Ontario’s Colorectal Cancer Screening Program

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Outline

• Burden of disease
• Organized vs. opportunistic screening
• Ontario’s program
• Learnings
Burden of Disease
Colorectal Cancer Incidence: North and South America (both sexes, per 100,000)

Source: GLOBOCAN 2012 (IARC)
Colorectal Cancer Mortality: North and South America (both sexes, per 100,000)

Source: GLOBOCAN 2012 (IARC)
CRC Incidence Trends (per 100,000): Oceania, North and Latin America

GLOBOCAN 2012 (IARC)
Organized vs. Opportunistic Screening
Organized Screening Program

- Defined target population
- Invitations to screen
- Timely access
- Quality assurance
- Tracking of outcomes
Organized Screening Program

• Greater protection against harms
  ➢ Over-screening
  ➢ Poor quality
  ➢ Poor follow-up
  ➢ Complications

Screening is a Process

Identify

Invite/remind

Assess risk

Screen

Notify of results

Recall/remind

Follow up
Ontario’s Cancer Screening Information System

**Inputs**
- Population database
- Hospital records
- Kit results
- MD billings
- Colonoscopy results
- Ontario Cancer Registry

**Outputs**
- Program Operations
- Program Evaluation
- Program Reporting

**InScreen**

**Program Evaluation**
Percentage overdue for colorectal cancer screening
Figure 1: Age-adjusted percentage of Ontario individuals aged 50-74 who were overdue for colorectal cancer screening in a calendar year, by Local Health Integration Network (LHIN), 2010-2013

**Program Reporting**
- JNCI Journal of the National Cancer Institute
Ontario’s Colorectal Cancer (CRC) Screening Program
Canada 35.8 M

Ontario 13.8 M
Funding Announcement

January 23, 2007
• gFOBT for average risk (50–74 years, no symptoms)
• Colonoscopy for increased risk (first-degree relative with CRC)
Performance
Number of Screen-Eligible People

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Screen-Eligible People</th>
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<tbody>
<tr>
<td>2010</td>
<td>500,000</td>
</tr>
<tr>
<td>2011</td>
<td>1,000,000</td>
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<tr>
<td>2012</td>
<td>1,500,000</td>
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<tr>
<td>2013</td>
<td>2,000,000</td>
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</tbody>
</table>
Overdue for Screening (50–74 yrs)
FOBT + in Ontario (50–74 yrs)
CRC Detection Using FOBT

Year

Cases detected (per 1,000 screened)

2008 2009 2010 2011 2012 2013 2014
CRC Detection Using Colonoscopy (50–74 yrs)

Cases detected (per 1,000 screened)

Year

2008
2009
2010
2011
2012
2013
2014
Colonoscopy Follow-up within 6 Months of FOBT+
Challenges and Opportunities
Challenges

• Participation rate
• Follow-up of FOBT+
• Switch to FIT (2017)
Lessons Learned
Moving Forward: Alignment

• Clinical champion
• Lay organization(s)
• Professional organization(s)
• Policy-makers (cancer agency)
• Ministry of Health ($)
Moving Forward: Celebrity

Darryl Sittler
Moving Forward

• CRC incidence >30/100,000

• Country resource level: Basic, limited, enhanced, maximal

Moving Forward

• Line up support
• Establish/adopt guidelines
• Consider a pilot
• Selected urban region(s)
• Test the steps in the process
• Expand
Networks

• IARC initiatives
• International Cancer Screening Network (ICSN)
• World Endoscopy Organization (WEO)
• Regional workshops
  ➢ NA (DDW)
  ➢ Europe (UEGW)
  ➢ Asia-Pacific (APDW)
  ➢ Latin America (SIED, Cartagena, Sept 2016)
Thank You