI can provide information and recommendations based on data analysis, it cannot (as yet) replace the nuanced understanding and empathetic response that a human nurse can offer. Thus, maintaining the human touch in nursing care is paramount

for its mission and, ultimately, its identity, even as technology evolves.

Ethics

Ethical considerations come into play as AI becomes more integrated into nursing practice. Issues such as patients' and nurses' autonomy, accountability for AI-generated decisions, and the potential for bias in AI algorithms must be carefully addressed. Nurses must ensure that patients remain informed and involved in their care decisions, navigating the balance between respecting AI recommendations and upholding patients' rights to make autonomous choices.

Another significant challenge is ensuring that AI systems are developed and deployed in a way that promotes equity and fairness within the context of evidence-based practice in healthcare. AI algorithms are trained on data that may reflect existing biases in healthcare practices. If not carefully managed, AI could perpetuate or exacerbate disparities in patient outcomes based on factors such as race, gender or socioeconomic status (NMC, 2023; Regulatory Horizons Council, 2022). Nurses must play a critical role in advocating for the ethical use of AI, not only by promoting professional autonomy, accountability and transparency in clinical decision-making, but also by challenging biases to ensure that AI enhances healthcare equity rather than perpetuating inequalities.

Striking a balance

Striking a balance between technology and the human touch in nursing practice requires deliberate efforts on multiple fronts. Nurses must be equipped with the knowledge and skills to effectively use AI tools while maintaining their role as advocates for patients' holistic wellbeing. This includes

ongoing education and training on AI technologies, updated ethical standards, and communication strategies that foster trust and collaboration between nurses, patients and AI systems.

Furthermore, interdisciplinary collaboration is essential in integrating AI into nursing practice successfully. Nurses, alongside other health professionals and technologists, data scientists, bioethicists and policymakers, can collectively shape the future of AI in health care. By working together, nurses can develop AI solutions that complement nursing expertise, enhance patient care outcomes, and preserve the humanistic values that define the profession and its mission.

AI integration in nursing practice represents a transformative opportunity to improve healthcare delivery and patient outcomes. However, achieving this potential

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requires a conscientious approach to balance technological advancements with the enduring human touch of nursing care.

By embracing AI as a supportive tool, advocating for ethical practices, and prioritising person-centred care, nurses can navigate the complexities of AI integration while upholding the values that define their professional identity. In doing so, nurses can ensure that AI enhances, rather than undermines, the compassionate, empathetic, authentic and holistic nature of nursing practice. **BJN**

- Fazakarley CA, Breen M, Leeson P, Thompson B, Williamson V. Experiences of using artificial intelligence in healthcare: a qualitative study of UK clinician and key stakeholder perspectives. *BMJ Open*. 2023;13(12):e076950. <https://doi.org/10.1136/bmjopen-2023-076950>
- Lammons W, Silkens M, Hunter J, Shah S, Stavropoulou C. Centering public perceptions on translating AI into clinical practice: Patient and Public Involvement and Engagement Consultation Focus Group study. *J Med Internet Res*. 2023;25:e49303. <https://doi.org/10.2196/49303>
- NHS England. The NHS long term plan. 2019. <https://tinyurl.com/yevr5n4w> (accessed 29 July 2024)
- Nursing and Midwifery Council. A pro-innovation approach to AI regulation. 2023. <https://tinyurl.com/yu65zzu5> (accessed 29 July 2024)
- Regulatory Horizons Council. The regulation of artificial intelligence as a medical device. 2022. <https://tinyurl.com/425hy73f> (accessed 29 July 2024)



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