Flexible sigmoidoscopy for colorectal cancer screening in Canada

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Fecal occult blood testing and lower gastrointestinal endoscopy are the two most commonly used tests for colorectal cancer (CRC) screening in Canada (1). Although utilization of flexible sigmoidoscopy (FS) has decreased rapidly, the use and wait times for screening colonoscopy continue to increase (2). Several randomized controlled trials (RCTs), which provide the highest level of evidence for efficacy of a screening test, have demonstrated fecal occult blood testing and FS lead to reduction in CRC mortality (3,4). Although there is substantial indirect evidence supporting the effectiveness of colonoscopy, RCTs of colonoscopy for CRC screening have been initiated only recently and are not expected to publish their results on CRC incidence and mortality for at least the next decade (5). Unfortunately, no available RCT is comparing FS with colonoscopy. The indirect comparisons between FS efficacy from FS trials and colonoscopy efficacy from colonoscopy trials will be difficult because there has been an increased emphasis on quality of endoscopy since the performance of endoscopies in the FS trials. Nevertheless, each jurisdiction has and will continue to decide on which CRC screening modality it wants to adopt based on the relative estimates of benefits and potential harms of the different CRC screening modalities as well as the local budgetary implications. For example, in the United States (US), colonoscopy has become the preferred method for CRC screening. It is the preferred option for CRC screening in the guidelines from major US societies (6,7), and is also covered by Medicare and the majority of insurance plans.

Increasingly, each jurisdiction is also deciding on the qualifications of the providers performing endoscopy in the respective jurisdiction. Programs in Germany, Ontario and New York (USA), require endoscopists to be performing at least 200 colonoscopies per year to participate in their CRC programs; the German CRC screening program excludes general practitioners performing endoscopy. Others, including the United Kingdom, Ontario and the University of Alberta (Edmonton, Alberta), are training nurses to perform endoscopy.

In the current issue of the Canadian Journal of Gastroenterology & Hepatology, Cooper et al. (8) (pages 13-18) describe a comprehensive training program for nurse endoscopists in the Ontario Registered Nurse-performed FS (RNFS) initiative. Their experience and description will be invaluable for other jurisdictions contemplating such initiatives. The Ontario RNFS initiative has successfully addressed several challenges to such a program, including recruitment of nurses to perform FS, their training, reimbursement for supervising physicians and licensure requirements for nurses. Although registered nurses (RNs) are performing FS independently in the current format, a physician trainer must be in a nearby office or the endoscopy suite. This requirement will likely change as the RNs gain more experience. However, as acknowledged by the authors, patient recruitment continues to be a challenge and some nurses (numbers not provided) entering the program never gain independence. Hence, the impact of the program on enhancing CRC uptake has, to date, been small (2000 FS over a seven-year period) but should now increase rapidly with the planned expansion. It is interesting to note that Ontario’s RNFS initiative started long before the publication of the first RCT demonstrating the efficacy of FS.

The reasons for Ontario restricting its FS program to RNs are not obvious. In the mid 1990s, many family physicians in Canada and the US used to perform FS and, in fact, continue to do so in many jurisdictions including Kelowna, British Columbia. In addition, it is also not clear whether the specialists (gastroenterologists, general surgeons) were approached to perform FS themselves by Cancer Care Ontario. The large differences between reimbursement for colonoscopy and FS for the specialists could impede enrollment of specialists to perform FS themselves, unless it becomes a requirement to provide FS as part of the service obligations in return for endoscopy privileges and/or was incorporated in the alternate funding (eg, salary) arrangements. Such arrangements should be explored given that many recent graduates (one-third of the respondents in the recent Royal College Employment Survey, 2011 and 2012) from gastroenterology training programs in Canada are reporting employment difficulties (9), and approximately 90% of trainees outside of Quebec are expressing anxiety with employment prospects (10) and 43% are considering a move to the US.

With the strong irrefutable evidence supporting the efficacy of FS, accompanied by low complication rates and proven feasibility to successfully train different categories of health care providers, FS should now be considered by population-based CRC screening programs in most jurisdictions including all Canadian provinces. The precise model of delivery will necessarily vary according to the local circumstances and needs. Patient acceptance and uptake, which are critical for the success of cancer screening programs, will be dependent on the information provided to the patients and their primary care providers. Optimizing endoscopic follow-up, such as for individuals with colorectal polyps, should enable the availability of necessary endoscopy resources. A major impediment to public uptake of FS in Canada maybe the influence of the practice in the US, where colonoscopy will, in all likelihood, remain the preferred option because the population in the US often desires the ‘best’ medical option at the individual level. Importantly, innovative programs, such as Ontario’s RNFS initiative, are essential to enhance CRC screening activities and endoscopy services in Canada.


REFERENCES


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