Optimizing Colorectal Cancer Screening in Alberta

Digestive Health Strategic Clinical Network™

Colorectal cancer (CRC) is a common disease that can be cured when detected early and prevented through screening, but is often deadly and very costly when discovered at later stages. CRC screening is cost-effective and in Alberta, the fecal immunochemical test (FIT) completed every 1-2 years is recommended for individuals aged 50-74 who are at average risk for CRC. Patients with a positive FIT should undergo urgent colonoscopy given the very high probability of finding precursor polyps and the increased risk of prevalent cancer.

The overall effectiveness of CRC screening is dependent on several patient-, provider- and system-level factors. In Alberta, determinants of CRC screening uptake and performance have not been adequately explored, yet are critical to maximizing the benefits of CRC screening. Unwanted variation in use of FIT and access to colonoscopy exist within the province which ultimately limits the potential benefits of CRC screening for all Albertans. To ignore these disparities results in reduced healthcare outcomes at substantial added cost.

Healthcare systems worldwide have been dramatically affected by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; COVID-19) pandemic. Beyond the immediate health threats of the virus, this public health crisis has uncovered many of the vulnerabilities in our system and has forced us to re-evaluate how we deliver non-COVID related care. Although the pandemic has been entirely undesirable, it has created a unique opportunity to learn, adapt and ultimately improve our healthcare system.

Using Alberta Cancer Prevention Legacy Funds (ACPLF), Alberta Health has funded the Digestive Health Strategic Clinical Network (DHSCN) to advance CRC screening innovation and improvement in Alberta. The DHSCN will explore deficiencies and disparities in CRC-screening access and outcomes across the province, many of which are likely to have been emphasized by the COVID-19 pandemic. Informed by this new knowledge, DHSCN will broker pivotal clinical practice change among key provincial stakeholders.

This project will produce the following objectives:

1. To report and compare numbers of FITs completed, adherence to colonoscopy following FIT and length of time from FIT to colonoscopy during a 2.5-year prepandemic period (April 1, 2017 - September 30, 2019) and a 2.5-year pandemic/post-pandemic period (March 1, 2020 – August 31, 2022).



- 2. To determine factors associated with FIT use, adherence to colonoscopy and time from FIT to colonoscopy during each of the study time-periods.
- To report and compare numbers of CRC cases diagnosed and CRC stage distribution at time of diagnosis for each of the study time periods stratified by health zone, population demographics, FIT use, adherence to colonoscopy and time from FIT to colonoscopy along with factors associated with later stage CRC.
- 4. To explore patient and provider experiences with CRC screening including facilitators and barriers to use of FIT and access to screening-related colonoscopy before and after the start of the pandemic.

Dr. Steve Heitman (DHSCN Scientific Director) and Dr. Susan Jelinski (DHSCN Assistant Scientific Director) are leading this project.

For more information, please email digestivehealth.scn@ahs.ca.