EQUITY SCIENCE Lab

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CASE STUDY

Patient-Centered Care through Guiding Values-Based, Equity-Informed Practices in Fraser Health's Virtual Hospital Unit

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Guiding Values-Based Choices Regarding Fraser Health's Virtual Hospital Unit Care

WHAT IS THE KNOWLEDGE TO ACTION PROBLEM?

The delivery of virtual health care, defined as the provision of clinical interactions through various information technologies,[1,2] has been rising internationally over the last two decades, including in Canada.[3,4] A substantial recent driver of transitions to virtual care was the COVID-19 pandemic, which facilitated the provision of most health care services to virtual formats.[4] In just the initial month of the pandemic, a large proportion of patients across Canada abruptly switched to virtual care for a variety of health care services, comprising 60% of all health care visits in April 2020 compared to just 10-20% in 2019.[4] Beyond the ability of virtual care to alleviate the exceeding demands on hospitals, this rapid transition demonstrated its potential utility for providing more accessible and efficient forms of care for patients across Canada.[5]

One form of virtual care are virtual hospitals, which aim to lessen the strain on brick and mortar hospital systems, staff, and processes by providing hospital-level care to patients within their communities.[5] The Fraser Health Authority is the largest regional health authority in British Columbia (BC), serving over two million people across 20 diverse communities east of Vancouver, from Burnaby to Boston Bar. In response to the COVID-19 pandemic, Fraser Health quickly adopted a virtual model of care and has since established itself as a leader in virtual care and innovation. In 2022, Fraser Health formed a Virtual Health Department to consolidate its efforts in transforming their clinical services for virtual delivery so that patients who would typically receive acute care services in-hospital would be better supported in receiving these services at home. The Virtual Health Department has been rapidly growing, with one virtual hospital unit already launched (Virtual Psychiatric Unit) and plans to launch a second unit in 2024-2025.

Over the past few years, the Virtual Health Department has conducted several evidence syntheses, qualitative explorations of patient perspectives on receiving virtual care, and service evaluations, and has developed knowledge products. Research in this area has revealed several barriers (e.g., resource limitations among hospitals, low digital literacy among patients) and enablers (e.g., organizational readiness for change, raising awareness and advocacy for virtual wards) to the uptake and use of virtual hospitals and key recommendations for improving equitable access to virtual hospital programs.[6] While these findings have influenced the design of the virtual units, an ongoing challenge lies in practically implementing these recommendations within the constraints faced by the Virtual Health Department.

DESCRIBING THE SCOPE

WHO DOES THIS PROBLEM AFFECT?

The Virtual Hospital is an innovative health care delivery model and has a significant impact on health equity and access to care for diverse parties, as illustrated via the **3-I framework** (i.e., Interests, Ideas, and Institutions).[7] The 3-I framework can help illustrate the specific people, processes, and places impacted by the Virtual Hospital as follows:

Interests

Patients: The Virtual Hospital benefits a wide range of patients across the Fraser region, including those with acute medical conditions, chronic illnesses, and post-surgical recovery needs. It is particularly advantageous for individuals who face mobility challenges or geographical constraints.[6]
Families and Caregivers: Families and caregivers play an important role in supporting patients during their recovery. Their inclusion as a key player in health care teams is essential for improved healing and wellbeing, and decreased anxiety and depression.[8] The virtual model allows families and caregivers to be actively and seamlessly engaged in care coordination and monitoring.
Healthcare Providers: Physicians, nurses, and allied health professionals are deeply interested in providing effective and efficient care to all patients. The Virtual Hospital enables providers to assess patients remotely, adjust care plans, and foster inter-disciplinary collaboration.

Ideas

Equity of Access: By offering the option of care at home, the Virtual Hospital addresses accessibility disparities. Patients do not need to travel long distances to receive care, alleviating geographical barriers. This is particularly relevant for patients who do not live in proximity to the hospital (e.g., those living in rural communities) and are more likely to be vulnerable or marginalized.
Person-Centered Care: The Virtual Hospital model prioritizes patient preferences and comfort. It recognizes that everyone deserves quality care, regardless of their location or socioeconomic status.
Reducing Strain on Physical Infrastructure: The Virtual Hospital optimizes existing hospital resources by triaging less critical cases to home-based care. This ensures that acute care beds are available for those who truly need them and demonstrates equitable health resource allocation by decreasing costs.

Institutions

Fraser Health Authority: As the implementing institution, Fraser Health plays a pivotal role. Their commitment to expanding their capacity through virtual care demonstrates a dedication to equitable access and person-centered solutions, providing care for all patients in the region.
Government and Policy Makers: Advocacy for virtual care models can influence policy decisions at both the meso-level and macro-level. Securing funding, obtaining regulatory support, and integrating the Virtual Hospital model into existing health care systems are foundational steps.
Community Partnerships: Building partnerships by collaborating with community organizations, home care agencies, and telehealth providers can enhance outreach efforts, help identify eligible patients, provide education, and offer additional support.

The Virtual Hospital represents a transformative shift in health care delivery by providing an opportunity to promote accessibility, patient empowerment, and equitable and efficient resource use. Adopting this model has the potential to provide a more inclusive and accessible health care system for patients.

EQUITY CONSIDERATIONS IN RESPONDING TO THE PROBLEM

DEVELOPING AN EQUITY-FOCUSED RESPONSE

To address the lack of engagement with virtual care and low digital literacy among patients, it is essential to improve communication between patients and providers so that patients can examine all the relevant information needed to make quality decisions on their care, and providers have tools to support this decision making and increase their awareness of patients' contexts. To this end, we collaborated on the development of a patient decision aid to support values-based, equity-informed care in the Virtual Hospital. Patient decision aids are rooted in shared decision-making, which emphasizes that patients' choices match their values, needs, and preferences.[9] Compared to usual care, decision aids have been shown to improve patients' knowledge of options and ability to make more informed decisions that align with what they value most.[9] Our decision aid was developed in line with the Ottawa Decision Support Framework, which highlights determinants of health care decisions (e.g., perceptions of the decision, personal and external resources) that can be improved through decisions aids.[10]

We also ensured the decision aid could help address inequities embedded in a health authority that operates within a Westernized context by applying the Systematic Equity Action (SEA) Framework. The SEA Framework can help in analyzing the (dis)advantages that exist in the social context in which the patient decision aid will be used.[11] Patients experience their health in relation to a broader societal context, which imposes systemic advantage to some and disadvantage to others.[11] Through applying this framework, we considered what social and structural determinants of health affect the equitable implementation of the patient decision aid by systematically examining how the four interrelated elements—worldview, coherence, potential, and accountability—are adopted in our response of bridging knowledge (or knowing) to action (or doing).[11]

Worldview

The patient decision aid uses simple and plain language to ensure that all patients will be able to use it. The decision aid follows the Fraser Health branding guidelines of accessible colour, font, and reading level to ensure that all patients can understand it. Pictures are also used to visually display the information in a way that meets the varied learning styles of individuals, and to improve aesthetics. The use of plain language will also make the decision aid easier to translate into other languages, which will help support the diverse patient populations that Fraser Health serves. The content of decision aid was developed based on evidence gathered from patient interviews, focus groups, and peer-reviewed articles spanning multiple countries, thus the decision aid is a patient-informed tool that can help address patient-identified issues by providing context and information that is valuable to patients in improving their care knowledge and quality.[6] The decision aid is also brief and simplified such that a patient could read it in one sitting, or that a health care provider would have enough time to go through the entirety of the tool with the patient, should they need to.

Coherence

Many patient decision aids provide information about a health condition being treated, diagnoses, or treatment options. The decision aid we developed is similarly designed to be informative and interactive to support the patient's decision-making process on whether to receive care at home or continue receiving care in the hospital. The decision aid is patient-focused and aligns with the health goals of virtual care as a primary reason for patients not receiving care from a virtual service is that they are unaware that it is an option.[12] Thus, offering this decision aid can help increase patient awareness and access to virtual care, thereby helping to decrease the costs of providing virtual care and offer better support equity-deserving populations living in rural communities.

Potential

The decision aid supports caregivers and families to be more connected to patients and in closer proximity for the duration of their virtual hospital stay. The decision aid also allows patients who are located further away from the hospital to receive the care they need without having to travel long distances. Further, the technology required to support the collection of samples and data from patients within their homes provides the opportunity for increased patient monitoring and could potentially decrease the length of stay in the hospital. Finally, the decision aid was designed to alleviate some of the concerns and fears patients may have regarding changing the location of their care to their home environment. For instance, some patients may be hesitant to change their care due to a lack of knowledge about virtual hospitals, or due to concerns about being further away from emergency services. This decision aid is meant to fill this gap and help patients make better informed decisions about, and take ownership of, their care.

Accountability

The importance of upholding quality relationships between patients, their families and caregivers, and their health care providers were considered in developing this decision aid. Specifically, the decision aid provides an opportunity for providers to inform patients about the Virtual Hospital and emphasize that the patient must make a decision about their own care that aligns with their personal values, needs, and preferences. Moreover, by providing patients with the decision aid, the health care provider demonstrates they are confident that the patient could be monitored in the comfort of their own home and supports continuity of care. Patient's families and support networks are also supported by admitting the patient to the virtual hospital as they would be able to visit their family member or loved ones without travelling to a hospital. This could eliminate some stress and worry among family members if they are able to interact with and monitor the patient from their home. Having family members in closer proximity while receiving care in one's own home provides patients with a stronger support network to assist with daily tasks, compared to receiving care alone in a hospital room, and provides greater privacy and security as patients are able to receive care from the comfort of their homes.

RECOMMENDATIONS

NEXT STEPS AND AREAS OF FUTURE IMPROVEMENT

Our knowledge to equity action strategy of co-developing the patient decision aid functions as a starting point to mobilizing the practical recommendations of the evidence base built within Fraser Health and the Virtual Health Department. However, further actions will be needed to continue equitable implementation of virtual care within the complexity of the hospital setting. Accordingly, we have developed a list of six tangible next steps that can guide future refinement of the patient decision aid, its implementation, and subsequent strategies to support the accessibility and sustainability of the Virtual Hospital:

1. Usability testing of the decision aid should be sought among a diverse range of patients and providers who would use the tool. Usability testing can help explore the ease of use, understandability, efficiency, and applicability of decision-support tool in health care settings through involving intended users of the tool in iteratively evaluating the tool.[13]

2. Further adaptation of the decision aid should be undertaken based on the findings of this usability testing. Here, patient perspectives should be incorporated into how adaptations are made, such as through focus groups to solicit patients' thoughts on proposed adaptations or by having one or more patient partners involved in the design of the updated decision aid.

3. Adaptation of the decision aid for different Virtual Hospital units could follow the final adaptation of the initial decision aid, as more units are launched.

4. A process evaluation should be incorporated into the planning stage for implementing the decision aid. Process evaluations can help assess outcomes of implementation, such as the fidelity of delivering the decision aid, alongside outcomes of the decision aid itself, such as effectiveness at improving the quality of patients' decisions.[14]

5. The decision aid should be translated into languages other than English to meet the language needs of the diverse patient populations that Fraser Health serves.

6. Future tools to compliment the decision aid should be deliberated, such as a translation guide to help address differences in jargon used between the Health Informatics team and Virtual Health Department at Fraser Health. These two teams must operate together to run the Virtual Hospital, therefore speaking the same 'language' can help the teams work cohesively. The translation guide would look like a table with common terms, definitions of those terms, and a goal-setting statement from each party to enhance understand of each other's context.

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