## ColonCancerCheck Primary Care **Invitation Pilot project**

## Family physician perceptions

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#### **Abstract**

Objective To determine family physician perspectives regarding the acceptability and effectiveness of 2 interventions—a targeted, mailed invitation for screening to patients, and family physician audit-feedback reports and on the colorectal cancer (CRC) screening program generally. This information will be used to guide program strategies for increasing screening uptake.

Design Qualitative study.

Setting Ontario.

**Participants** Family physicians (n=65).

**Methods** Seven 1-hour focus groups were conducted with family physicians using teleconferencing and Web-based technologies. Responses were elicited regarding family physicians' perspectives on the mailing of invitations to patients, the content and design of the audit-feedback reports, the effect of participation in the pilot project on daily practice, and overall CRC screening program function.

*Main findings* Key themes included strong support for both interventions and for the CRC screening program generally. Moderate support was found for direct mailing of fecal occult blood testing (FOBT) kits. Participants identified potential pitfalls if interventions were implemented outside of patient enrolment model practices. Participants expressed relatively strong support for colonoscopy as a CRC screening test but relatively weak support for FOBT.

**Conclusion** Although the proposed interventions to increase the uptake of CRC screening were highly endorsed, concerns about their applicability to non-patient enrolment model practices and the current lack of physician support for FOBT will need to be addressed to optimize intervention and program effectiveness. Our study is highly relevant to other public health programs planning organized CRC screening programs.

#### **EDITOR'S KEY POINTS**

- Findings suggest that the piloted interventions—a targeted, mailed invitation for screening to patients, and family physician audit-feedback reports-would be well received by family physicians with varying screening approaches and in different models of practice. However, there were some concerns about whether the interventions were applicable to nonpatient enrolment model practices.
- Critical challenges for colorectal cancer (CRC) screening program planners were identified, such as the need to change existing physician attitudes toward CRC screening, which must be addressed if organized CRC screening programs such as ColonCancerCheck are to be successful.
- Participants favoured colonoscopy over fecal occult blood testing for CRC screening, which represents a challenge for ColonCancerCheck program planners given program endorsement of fecal occult blood testing as the primary population-level CRC screening test.

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# Projet pilote du programme ColonCancerCheck pour inviter les patients au dépistage en contexte de soins primaires

Ce qu'en pensent les médecins de famille

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#### Résumé

Objectif Vérifier l'opinion de médecins de famille quant à l'acceptabilité et l'efficacité de 2 interventions-une lettre aux patients les invitant à un dépistage et les rapports des médecins de famille pour vérifier la réponse-et ce qu'ils pensent du dépistage du cancer colorectal (CCR) en général. L'information recueillie servira à orienter les stratégies des programmes visant à accroître le taux de dépistage.

*Type d'étude* Étude qualitative.

Contexte L'Ontario.

**Participants** Médecins de famille (n=65).

Méthodes On a tenu 7 groupes de discussion d'une heure avec les médecins de famille à l'aide de téléconférences et d'une technologie utilisant le Web. On voulait connaître l'opinion des médecins de famille sur le fait de poster les invitations aux patients, sur le contenu et la forme des rapports pour vérifier les réponses, sur l'influence de la participation à un projet pilote sur la pratique quotidienne et sur le fonctionnement global du programme de dépistage du CCR.

**Principales observations** Parmi les thèmes clés, mentionnons l'excellent appui exprimé à l'égard des 2 interventions et du programme de dépistage en général. L'envoi postal de trousses pour la recherche du sang occulte dans les selles (RSOS) recevait un appui mitigé. Les participants prévoyaient d'éventuelles difficultés si ces interventions devaient être appliquées à des cliniques ne fonctionnant pas sur un modèle de patients inscrits. Les participants se sont dits généralement très en faveur de la colonoscopie comme moyen de dépistage du CCR mais moins en faveur de la RSOS.

**Conclusion** Même si on était très en faveur des interventions proposées pour augmenter le taux de dépistage du CCR, les réserves exprimées quant à leur applicabilité à des cliniques ne fonctionnant pas sur un modèle de patients inscrits et au manque actuel d'appui des médecins à l'égard de la RSOS devront être prises en compte si on veut optimiser l'efficacité des interventions et du programme de dépistage du CCR.

#### POINTS DE REPÈRE DU RÉDACTEUR

- D'après ces résultats, les interventions proposées-une lettre aux patients pour les inviter au dépistage et des rapports des médecins de famille pour vérifier la réponse-recevaient un bon appui des médecins de famille, et ce, pour diverses formes de dépistage et dans divers types de pratique. On émettait toutefois certaines réserves si ces interventions devaient être appliquées à des cliniques ne fonctionnant pas avec des patients inscrits.
- On prévoyait des défis importants pour les responsables du programme de dépistage du cancer colorectal (CCR), comme la nécessité d'un changement d'attitude des médecins envers le dépistage du CCR, un point dont il faudra tenir compte si on veut que les programmes de dépistage organisés comme le ColonCancerCheck soient efficaces.
- Les participants préféraient la colonoscopie à la recherche du sang occulte dans les selles pour le dépistage du CCR, ce qui représente un défi pour les responsables du programme du ColonCancerCheck puisque ce programme estime que la recherche du sang occulte dans les selles est l'examen de premier niveau pour le dépistage du CCR dans la population.

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olorectal cancer (CRC) is the third most common cancer and the fourth leading cause of cancerrelated death worldwide.1 Screening is critical to prevent CRC-related mortality, as early detection is associated with improved expected survival. Colonoscopy, flexible sigmoidoscopy, barium enema, or fecal occult blood testing (FOBT) are used in CRC screening, although only FOBT<sup>2-4</sup> and flexible sigmoidoscopy<sup>5</sup> have been shown to decrease CRC mortality in randomized controlled trials.

Recently, Ontario launched an organized provincewide CRC screening program, ColonCancerCheck (CCC), in which FOBT is offered to those at average risk for CRC and colonoscopy to those at increased risk (based on family history). The program is structured with family physicians as the cornerstone; they initiate screening activities and are responsible for clinical follow-up, patient education, and outreach.

Patient participation in CRC screening is critical to the success of CCC. Baseline rates of CRC screening are low in Ontario and in Canada. To improve uptake, CCC plans to send mailed invitations to eligible patients (ie, appropriate age, no previous screening, no previous CRC) on behalf of their family physicians, inviting them to visit the office to arrange screening. In addition, the program plans to issue Screening Activity Reports (SARs; example available from CFPlus\*)—audit-feedback reports on CRC screening activities—to family physicians. The SAR identifies eligible unscreened patients and those who started but did not complete screening, as well as reports physician remuneration related to screening. Currently, patients must visit their family physicians to obtain FOBT kits, but the program is considering including the FOBT kit with the mailed invitation.

The CCC Primary Care Invitation Pilot (the Pilot) was conducted to test and refine the technical components of these 2 interventions (mailed invitations to patients and SARs) in a select sample of Ontario physicians. The Pilot comprised 118 family physicians in rostered models or patient enrolment models (PEMs) of care and their 13000 associated eligible patients. Mailed invitations were sent to patients in November 2009 and the SARs were issued to physicians in January 2010. Earlier, we reported results from focus groups with screeningeligible patients in Ontario; these results were used to inform the content and design of the mailed invitation.7

The Pilot was restricted to physicians participating in PEM practices. Over the past few years, new compensation models (eg, PEMs) that emphasize comprehensive care and provide incentives for preventive care

\*The Screening Activity Report and the organizational themes related to the study are available at www.cfp.ca. Go to the full text of the article online, then click on CFPlus in the menu at the top right-hand side of the page.

including screening<sup>8,9</sup> have been developed in Ontario. These practices offer extended hours and might include allied health professionals such as nurses or dietitians. In PEM practices, the physician agrees to provide comprehensive primary care and the patient agrees to exclusively see that physician or other physicians in that practice for primary care, unless it is an emergency. Similar models of care have been introduced in most other Canadian provinces as a part of national primary care reform.<sup>10</sup> The Ontario Ministry of Health maintains an enrolment database of patients and physicians in PEM practices. Before the Pilot mailing, CCC generated lists of eligible enrolled patients for each physician using health administrative data (ie, lists restricted to enrolled patients aged 50 to 74 with no previous CRC who were due for CRC screening). Physicians were then asked to "validate" or review these lists to ensure clinical appropriateness and that the address information for patients was correct.

In this study, we report on findings from focus groups undertaken with several groups of family physicians, including participants in the Pilot and nonparticipants. Our aims were to determine the acceptability and effectiveness of the 2 Pilot components—the mailed invitation campaign and the CRC SARs—as well as the usefulness and feasibility of the CCC screening program generally.

#### **METHODS**

Seven 1-hour focus group sessions were conducted with physicians between February and May 2010 via teleconference (n = 65) from across Ontario, with a subset (n=44) who additionally used an interactive online conferencing tool that allowed participants to view materials, including examples of the mailed invitation letter, the SAR, and the validation lists. The study was approved by the research ethics board at Sunnybrook Health Sciences Centre in Toronto, Ont.

We wanted to study both physicians participating in the Pilot and physicians who were not offered Pilot participation. Non-Pilot physicians were randomly selected by dividing all physicians in the province into 3 lists based on available practice data: physicians in PEM practices tending to request colonoscopy more often than FOBT, those in PEM practices who tended to use FOBT over colonoscopy, and non-PEM physicians. We hired a private firm to recruit, from the respective, randomly sorted lists, 1 focus group each of physicians in PEM practices preferring colonoscopy and preferring FOBT, 2 groups of non-PEM physicians, and 1 mixed group. We also selected 2 groups of Pilot physicians using convenience sampling. Physicians received an honorarium of \$200.

During the session, the moderator (P.R.) carefully elicited attitudes and beliefs from the physicians about 1) the mailed invitation from the physician perspective, 2) the content and design of the SAR, 3) the experience of validating patient lists, 4) the effect of their participation in the Pilot on daily clinical practice, and 5) overall impressions of the program.

The focus group interviews were audiorecorded, transcribed verbatim, and analyzed using NVivo 8 qualitative analysis software according to grounded-theory principles.<sup>11</sup> The constant comparison method was used. Line-by-line coding of verbatim text was divided into "meaning units" and then clustered into broader, more comprehensive "meaning categories." Through this process several different thematic categories emerged representing varying attitudes and preferences of participants. The coded concepts were then categorized through an iterative analytic process in which categories and concepts were continuously revisited and compared until an internally consistent, refined organization and conceptualization of data was achieved. 12 During the analyses of the data provided by the 7 focus groups, the judgment of the 4 analysts (J.T., P.R., S.E.M., C.G.) was that saturation was reached (ie, a point where no further variations were detected in additional analyses of interview responses).

#### **RESULTS**

Sixty-five physicians participated from across the province; 20 were women and the median age was 47 years (range 29 to 75 years). Of the 65 participants, 20 were Pilot participants and 45 were not; of the latter, 27 were in PEM practices. All 14 health regions were represented except one (North Simcoe Muskoka), with Toronto Central represented most often (n=15) and Central West, Mississauga Halton, South East, Champlain, and North East represented least often (n=2 for each).

Themes relating to the Pilot study, the CCC program, and CRC screening practices and attitudes were identified during qualitative analyses of the verbatim transcripts. The organizational structure of these themes is available from CFPlus.\* Below, we summarize findings relating to these themes, including focus group participant responses. Tables 1 to 3 provide detailed results for each theme.

#### ColonCancerCheck Invitation Pilot

Mailing campaign. Participants favoured a comprehensive, centralized, standardized mailing sent from CCC to eligible persons in their practices. A standardized letter drafted with help from primary care clinical practice leaders such as Cancer Care Ontario's Provincial Primary Care Cancer Network was favoured. Benefits of such a letter included ensuring that leading family physicians informed communications intended to improve patient compliance with CRC screening recommendations and strengthen program identity and legitimacy for patients. Some participants were concerned about unnecessary patient visits that arose from the invitation and adaptation of the letter for non-English-speaking populations.

Validating lists of eligible patients. The Pilot findings that CCC patient lists were 89% accurate for address information and 93% accurate for clinical information were reported to focus group participants. Most participants believed these high accuracy rates were a sufficient trade-off for the considerable labour involved in validation and would opt out of validating address or clinical information in future mailed invitation campaigns. Because of previous adverse experiences or perceived risk, some participants indicated they wanted to validate their patient lists in the future.

Screening Activity Report. Participants were highly supportive of the SAR, the audit-feedback report on physician CRC screening-related activity used in the Pilot.

Implementing the Pilot in non-PEM practices. In discussions with non-PEM physicians, we hypothesized that a "virtual roster" of their patients could be created using health administrative data (ie, based on physician billing patterns); this would differ from PEM physicians for whom the lists already exist based on a signed enrolment agreement between physician and patient. Many of the physicians in non-PEM practices were supportive of a mailed invitation campaign to patients using the strategy described above. Concerns were raised for those in PEM practices who also provided care to non-enrolled patients (eg, in walk-in clinics or hospital emergency departments), as the invitation might suggest to nonenrolled patients a greater level of physician accessibility and responsibility than that which currently exists. Also, accurate identification of a "most-responsible" family physician could be problematic, as non-enrolled patients frequently see multiple doctors.

**Table 1** provides detailed results from the physician focus groups on their attitudes toward the Pilot.

### ColonCancerCheck program

Reactions to the CCC program in general. Most physicians supported the concept of CRC screening and, therefore, were supportive of the CCC program and motivated by the financial incentives provided to promote CRC screening activities. However, specific program features, such as scheduling office visits to discuss screening, were viewed as barriers to the other care delivered in the practice. The direct mailing of FOBT kits

### **Research** | ColonCancerCheck Primary Care Invitation Pilot project

THEME	up results of physicians' attitudes toward the Pilot  SELECTED QUOTATIONS
Mailing campaign	<ul> <li>"I think it would work great we'll be catching the people that may be falling through the cracks." (PEM, non-Pilot participant, 2010 Apr 12)</li> <li>"The more standardized the letter, the better Because patients, they'll come to identify with the letter." (PEM, non-Pilot participant, 2010 Apr 12)</li> <li>"The letter is a fantastic idea along the lines of the Ontario Breast Screening Program a lot of my patients enrolled in that program do get mammograms every 2 years because of it." (Non-PEM participant, 2010 Mar 29)</li> <li>"It educates patients about what FOBT is if people know about [it] they're more likely to, to come in and see us and talk about it. They'll be more receptive when we bring it up as part of the complete physical I think we'll capture more of the patient population this way." (Non-PEM participant, 2010 Mar 29)</li> <li>"I did not have time to fit people in for appointments who have a decent understanding and just need to pick up the kit." (Pilot participant, 2010 Feb 11)</li> <li>"I find that there are many people who are not that conversant with English and they might not understand or might be scared they have cancer and run to the doctor's." (Non-PEM participant, 2010 Mar 29)</li> </ul>
Validating lists of eligible patients	<ul> <li>"But I think 89% this is as good as I do in my office anyways, so that's really good." (PEM, non-Pilot participant, 2010 Mar 29)</li> <li>"A couple had just recently been diagnosed with bowel cancer I was glad to have the option to say, 'Oh, don't send it out,' because that would have made me look bad." (Pilot participant, 2010 Mar 25)</li> <li>"If we were not to validate the addresses and we're sending out medical information by mail and some random person got it because we haven't checked the addresses, would we be at any kind of risk around this confidentiality stuff?" (Pilot participant, 2010 Mar 25)</li> </ul>
Screening Activity Reports	<ul> <li>"Yes, I think these reports would be an important visual and numerical reminder of whom we need to grab, both for myself and my staff." (PEM, non-Pilot participant, 2010 Apr 12)</li> <li>"[The p]art that really catches my eye is patients requiring follow up, particularly that red box—FOBT patients with positive results and no colonoscopy. That's a critically important we need to be aware because something might have slipped by me." (PEM, non-Pilot participant, 2010 Apr 12)</li> </ul>
Implementing the Pilot in non-PEM practices	<ul> <li>"I think it's a great idea. I think [that] some sort of electronic method of sending out this information would be in everyone's best interests." (Non-PEM participant, 2010 May 6)</li> <li>"A good 20% to 25% of our practice is walk-in clinics. I see somebody who's seen 3 other doctors in the last week, so I don't know how you would deal with them because, they go see multiple people and they're not really associated with anybody." (Non-PEM participant, 2010 Mar 29)</li> <li>"We don't want to have any institution to basically use this to start to force patients onto a practice just because of an invitation." (Non-PEM participant, 2010 May 6)</li> <li>"I am just wondering [if] this extra virtual rostering thing [is a] necessary step or are you gonna lose a lot of physicians by not getting appropriate buy-in. Has someone considered the mass mail-out and then put it in the patient's hands to bring in? Why try to do this whole linking thing?" (Non-PEM participant, 2010 May 6)</li> <li>d testing, PEM-patient enrolment model, Pilot-ColonCancerCheck Primary Care Invitation Pilot.</li> </ul>

to patients was viewed as a solution for some, while others were doubtful that it would reduce the number of visits. Some thought the financial incentives to physicians for reaching screening objectives were inappropriate based on the ethical position that money should not be used as a motivator for this purpose.

Colorectal cancer screening strategies used by non-Pilot participants. Physicians who were not a part of the Pilot described their current CRC screening strategies as the following: 1) "opportunistic screening" (ie, offering screening to those coming in for a medical visit for another reason), 2) mailing campaigns or telephone calls to unscreened patients, and 3) hiring

third-party private companies to maximize their CRC screening uptake.

Table 2 provides detailed results from the physician focus groups on their attitudes toward the CCC program.

#### Context

Pre-existing attitudes toward CRC screening. Inquiries into CRC screening attitudes and beliefs found that focus group participants had a number of concerns about the CCC provincial program recommendation for FOBT for average-risk patients. Colonoscopy was favoured over FOBT or used in addition to it because of beliefs that patients were unwilling or unable to use FOBT kits and doubts about FOBT based on previous experience

	Table 2. Focus grou	p results of physiciar	ns' attitudes toward	I the CCC program
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#### THEME SELECTED QUOTATIONS • "I think [direct mailing of FOBT kits] is a good idea. Sometimes we forget at a visit ... or if you give it to Reactions to the CCC program in them, they don't do it, so this is another way to incentify [sic] them ... to do it." (Non-PEM participant, general • "So [seeing patients in the office for CRC screening counseling] was somewhat contrary to how we're running our practice as a family health team ... we're making same-day appointments available to people. For me, it would have been just as comfortable to do it on the phone." (Pilot participant, 2010 Feb 11) • "In my patient population I prefer that [the kit] not be sent. Because ... as soon as they receive it they will be ... coming to the office ... panicked ... so, I [would prefer] to wait for them to come and see me, and explain to them." (PEM, non-Pilot participant, 2010 Mar 25) • "As soon as they offered me \$7 for giving out the kit and \$5 for when the kit comes back with the response, I went after all of my patients and really tied it on them that it was their responsibility to do this because this was the best increase family doctors had in ages ... we made it a humorous thing, but the point got across ... if they didn't do the kit I didn't get my \$5." (Non-PEM participant, 2010 Mar 29) • "I don't mind the monetary gain, but I don't like publicizing of that information or, making it look like I put this effort into solely obtaining that goal ... it's only justifiable if it's being done to save lives or better people's lives." (PEM, non-Pilot participant, 2010 Apr 12) CRC screening • "Over the age of 50, annual fecal occult blood testing is what I do ... usually ... around a physical." (PEM, strategies used by non-Pilot participant, 2010 Apr 12) non-Pilot • "We have [company name] software. It has a reminder and you can see how many patients have had ... participants various [types of] screening. It generates a list of patients who have not had the FOBT done and [my secretary] phones each of the patients to come in for a kit." (PEM, non-Pilot participant, 2010 Apr 12) • "That's where that [third party] service [provider] comes in. They're very good ... by using that service I found that ... not only the colon cancer but some of the other screens that were available ... everything adds up. Over the course of a year, a fairly substantial amount of money can be added to your income. I mean they're a profit-making organization, they take I think up to 15% of the gross billings, but they send the mailings out and they're pretty busy working on your behalf, so, I basically feel positively about it." (Non-PEM participant, 2010 Mar 29) CCC-ColonCancerCheck, CRC-colorectal cancer, FOBT-fecal occult blood testing, PEM-patient enrolment model, Pilot-ColonCancerCheck Primary Care Invitation Pilot.

(ie, "failures of FOBT"). Some commentary reflected practices not supported by the evidence or by the CCC program (ie, use of FOBT in conjunction with colonoscopy).

**Table 3** provides detailed results from the physician focus groups on their attitudes toward CRC screening.

#### **DISCUSSION**

Analyses of focus group findings indicated high levels of acceptance from a diverse group of family physicians from across Ontario for 2 piloted interventions: a targeted mailed invitation to patients for CRC screening, and a CRC screening audit-feedback report. Current practice typically involves physicians recommending screening for their patients when they are seen for other reasons, although some focus group members described systematic CRC screening approaches. While we identified strong generic support for the CCC program, participants favoured colonoscopy over FOBT for CRC screening, which represents a challenge for CCC program planners given program endorsement of FOBT as the primary population-level CRC screening test. As most Canadian and international organized CRC

screening programs also rely on stool-based screening tests, this challenge is likely universal.

The high level of physician acceptance for the 2 piloted interventions is very encouraging, particularly as their efficacy is also well documented. A recent comprehensive systematic review of interventions to promote the uptake of cancer screening in the general population pooled results from 43 studies and found sufficient evidence to recommend client reminders, and provider assessment and feedback for CRC screening.13 Our findings suggest that, if introduced, these interventions would be welcomed by physicians, increasing the likelihood that they would be effective in increasing the uptake of CRC screening in usual practice.

Although colonoscopy is more sensitive for the detection of CRC than FOBT, the cost, safety profile, and invasiveness make it inappropriate as a population-level screening tool. Further, there is no evidence from randomized controlled trials to support its use; recently, a number of observational trials suggest that its effectiveness is comparable to flexible sigmoidoscopy for the prevention of CRC-related mortality.<sup>14</sup> Nonetheless, before the CCC program launch, the use of colonoscopy among those deciding to be screened for CRC had achieved a high level of acceptance. This acceptance is supported

Table 3. Focus group results of physicians' attitudes and beliefs regarding CRC screening

Context: pre-existing attitudes and practices toward CRC screening

THEME

- SELECTED QUOTATIONS
- "Some patients are actually not happy with getting the occult blood testing; they ask for colonoscopy. They say the Americans are doing it ... they wanted to bypass the FOBT." (PEM, non-Pilot participant, 2010 Mar 29)
- "To me, the frustration is some patients who feel it's [the FOBT kit] ... a dirty thing to do and they don't want to do it." (PEM, non-Pilot participant, 2010 Apr 12)
- "People you've given it to, they come back for the 3- or 6-month follow-up ... 'No, I didn't do it,' they've lost it, you ... give them another kit ... there's a lot of wastage." (PEM, non-Pilot participant, 2010 Apr 12)
- "In my opinion, the fecal occult blood has failed me many times ... I continue to use it ... for ... completeness ...but for the most part I recommend ... colonoscopy." (Non-PEM participant, 2010 Mar 29)
- "It's a very tricky question ... FOBT kits ... are a wonderful tool for the population at large, but when you're talking about your patient, one-on-one, it might not be the best screening. Once I get an initial screen colonoscopy ... they are not due ... for another 5 to 10 years for a repeat ... then I might use the stool kits ... for the years in between." (Non-PEM participant, 2010 Mar 29)
- "With colonoscopies being so easy to perform and so accurate and so safe, I never had a mishap. I prefer ... that route ... no false positives and basically no false negatives." (Non-PEM participant, 2010 May 6)

CRC-colorectal cancer, FOBT-fecal occult blood testing, PEM-patient enrolment model, Pilot-ColonCancerCheck Primary Care Invitation Pilot.

by the fact that "primary screening" (ie, screening in patients who do not have positive FOBT results or a family history of CRC) is the indication for approximately 25% of colonoscopies performed in hospitals participating in CCC, exceeding the proportion performed for the combined indications of positive FOBT results and family history (Cancer Care Ontario, unpublished data).

In the absence of scientific evidence to support its use, colonoscopy's acceptance as a primary screening tool might be related to recommendations by experts such as gastroenterologists. In fact, colonoscopy is one of several CRC screening modalities endorsed by leading Canadian and American gastroenterologic associations. 15,16 This endorsement and the resulting expectations by family physicians and patients for "routine" screening colonoscopy poses particular challenges to organized CRC screening programs that rely on arguably more appropriate screening tests such as stoolbased testing<sup>2-4</sup> or flexible sigmoidoscopy.<sup>5</sup>

Previous work has shown that patients rely on advice from their family physicians regarding cancer screening,<sup>17</sup> including for CRC screening.<sup>7</sup> Targeted interventions to improve family physician practices and knowledge and attitudes toward CRC screening (ie, using both FOBT and colonoscopy concurrently or favouring colonoscopy over FOBT) are essential for the success of CRC screening programs, including CCC. Such interventions might include using audit-feedback reports such as the SAR to also reflect inappropriate CRC screening activities, and engaging local family physician opinion leaders, such as Cancer Care Ontario's Provincial Primary Care Cancer Network, to assist with peer education and to facilitate shifts in family physician attitudes and practices. Finally, in many jurisdictions,

the introduction of the fecal immunohistochemical test is an important opportunity to shift physician support toward a CRC screening test that is less invasive and more appropriate than colonoscopy and that has better test characteristics than FOBT.18

Proceeding with the implementation of a similar campaign for patients in non-PEM practices and patients without family doctors should be undertaken with considerable care. While informative, the focus group findings presented here are preliminary and explorative. Although a centralized, large-scale mailing approach is appealing (in terms of economy of scale and efficiency) and virtual rostering was found to be acceptable to many non-PEM participants, important concerns were raised that might ultimately limit physician engagement. Further consultation with patient and physician stakeholders should be undertaken before a similar campaign is launched for patients in non-PEM practices.

#### Limitations

Using qualitative methodologies, our findings suggest that the piloted interventions would be well received by family physicians with varying screening approaches and in different models of practice. While these findings are encouraging, our methodology cannot quantify the effectiveness of the piloted interventions on improving screening rates. However, our methodology does allow investigators to report a broader and more nuanced spectrum of attitudes and opinions than can be found typically in quantitative research. In so doing, findings such as those articulated by a vocal minority, which might be important to health system planners who are developing or running population-based CRC programs, are not lost.

## ColonCancerCheck Primary Care Invitation Pilot project | Research

#### Conclusion

Our study of a diverse group of family physicians indicates a broad level of support for mailed invitations and audit-feedback reports for CRC screening activities. We also identified critical challenges for CRC screening program planners, such as the need to change existing physician attitudes toward CRC screening, which must be addressed if organized CRC screening programs are to be successful.

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#### **Competing interests**

None declared

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