

# Evaluation of the Satisfaction of Inflammatory Bowel Disease Patients and Gastroenterology Care Providers with Telephone Care: A research proposal



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## Background and Rationale

- IBD is a chronic gastrointestinal disease. (1)
  - ✓ Main types: Crohn's disease and ulcerative colitis.
  - ✓ Patients require lifelong health care follow-up.
  - ✓ Patients in remote areas may lack access to specialized IBD care.
- Virtual care (VC) is any form of care between a health care provider and a patient occurring remotely using different technologies, including video conferencing consultation, remote telemonitoring, instant messaging, and telephone appointments.
- VC may act as a solution to:<sup>(2)</sup>
  - ✓ Reduce the burden of travel.
  - ✓ Hospital waiting time.
  - ✓ Cost for patients who need to seek consultation from gastroenterology care providers (GCPs).
- The Covid -19 pandemic led to a significant transition from in person to VC in Canada.
  - ✓ In Saskatchewan (SK), health care providers have been using VC, predominantly telephone care. (3)
  - ✓ GCPs have been doing outpatient visits mainly via telephone in SK.
- Some studies have evaluated patients' satisfaction with VC, specifically with telehealth, mobile applications, and nurse-led telephone advice lines.
- There are no studies assessing patients' or GCPs satisfaction with IBD telephone care (TC).

- This study aims to examine the perceptions of IBD patients and GCPs with TC. The specific research objectives are to:
  - A. Adapt and validate a questionnaire to measure IBD patients' satisfaction with TC.
  - B. Measure the satisfaction of patients with IBD using TC in SK.
  - c. Evaluate factors associated with patients' satisfaction with TC for IBD in SK.
  - D. Adapt a questionnaire to measure GCPs' satisfaction with TC.
  - E. Explore the satisfaction of GCPs with TC for IBD outpatient visits in SK.

### Methods

- The Telemedicine Usability Questionnaire (TUQ)<sup>(4)</sup> was adapted to the TC context.
  - ✓ The TUQ examines satisfaction with telemedicine.
  - ✓ The TUQ has 21 items scoring on a 7-point Likert scale.
- A multistep adaptation process (Figure 1) was followed to generate two questionnaires for assessing satisfaction with TC:
  - ✓ For patients with IBD (IBD-TCSQ-Patient).
  - ✓ For GCPs (IBD-TCSQ-Provider).

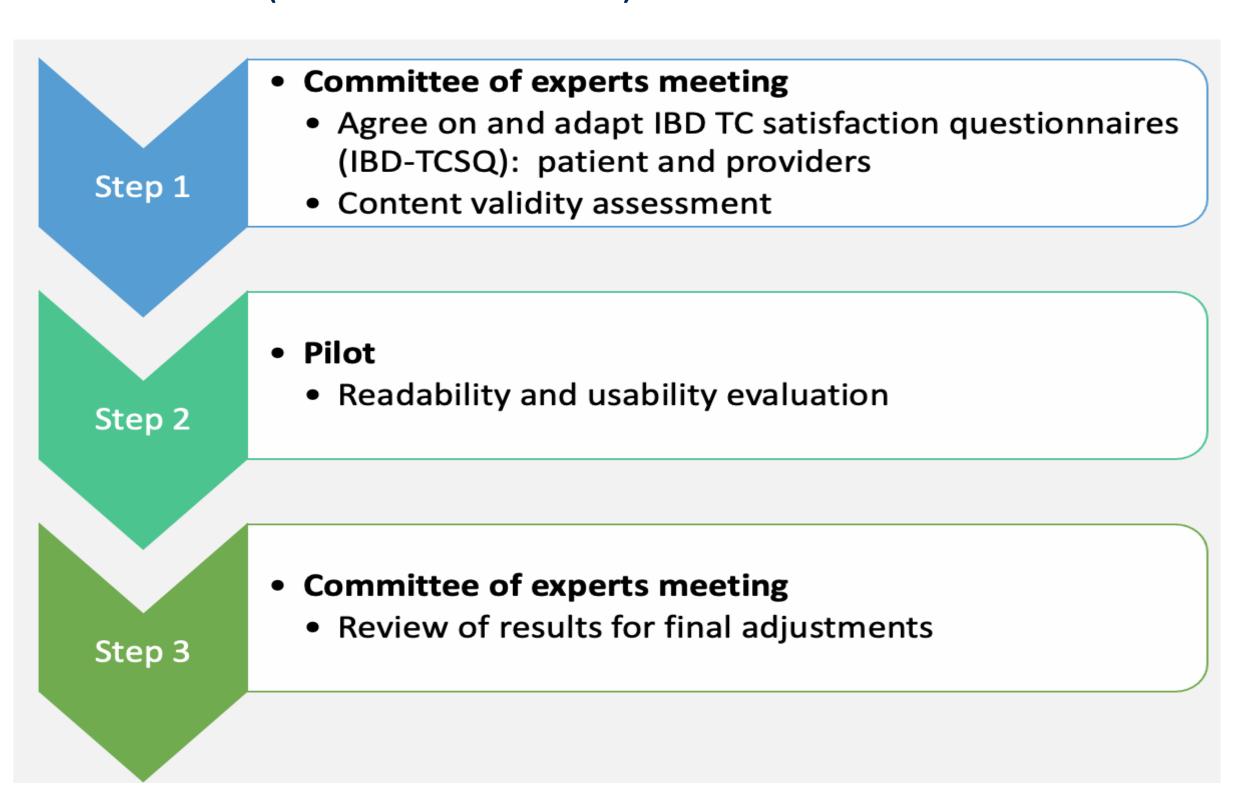


Figure 1. Questionnaire adaptation process.

- A cross-sectional study will be conducted in SK among individuals living with IBD and GCPs utilizing telephone care.
  - ✓ Individuals with IBD aged ≥18 who have had at least 1 TC visit with any of the 3 IBD HCPs within the past 1 year will be invited to complete an online survey between December 2021 and February 2022.
  - ✓ All the CO-I HCPs' in SK (n=18) will also be invited to complete an online survey.
- Standardized scores will be calculated for the IBD-TCSQ-Patient and IBD-TCSQ-Provider (range 1.0-7.0)
- Factor analysis will evaluate the dimensions of the IBD-TCSQ-Patient and reliability will be assessed by computing Cronbach's alpha coefficients.
- To assess factors associated with TC satisfaction among IBD patients, bivariate and multivariable regression models will be run.

✓ Covariates: age, gender, and urban/rural residence

# Preliminary Results

- A committee of experts (including three IBD GCPs, two IBD-patient partners, and the principal investigators of this study) assessed and adapted each item of the TUQ.
- A pilot was completed in September 2021.
  - ✓ 13 IBD patients and 5 GCPs evaluating the readability and usability of the adapted questionnaires.
- Majority of the adapted items in both questionnaires were readable and usable. A few items required revisions or minor wording adjustments (Figure 2 and 3).

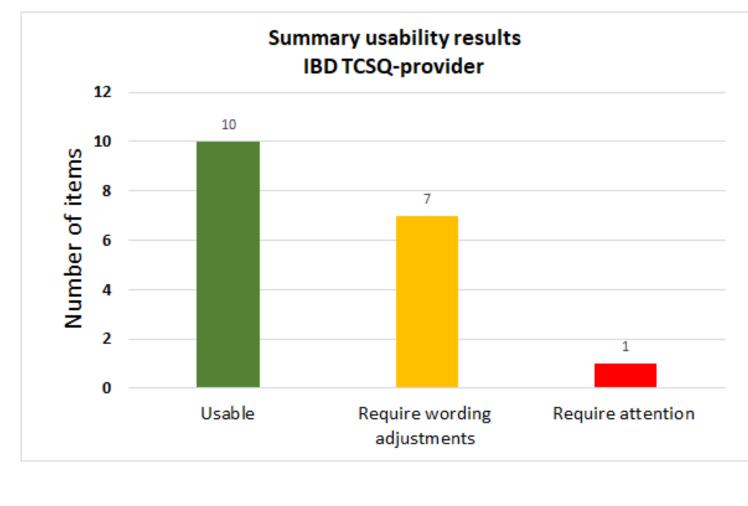
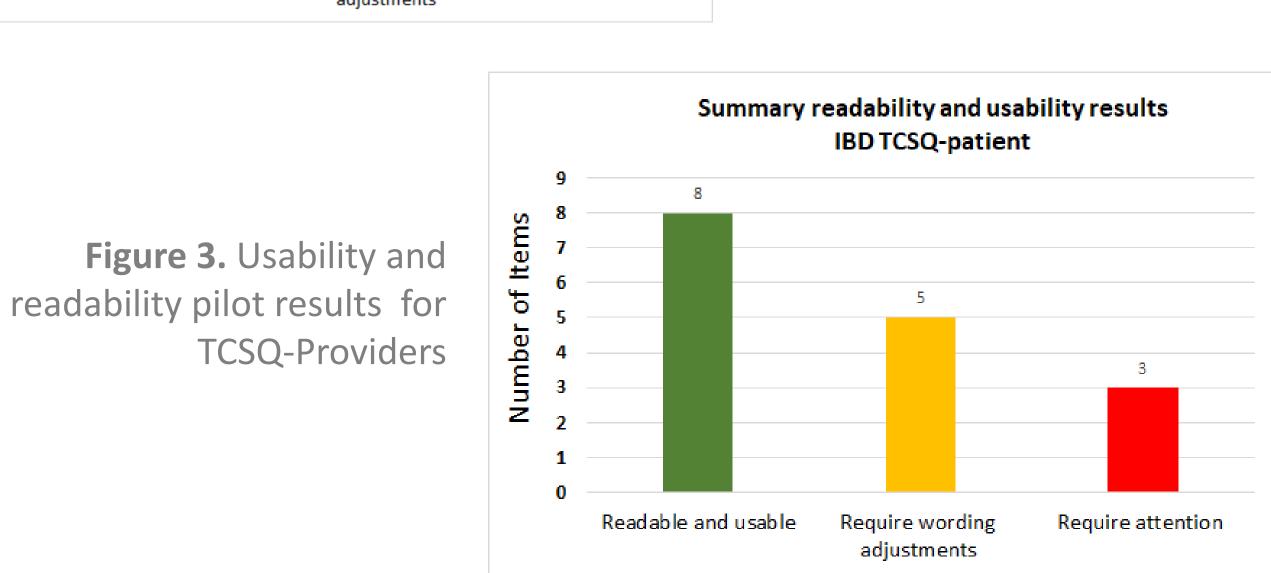


Figure 2. Usability results for TCSQ-Patients



- We are generating two questionnaires to measure the satisfaction of IBD patients and GCPs with TC.
- This study will:
  - ✓ Test questionnaires to measure satisfaction with TC.
  - ✓ Measure current perceptions of TC in SK among individuals with IBD and GCPs.
  - ✓ Inform subsequent studies in the field of TC for IBD care.
  - ✓ Identify opportunities for improvement and promoting the utilization of TC among IBD patients and GCPs in SK.

# Acknowledgments







## Key References

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