

My CancerIQ: A new tool for engaging your patients in cancer prevention and screening

Shawn Chirrey, M.A., M.H.Sc.

Alice Peter, M.A., M.B.A.

Corinne Hodgson, M.A., M.Sc.

Prevention and Cancer Control, Population Health and Prevention

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Presenter Disclosure

- **Presenters:** Shawn Chirrey
- **Relationships with commercial interests:**
 - None
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 - None
- **Mitigating Potential Bias:**
 - Not applicable



My CancerIQ as a Gateway

If patients bring a My CancerIQ risk assessment report/health action plan to an appointment, use as a gateway to open conversations about:

Cancer screening

Cancer prevention

**Behaviour change &
motivational interviewing**

Online Cancer Risk Assessment Tool (OCRAT) / My CancerIQ Commitments

Ontario Cancer Plan III (OCPIII) - CCO

- “By 2015 Ontarians will be able to calculate their cancer risk profile online.”

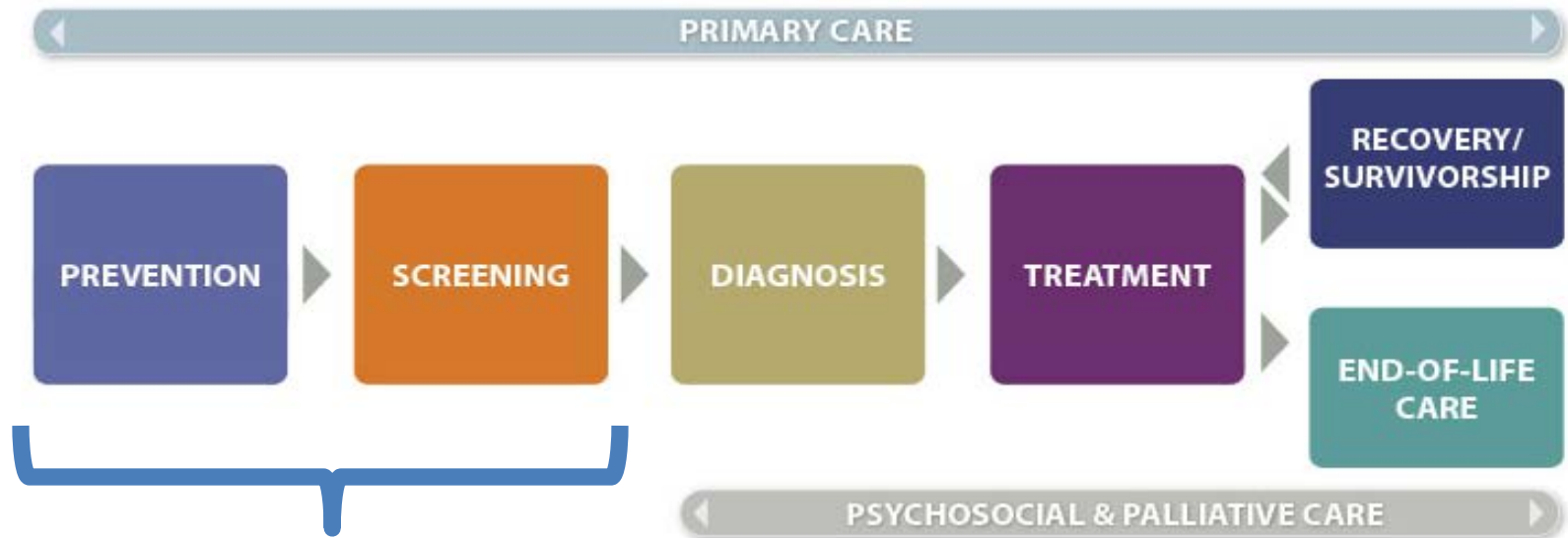
Ontario’s Action Plan for Health Care - MOHLTC

- “All Ontarians will have access to an online Personalized Cancer Risk Profile that will use medical and family history to measure the risk of cancer and then link people at higher risk to screening programs, prevention supports or genetic testing.”

My CancerIQ and the Cancer Journey

Main objectives:

- Prevention - delivering a personalized cancer risk profile with appropriate messaging and drive to local resources to moderate their risk (MoHLTC, Public Health, CCS, Health Canada)
- Screening - driving individuals towards Screening program resources (MoHLTC & CCO)



My CancerIQ

My Cancer IQ - Evidence-Based Algorithm & Prevention Content

- Based on algorithms developed by international panel of experts.
- Risk estimates are Ontario and cancer specific.
- Best available evidence and are updated as new evidence emerges.
- Reviewed and revised by CCO epidemiologists, scientists and prevention experts .
- Site warns the user that estimates are most accurate for:
 - Ontarians age 40 and over
 - Ontarians without a previous history of cancer

Prototype Phase

- In 2013, developed a prototype - proof of concept
- Research informed the development of the site
 - Phase I – In-depth qualitative interactive user interviews (15 target audience and 5 doctors/nurse practitioners)
 - Phase II – Quantitative interactive user interviews (708 target audience and 50 doctors /nurse practitioners)

The screenshot shows a web application titled "Female Breast Cancer". The interface includes a navigation menu on the left with options for "Type of Cancer" (Female Breast Cancer (English), Lung Cancer (English)), "Home", "About", and "Resources". The main content area is titled "Female Breast Cancer" and features a progress bar with six steps: 1 Personal, 2 Family, 3 Health, 4 Lifestyle, 5 Reproductive History, and 6 Results. Below the progress bar, a red banner displays the result: "Your risk is Higher than average". This banner includes a paragraph explaining the result, a list of "Things to keep in mind" with three bullet points, and three circular images of people. At the bottom of the banner, there are three expandable sections: "How your answers affect your risk", "What you can do to lower your risk", and "Resources".

My CancerIQ / Mon QICancer Design

Cancer Care Ontario
Action Cancer Ontario

Search [Français](#) [t](#) [f](#) [in](#)

[HOME](#) [WHAT'S MY RISK?](#) [ABOUT My CancerIQ™](#) [ABOUT CANCER RISK](#) [FOR HEALTHCARE PROVIDERS](#)

my CANCERIQ

LEARN YOUR RISK.
You can take action against cancer.

Take the risk assessment and get your personalized action plan now.

BREAST
CANCER

CERVICAL
CANCER

COLORECTAL
CANCER

LUNG
CANCER

ABOUT My CancerIQ™
Built by Cancer Care Ontario (CCO), Ontario's provincial cancer agency, this site will show you what steps you can take to help reduce your cancer risk.
[More](#)

FOR HEALTHCARE PROVIDERS
Learn how My CancerIQ helps support patient education and get links to downloadable resources.
[More](#)

ABOUT CANCER RISK
Learn more about factors that can increase or decrease your risk for certain cancers, and find a list of helpful resources.
[More](#)

GET UPDATES
Sign up to be notified when we update our current assessments or add new ones to the site.
[More](#)

[About CCO](#) [Legal & Privacy](#) [Contact](#) [FAQ](#)

Optimized for:

- Computer
- Tablet
- Mobile

Risk Assessment Selection Page

The screenshot shows the 'What's My Risk?' page on the Cancer Care Ontario website. The page features a blue header with the logo and navigation links. A sidebar on the left lists cancer types: Breast Cancer, Cervical Cancer, Colorectal Cancer, Lung Cancer, and Get Updates. The main content area is titled 'WHAT'S MY RISK?' and includes a quote: 'When it comes to avoiding cancer, prevention and early detection are essential. That's why knowing your risk is so important.' Below this, there is a section titled 'Choose an assessment now to get started.' with four options: Breast cancer, Cervical cancer, Colorectal cancer, and Lung Cancer. Each option includes a brief description and an 'Assess my risk' button. At the bottom, there is a 'GET UPDATES' section with a sign-up button and a link to 'More'.

Launching with 4 cancers:

- Female Breast
- Cervical
- Colorectal
- Lung

Will add 2 new cancers each year

2015 adding:

- Melanoma
- Kidney

Sample Assessment Entry Page

Cancer Care Ontario
Action Cancer Ontario

HOME WHAT'S MY RISK? ABOUT My CancerIQ™ ABOUT CANCER RISK FOR HEALTHCARE PROVIDERS

COLORECTAL CANCER

Colorectal cancer (cancer of the colon or rectum) is the fourth most common form of cancer diagnosed in Ontario men and women.

How the assessment works

- We'll ask you questions about things that may affect your risk of colorectal cancer. To find out why we're asking a particular question, click the "Why is this important?" link.
- At the end of the assessment we'll estimate your colorectal cancer risk compared with other Ontarians your age and sex who have never had cancer. You'll also receive a personalized action plan report full of great tips on how you can help lower your risk.
- Save, print or email your results to refer to later or share them with your healthcare provider. Together you can develop an action plan for a healthier future.

This quiz will take about

10-15 minutes.

What you should know

- The risk calculations in this assessment are based on studies of people age 40 and over who have no previous history of cancer. This calculation of relative risk is more accurate for adults of similar age and with a similar medical history.
- This assessment looks at relative risk only. If you are concerned about your health or have symptoms, consult your doctor or nurse practitioner.
- Your risk can change over time. We suggest coming back every so often to see how your risk for colorectal cancer may have changed.

I confirm I have read the Terms and Conditions of Use, I understand its contents, and I agree to be bound by the following terms and conditions.

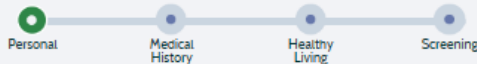
Schedule "A"
TERMS AND CONDITIONS OF USE
Acceptance of Terms and Conditions and Changes
By accessing this website, and any of its pages (the "My CancerIQ" Website), you agree to be bound by the terms and conditions ("Terms and Conditions") set out below. If

Start Now ▶

Brief explanation of how risk is calculated & amount of time assessment requires

No technical medical information required

COLORECTAL CANCER ASSESSMENT



Sample Questionnaire Design

Progress bar/breadcrumb

We'll start this assessment with some basic personal questions such as your age and sex.

Q Have you ever been diagnosed with cancer, except for **non-melanoma skin cancer**?

Yes No [Why is this important](#)

A This tool was designed for people who have never had cancer. Because you've had cancer before, your risk of getting another cancer in the future is higher than in someone who hasn't been previously diagnosed.

We hope you'll continue with the remaining questions to learn how other factors may affect your risk of developing colorectal cancer. But keep in mind that the results at the end are more accurate for people without a history of cancer.

For some questions, immediate response

Q Are you male or female?

More information: Please answer based on your sex at birth.

Male Female [Why is this important](#)

More information to clarify how to respond

Q How old are you?

Why is this important? This tool estimates your risk of developing colorectal cancer compared to people who are the same age. For this reason, it's important to know how old you are. X

[Why is this important](#)

Why is this important?

Q Has your biological parent, brother, sister or child ever had colorectal cancer?

More information: Include only biological family members (those related by blood) in your response, and only those in your immediate family (not your aunt, uncle, grandparents, etc.). Do not include those you are related to by adoption or marriage.

Yes No [Why is this important](#)

Risk Assessment Report

Once questions are completed
My CancerIQ will generate a risk
assessment report with a personalized
health action plan.

There are 3 parts to this report

Part 1 - Risk Assessment Report: Risk category



COLORECTAL CANCER ASSESSMENT

Personal Medical History Healthy Living Screening

YOUR RISK: HIGHER THAN AVERAGE

An average Canadian man's risk of developing colorectal cancer in his lifetime is 1 in 13. Your risk for developing colorectal cancer is higher than most Canadian men your age. It's important to make changes to reduce your risk. Read on for ways to get started.

The graphic features a dark blue header with the title 'COLORECTAL CANCER ASSESSMENT' and a stylized illustration of a person's lower torso and pants. Below the header is a horizontal timeline with four checkmarks in blue circles, labeled 'Personal', 'Medical History', 'Healthy Living', and 'Screening'. To the left of the main text is a red octagonal warning sign with a white exclamation mark. The main text is in a bold, sans-serif font, with 'YOUR RISK: HIGHER THAN AVERAGE' in red and the rest in blue. The background is a light gray gradient.

Part 1 - Risk Level My CancerIQ Algorithm

- Risk Score:
 - Individual compared to Ontario population
 - Individual: Relative risks multiplied
 - Ontario: Prevalence x Relative risk
- Risk levels
 - Lower than average, average and higher than average
 - Triggers for “much higher than average risk”
 - Breast: High Risk Screening (genetics)
 - Lung: Current smoking and occupational exposures

Part 2 - Risk Assessment Report: Quick summary of main factors affecting risk



What factors are raising your risk?

- ▶ You have a family history of colorectal cancer
- ▶ You're overweight
- ▶ You smoke
- ▶ You drink more alcohol than recommended
- ▶ You don't get enough vegetables and fruit, whole grains, and milk, milk alternatives or calcium in your diet
- ▶ You don't get a minimum of 30 minutes of physical activity each day (or 3 hours each week)
- ▶ You have inflammatory bowel disease (IBD), such as Crohn's disease or ulcerative colitis



What factors are keeping your risk down?

- ▶ You eat fewer than 3 servings of red/processed meat each week

Part 2 – Summary of Risk Factors

This section will include an overview of risk factors based on responses. It will highlight what factors are increasing and lowering their risk.

Risk factors that will apply across cancers (lung, breast, cervical, CRC)	Risk factors that will apply to <u>specific</u> types of cancer
<ul style="list-style-type: none">• demographics (age, gender)• height and weight (BMI)• smoking history• diet & healthy eating• alcohol consumption (cancer specific vs low-risk guidelines)• physical activity• family history/genetics• medical history	<p>Lung cancer</p> <ul style="list-style-type: none">• occupational and environmental exposures <p>Breast cancer</p> <ul style="list-style-type: none">• reproductive history• screening status <p>Cervical cancer</p> <ul style="list-style-type: none">• reproductive and sexual history• screening status

Part 2 – Summary of Risk Factors

- These first two sections will provide an opportunity for physicians and nurse practitioners to engage in health behaviour change and motivational interviewing (MI).
- This report will help support the 5 A's of behaviour change:
 - ***Ask, Advise, Assess, Assist & Arrange***
- And assist in the 4 process of motivational interviewing (MI):
 - ***Engaging*** – getting the patient to talk about issue and build trust.
 - ***Focusing*** – narrowing in on the behaviour/risk the patient wants to alter.
 - ***Evoking*** - understanding the patient's motivation for change and supporting the need for change, their ability/confidence to change and assessing their readiness to change.
 - ***Planning*** - developing the practical steps patients will need to plan for and make the health behaviour change.

Part 2 – Summary of Risk Factors

Motivational interviewing relies up four core skills during the interaction with a patient:

- Asking open ended style questions
- Providing affirmative support
- Listening reflectively
- Periodically summarizing the conversation

My CancerIQ can provide a teachable moment for patients that are looking to understand and modify risk factors that have been highlighted.

Part 3 – Personal Health Action Plan

- This section provides explanation of the risk factors prioritized by contribution to overall risk .
- Provides links to resources that patient's can turn to for extra support .
- We encourage people to connect with evidence based and trusted Ontario and Canadian resources to find out more about the risk factors they have, including resource links and 1-800 phone lines to:
 - Smokers' Helpline
 - Eat Right Ontario
 - Canadian Cancer Society's Cancer Information Service
 - Sexuality and U
 - Carex Canada
 - Canadian Centre for Occupational Health and Safety.

Part 3 – Personal Health Action Plan

Protect Yourself Screening Messages

- Screening status is assessed for female breast, cervical and colorectal.
- Messaging based upon the Ontario screening guidelines.
- Assessed based on age and family history.
- Messaging provided for all persons:
 - At what age and interval they should be screened at.
 - Highlight if they are under screened or never screened.
- Direct patients to speak to their physician / nurse practitioner.
- Connects them to CCO resources
 - Ontario Breast and Cervical Screening programs or Colon Cancer Check. program
 - Working in tandem with our Integrated Cancer Screening work

Part 3 - Risk Assessment Report: For screening cancers, personalized screening message

YOUR PERSONAL HEALTH ACTION PLAN



The Action Plan below was put together specifically for you based on the answers you provided. Use it to make changes to your lifestyle to help lower your risk and/or to help you recognize what you're already doing well. And don't forget to visit the resources listed here for more helpful advice and useful information.

Protect yourself

COLLAPSE

Screening saves lives. Regular screening is the **most important thing you can do** to stay protected from colorectal cancer. In fact, if colorectal cancer is **caught early**, there is a **90% chance it can be cured**.

Because your parent, sibling or child has been diagnosed with colorectal cancer, you have a higher risk of developing this disease. Talk to your doctor or nurse practitioner about your family history and how it may affect your risk.

You report you have never had any screening for colorectal cancer. For people who are at an increased risk because of family history, like you, ColonCancerCheck (Ontario's colorectal cancer screening program) recommends you get a screening colonoscopy:

- ▶ starting at age 50 (in 6 years);
OR
- ▶ 10 years earlier than the age of your relative when he/she was diagnosed (whichever is first).

You should also talk to your doctor or nurse practitioner about what test(s) would be right for you if you develop any of the following:

- ▶ Any symptoms that could mean colorectal cancer, such as a change in bowel movements, blood in the stool, constipation, fatigue or stomach discomfort;
- ▶ A previous diagnosis of colorectal polyps;
- ▶ Inflammatory bowel disease (Crohn's disease or ulcerative colitis).

Visit [ColonCancerCheck](#) or call ServiceOntario INFOline at 1-888-410-5853 (TTY 1-800-387-5559) Monday to Friday 8:30 a.m.-5:00 p.m. to:

- ▶ Get more information on screening guidelines for you and your loved ones
- ▶ Download an instruction sheet if you're taking a fecal occult blood test (FOBT)

Sample for Male :

- 44 years old
- Family History of CRC
- No previous screening

Health Action Plan with links to resources

Sample messaging in action plan – healthy eating

Eat well.

You may be able to help lower your risk of colorectal cancer by making some small changes to your diet.

- ▶ Your answer suggests your diet is low in **vegetables and fruit**. Eating **5 or more servings each day** may help lower your risk of developing several cancers. Try to include one or more fresh or frozen vegetables or fruits into every meal.
- ▶ Whole grains are a good source of fibre, which can help keep your colon healthy. In fact, eating **3 or more servings of whole grains each day** may lower your risk of developing colorectal cancer. Take a step in the right direction today by keeping count of those whole grains.
- ▶ Not getting enough calcium may raise your risk of developing colorectal cancer. Aim for **3 or more servings of milk and dairy products, or fortified alternatives, on most days** each week to lower your risk.

Learn more about healthy eating at any age at [EatRight Ontario](#). There you'll find:

- ▶ Tips for planning meals and snacks
- ▶ Healthy recipes to try at home
- ▶ Tools to help you reach your healthy living goals

To speak with a Registered Dietitian, go to EatRight Ontario at www.eatrightontario.ca or call 1-877-510-5012. Ask about programs or resources available in your community or through your local Public Health Unit or for free resources to be sent to you on food and colorectal cancer.

Health Action Plan with links to resources

Sample messaging in action plan – Alcohol

Avoid excess alcohol.

You report you typically drink 14-20 alcoholic drinks per week. Drinking alcohol may raise your risk of developing colorectal cancer, so try to cut back to fewer than 2 drinks each day, on average, to reduce your risk.

Get the facts on alcohol and cancer from the [Canadian Cancer Society](#). There you'll find:

- ▶ Guidelines on reducing your risk if you choose to drink
- ▶ Links to other resources to help you cut down your alcohol intake

For information and support by phone, call its Cancer Information Service toll-free 1-888-939-3333 Monday to Friday 9 a.m.-7 p.m. (EST). Ask about programs available through your local Public Health Unit.

Risk Factor Example – Smoking Status & Second Hand Smoke

Sample messaging in action plan – Smoking & Second Hand Smoke

Commit to quit smoking.

You said you smoke:

- ▶ 10 cigarettes/day
- ▶ for about 20 year(s)

Tobacco smoke from cigarettes contains many harmful chemicals that damage the cells in the lungs. What you may not know is that smoking cigarettes and cigars increases the risk of more than just lung cancer. Smoking increases your risk of other types of cancer and of other serious diseases. **The longer you smoke and the more you smoke, the greater the risk to your health.**

Quitting smoking isn't easy but it's the number one thing you can do to lower your risk of lung cancer. Once you stop smoking, your body will start replacing damaged lung cells with healthy ones. Your risk of lung cancer begins to fall within 2–5 years after quitting and within 10 years is cut nearly in half. If you stay smoke-free for 20 years or more, your risk of lung cancer is the same as someone who never smoked.

You also report you haven't tried to quit smoking during the past 12 months. Maybe it's time to start thinking about quitting. **Trying to quit would be a big step in the right direction.** It may be helpful to know that many people have to try several times before they quit permanently. Each attempt to quit can get you closer to your goal of being smoke-free. Talk with your doctor or nurse practitioner about the different approaches available to help you quit smoking.

Access tools to help you become tobacco-free at [Smoker's Helpline](#), including:

- ▶ An online community
- ▶ Support from a Quit Coach by phone or text
- ▶ Self-directed and personalized information to help you reach your goals

To contact them by phone, dial 1-877-513-5333. Ask about programs available through your local Public Health Unit.

My CancerIQ Health Care Provider Resources



Q What is My CancerIQ™? EXPAND

Q How does My CancerIQ calculate a patient's risk? EXPAND

Q How were the risk factors identified? EXPAND

Q How were the Ontario prevalence estimates obtained? EXPAND

Q What are the sources of the screening recommendations used on the site? EXPAND

Q How were links to outside resources selected? EXPAND

Q How can completing a cancer risk assessment benefit my patient? EXPAND

Q Why should I encourage my patients to complete a cancer risk assessment? EXPAND

Q What topics are covered by the website? EXPAND

Q What topics are not covered? EXPAND

Q How is my patient's information protected? EXPAND

Q Why are the recommendations for alcohol different from the Canadian Centre on Substance Abuse Low Risk Drinking Guidelines? EXPAND

Q Where can I find links to resources? EXPAND

Q Is there a print version I can give to my patients? EXPAND

Q Does CCO have resources for primary care providers? EXPAND

Public Target Audience

Early Adopters
Influencers – M/F
Ages 35 to 54

Most at Risk
Key Target – M/F
Ages 35 to 54

Under/Never Screened
Demographics – M/F
Ages 50 to 74



Involved Advocate

Proactive Holistic

Self oriented Moderate

Reactive Life Manager
(Incl. Under Never Screened & low health literacy)

- Screened once (with lapse 2x suggested interval) or never screened
- Non-Canadian born, low SES, remote communities, Aboriginal communities

W 35-54 with high health literacy and a prevention predisposition

Men 35-54 with good health literacy but low focus on prevention, and women 35-54 with moderate health literacy and low focus on prevention

My CancerIQ

- Evidence-based prevention and screening information
- High priority given to privacy & security
- Lay language, attractive & AODA compliant
- Available in English and French.
- Comprehensive
 - Information & resources for patients
 - Health care provider resources & information

Launching January 2015



Thank you!