

Others

The value of having community health nurses on your AI research and development team M. Henderson Betkus, S. Freeman, L. Currie, D. Banner, P. Jackson. *Gerontechnology* 25(s)

Purpose Community health nursing is a unique practice setting with its own distinct set of nursing knowledge and competencies [1]. Community health nurses (CHNs) are registered nurses who work in this practice setting providing nursing care outside of typical healthcare settings, i.e., in less controlled environments such as clients' homes. CHNs provide an essential service of maintaining clients in the community through home nursing, usually to older adults who have multiple chronic health problems but wish to stay at home. With a rapidly changing healthcare world including the emergence of artificial intelligence (AI) with the potential to support healthcare delivery and enhance patient care, CHNs can offer an in-depth view of older clients, their needs and also what CHNs need to provide care. The success of AI initiatives is dependent on having the right people involved [2-4]. This study examined the realities of community health nursing practice to understand community health nurses' perspectives of AI and how they could be better involved in AI that influences their practice.

Methods A qualitative interpretive description study was undertaken, with data collected from a purposive sample of 27 community nurses across Canada through eight virtual focus groups. Data were analyzed using NVivo software guided by Braun and Clarke method for thematic analysis. **Results and Discussion** CHNs (70.4%) in this study were experienced (5 plus years) in community practice with more than half (55.5%) of nurses under 40 years old. The qualitative findings revealed the realities of CHNs practice contributed to the value and complexities of involving CHNs. CHNs had valuable knowledge about their practice and the effects of technology had on the data they accessed and used. They identified features which would improve acceptability of AI technology. CHNs did not readily recognize the relevance of their knowledge or where it fit in AI development. The complexities of involving nurses included fragmented AI knowledge and history of limited engagement in technology. This was compounded by lack of support to provide CHNs with dedicated time for education or involvement in AI. CHNs were keen to be engaged in AI initiatives and need to be part of an advisory team to ensure relevancy of AI for nurses and clients, their practice setting, and the health organization. Researchers, AI developers and healthcare leadership need to recognize the value of including nurses and advocate for nurses to be involved in the development of AI to promote successful AI projects. Healthcare would benefit from providing CHNs with dedicated time to participate in AI development and education to ensure AI is relevant to community nursing practice and promote improved care of their clients.

References

1. Community Health Nurses of Canada. Canadian Community Health Nursing Professional Practice Model & Standards for Practice. Community Health Nurses of Canada; 2019. <https://www.chnc.ca>
2. Cooper RG. Why AI projects fail: Lessons from new product development. *IEEE Engineering Management Review*. 2024 Jun 26;52(4):15-21. doi: 10.1109/EMR.2024.3419268
3. Dilmegani, C. AI fail: 4 root causes & real-life examples in 2025 [Online]. accessed 2025 June 29. Available: <https://research.aimultiple.com/ai-fail/>
4. Lamarre, E. In digital and AI transformations, start with the problem not the technology. *McKinsey Strategy & Corporate Finance Practice*. n.d. [Online] Accessed July 19, 2025, available [How to succeed in digital and AI transformations. | McKinsey](#)

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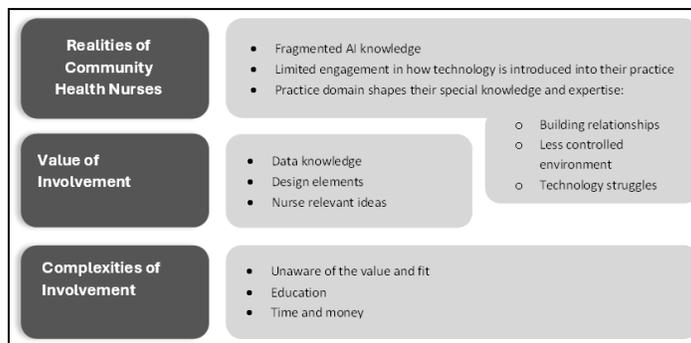


Figure 1. Reality, Value and Complexities of involving CHNs