

**FORZANI &  
MACPHAIL** | **COLON CANCER  
SCREENING CENTRE**

**Continuous Quality Improvement Report  
March 2011**

**Quality of the Patient Experience**



**Contents**

- 1. Introduction ..... 4
- 2. CCSC Clinical Services..... 5
- 3. Wait Times ..... 5
- 4. Characteristics of Those Completing the Colonoscopy Experience Questionnaire ..... 6
- 5. Education, Counselling and Pre-Assessment Appointment ..... 7
- 6. The day of your colonoscopy ..... 10
- 7. Colonoscopy Sedation and Tolerance ..... 12
- 8. Aftercare ..... 13
- 9. Global Rating Scale Reporting ..... 14
- 10. Looking Forward ..... 15

## 1. Introduction

The doctors, nurses and administrative staff of the Forzani & MacPhail Colon Cancer Screening Centre (CCSC) are dedicated to providing high quality colon cancer screening services. A comprehensive continuous quality improvement (CQI) program is used to ensure that the services provided at the CCSC are of the highest quality and that clients have the best possible experience.

The CCSC's Quality Assurance Committee uses the UK Endoscopy Global Rating Scale ([globalratingscale.com](http://globalratingscale.com)) as a framework to guide its quality improvement activities.

Several methods are used to measure and improve the quality of the services provided at the CCSC:

1. Biannual reporting to Canadian Global Rating Scale database
2. Client experience questionnaires
3. Measurement of colonoscopy process and outcomes quality indicators
4. Physician performance benchmarking and report cards
5. Adverse event monitoring and reporting
6. Tracking of wait times

The Global Rating Scale, a framework for evaluating the quality of colonoscopy services provided within the UK's National Health Service, guides the quality assurance activities at the CCSC.

The Colonoscopy Experience Questionnaire is a comprehensive survey that includes items assessing the quality of care provided at various steps of the colonoscopy experience, including the pre-assessment visit, the colonoscopy and post-colonoscopy care. Questionnaires were given to 650 individuals undergoing colonoscopy in 2009 and 350 individuals undergoing colonoscopy in 2010. The questionnaire was given out at discharge from the colonoscopy unit along with a business reply envelope. Clients completed the questionnaire at home and were asked not to provide any identifiable information; therefore, the results of individual questionnaires are anonymous. The Colonoscopy Experience Questionnaire allows clients to write additional comments about their experience to expand upon the areas they were questioned about or to address areas that were not covered by the questionnaire.

This document reports the results of the most recent Colonoscopy Experience Questionnaire. Where relevant, information from other CQI activities is provided to further explore or explain issues raised by clients' responses in the questionnaire.

### **CCSC Quality Assurance Committee:**

Catherine Dubé, Chair, Quality Assurance Committee

Robert Hilsden, Director of Research

Alaa Rostom, Medical Director

Darlene Pontifex, Clinical Operations Manager

## 2. CCSC Clinical Services

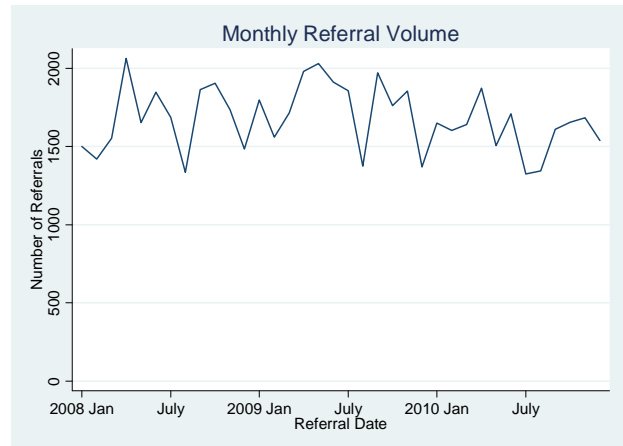
The Colon Cancer Screening Centre provides colon cancer screening-related colonoscopies to generally healthy, asymptomatic individuals age 74 or younger who meet one of the following criteria:

- Average risk for colorectal cancer, age 50 – 74.
- Family history of colorectal cancer.
- Personal history of colorectal cancer or polyps.
- Positive fecal occult blood test done for colorectal cancer screening.

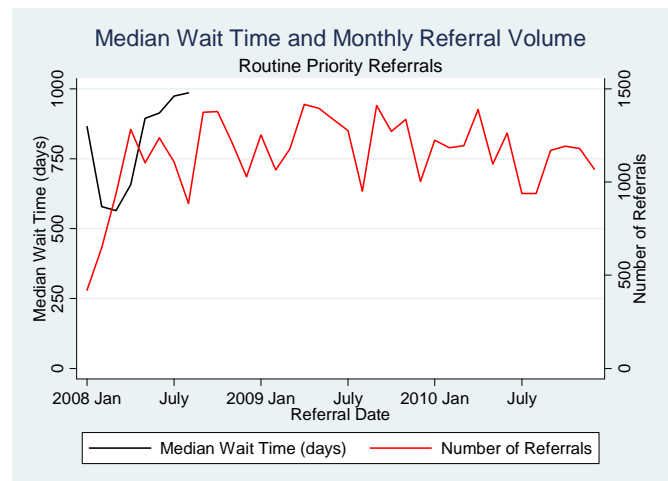
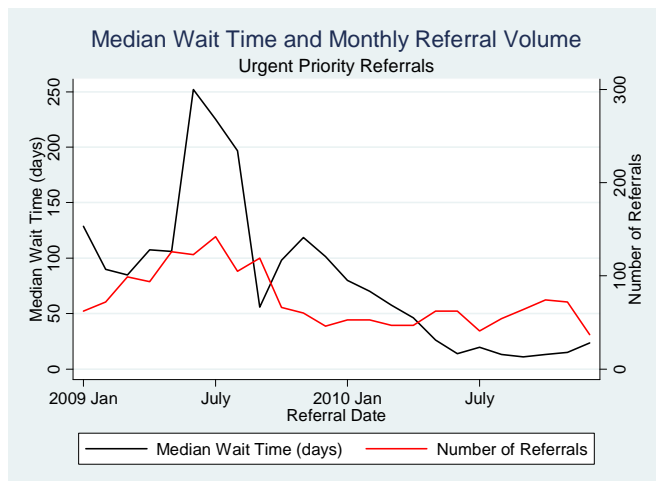
The total number of procedures performed at the CCSC was 8,040 in 2009 and 9,388 in 2010.

## 3. Wait Times

The CCSC receives a large number of referrals each day. The management of new referrals is the responsibility of a group of trained nurses and clerks who triage referrals and schedule appointments. Referrals are assigned a priority based on the presence of risk factors for colorectal cancer. Four priority categories are used: (1) urgent priority – positive fecal occult blood test or very strong family history of colorectal cancer, (2) urgent – personal history of colorectal cancer or polyps or strong family history of colorectal cancer, (3) other family history of colorectal cancer that does not meet criteria for urgent categories and (4) routine – no risk factors for colorectal cancer. Available appointments are preferentially allocated to the three increased risk categories. Any remaining appointments are then offered to routine referrals.



The two graphs below show the average monthly number of referrals received by the CCSC and the median wait time for those triaged as urgent priority and routine. Wait times for increased risk referrals have dropped dramatically over the past three years, whereas wait times for routine referrals remain long and are increasing. Currently, referrals triaged as urgent priority are seen within two weeks of the date the referral was received. Routine referrals received in September 2008 are being booked into available colonoscopy spots.



#### 4. Characteristics of Those Completing the Colonoscopy Experience Questionnaire

The following tables show the characteristics of the 406 individuals who completed the survey in 2009 and the 196 individuals who completed the questionnaire in 2010.

Gender	2009	2010
Male	47%	52%
Female	53%	48%

Age	2009	2010
Under 50 years	12%	8%
50 – 65 years	68%	73%
Over 65 years	20%	19%

First Colonoscopy	2009	2010
Yes	78%	78%
No	22%	22%

Family History of CRC	2009	2010
Yes	45%	54%
No	55%	45%

Why did you initially decide to undergo testing/screening:	2009	2010
Doctor recommended that I undergo screening	73%	68%
I brought it up with my doctor	22%	26%
Other	9%	6%

Why did you have this colonoscopy?	2009	2010
Because I had polyps or colorectal cancer in the past (surveillance)	7%	7%
Because I had a positive fecal occult blood test (diagnostic)	5%	7%
For another reason (screening)	84%	83%
No response	4%	3%

## 5. Education, Counselling and Pre-Assessment Appointment

All individuals undergoing colonoscopy at the Colon Cancer Screening Centre first receive comprehensive education and counselling about colon cancer, including their risk for colon cancer and options for screening. This is provided in various formats, including printed material, CCSC's website (colonscreeningcentre.ca), group education sessions and individual counselling by a nurse or doctor.

All individuals undergoing colonoscopy at the CCSC also complete a medical pre-assessment where their eligibility and fitness for colon cancer screening and colonoscopy is determined. This is done either over the phone (3%) or in person (97%).

The following results focus on the client experience with the education, counselling and pre-assessment services provided at the CCSC.

### Education Pamphlet

The first contact that many clients have with the CCSC is when they are notified of their pre-assessment appointment. When they are notified by mail, an information brochure is sent that provides detailed information about colon cancer and screening options. For those who do not receive this brochure by mail, it is available to them at their pre-assessment visit.

<b>Did you receive any information about colon cancer and/or colon cancer screening from the Colon Cancer Screening Centre?</b>	<b>2009</b>	<b>2010</b>
Yes, I received a pamphlet by mail prior to my appointment	49%	50%
Yes, I received a pamphlet at the time of my appointment	45%	36%
Yes, I received a pamphlet by mail and at my appointment	4%	7%
No	1%	6%
Don't remember	0.5%	0.5%

<b>If you received a pamphlet or booklet, did it explain about colon cancer and your risk of colon cancer in a clear manner?</b>			
	Yes	99%	98%
	No	1%	2%

<b>If you received a pamphlet or booklet, did it explain about the different options for colon cancer screening in a clear manner?</b>			
	Yes	96%	97%
	No	4%	3%

<b>If you received a pamphlet or booklet, how useful did you find this material?</b>			
	Very Useful	60%	63%
	Useful	40%	37%
	Not useful	0.25%	0%

## Reception Staff and Waiting Area

Were you treated courteously and with respect by the reception staff?	2009	2010
Yes	99%	100%
No	1%	0%

Did you find the waiting area comfortable and pleasant?	2009	2010
Yes	98%	98%
No	2%	2%

## Group Education Session

To provide consistent education in a efficient manner, the CCSC holds group education sessions. These large group sessions are held in the Pentax lecture theatre and are led by a nurse using a powerpoint presentation. The presentation addresses risk factors for colon cancer and screening options, including available screening tests, their strengths and weakness and their risk of complications. In addition, preparing for colonoscopy is reviewed. The following items addressed the clients' experience with the group education session.

Did you participate in a group learning session held in the lecture theatre?	2009	2010
Yes	68%	75%
No	32%	25%

How useful was the group learning session for learning about colon cancer?	2009	2010
Very useful	64%	75%
Useful	33%	24%
Not useful	3%	1%

How useful was the group learning session for learning about colon cancer screening?	2009	2010
Very useful	69%	82%
Useful	29%	17%
Not useful	2%	1%

How useful was the group learning session for learning about colonoscopy?	2009	2010
Very useful	80%	83%
Useful	18%	16%
Not useful	2%	1%

***“In light of the fact that tests such as this can be stressful, the entire staff made the experience very comfortable with their friendly attitude.”***

***“Staff were fantastic!”***



### Nurse/Physician Consultation

Most individuals undergoing colonoscopy at the CCSC undergo an in-person consultation with a nurse or physician. This consultation focuses on the client’s risk of colon cancer and the available screening options for them. In addition, the client’s medical fitness for undergoing colonoscopy is determined. The following items address the clients’ experience with the one on one consultation.

Did you feel that you had enough time with the nurse or doctor?	2009	2010
Yes	98%	98%
No	2%	2%

Did the nurse or doctor indicate what screening tests were appropriate for you based on your risk of colorectal cancer (e.g. fecal occult blood test, colonoscopy)?	2009	2010
Yes	84%	91%
No	16%	9%

Did the nurse or doctor discuss what colonoscopy involved?	2009	2010
yes	96%	93%
No	4%	7%

Did the nurse or doctor mention that, although it happens very rarely, there might be risks (complications such as bleeding or perforation) of doing the colonoscopy?	2009	2010
Yes	96%	97%
No	4%	3%

Did the nurse or doctor describe what would happen on the day of your colonoscopy?	2009	2010
Yes	94%	97%
No	6%	3%

Based on what you learned at the CCSC or from any of the educational resources, please indicate your agreement with the following statements	Agree or Strongly Agree	
	2009	2010
I had enough information to prepare for my colonoscopy.	99%	97%
I had a good understanding of my risk of developing colon cancer.	93%	94%
I had a good understanding of the screening test options appropriate for me.	94%	96%
I had a good understand of what my colonoscopy would involve.	98%	98%
I had a good understanding of the sedation that would be used for the colonoscopy and of its effect.	92%	93%
I had a good understanding of what to expect during my colonoscopy.	95%	93%

***“It was nice to have the prep session ahead of receiving the colonoscopy test. I find that very helpful. Knowing what’ll happen all through makes it easier.”***

## 6. The day of your colonoscopy

On the day of their colonoscopy, all clients first check in with the reception desk. They then are taken into the recovery room by a nurse where they are prepared for their colonoscopy. They are then taken to the endoscopy room for the procedure. Once the procedure is complete, they go back to the recovery room where they stay until they are ready for discharge. The following items address the clients' experience on the day of colonoscopy.

<b>Were you treated courteously and with respect by the reception staff?</b>	2009	2010
Yes	100%	99%
No	0%	1%
<b>Was your journey through the unit well co-ordinated?</b>		
Yes	99%	99%
No	1%	1%
<b>Did you feel adequately informed about what was happening to you and when?</b>		
Yes	99%	99%
No	1%	1%
<b>Was there an excessive delay in waiting for your test?</b>		
Yes	5%	4%
No	95%	96%

***“Your excellence raises the bar of the medical profession to a whole new level.”***

***“Thank you very much for the considerate, informative care I received. Everything was so much easier than I had imagined.”***

***“I consider myself very lucky that I live in Calgary and was seen at such a wonderful facility.”***

***“Eye opening experience to witness such happy, competent and efficient operation.”***

## In the Endoscopy Room

	2009	2010
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**Do you feel that you had adequate time in the endoscopy room and that you and the doctor doing the test were not rushed?**

Yes	96%	96%
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No	4%	4%
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**Was the doctor doing the test courteous and considerate?**

Yes	100%	99%
-----	------	-----

No	0%	1%
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**Were the nurses assisting with the test courteous and considerate?**

Yes	100%	100%
-----	------	------

No	0%	0%
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**Did you feel that your privacy was respected as best it could be?**

Yes	100%	99%
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No	0%	1%
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***“I was very pleased with the procedure and how well your staff treated me. The whole experience was much better than I had expected!”***

## 7. Colonoscopy Sedation and Tolerance

The majority of colonoscopies are done with conscious sedation. Usually a combination of a narcotic (fentanyl) and a sedative (midazolam) is used. Some clients (6.6%) choose to undergo colonoscopy without sedation, and this is usually well tolerated. The following items address the clients' comfort during colonoscopy.

<b>Do you think you received the right amount of sedation?</b>	<b>2009</b>	<b>2010</b>
Yes	88%	87%
No, I would have tolerated the procedure better if I received more sedation	7%	11%
No, I think I would have tolerated the procedure just as well with less sedation	5%	2%
<b>On the scale below, please mark your overall assessment of the level of discomfort you experienced during your colonoscopy.</b>		
No discomfort	45%	41%
Mild discomfort	35%	35%
Moderate discomfort	15%	17%
Severe discomfort	4%	7%
<b>On the scale below, please mark if the colonoscopy experience was worse, better or as you had expected.</b>		
Worse than expected	6%	10%
As expected	33%	34%
Better than expected	60%	56%
<b>Overall, how acceptable did you find your colonoscopy?</b>		
Procedure was acceptable and I would have it again if necessary	90%	84%
Procedure was acceptable, but uncomfortable. I would only have it again if essential	10%	16%
Procedure was totally unacceptable. I would not have the procedure again	0.25%	0%

***"I was asleep the whole time – the sedation was wonderful!"***

***"I also want to thank all the nurses and Dr. Turbide for being so supportive of my decision to have the colonoscopy without sedation. This was important to me and they were all very accommodating. They also did a fantastic job as it was only mildly uncomfortable!"***

***"Being able to be alert and watch on screen was a positive experience."***

***"The colonoscopy itself was a breeze and I was very surprised at how pain free + easy it was."***

## 8. Aftercare

Prior to discharge, clients are provided with the results of their colonoscopy usually both verbally by the nurse or doctor and as a written report.

Were you given information on what reactions to expect after your procedure?	2009	2010
Yes	97%	96%
No	3%	4%
<b>Have you been told the results of your test?</b>		
Yes	98%	97%
No	2%	3%
<b>Were you told if you should have another colonoscopy in the future, and if so, when the colonoscopy should take place?</b>		
Yes	93%	93%
No	7%	7%
<b>If some results of your colonoscopy were pending, for example, pathological examination of polyps, do you know how and when you will be notified of the results?</b>		
Yes	67%	62%
No	33%	38%

*“Having a report when leaving is excellent.”*

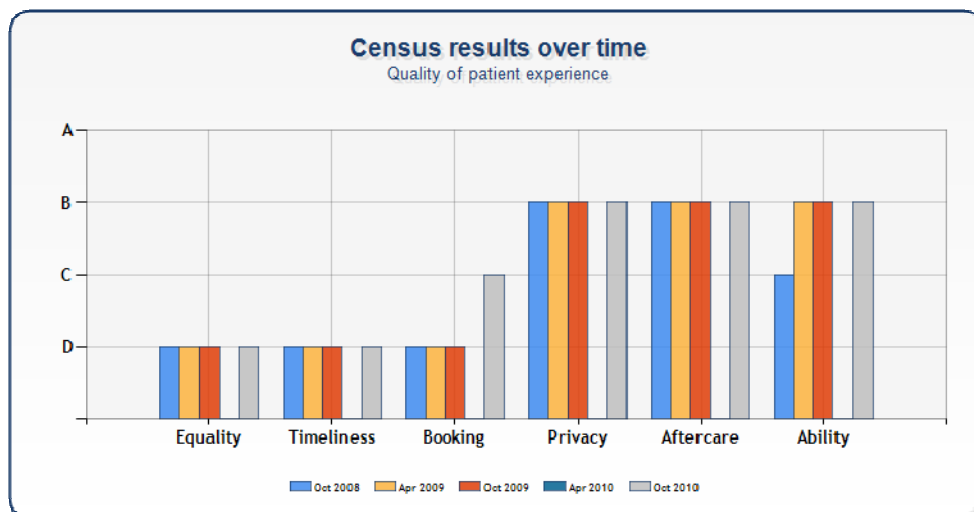
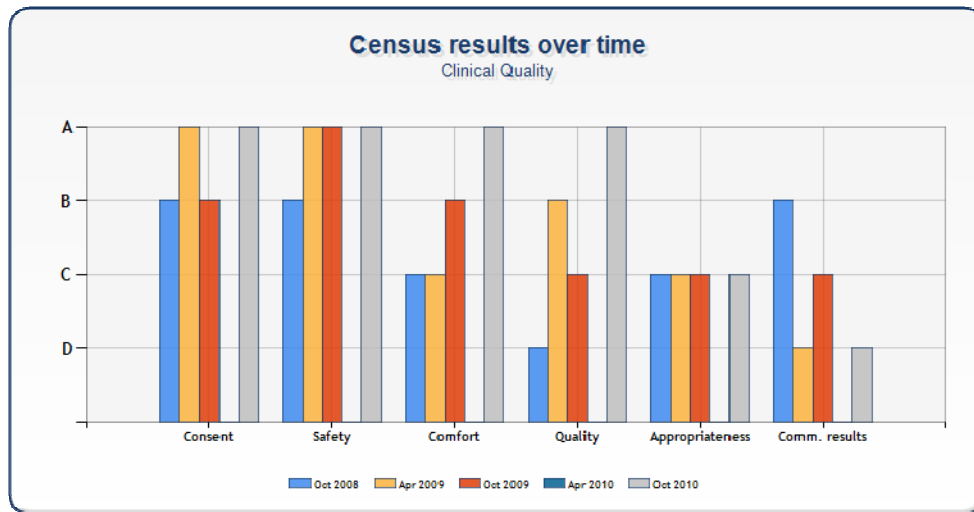
*“More info about what to expect the day after the procedure would have been helpful.”*

*“This was one of my best hospital experiences. There was lots of information – all questions were answered. The staff are very courteous and deal with the patients as though they are intelligent and worthy of respect. The staff is kind and caring! Thanks for being very good at what you do!”*

## 9. Global Rating Scale Reporting

The Global Rating Scale (GRS) divides the patient experience into two dimensions: clinical care and quality of the patient experience. The clinical care domain includes six items: appropriateness, information/consent, safety, comfort, quality of the procedure and timely results. The quality of the patient experience also includes six items: equality, timeliness, choice, privacy and dignity, aftercare and ability to provide feedback. For each item, criteria indicate what is required for an endoscopy unit to achieve a rating from D (basic service) to A (excellent service with fully establish quality assurance processes).

The CCSC has reported to the Canadian database four times from October 2008 to October 2010. The CCSC has achieved A level ratings on the items for consent, comfort, safety and quality. The lowest ratings have been for three items in the quality of the patient experience: equality, timeliness and booking. The CCSC received a low rating for equality because it did not have a demographic/language profile of the local population, nor did it have written information available in languages other than English. The CCSC did not achieve the minimum standard for timeliness in the GRS: “Waits are <8 weeks for urgent procedures and < 52 weeks for routines.” However, this may be an example of where consistent inter-country definitions are lacking. It is unlikely that in the UK that “routine” refers to average risk screening colonoscopy, as that service is not provided by the NHS. The CCSC’s low rating on bookings also likely reflects wording that is specific to the UK.



## 10. Looking Forward

The Forzani & MacPhail Colon Cancer Screening Centre incorporates a comprehensive quality monitoring and improvement program as part of its ongoing operations. These data have now been collected for three years and not only guide improvements in clinical operations and care delivery, but also support extensive ongoing research which highlights the CCSC's leadership in the area of quality assurance. This leadership has been recognized locally and nationally and is used as an example for other local and national endoscopy units

The attached quality report summarizes data collected to December 2010, representing over 20,000 colonoscopy procedures. The CCSC clearly has had a significant clinical impact. During the monitoring period approximately, 40% of patients have had a polyp removed, and a cancer was identified in close to one in 250 colonoscopies. Serious colonoscopy complications continue to occur at rates which are well below those reported in the literature. Patient questionnaires continue to indicate that patients remain highly satisfied with the CCSC staff, operations, and outcomes. The CCSC has also made significant gains in areas of satisfaction with our individual and group educational presentations. This suggests that the CCSC does a great job from the point of the initial patient pre-assessment to the subsequent colonoscopy and follow-up.

While these results are quite satisfying, and reflect a great deal of dedication at all levels at the CCSC, over the last year the CCSC has expanded quality monitoring to more accurately assess processes related to referral intake, triage and wait times. The CCSC has made significant gains in wait times for urgent and moderately urgent referrals, but average risk referrals continue to be a challenge

The CCSC continues to be challenged by an ongoing high referral volume (100-150/day), an accumulated referral volume base of over 30,000 patients (mostly average risk), and a budget for approximately 8,000 procedures per year (less than 50% of potential capacity). The absence of suitable electronic medical records and patient management systems also challenges the CCSC's ability to efficiently handle the referral volume, as well as patient queries and phone calls. In addition to the high referral volume, these factors also challenge our clerical staff, though we have been able to increase clerical staffing over last year. These deficiencies however have been recognized by patients and referrers in the form of individual letters to the CCSC that highlight concerns we also share regarding referral management.

In summary, these quality data confirm high quality clinical operations at the CCSC from the point of first patient contact. They reflect an excellent quality program at a unique outpatient screening centre. The challenge for the coming year will be for the CCSC to streamline the referral management and tracking processes we have established, acquire an acceptable electronic patient management and scheduling system, and demonstrate improved quality measures around patient referral and scheduling.

The CCSC also looks forward to approval of the proposed provincial colorectal cancer screening program and to aligning CCSC activities with the provincial program. Average risk referrals to the CCSC will continue to be a resource challenge in the setting of a provincial screening program. On the one hand, the majority of these referrals would be redirected to the program's high sensitivity stool-based screening test. But on the other hand, the expanded use of these stool tests will produce a greater number of individuals requiring rapid access to colonoscopy due to a positive screening test. Therefore, overall colonoscopy demand is expected to rise and thus the importance of an efficient, well developed quality monitoring and improvement program.

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