Does your patient really need a colonoscopy?
Using existing evidence to monitor and refer symptomatic patients for colonoscopy
Cancer Council NBCSP Spotlight
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WA Bowel Cancer Screening Implementation Team
Bowel (Colorectal) Cancer

- Second commonest internal cancer after prostate
- Commonest cancer affecting Men and Women
  - Risk = 1 in 12 by 85 yrs
- Risk: M = 1:10  F = 1:15
- WA in 2013
  - 1281 new cases
  - 431 deaths

AIHW and WA Cancer Registry
Bowel cancer in Australia

Incidence markedly increases after 50 yo

Source: Australian Institute of Health and Welfare

AIHW 2015 Australian Cancer Incidence and Mortality
Adenoma → Carcinoma
5 - 20 year sequence
Bowel Cancer Diagnosis
Colonoscopy in WA

- Approximately 60,000 colonoscopies p.a.
- Approximately 1200 cancers p.a.
- 50 colonoscopies per cancer found
- Of course, colonoscopy is not just for cancer
Colonoscopy yield: WA

- SCGH: 5% of colonoscopies yield Ca
- Osborne Park Hospital: <2% yield cancer
- NBCSP iFOBT (+): 3.4% cancer
- Estimated population prevalence
  - 1:300-500 people >50 yo are harbouring an undiagnosed bowel cancer
What drives colonoscopy demand?

- Patients, referrers, endoscopists, media
- Fear
  - Patients fear cancer
  - Doctors fear lawyers
  - Disproportionate fear of rare anecdotes
- Misunderstandings
  - indications, screening, follow-up guidelines
  - mixed messages, re-scope in 1, 3, 5 years?
  - cancer progression times
- Technology superior to doctors’ opinions
- Financial
Colonoscopy indications
Most urgent

- Palpable rectal mass
- Palpable abdominal mass (usually RIF)
- Abnormal imaging
  - CT scan
  - CT colography
  - PET scans
  - Barium enema
Colonoscopy indications
Urgent

- Chronic rectal bleeding > 4 weeks
- Iron deficiency anaemia
  - Male Hb <11
  - Post-menopausal Female Hb <10
  - Pre-menopausal Female Hb <9
- Change in bowel habit > 4 weeks plus alarm
  - Palpable mass, anaemia, weight loss
- FOBT (+)
- After acute diverticulitis, 1st episode
Colonoscopy indications
Less urgent

- Altered bowel habit without alarm symptoms
- Chronic diarrhoea > 6/52
- Small polyp on imaging e.g. < 2cm
Colonoscopy indications
Low risk

- Constipation
- Bloating
- Chronic abdominal pain
- Family history
- Post-surgical cancer surveillance
- Polyp surveillance
Low risk

- Colonoscopy in last 5 years
  - <1% cancer
  - Even if presenting with symptoms
  - Examples
    - proven diverticula but repeat bleeding
    - bleeding but had colonoscopy <5 years ago
Inadequate referrals

Dear Dr,

Re

Current Problem: please review [redacted] for endoscopy and colonoscopy. She has a strong Fhx of cancer.

Past History:

Current Medications:

- What’s the family history?
- Which cancers? At what age?
Inappropriate referrals

Thank you for seeing [redacted], aged 83 yrs, who was referred by my colleague on Sept 14 for pos FOBT still waiting, I would appreciated your urgent opinion and management to consider colonoscopy at your earliest

History:
Alzheimer's Dementia OPH 20/30 19 Sept 2014

• Why screen?
Stopping polyp surveillance

2.4.11 Stopping rules

The lead time for progression of an adenoma to cancer is around 10 to 20 years which is of the same order as the average life-expectancy of an individual aged 75 years or older, suggesting that most people over 75 years of age will not benefit from surveillance.

<table>
<thead>
<tr>
<th>1. Blood from back passage</th>
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<tbody>
<tr>
<td>a. Blood old/fresh</td>
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<tr>
<td>b. Blood in/separate from stool</td>
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<tr>
<td>c. Amount of blood</td>
</tr>
<tr>
<td>d. Frequency of blood</td>
</tr>
<tr>
<td>e. Total length of time</td>
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<tr>
<td>f. In past month bleeding has improved/worsened</td>
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<tr>
<th>2. Changes in bowel habit</th>
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</thead>
<tbody>
<tr>
<td>a. Type of change</td>
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<tr>
<td>b. Increased frequency</td>
</tr>
<tr>
<td>c. Increased frequency time of day</td>
</tr>
<tr>
<td>d. Urgency</td>
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<tr>
<td>e. Total length of time</td>
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<tr>
<td>f. In past month frequency has improved/worsened</td>
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<tr>
<td>g. Normal bowel habit</td>
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| 3. Slime +/- mixed blood |

| 4. Incomplete bowel movement |

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<th>5. Symptoms around back passage</th>
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</thead>
<tbody>
<tr>
<td>a. Type of symptom</td>
</tr>
<tr>
<td>b. Total length of time</td>
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<tr>
<th>6. Abdominal pain</th>
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</thead>
<tbody>
<tr>
<td>a. Location of pain</td>
</tr>
<tr>
<td>b. Bloating</td>
</tr>
<tr>
<td>c. Abdominal symptoms total length of time</td>
</tr>
<tr>
<td>d. In past month symptoms have improved/worsened</td>
</tr>
</tbody>
</table>

| 7. Weight loss |

| 8. Loss of appetite |

| 9. Excessive tiredness |

| 10. Medications |

| 11. Previous illnesses |

| 12. Family history of cancer |

| 13. Previous colonoscopy |

| 14. Other information |

- Various symptoms have different scores
- Composite score made
- Score determines probability of cancer = Risk category
- Devised for UK, still being tested in WA
Colonoscopy hazards

- Significant problem for elderly, comorbid
- Fluid shifts, haemodynamic compromise
- Electrolyte abnormalities
- Falls risk
- Anaesthetic/sedation risks
- For what benefit?
Colonoscopy summary

- Colorectal cancer is very common
- Colonoscopy is best diagnostic test for cancer
- Colonoscopy is expensive, demanding
  - Risk stratification improves yield
- Appropriate use improves priority, accessibility, equitability