Colorectal early diagnosis: technology, clinicians & pathways: CREDIBLE

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CREDIBLE

- **C**olo**R**ectal cancer **E**arly **D**iagnosis an **I**nformation **B**ased **L**ocal **E**valuation
- Feasibility study
  - Can software flag up patients with suspected colorectal cancer?
  - Could this lead to earlier diagnosis?

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1.

Adults More Mile cushioned pair LONDON
More Mile (2 Mar. 2011)
Average Customer Review:

Price: ~~£6.00~~
Sale: **£3.50**

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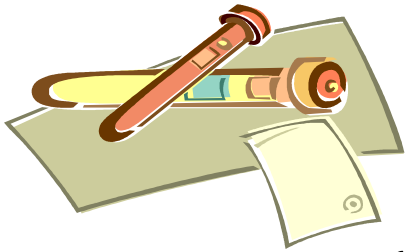
Recommended because you said you owned **More Mile Cheviot Trail Shoe Black**

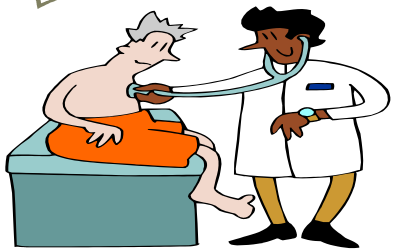
Generate list of patients
aged 60-79 meeting
NICE referral criteria

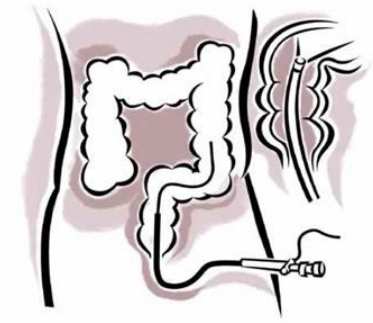
Review list:
- Already under investigation
- Unsuitable
- Other diagnosis

GP invites patients
for consultation



GP check up
- In own practice





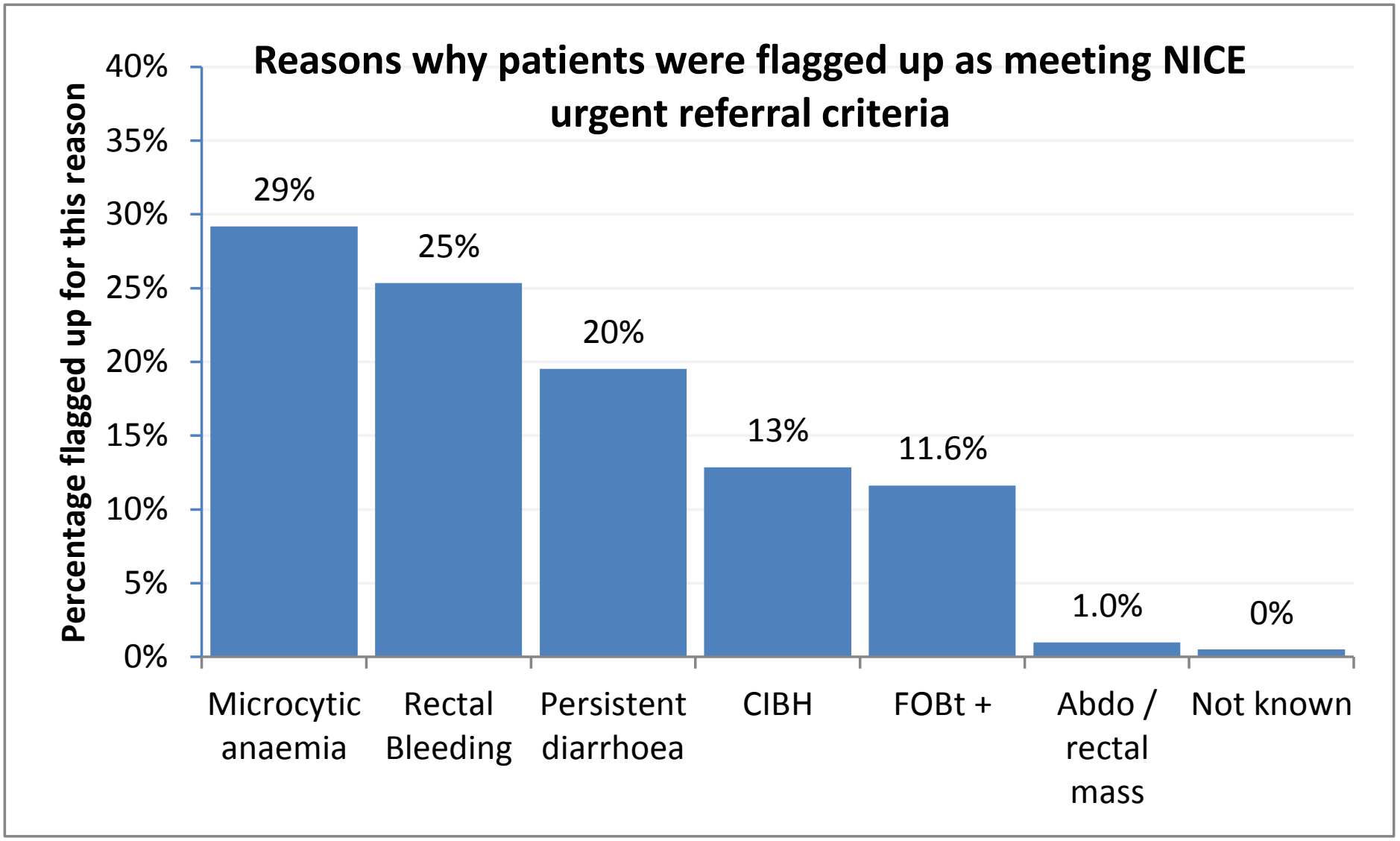
GP refers for investigation
- Flexible sigmoidoscopy / colonoscopy

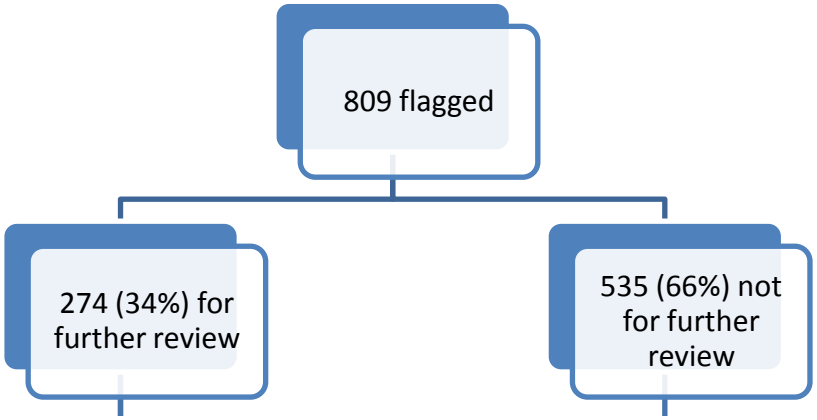
Software Hitches

- Infrequent uploads of patient records
- Changes in software
- Delays

Results

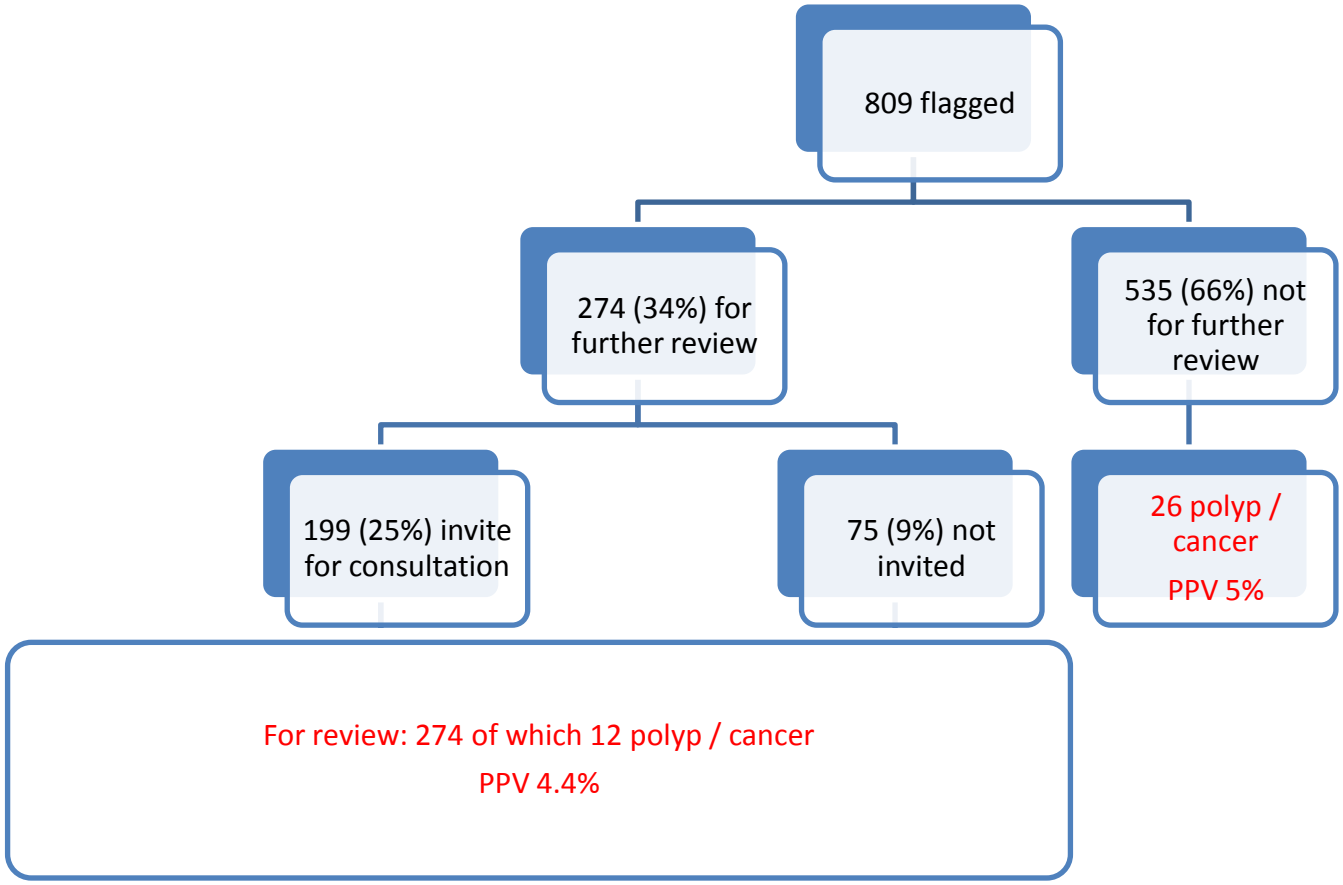
- In 20 practices, searched 19,580 patient records (aged 60-79)
  - 809 (4.1%) met NICE referral criteria
    - First search – prevalent cases (backlog)
    - Subsequent search – incident cases


Reasons why patients were flagged up as meeting NICE urgent referral criteria
Percentage flagged up for this reason
40%
35%
30%
25%
20%
15%
10%
5%
0%
29%
25%
20%
13%
11.6%
1.0%
0%
Microcytic anaemia
Rectal Bleeding
Persistent diarrhoea
CIBH
FOBt +
Abdo / rectal mass
Not known


809 flagged
274 (34%) for further review
535 (66%) not for further review

Flagged up patients: further review

- Further review of records by GP: 34%
- No further review: 66%
  - Most had been previously referred (53%)


809 flagged
274 (34%) for further review
535 (66%) not for further review
199 (25%) invite for consultation
75 (9%) not invited
26 polyp / cancer
PPV 5%
For review: 274 of which 12 polyp / cancer
PPV 4.4%

New Diagnoses

- New diagnoses 4.7%:
  - 10 (1.2%) colon cancers
  - 28 (3.5%) polyps
- Among incident cases 7.1%:
  - 5 (1.6%) colon cancers
  - 17 (5.5%) polyps

Colorectal cancers and polyps flagged up by CREDIBLE

Row Labels	Polyp		Bowel cancer	
Prevalent cases	**11**		**5**	
Already referred	9	82%	1	20%
Not eligible for further investigation	1	9%		
Eligible for further investigation	1	9%	4	80%

Successes

- Software worked
- Of incident cases flagged:

  1.6% had colon cancer
  7.1% had colon cancer or polyp

- PPV of colon / polyp with incident symptoms:

FOBt +	7.5%
Anaemia (Fe deficient)	7.8%
Rectal Bleeding	10.3%

Old Problems Persist

- Anaemia / persistent diarrhoea less likely to have been previously referred than rectal bleeding / CIBH

Issues

- Flagged up patients not investigated / referred
    - Variation by GP
        - Hb / FOBt for 0% to 80% of consulting patients
- Varied referral pathways
    - Haematology / upper GI
- Delays
    - Incident cases (median days)
        - Symptoms → flagged up — 53 (IQR: 37 to 90)
        - Flagged up → GP consultation — 45 (IQR 21 to 179)
        - Flagged up → secondary care — 71 (IQR: 40 to 120)

Thanks

- 20 practices in Sandwell, Dudley & Birmingham

The CREDIBLEs

- Elaine Kidney
- Alexis Macherianakis
- George Dowswell
- Lindy Berkman
- Dion Morton
- Willie Hamilton
- Helen Awberry
- Marie Crook

Questions