



Award of Excellence in Quality and Safety

Your Email Address

Meghan.harris@sinaihealth.ca

Please select the type of application you are completing

Team-Based Applications

Names and roles of Team members (please indicate corresponding applicant)

Dr Geoffrey Nguyen (PI), Dr Hillary Steinhart (Co-I), Dr Adam Weizman (Co-I), Dr. Mark Silverberg (Co-I), Dr. Vivian Huang (Co-I), Peter Habashi RN (Research Coordinator, IBD nurse), Florissa Montilla RPN (Research Coordinator, IBD nurse), Meghan Harris RN (Research Coordinator, IBD nurse), Dr. Frances Dang (co-author to application)

Title of Team Project/Innovation

PACE IBD Telemedicine Program

Description of eligibility (see below criteria)

Introduction

Since launching in 2016, the Promoting Access and Care through Centres of Excellence (PACE) Telemedicine program has revolutionized access to inflammatory bowel disease (IBD) care across Ontario. The program has been shown to:

- reduce wait times to see a gastroenterologist;
- increase satisfaction with the care given;
- minimize burden of travel to an IBD centre for routine appointments;
- reduce hospitalizations;
- Reduce the carbon footprint incurred from travel to appointment
- decrease emergency room visits;
- improve the quality of life; and
- improve health outcomes.

In collaboration with Crohn's and Colitis Canada, the PACE IBD program was established to increase access to high quality IBD care in Canada with Dr. Geoffrey Nguyen selected to spearhead both the national PACE initiative and telemedicine program at Mount Sinai Hospital (MSH). Through the Toronto centre, a multidisciplinary team of clinicians leverage the Ontario Telemedicine Network (OTN) to provide timely IBD specialist care to individuals residing in underserved regions of the province. The team includes eight gastroenterologists, four colorectal surgeons, two registered nurses, a nurse practitioner and a dietitian.

Development and Implementation

Following a thorough needs assessment of provincial IBD specialist care, the PACE team designated existing OTN centres in underserved regions as an IBD node of care. Physicians within these regions were provided the option to refer patients to PACE. Upon referral to the PACE network, a centrally located IBD trained nurse triages the case and compiles relevant IBD clinical data before coordinating the telemedicine appointment. Patients would then be assessed virtually by an IBD specialist at the

NOC. Afterwards, the centrally located nurse arranges any interventions and/or treatments in addition to providing the patient with a summarized care plan to help facilitate continual care and communication. The program also provides consultation by an IBD surgeon, which to date, has facilitated care for 47 surgical patients. For women with IBD who are in preconception or pregnant, the program also provides access to specialist care as pregnancy often has unique challenges to IBD management. Through PACE, 42 patients were seen by a dedicated IBD specialist with focus in pregnancy during 2022.

Outcomes

Research has suggested that receiving prompt specialist care early in disease course can improve outcomes associated with IBD. Though the recommended wait times to see a specialist for IBD is two weeks, national audits suggest that the wait time is closer to 126 days. Our analysis showed that for in-person consultation, wait times at MSH had a mean of 279.04 days with a median of 51 days. After implementation of the PACE Telemedicine program at MSH, the mean wait times for new consultations was 31.78 days and a median of 22 days, which is significantly lower than that of national audits.

The PACE Telemedicine network has also provided significant cost savings to stakeholders since its launch. With many patients within our cohort eligible for the Northern Travel Grant, for each visit that was delivered virtually, the healthcare system saved an average of \$800 dollars. For the past six years, the program has saved the province nearly \$480,413.86 in NTG grants alone. As of September 9th 2022, the program oversaw roughly 1,899 virtual visits for over 370 patients in Ontario. Satisfaction with care and cost saving has been documented in multiple testimonials of PACE telemedicine patients as they no longer have to arrange and pay for travel to arrive for a brief in-person appointment. Since launch, the program has lessened the carbon footprint by saving 1,058,076.44 kilometres of travel.

The Covid-19 pandemic provided an exceptional challenge to healthcare across all specialties and care settings. The pioneering work of the PACE program meant that patients within the telemedicine network were seamlessly transitioned to secure virtual visits without experiencing interruption to their care. It also was an early adopter of remote patient monitoring and pioneered the use of two Apps within the cohort. The program can help provide a model and framework for the development of similar programs both related to IBD and for the care of other chronic diseases.

Quality Assurance

In order to provide the highest quality of care, the PACE Telemedicine program is subjected to continual evaluation. At each visit, evidence based quality indicators are collected from both in-person and virtual appointments for comparative analysis. Focus groups and yearly surveys are conducted for patients to share experiences with care and provide feedback. Process measures of health care utilization are also linked to databases at the Institute of Clinical and Evaluative Sciences (ICES) to evaluate program efficacy.

As part of the PACE program's commitment to innovation, we actively address barriers facing the program. Enhancements to the OTN video consultation platform were piloted to improve user friendliness and functionality, which enabled users to access the service from home. Additionally, the team has conducted extensive webinars with stakeholders and public healthcare sector workers to increase referral base.

Sustainability and Spread

The multidisciplinary team within PACE is growing the network to include additional centres and expand access to virtual care across Canada. The team also aims to integrate other subspecialties into the program (i.e. rheumatology, psychiatry, dermatology) to provide more holistic care. The telemedicine program will continue to evaluate the quality of IBD care, health outcomes, access to care, productivity, cost savings and environmental impact in keeping with Infoway evaluation indicators. There will be continued discussion with local health authorities to illustrate the importance of governmental funding to sustain the benefits of the program. We are also piloting the national

project across 6 different provinces in the fall of 2022 with funding from Helmsley Charitable Trust.

Telemedicine services such as PACE, will remain a prominent fixture of the Canadian healthcare landscape as it is a vital resource in mitigating existing system inefficiencies and the mounting need to reduce emissions. PACE is improving disease outcomes in inflammatory bowel disease and reducing geographical disparities in access to care. By leveraging the latest technology in telemedicine, the multidisciplinary team continues to provide timely, effective and sustainable care to Ontario patients.

Eligibility Criteria for Team-Based Applications

Please include the following information in the application:

Candidates should be primarily based at Sinai Health. Applicants will be judged based on the following criteria:

I. Innovation

- Clear description of how the initiative/innovation addresses an important quality/safety problem and its contributors/root causes
- Clear description of how the program/initiative improves and enhances innovation and encourages new ways of thinking/applying solutions.
- Demonstration of the entrepreneurial spirit in order to improve population health and equity.
- Evidence of supporting the promotion of health equity and cultural competence
- Demonstrates innovative approaches to helping to ensure seamless transitions for patients/providers in providing the best possible care.

II. Enhancing integration/collaboration

- Demonstrates collaborative leadership to advance local/regional priorities for delivering and/or supporting care that is responsive to patients' needs, values and preferences.
- Clear engagement with health care partners across care settings or hospitals
- Clear engagement with patients/families/caregivers to integrate their perspectives in programs/services.
- Cross-departmental/inter-professional team plays significant role in driving implementation.
- Team membership is diverse and inclusive.
- Demonstrates approaches to recognizing population-based health characteristics in programs/initiatives (e.g. Health literacy, mental health or housing status etc.)

III. Outcomes and Results

A. Implementation

- Describes a clear plan which outlines how the initiative/program was implemented
- Provides appropriate measurement processes used to track performance, with reference to change management processes
- Includes data and/or other supplemental information to support the implementation plan. SPCs are preferred tools for displaying data and should be provided, if possible.

B. Outcomes

- Performance goals outlined and/or achieved
- Demonstrates progress across empirical indicators and metrics aligned with Sinai Health system priorities (e.g. Sinai Health QIP/Strategic and Operating Plans, Health Quality Ontario, Accreditation Canada Standards, etc and including indicators that measure patient experience)
- Acknowledges success factors and reflects on opportunities for further improvement

IV. Demonstrates System value

- Clear description of how the program/initiative improves quality in a cost-effective manner
- Clear description of how the team demonstrates creative solutions to drive improvement while recognizing various constraints
- Demonstrates savings and/or return on investment

V. Sustainability and spread

- Includes a robust plan for sustaining the program in the long-term
- Discusses transferability of initiative/program and/or lessons learned to other settings or population groups
- Engages with others within and outside of their areas/settings to increase spread of the initiative/program beyond local impact