

Hybrid Virtual Care Delivery Model for Case Management: A Possible Solution to Address Nursing Retention and Job Satisfaction in Alberta.

Puneet Sangha RN, BSN, EMHI(c)^{a,1}

Abstract. Nurse burnout, retention, and reliance on personal care contribute to Alberta's nursing shortage. This can be attributed to low job satisfaction. This paper proposes a hybrid virtual care model, leveraging existing technologies to incorporate case management delivery. Interviews with nurses and management reveal strong support for flexible working schedules with comprehensive training. This model is projected to reduce costs, improve nursing retention and enhance care accessibility.

Keywords. Case Management, Home Care, Seniors Health, Virtual Care, Retention, Nursing, Job Satisfaction

1. Introduction

Alberta faces critical challenges related to nursing retention, job satisfaction, and access to patient care. High turnover rates, nurse burnout, and an unsustainable reliance on in-person visits compromise the quality of care and burden the healthcare system financially. There is a clear need for a flexible, patient-centric solution that supports nurses and improves access to care.

Virtual care delivery has been explored globally to reduce staffing pressure on healthcare organizations and improve patient outcomes. Research shows that virtual care can reduce hospital readmissions, improve chronic disease management, and increase patient satisfaction [1]. Leading institutions like University of Pittsburgh Medical Center have demonstrated successful models where virtual care is effectively integrated into case management [2]. In the current Canadian healthcare landscape, many programs face challenges related to technology adoption, health care provider training, and patient engagement. The Government of Canada recently published a toolkit which highlights flexible and balanced ways of working as a potential method to improve nursing retention from the need to improve nurse satisfaction [3].

The current estimated annual cost of inaction for the home care program is approximately \$6.89 million, driven by recruitment costs, overtime payments, and reduced quality of care [4]. In contrast, the proposed virtual care solution,

with an implementation cost of \$476,500, is projected to generate efficiency, reduce nurse burnout, and optimize care delivery.

There is a gap in knowledge regarding how virtual care can be fully integrated into a comprehensive care model that supports patient and healthcare worker (HCW) needs. Additionally, more data needs to be collected on how this model can improve nursing retention.

2. Methods

To understand the current needs and design a solution that is responsive to this current issue - stakeholder engagement was vital. Stakeholders, including registered nurses (n=24) and program management members (n=4), were engaged via focus groups and semi-structured interviews. This method is critical to understanding the current reasons for attrition, what would improve retention, the overall barriers to virtual care adoption and the specific needs of each stakeholder.

2.1. Approach to Solution Design

The approach to solution design was registered nurse and patient-centric to ensure that the solution integrates within existing technological structures with a new use case for virtual care in case management. The first step to developing a robust virtual care solution was the active engagement of stakeholders which included registered nurses, program management and patients. Through focus groups and semi structured interview with nurses, it became evident that flexible methods of working, improved work-life balance and access to comprehensive training resources would be key to improving job satisfactions and retention.

Another one of the critical factors in the solution design was ensuring seamless integration with the existing Electronic Health Record (EHR) system in Alberta, Connect Care, which is already utilized across healthcare settings. Leveraging existing telehealth platforms such as MyChart, the virtual care solution will allow RNs to conduct case management visits remotely, thus enhancing the flexibility and scalability of the care model. By utilizing platforms that nurses and patients are already familiar with, the solution minimizes the need for extensive retraining and reduces implementation friction.

3. Results

71% of participants stated that they would like to see a more flexible working style to support their high workload. When completing semi-structured one-on-one interviews, it emerged that the nurses wanted flexible scheduling and

comprehensive training support. Program management had cited that increased cost savings, reduced recruitment burden and enhanced team stability would be requirements that would lead to the support of a virtual care delivery model for case management.

3.1 What Needs to be True

There are a multitude of factors that were recognized as ‘needing to be true’ for the solution to succeed. This includes adequate training and comfort in utilizing virtual care tools, a comprehensive level of digital health literacy from the patient perspective, seamless integration with current EHR (electronic health record) systems and an overall data retrieval process to validate whether virtual care delivery improves nurse retention within programs. Each aspect reinforces the responsibility of the organizational ecosystem to ensure that the solution is feasible and sustainable.

3.2 Solution Description

The proposed solution involves the development of a hybrid care model where registered nurses can conduct virtual case management visits via the MyChart platform already in use within the healthcare system in Alberta. It leverages the existing telehealth platform that is connected to the province-wide EHR system in Alberta - Connect Care. Figure 1 below displays the data-based structure required to support the virtual care delivery model. This architecture integrates data integration, management, and analysis across existing structures to provide patient-centric Care through virtual care delivery. This will also engage predictive analytics to help understand the future of registered nurse shortage and attrition rates. Regarding workflow, this will allow greater flexibility in the scheduling and frequency of visits.

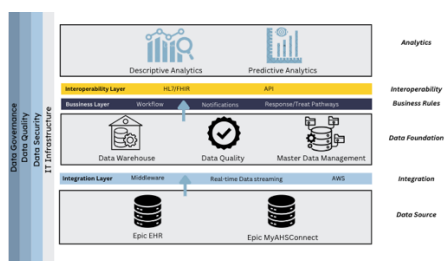


Figure 1. Data Architecture

3.3 Solution Advantages & Disadvantages

The current state revolves around reliance on in-person visits, found through semi-structured interviews to contribute to nurse attrition due to non-flexible

working methods. This solution must be revised due to high attrition rates and recruitment costs in the current climate. The advantage of this proposed solution is that it maintains the core care processes already familiar to staff and patients and offers the potential for better data collection and analytics opportunities for tackling the nurse shortages. The suggested solution of a hybrid care delivery model to leverage current in-person visits and introduce virtual care visit options will promote flexibility in work for registered nurses, improve access to care, reduce operational recruitment/overtime costs and shift the program towards value-based care. Obstacles that may be faced with the hybrid solution are investments in technology, training, and ongoing operational support, which are required to succeed in this delivery model.

4. Discussion

4.1 Alternative Solutions

An alternative to the proposed hybrid virtual care model is the increased expansion of the current in-person model. This solution focuses on increasing staffing to improve patient-to-nurse ratios. The familiarity with current processes, limited training required, and increased face-to-face interactions, can be cited as the advantages to this alternative. The disadvantages of this solution relate to the problem at hand, increasing costs for recruitment and staffing and overall concern with the long-term sustainability of this option. While the expanded in-person care model offers the value of familiarity, it does not tackle the core issues of nurse burnout, high operational costs, or accessibility for all patients.

4.2 Policy

To successfully implement virtual care case management services in Alberta, several policy options must be considered at the provincial and national levels. At the provincial level, policy expansion around billing codes and broad broadband access support through Alberta Innovates makes virtual care more accessible for rural clients. To drive these changes, all key stakeholders, inclusive of the Alberta Ministry of Health, College of Registered Nurses of Alberta, and United Nurses of Alberta, will require the engagement of policymakers to display evidence-based outcomes from pilot projects, will be vital in demonstrating the costs savings, improved health outcomes and increased satisfaction/retention of Registered Nurses.

5. Conclusion

Currently, home care programs in Alberta are facing high nurse turnover and low job satisfaction of their nurses. The traditional model of in-person case management visits is not currently providing the job satisfaction required to retain nurses for client care. Previous initiatives to increase full-time equivalencies through increased funding fail to tackle the root cause of nurse dissatisfaction due to not addressing the current high workload of RNs in the program. The proposed hybrid virtual care model offers a patient and HCW-centric approach that enhances job satisfaction for nurses by bringing a new use case for existing technologies. Key stakeholders have validated this approach as the value-based care model promotes long-term sustainability.

References

- [1] K. Sanford, S. Schuelke, M. Lee, and S. Mossburg, Virtual Nursing: Improving patient care and meeting workforce challenges, *PSNet*. (2023). <https://psnet.ahrq.gov/perspective/virtual-nursing-improving-patient-care-and-meeting-workforce-challenges>.
- [2] How UPMC's virtual-first healthcare model works, *Healthcare IT News*. (2023). <https://www.healthcareitnews.com/news/how-upmcs-virtual-first-healthcare-model-works>.
- [3] Health Canada, Flexible and balanced ways of working: Nursing retention toolkit, Canada.Ca. (2024). <https://www.canada.ca/en/health-canada/services/health-care-system/health-human-resources/nursing-retention-toolkit-improving-working-lives-nurses/flexible-balanced-ways.html>.
- [4] Alberta Health Services. Receiving home care | Alberta Health Services [Internet]. Alberta Health Services. Available from: <https://www.albertahealthservices.ca/about/Page13487.aspx>
- [5] Health Canada, Flexible and balanced ways of working: Nursing retention toolkit, Canada.Ca. (2024). <https://www.canada.ca/en/health-canada/services/health-care-system/health-human-resources/nursing-retention-toolkit-improving-working-lives-nurses/flexible-balanced-ways.html>.