Colorectal early diagnosis: technology, clinicians & pathways: CREDIBLE

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CREDIBLE

• ColoRectal cancer Early Diagnosis an Information Based Local Evaluation

• 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: ⭐⭐⭐⭐⭐
   Rate this item

   I own it  Not interested  Rate this item

   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 checks 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)
  o 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

- Microcytic anaemia: 29%
- Rectal Bleeding: 25%
- Persistent diarrhoea: 20%
- CIBH: 13%
- FOBt +: 11.6%
- Abdo / rectal mass: 1.0%
- Not known: 0%
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

199 (25%) invite for consultation

75 (9%) not invited

535 (66%) not for further review

26 polyp / cancer
PPV 5%

For review: 274 of which 12 polyp / cancer
PPV 4.4%
New Diagnoses

• New diagnoses 4.7%:
  o 10 (1.2%) colon cancers
  o 28 (3.5%) polyps

• Among incident cases 7.1%:
  o 5 (1.6%) colon cancers
  o 17 (5.5%) polyps
Colorectal cancers and polyps flagged up by CREDIBLE

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Polyp</th>
<th>Bowel cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalent cases</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Already referred</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Already referred</td>
<td>82%</td>
<td>20%</td>
</tr>
<tr>
<td>Not eligible for further investigation</td>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td>Eligible for further investigation</td>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td>Eligible for further investigation</td>
<td>4</td>
<td>80%</td>
</tr>
</tbody>
</table>
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 $\rightarrow$ flagged up 53 (IQR: 37 to 90)
    – Flagged up $\rightarrow$ GP consultation 45 (IQR 21 to 179)
    – Flagged up $\rightarrow$ secondary care 71 (IQR: 40 to 120)
Thanks

• 20 practices in Sandwell, Dudley & Birmingham

The CREDIBLEs
• Elaine Kidney
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• Dion Morton
• Willie Hamilton
• Helen Awberry
• Marie Crook
Questions