Primary Care and Cancer Matters

COLORECTAL CANCER & FIT

Dorin Ziyaie MBChB, MD, FRCS
Consultant Colorectal Surgeon
Honorary Senior Lecturer
Dundee Scotland UK
Cancer Research UK; Bowel cancer Statistics

National Cancer Diagnosis Audit Scotland 2014

Over 2000 cancer patients Published June 2018

• 3rd after lung and breast
• 1st presentation Primary Care 62.9% referrals
• 20% referred to EDs or ASRUs 1/3rd via GP
• <4% SELF presented to EDs
• Median interval 4 days
• 65.3% <3 GP consultations Median number 1 (Range 0-24)
Bowel Cancer
Aspiration to do Better
Diagnosis & Survival ∞ Economy

Constant Battle
Symptoms vs. Screening

Colorectal Cancer
Detect Cancer Early Campaign

DON'T TAKE A CHANCE, TAKE THE TEST.

DON'T GET SCARED, GET CHECKED.

Younger Population

*****
Screening program & Clinical impact

- Biennial guaiac FOBT (gFOBT) Since 2007
- Prevalence vs. Incidence
- Dukes A
- Asymptomatic vs. Symptomatic
- 35% vs. 11%

Steele et al. UEG J 2016; 4: 587–94.

Scotland 50 - 74 years
Wales 60 - 74 years
NI 60 - 74 years
England 60 – 74 years
FS offered at 55
Screening for Colorectal Cancer

- FIT vs. gFOB
- By Implication
  - Threshold of equal analytical sensitivity as gFOB
- Specific for human haemoglobin
- User friendly
- Better in detecting adenomas  
  *Moss et al Gut 2017; 66: 1631–44*
  - Flexible sigmoidoscopy reduces CRC mortality
  - Detection of adenomas  
    *Steele et al UEG J 2013; 1: 198–205*
  - Polyp cancer detection 16% definitive endoscopic treatment
- Quantitative
Quantitative FIT Screening In Scotland

FIT Pilot ran 2010-2011
Full business case submitted to Scottish Government June 2014
Implementation planning between 2015 – 2017
80 µgHb/g Faeces Positivity Threshold
Quantitative FIT Go Live 20\textsuperscript{th} November 2017 across Scotland
Dual running of old and new algorithms
FOBT functionality removed 14\textsuperscript{th} January 2018

Cancer Waiting Target Times Missed
The Herald

• Threshold Trigger for Endoscopy / Colonoscopy vs. Service capacity
Effect of FIT Screening on Colonoscopy Waiting times

![Graph showing the effect of FIT screening on colonoscopy waiting times. The graph compares the number of individuals on the list, those waiting more than 4 weeks, and those waiting more than 6 weeks. The data is presented from March 2016 to March 2018.]
Is Screening in UK perfect?

Deprivation factor and uptake

Increase adenoma detection

Sensitivities gFOB & FIT ∞ Endoscopy service availability ∞ Interval cancers

Challenges & Complexity (Endoscopist, Pathologists, Surgeon)

SPECC (Significant Polyp & Early Colorectal Cancer) program

Pelican Cancer Foundation

Over diagnosis  (Morbidity vs. Mortality; Mean age 70)
Colorectal Hospital Referrals

How can we control this?
6 month pilot; 1043 FIT tests returned
Combined FIT; Clinical Assessment/Decision
Colorectal cancer + high-risk adenoma + IBD

<table>
<thead>
<tr>
<th></th>
<th>SBD</th>
<th>No SBD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test +</td>
<td>90</td>
<td>347</td>
<td>437</td>
</tr>
<tr>
<td>Test -</td>
<td>12</td>
<td>301</td>
<td>313</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>648</td>
<td></td>
</tr>
</tbody>
</table>

Undetectable f-Hb could be a good ‘rule–out test’ for significant bowel disease and avoid unnecessary colonoscopy
• Packs (tube and leaflet) GP surgeries Tayside & NE Fife

• Patients presented with new bowel symptoms, FIT+FBC (anaemia screen) test requested by primary care as *adjunct* to clinical assessment.

• FIT not mandatory and referrals not rejected if no FIT result available

• Returned to Blood Sciences, Ninewells via GP
5,660 FIT kits returned to laboratory

Referral to secondary care: n = 2,881

- Triaged to colonoscopy: n = 1,393
  - Test not done: n = 205
  - No referral: n = 2,612

- Triaged to GI clinic: n = 684
  - No colonoscopy required: n = 458
  - Referred to colonoscopy, not done: n = 22

- Triaged to other assessment (sigmoidoscopy, OGD, CT etc.): n = 728

Referred to colonoscopy: n = 1,392

Test not done: n = 205

No referral: n = 2,612

No colonoscopy required: n = 458

Referred to colonoscopy, not done: n = 22

Total with completed colonoscopy: n = 1,392

Courtesy of Professor RJC Steele
Professor of Surgery
Chair of the UK National Screening Committee.
No pathology

High-risk adenoma

IBD

Other*

Cancer

6 patients with f-Hb < 10 µg/g faeces had CRC...

> 400 µg Hb/g faeces
10-399 µg Hb/g faeces
< 10 µg Hb/g faeces

Courtesy of Professor RJC Steele
Professor of Surgery
Chair of the UK National Screening Committee.
38 cases
SBD in patients with f-Hb < 10 µg Hb/g faeces

- 6/6 patients with colorectal cancer had iron deficiency anaemia (IDA)
- 10/28 patients with high-risk adenoma had IDA
- 1/4 patients with IBD had IDA
- IDA should prompt scope regardless of FIT result

Courtesy of Professor RJC Steele
Professor of Surgery
Chair of the UK National Screening Committee.
2612 FIT not referred?

- 95.0% had f-Hb < 10 µg/g
- Median f/u 11 months (0 – 18 months)
- 183 patients (7.2%) referred to the Colorectal Service;
- 27 patients (1.1%) attended primary care Out of Hours (OOH) with similar symptoms but were not referred
- 22 patients (0.9%) were admitted acutely

- **Subsequent colonoscopy**
  - 15 SBD (incidence 0.6%);
  - 2 CRC (incidence 0.08%) - initial f-Hb < 10 µg/g
  - 7 HRA
  - 6 IBD

*Courtesy of Professor RJC Steele
Professor of Surgery
Chair of the UK National Screening Committee.*
Impact of FIT on referral rates from Primary Care

- Overall reduction in referrals of **15%**.

*Courtesy of Professor RJC Steele*
*Professor of Surgery*
*Chair of the UK National Screening Committee.*
Benefits of FIT in symptomatic

• Target colonoscopy more appropriately
  
  Avoid colonoscopy in symptomatic patients with undetectable fHb and no other concerning clinical features

  Fast track patients with high f-Hb

• Create capacity for a superior screening service
Thank you