

Implementation of a Novel Multidisciplinary Preoperative Assessment Pathway: Virtually There



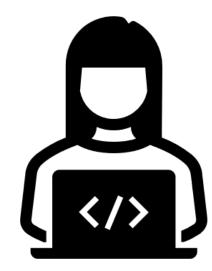
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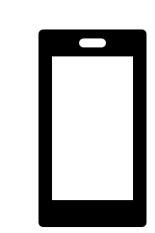
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Background

- Multidisciplinary preoperative assessment minimizes intraoperative and postoperative complications
- Nearly 10,000 multidisciplinary preoperative assessments were completed in Saskatchewan last year
- In-person attendance poses potential burdens for patients and their caregivers for many reasons including: schedule disruption, travel, arranging drivers, childcare, navigating the medical facility, and associated costs
- Virtual care is not novel, but adoption of this innovation in Saskatchewan has been slow
- Virtual care can be high quality and is desired by patients







Objectives

- To systematically assess needs, barriers, and facilitators to implementing virtual multidisciplinary preoperative assessments within Saskatchewan
- To develop and pilot a multidisciplinary preoperative assessment implementation process
- To evaluate the feasibility of multidisciplinary virtual care by measuring the proportion of virtual preoperative assessments that did not require additional in-person consultation with a physician or day-of-surgery cancellation/postponement
- Measure outcomes including: patient and provider satisfaction, trips to hospital/travel distance saved, convenience, works hours missed for appointment, and technological access/literacy

Research Questions

With regards to virtual multidisciplinary preoperative assessment in Saskatchewan:

- 1. What constructs and concepts influence successful implementation?
- 2. Are assessments feasible using the developed pathway?
- 3. Do they reduce the number of times that patients require in person preoperative assessment?
- 4. Are assessments high-quality and are patients, caregivers, and healthcare providers satisfied with virtual preoperative care?

Methodology

- Design: Effectiveness-Implementation Hybrid Design
- Participants: Stakeholders in multidisciplinary preoperative assessment, including patients, caregivers, physicians, registered nurses, allied health care professionals, schedulers, information technologists, and preassessment clinic support staff
- Setting: RUH, SCH, Regina PAC, Prince Albert PAC
- Sampling (evaluation phase): 18 key informants from each of three broad groups (total n=54): 1) patients and caregivers,
 2) clinicians/healthcare providers, and 3) decision-makers
- Sampling (implementation phase): Pilot the virtual pathway with 50 patients and follow up with 12 clinicians/healthcare providers, and 12 decision-makers
- Analysis: Interviews will be analyzed using deductive thematic analysis with the aim of exploring the experiences and perspectives of the identified stakeholders
- Ethics: REB approval (BEH-1970); we do not expect any issues with ethics and are using established methodology



Expected Results

- Implementation: Anticipate a high degree of need for virtual care especially in rural and remote communities; barriers may include technological access/literacy, privacy concerns and interoperability between platforms
- **Feasibility:** Expect most virtual preoperative assessments do not require additional in-person consultation with a physician or day-of-surgery cancellation
- Clinical: High clinician satisfaction, low need for further testing, similar rates of major postoperative complications (as compared to in person assessment) including: sepsis, pneumonia, renal failure, pulmonary embolism, myocardial infarction, stroke and respiratory failure
- Patient-oriented: Saved trips to hospital, increased convenience (schedule disruption, arranging drivers, and childcare), less work hours missed, decreased associated costs, and high-quality care and satisfaction

Expected Conclusions

- Virtual multidisciplinary preoperative assessment is a feasible method to deliver effective care in Saskatchewan
- Patients, caregivers and health care providers are satisfied with virtual preoperative assessments
- Improved access and decreased costs to PAC consultation for Saskatchewan patients
- Further studies are needed to assess the provincial impact of virtual preoperative assessment pathways

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