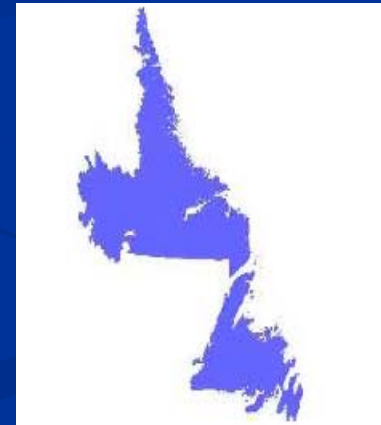


# Hereditary Colorectal Screening: The Knowledge, Attitude and Practice Patterns of Gastroenterologists and Surgeons in NL

Jill MacEachern

Masters in Applied Health Services Research, 2<sup>nd</sup> Year  
Memorial University of Newfoundland and Labrador

May 12<sup>th</sup>, 2009  
CAHSPR, Calgary



# Outline

- Introduction & background
- Study objectives
- Materials & methods
- Survey response
- Summary of findings

# Colorectal Cancer (CRC)

- Second leading cause of death from cancer
- NL has the highest incidence rate of CRC among men of any Canadian province and second highest rate among women
  - Men: 87/100,000
  - Women 52/100,000
- 2009 NL Estimates:
  - 490 new CRC cases (290 men; 200 women)
  - 230 CRC deaths (130 men; 100 women)

# Risk Factors

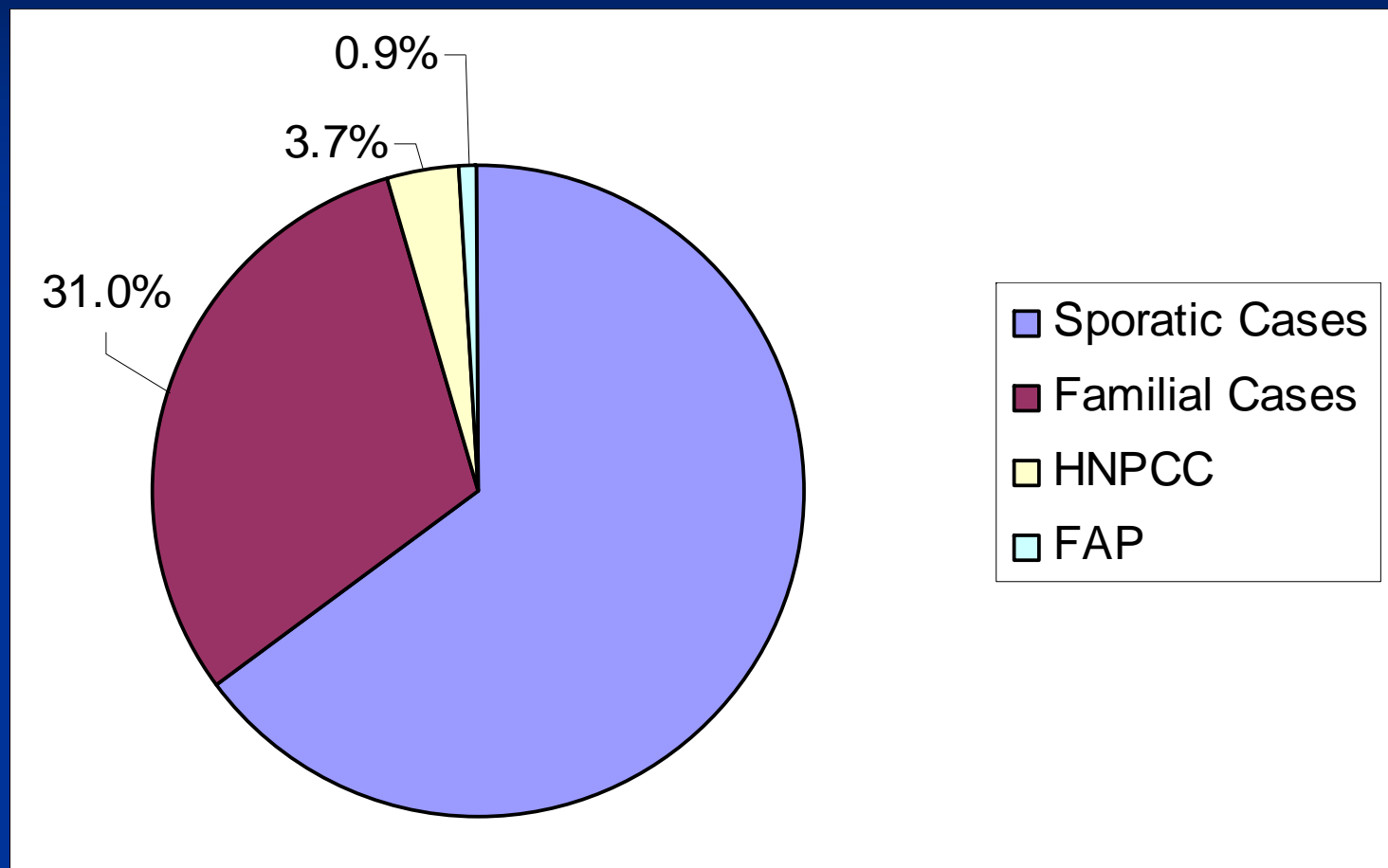
## Modifiable

- Diet (high in fat)
- Smoking
- Alcohol
- Physical inactivity
- Obesity

## Non-modifiable

- Age
- *Family history*
- *Hereditary syndromes*  
(i.e. HNPCC, FAP)
- Personal medical history  
(i.e. CRC, IBD)

# Hereditary CRC Cases in NL



# CRC Screening

- Reduces CRC incidence through the removal of premalignant polyps and CRC mortality through early detection and treatment

## Screening Tests

- Fecal occult blood test (FOBT)
- Double contrast barium enema
- Flexible sigmoidoscopy
- Colonoscopy

# CRC Screening in NL

- Screening rates are lower in NL than in other parts of Canada
  - CCHS (2.1)
    - 12.6% of adults > 50 years reported being up to date on CRC screening
    - 4% of women > 50 years reported have a FOBT within previous 2 years
- Gastroenterologists and Surgeons (G/S) in NL play a critical role in screening because they are the only health professionals who perform endoscopy procedures (i.e. colonoscopy, sigmoidoscopy)
  - They determine dates and frequencies of screening
  - Unclear what role they should play in on-going screening management of high risk patients

# Research Objectives

1. To understand the characteristics of G/S who perform colonoscopies in NL
2. To understand G/S knowledge of recommended CRC screening guidelines for average and high risk patients
3. To understand G/S attitudes about current CRC screening practices in the province

# Survey

- **Piloted on 1 Surgeon and 1 Gastroenterologist**
- **Sample**
  - G/S who perform colonoscopies in their practice
  - Identified through the College of Physicians and Surgeons of NL website
- **Modified Dillman Approach**
  - Respondent friendly mail out survey
  - 2<sup>nd</sup> mail out
  - Use of return envelopes
  - Personalized correspondence to non-respondents

# Response Rate/ Characteristics

**58 Gastroenterologists and Surgeons**

**Excluded (n = 15)**

- No/incorrect address (n = 5)
- Did not perform colonoscopies (n=9)
- Pediatric surgeon (n-1)

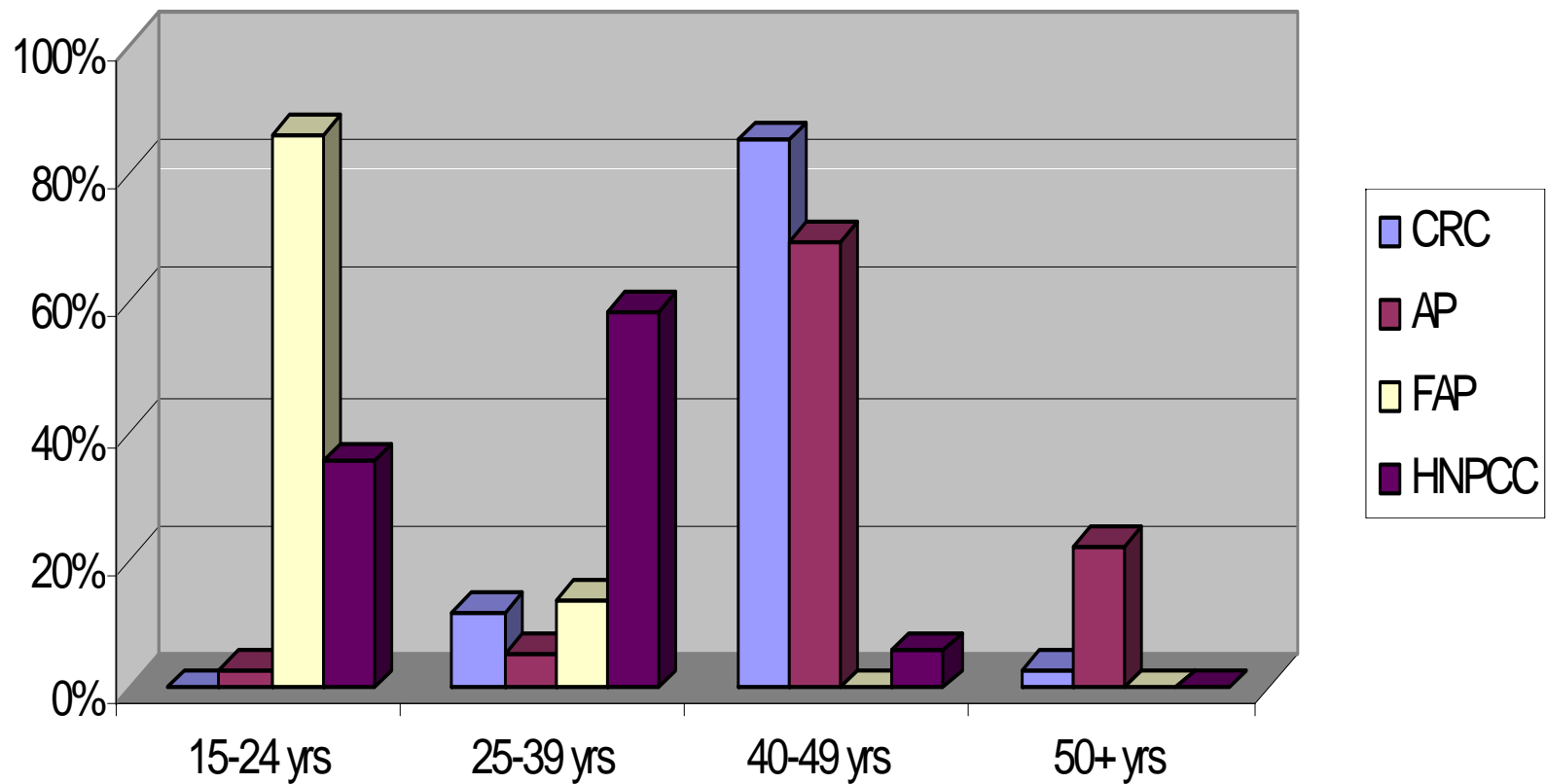
**Included (n= 36)**

**83.7% Response Rate (36/43)**

- 83% male
- 25% Gastroenterologists
- 57% practicing NL < 10 years
- 35% graduated < 10 years ago
- 83% certified with RCPS
- 74% performed >250 colonoscopies annually

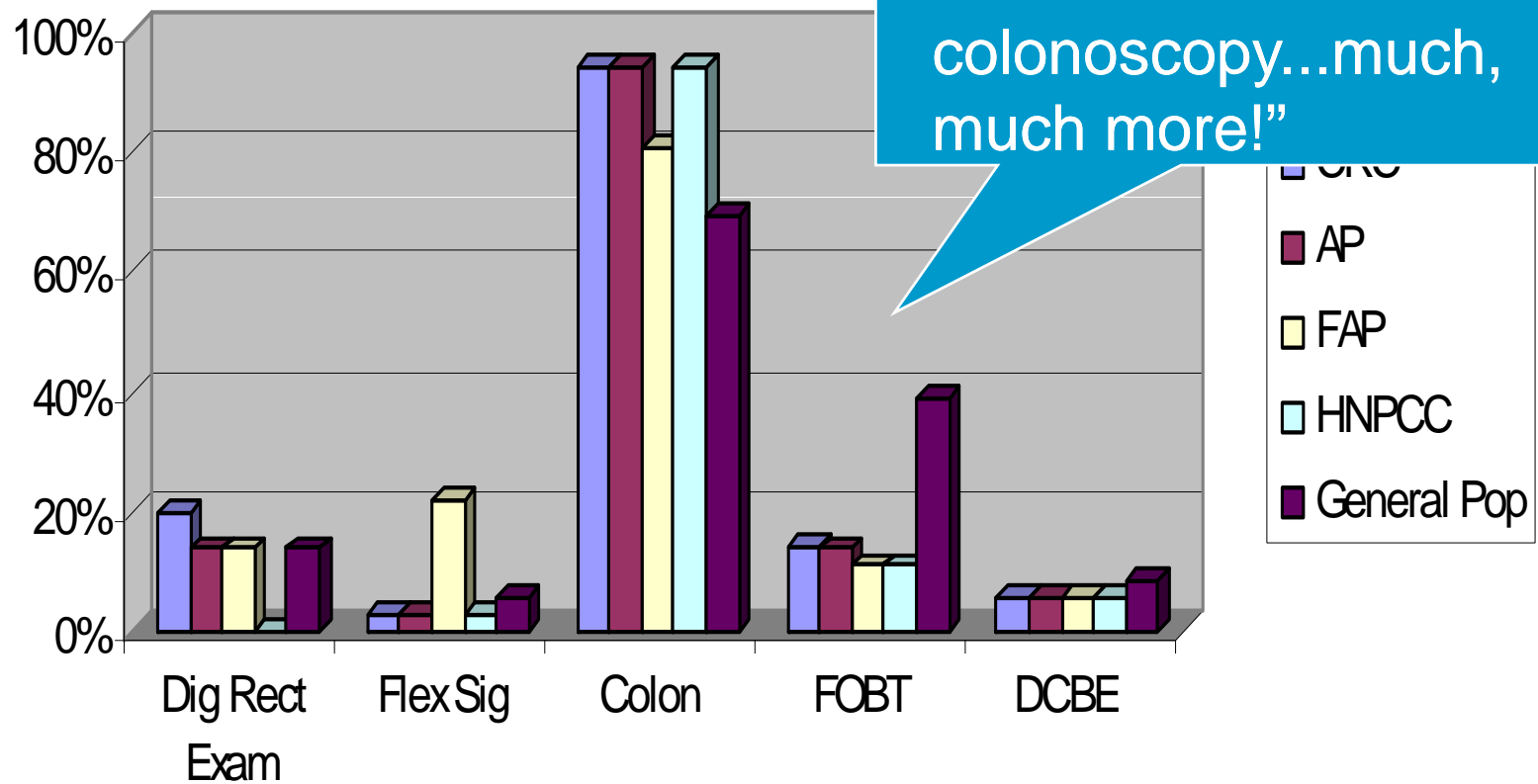
# Key Findings: Knowledge and Practice Patterns

# Age Recommended to Begin Screening

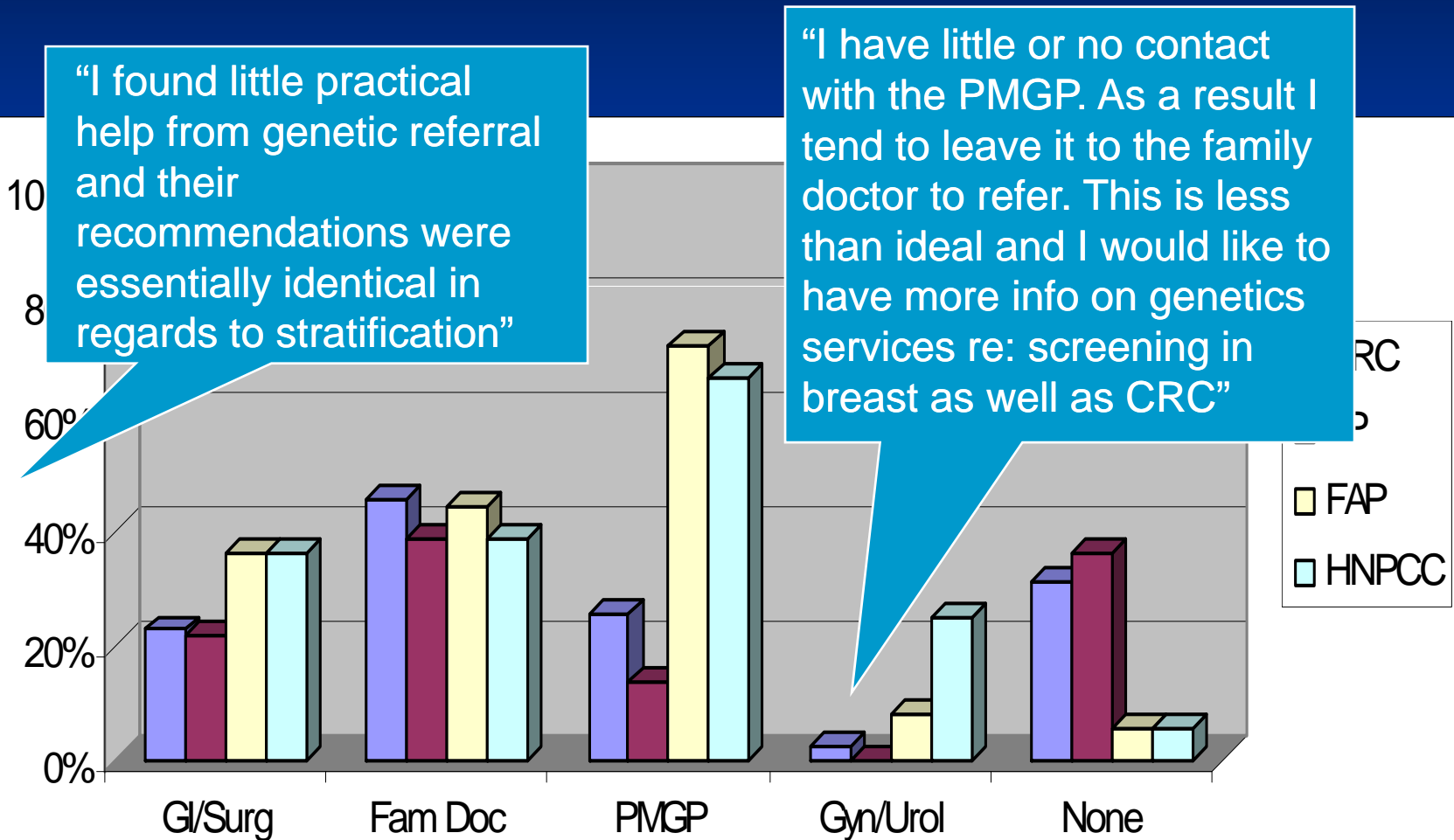


# Preferred Screening Test

“We need more resources for colonoscopy...much, much more!”



# Interdisciplinary Health Team Involvement

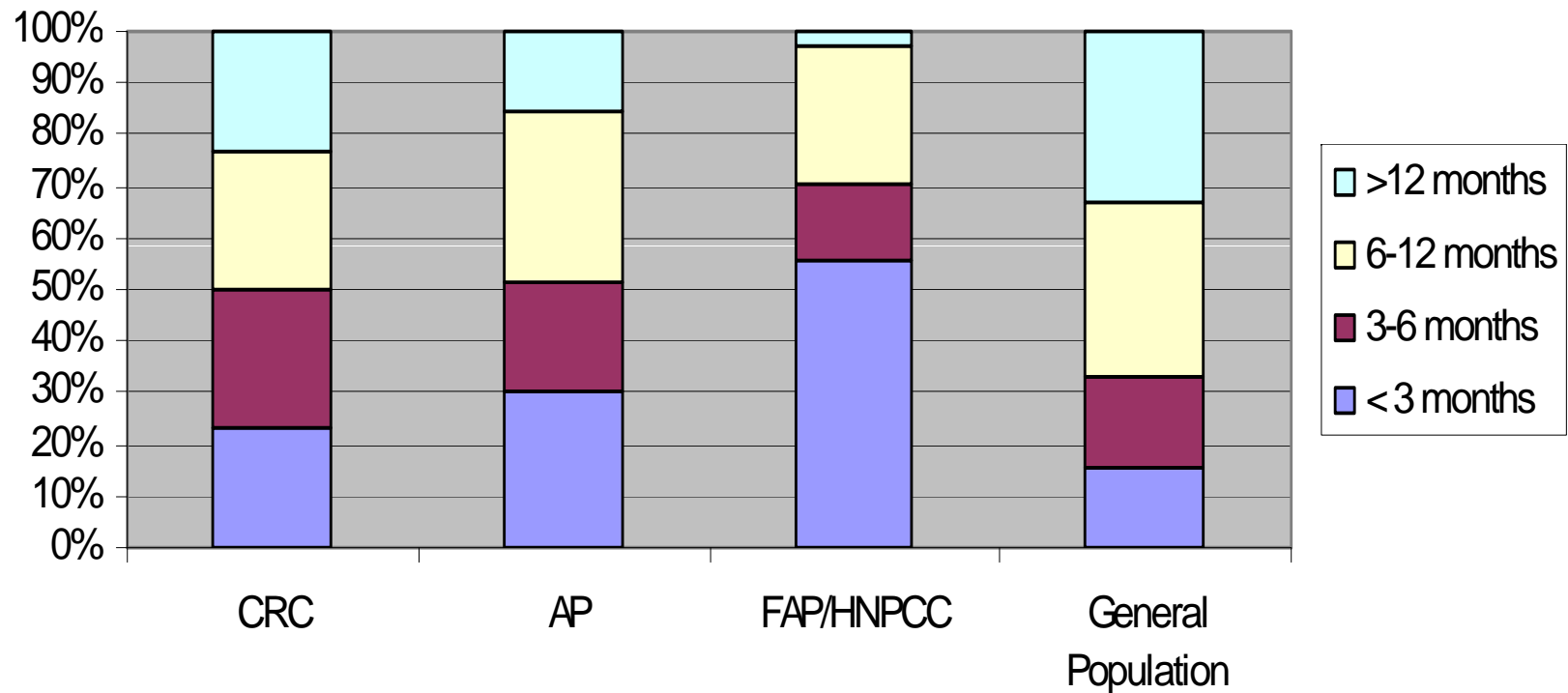


# Routine referral for genetic testing

- FAP: Yes 97%
- HNPCC: Yes 81%

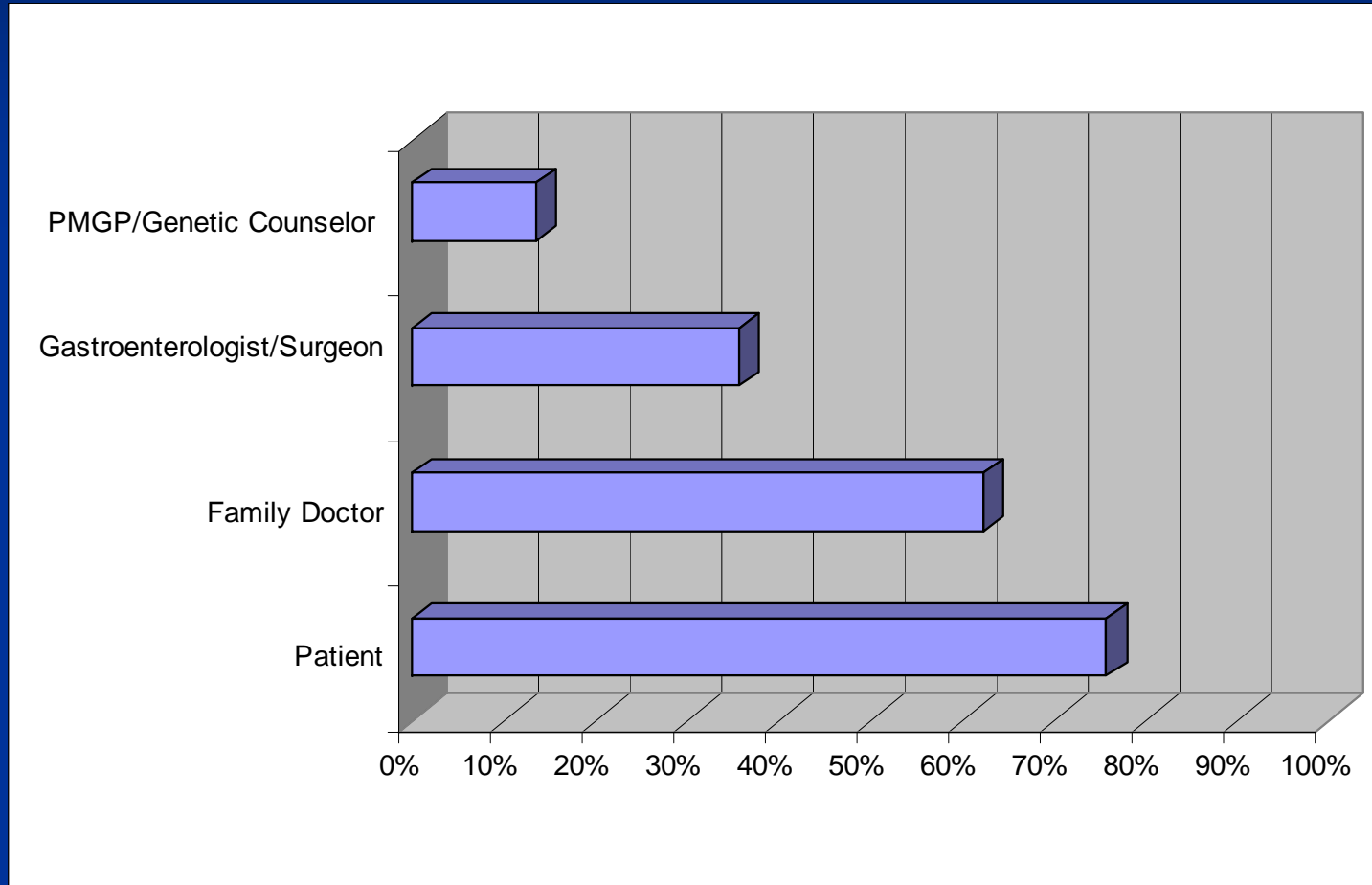
“I'm not aware genetic testing is routinely being available in this province”

# Wait times for a colonoscopy

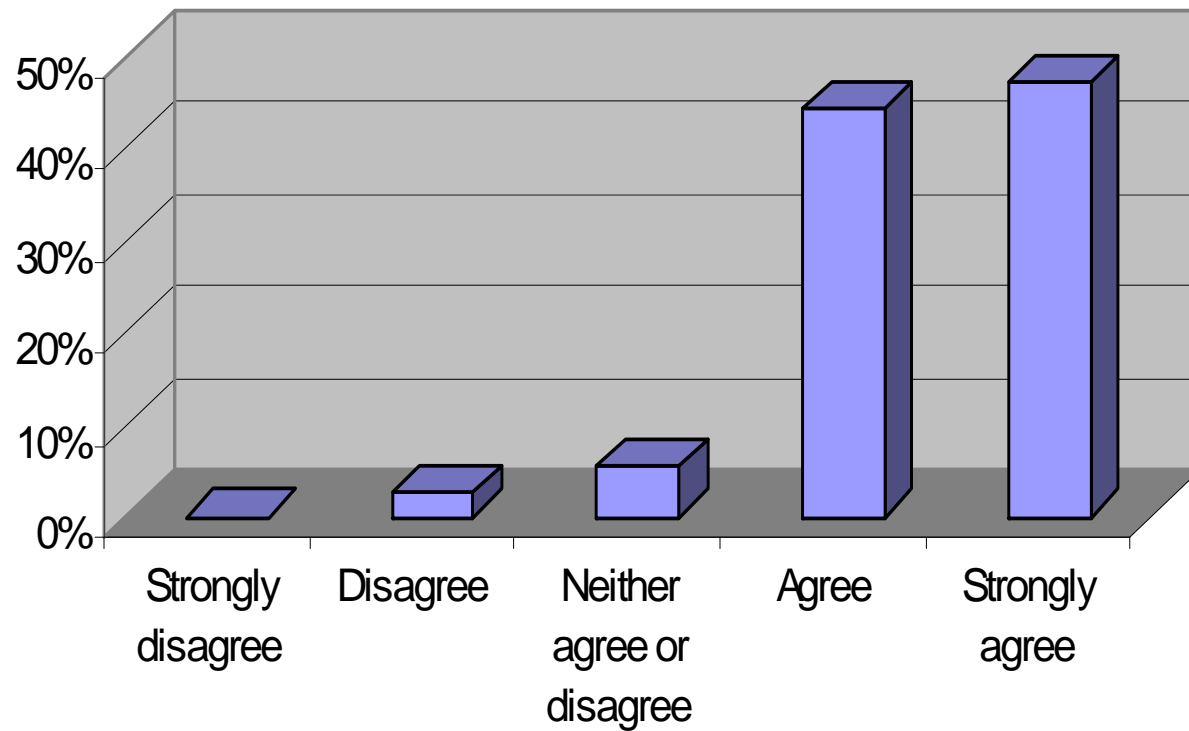


# Key Findings: Attitude

# Who should monitor patient compliance to screening?



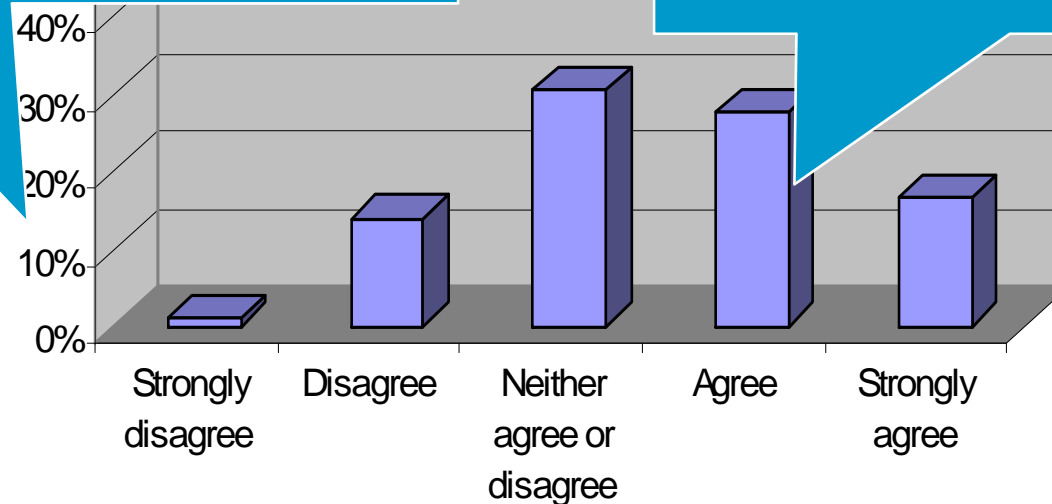
# There is a need for a province wide CRC registry



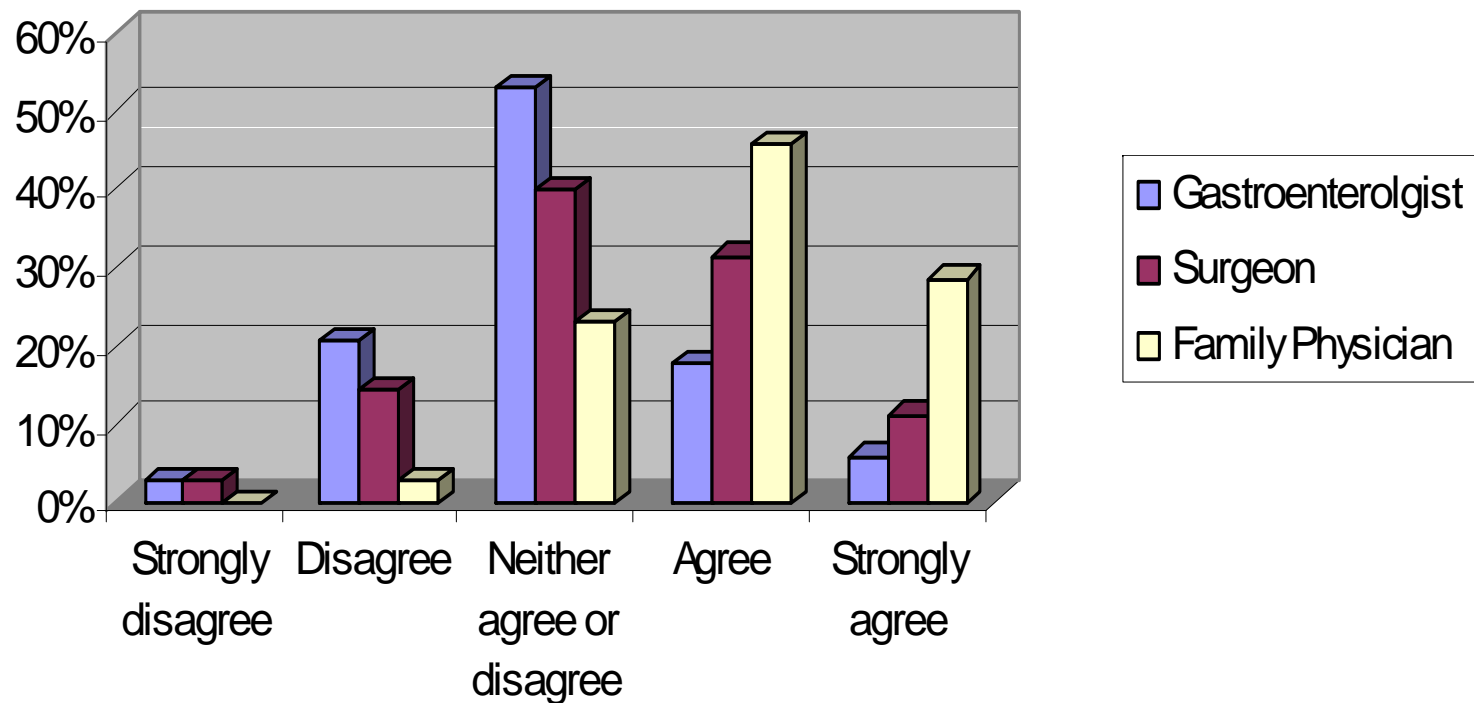
# There is a need for central CRC screening booking centre

“Does a proposed central booking registry have to be located in Avalon? I suspect it is pre ordained”

“Approving province- wide system may not work as well or as effective as a regional program with dedicated staff who therefore know the individuals personally”



# Gastroenterologists, Surgeons and Family Physicians need more education re: hereditary CRC and screening



# Summary of Findings

- Potential over use of colonoscopy
- Improved coordination of CRC screening services is needed
  - Other studies have shown high risk CRC patients want more coordination among their health providers
- Increased education about CRC screening guidelines among G/S could improve consistency and quality of care

# Thank you...

- Supervisory Committee:
  - Dr. Daryl Pullman
  - Dr. Maria Mathews
  - Dr. Jane Green
- AMGGI
- Atlantic Regional Training Program



Questions/ Comments?

# CAG CRC Screening Guidelines

FAP/ HNPCC

Genetic testing and genetic counseling

**HNPCC:**  
Colonoscopy every 1-2 years. Begin at age 20 years or 10 years younger than earliest case in family

**FAP:**  
Sigmoidoscopy annually. Begin at age 10 to 12 years

One first degree relative with CRC or adenomatous polyp < age 60 years

Colonoscopy every 5 years. Begin at age 40 or 10 years earlier than the youngest diagnosis of polyp or cancer in the family, which ever comes first

	<b>Fecal Occult Blood Test (FOBT)</b>	<b>Colonoscopy</b>	<b>Flexible Sigmoidoscopy</b>	<b>Double-Contrast Barium Enema (DCBE)</b>
<b>Guidelines Advisory Committee (2008) , endorsed Australian Cancer Network (2005)</b>	At least every 2 years For positive result, do colonoscopy	Insufficient evidence to include or exclude as primary screening tool	Every 5 years Recommendation equivocal”	Not considered
<b>American Cancer Society, U.S. Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology (2008)</b>	Annual gFOBT <i>if</i> test with high sensitivity available. Effective for early detection of CRC. Follow-up vital for effectiveness.	Every 10 years Recommended for detection of adenomas and colorectal cancer	Every 5 years Recommended as option for detection of adenomas as well as colorectal cancer	Every 5 years DCBE and CT colonography recommended as options for detection of adenomas and colorectal cancer
<b>Canadian Association of Gastroenterology (2004); American Gastroenterological Association (2003)</b>	Every 2 years (Canadian) Every year (US) For positive result, do colonoscopy	Every 10 years (not supported by direct evidence)	Every 5 years . Can combine yearly FOBT with sigmoidoscopy every 5 years. Do FOBT first	Every 5 years
<b>US Preventive Services Task Force (2002)</b>	Note: Annual FOBT offers greater reductions in mortality rates than biennial screening but produces more false-positive results and is more costly	Insufficient evidence to recommend for or against routine use for screening	Insufficient evidence to determine if combination of FOBT and sigmoidoscopy is superior to either test alone	Insufficient evidence to recommend for or against
<b>Canadian Task Force on Preventive Health Care (2001)</b>	Include annual or biennial Hemoccult test in PHE	Insufficient evidence to include or exclude as primary screening tool	Insufficient evidence re: whether only 1 or both of FOBT and sigmoidoscopy be performed	Not considered