Prevention of Bowel Cancer: which patients do I send for colonoscopy?

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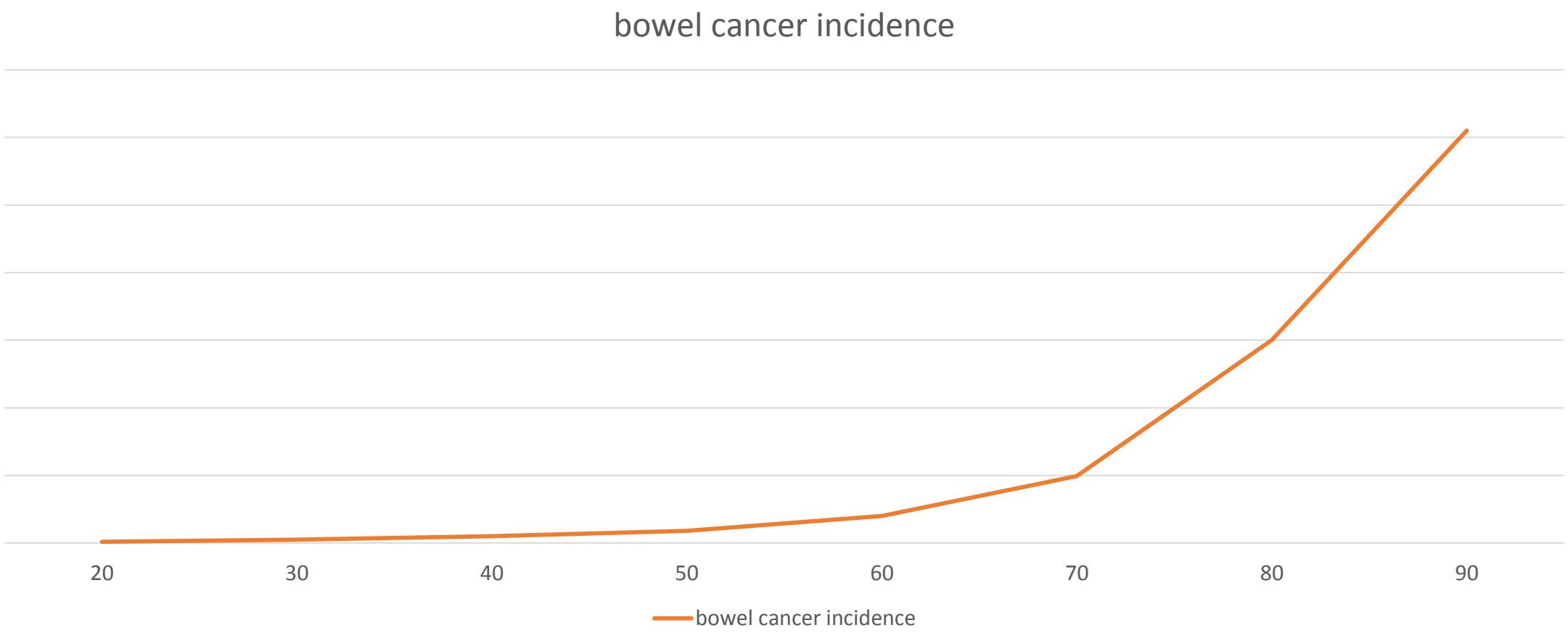
Prevention of Bowel Cancer: which patients do I send for colonoscopy?

- bowel cancer screening update
  - BOSS
- surveillance colonoscopy in high risk groups
  - family history
- referring symptomatic patients
  - new NICE guidelines

colorectal cancer incidence uk



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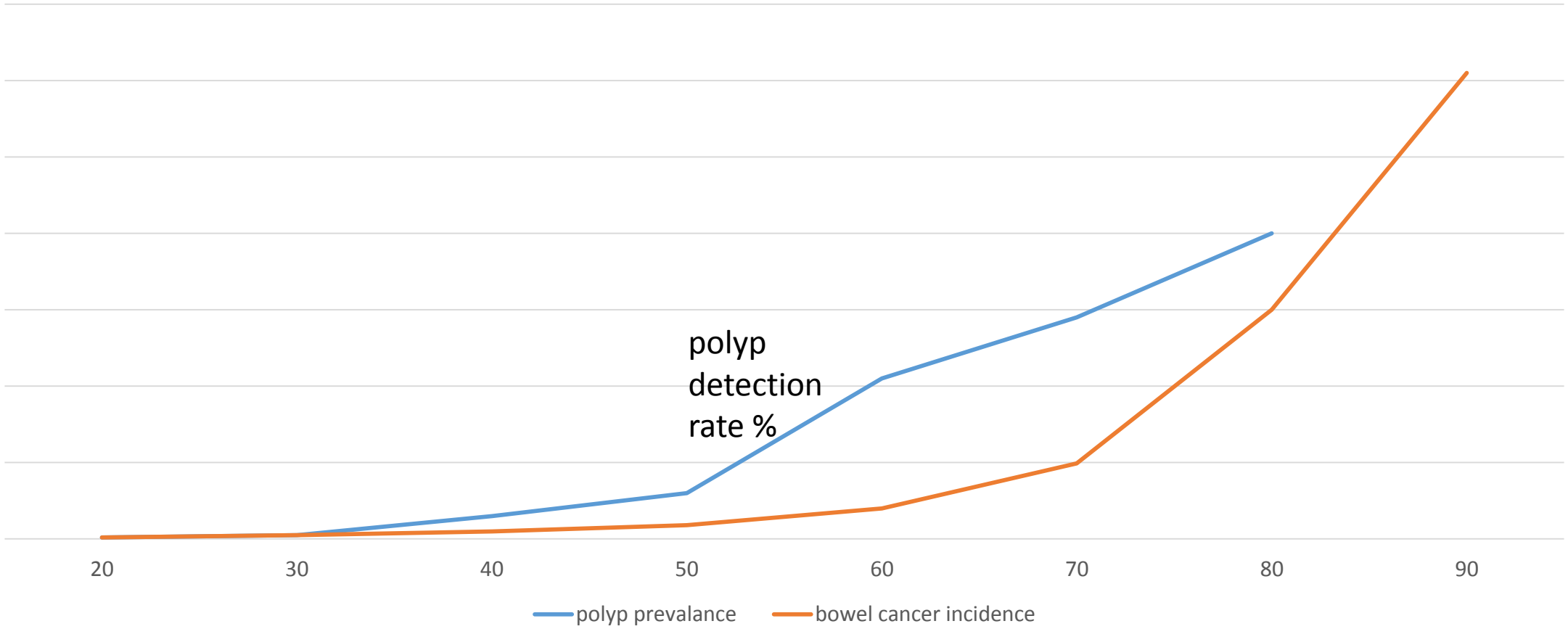


colonoscopy prevents bowel cancer

- US National Polyp Study, NEJM 2003, 2012
  - patients undergoing colonoscopy had 76% reduction in CRC incidence over 8 yrs compared with general population registry; 53% reduction after 16 yrs
- Italian Multicentre Study Group, Gut 2000
  - CRC incidence ratio of 0.34 in patients undergoing polypectomy of >5mm polyps vs reference population
- Telemark Polyp Study, Scand J Gast 1999
  - flexible sigmoidoscopy followed by colonoscopy: 0.2 RR of CRC over 13 years

bowel cancer screening

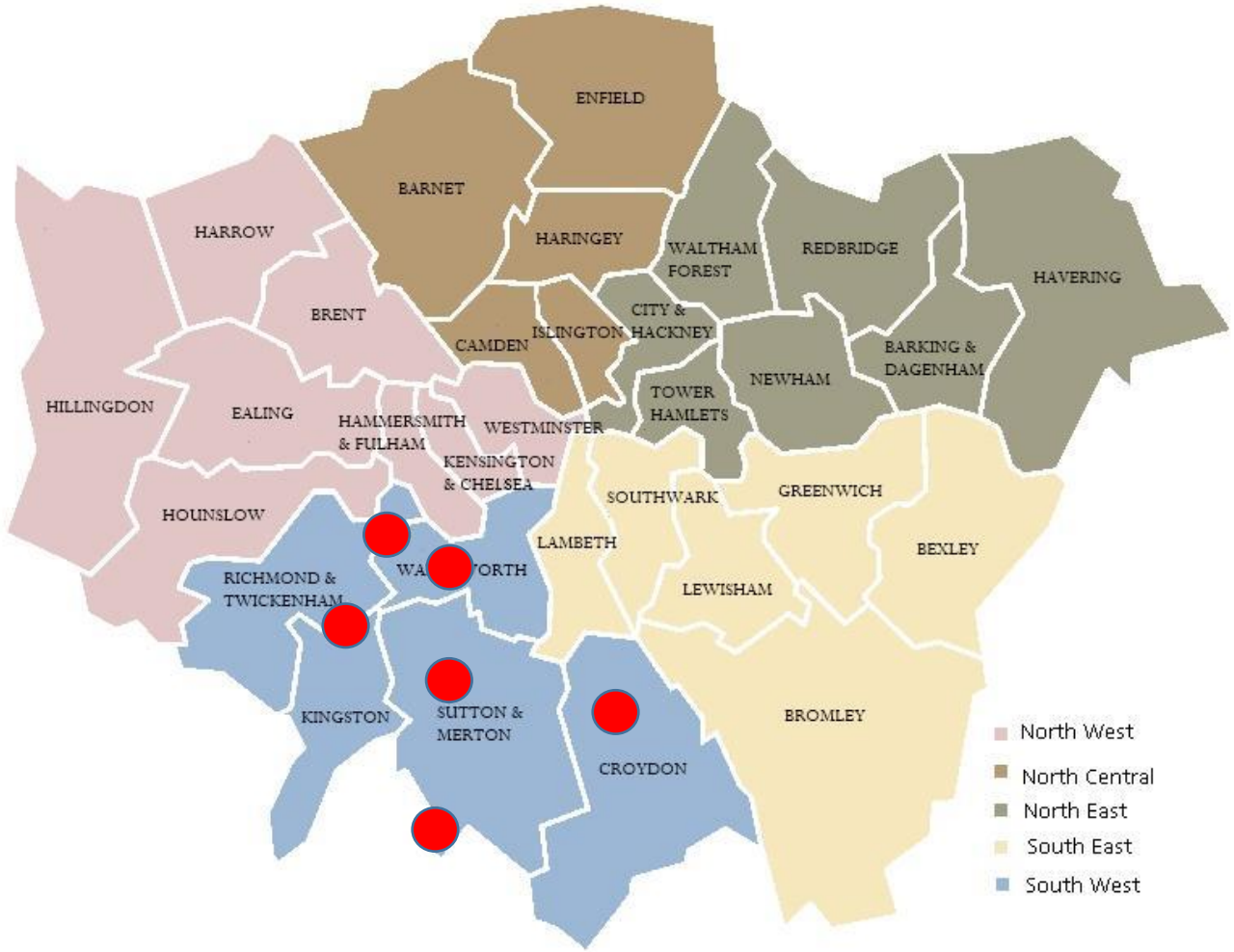
- four RCTs of population screening using the faecal occult blood test
- UK, Denmark, US and Sweden
- meta-analysis of trials reported 16% reduction in bowel cancer mortality with screening (OR 0.84; CI 0.78-0.89)

- guiac FOBT based BCS introduced to UK in 2006
- runs alongside established UK endoscopy services
  - audited in accordance with JAG guidelines
- does not replace family history surveillance, polyp follow up

Bowelscope- the “five minute cancer test”

- once only sigmoidoscopy offered to whole population aged 55
  - 70% bowel cancer occurs in left colon
- based on results of MRC study published Lancet 2010
  - reduction in CRC mortality 31%; median follow up 11yrs
  - NNT 191 to prevent one CRC
- now introduced to UK
  - SW London region 45% established

SW London Bowel Cancer screening centre

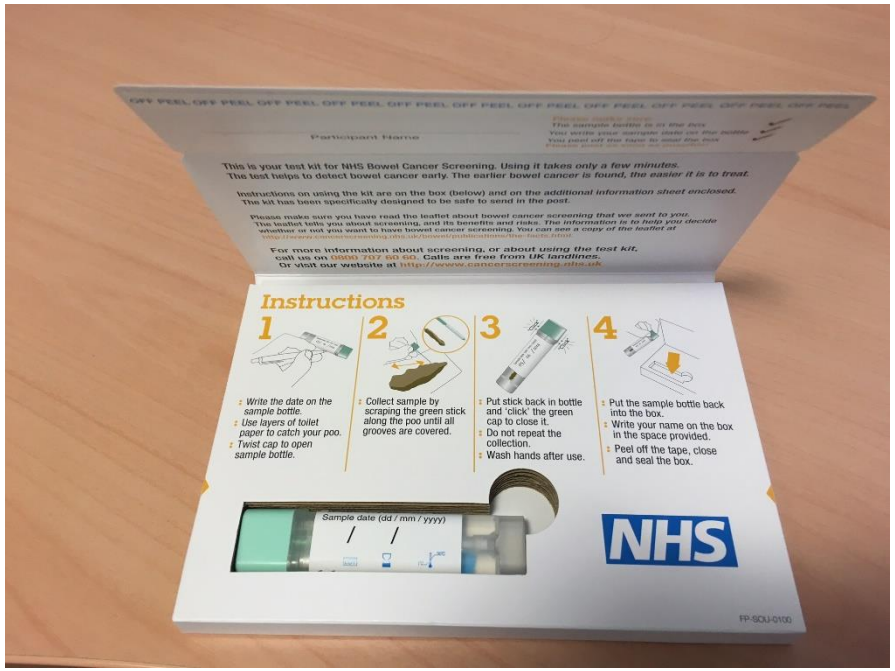


bowel cancer screening- update 2016

- commissioned by Public Health England
  - provides quality assurance

- FOBT based BCS age 60-74 yrs
- Bowelscope age 55

- FIT testing due to start 2017



Bowel cancer screening in other countries

England and Wales	55, 60-74	Flexi sig, FOBT
Scotland	50-74	FOBT
USA	50, 60	colonoscopy
Australia	50-74	FIT testing
Germany	55, 65	colonoscopy

screening vs surveillance

- screening the normal population
- surveillance of at risk individuals
  - polyp follow up
  - family history of bowel cancer
    - includes family cancer and inherited bowel cancer syndromes
  - those with longstanding colitis
  - post radiotherapy
  - acromegaly

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CATEGORY	NUMBER OF AFFECTED RELATIVES	AFFECTED FAMILY HISTORY	TYPE OF CANCER	AVERAGE AGE OF CANCER DIAGNOSES	FAMILIAL RISK	SCREENING BY COLONOSCOPY AND CHEMOPREVENTION	REFERRAL TO GENETICS OR FAMILY HISTORY CLINIC * Undertake tumour block testing in affected pt if possible
C1	1	1 FDR	CRC	≥60	Population	NBCSO One off flexible sigmoidoscopy at 55 FOB (from 60y)	No
C2	1	1 FDR	CRC	<50	Low	One off colonoscopy aged 55[1]	Yes*
	1	1 FDR	CRC	50 - 60	Low	One off colonoscopy aged 55[1]	No
	2	Both Parents	CRC	≤75	Low	One off colonoscopy aged 55[1]	No
	2	2 FDRs	CRC/LRC[3,4]	>60	Low	One off colonoscopy aged 55[1]	No
C3	2	2 FDRs	CRC/LRC[3,4]	≤60	Moderate	5 yearly from 50 -75y[1]	Yes*
	2	1 FDR + 1 SDR (must be FDR of each other)	CRC/LRC[3,4]	≤60	Moderate	5 yearly from 50 -75y[1]	Yes*
	3	3 FDR / SDR (at least one a FDR of the proband)	CRC/LRC[3,4]	Any (but none <50y)	Moderate	5 yearly from 50 -75y[1]	Yes*
C4	3	FCCX[5] or LOFCC[6]	CRC/LRC[3,4] (Lynch and FAP exclusion required)	See Guidance	High - Moderate	5 yearly from 35 -75y[1]	Yes*
C5	3	Amsterdam positive family[2] /known Lynch mutation in family	CRC/LRC[3,4]	See Guidance	High	18 monthly - 2 yearly from age 25 - 75y Discuss aspirin	Yes*
C6	≥1	Multiple Polyps	Nil	Minimum of ≥3 polyps at ≤45 or 10 polyps at any age	To be discussed	To be discussed	Yes*

easy summary for NHS referrals…….

one or more FDR <60 yrs……..

two or more FDR >60yrs……..

case one

- “Doc, my brother got bowel cancer- should I get checked”

case one

- “Doc, my brother got bowel cancer- should I get checked”
- “how old is he?”
- “72”
- “are there any other family members with bowel cancer?”
- “no”

case one

- what to do when the criteria are not met
  - has the patient taken part in BCS screening?
  - if no, can call Freephone number and request new screening kit
  - available to those >60yrs- no upper age limit
  - 0800 707 60 60

  - advice on healthy eating, avoidance of smoking, excess alcholol
  - suggest reporting abnormal bowel symptoms
  - for young patients, reassure that the risk is very low
  - can refer for specialist advice

Case two

- “Doc, my Dad has just had an op for bowel cancer- should I get checked?”

Case two

- “Doc, my Dad has just had an op for bowel cancer- should I get checked?”
- “how old is he?”
- “just turned 67”

Case two

- “Doc, my Dad has just had an op for bowel cancer- should I get checked?”
- “how old is he?”
- “just turned 67”
- “are there any other family members with bowel cancer”?
- “no, but my Aunt had a hysterectomy”

hereditary non-polyposis colorectal cancer

- Lynch syndrome
- inherited germline mutation of mismatch repair genes
- 75% lifetime incidence of bowel cancer; 40% of endometrial cancer
- also ovarian, gastric, pancreatic, urothelial, others
- accounts for 3% bowel cancer; proximal colonic cancer
- 18 monthly colonoscopy; pelvic ultrasound

familial adenomatous polyposis

- inherited germline mutation of APC gene
- 100% lifetime risk of bowel cancer, median age 39
  - prophylactic colectomy
- minor risk of other cancers: duodenal and others
- rare
- accounts for <0.2% bowel cancer
- most patients identified through tracing family members

case three

- “my grandad and grandma had bowel cancer- should I have a colonoscopy…?”
- “how about your mother and father?”
- “my Dad had a colonoscopy but it was normal?”

case four

- 52 year old man c/o abdominal pain, LIF, and diarrhoea lasting 3 weeks
- no family history of bowel cancer; no PMH and no medications

Urgent referral pathways

- NICE TWR guidelines NG12 published 2015
- organised by disease site, symptom or results of primary care tests
- pan-London referral forms
- PPV reduced from 5% to 3%
- direct access to tests encouraged
  - gastroscopy
  - ultrasound/ CT

colorectal pan-London TWR guidelines

- Abnormal lower GI investigations (colonoscopy / flexible sigmoidoscopy / CT colonography) suggestive of cancer
- Any age with suspicious abdominal or rectal mass
- Any age with unexplained anal mass or ulceration
- ≥ 40 years with unexplained abdominal pain and weight loss
- ≥ 40 years with unexplained iron deficiency anaemia
- ≤ 50 years with rectal bleeding with any of the following unexplained symptoms:
  - Abdominal pain
  - Change in bowel habit
  - Weight loss
  - Iron deficiency anaemia
- ≥ 50 years with unexplained rectal bleeding
- ≥ 50 years with unexplained abdominal pain or weight loss
- ≥ 50 years with unexplained change in bowel habit
- ≥ 60 years with unexplained anaemia even in the absence of iron deficiency
- Referral is due to clinical concerns that do not meet NICE/pan-London referral criteria (the GP must give full clinical details at the time of referral)

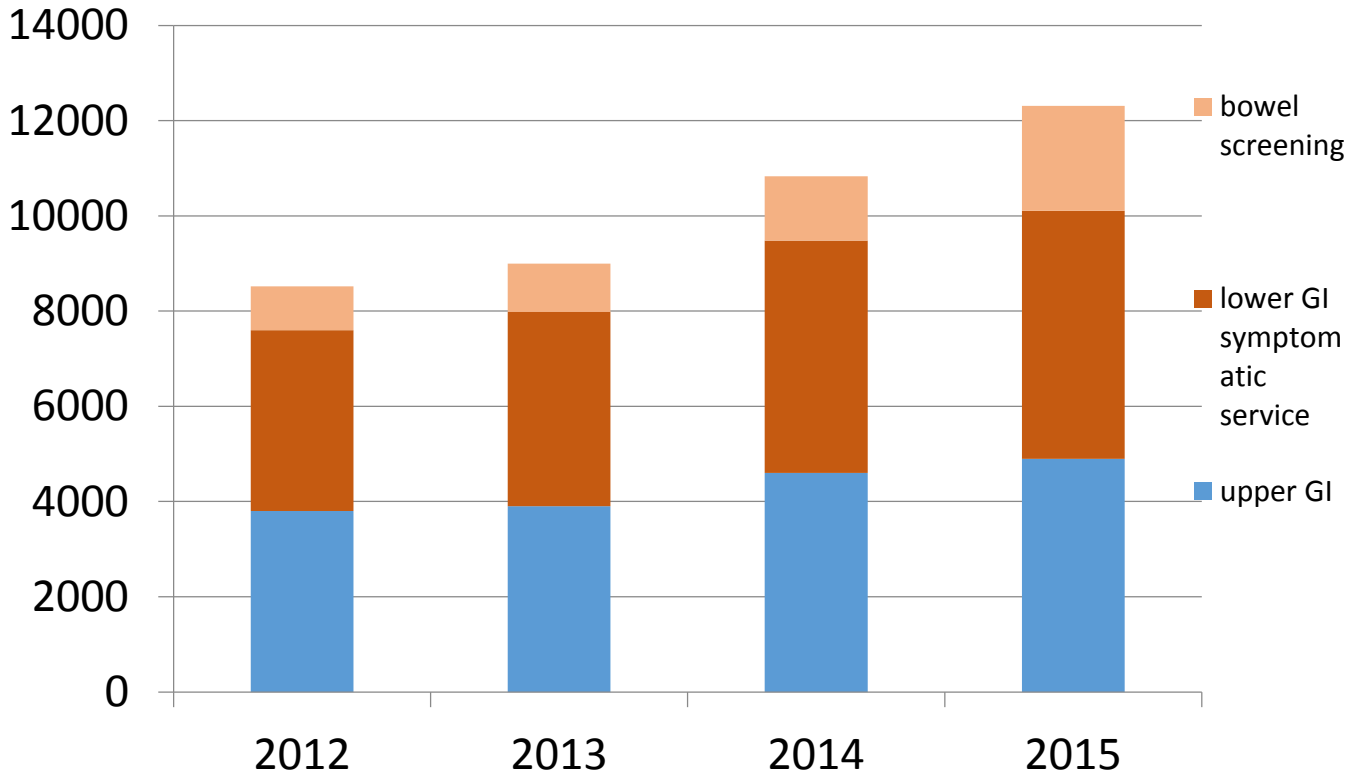
straight to test vs direct access

- straight to test
  - can include TWR and other symptomatic referrals
  - pre-arranged telephone clinic
  - colorectal nurse specialist triages to colonoscopy, CT colonography or clinic
- direct access
  - more appropriate for OGD referral
  - forms basis of new upper GI TWR pathway

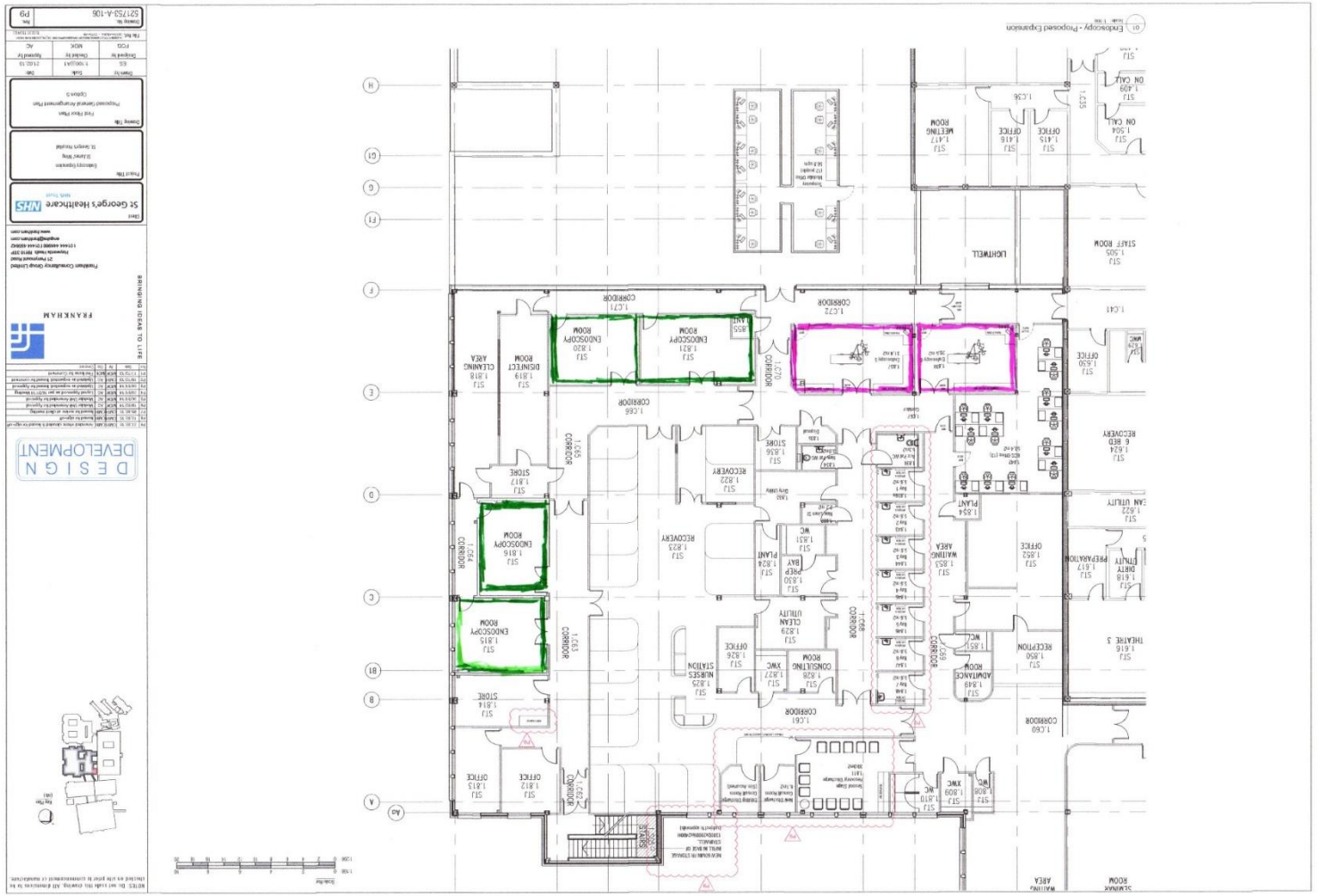
case four

- 52 year old man c/o abdominal pain, LIF, and diarrhoea lasting 3 weeks
- no family history of bowel cancer; no PMH and no medications

St George's endoscopy unit - procedures performed



Expansion of endoscopy 2016



case five

- 32 year old man c/o abdominal pain, LIF, and diarrhoea lasting 3 weeks
- no family history of bowel cancer; no PMH and no medications

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- 32 year old man c/o abdominal pain, LIF, and diarrhoea lasting 3 weeks
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- stool microbiology
- faecal calprotectin
- blood tests; include coeliac screen for chronic symptoms

basic algorithm for lower GI symptoms

age <40	age >40
faecal calprotectin blood tests and coeliac screen stool culture direct access flexible sigmoidoscopy	TWR pathway for many patients or blood tests, coeliac screen, stool culture direct access flexible sigmoidoscopy

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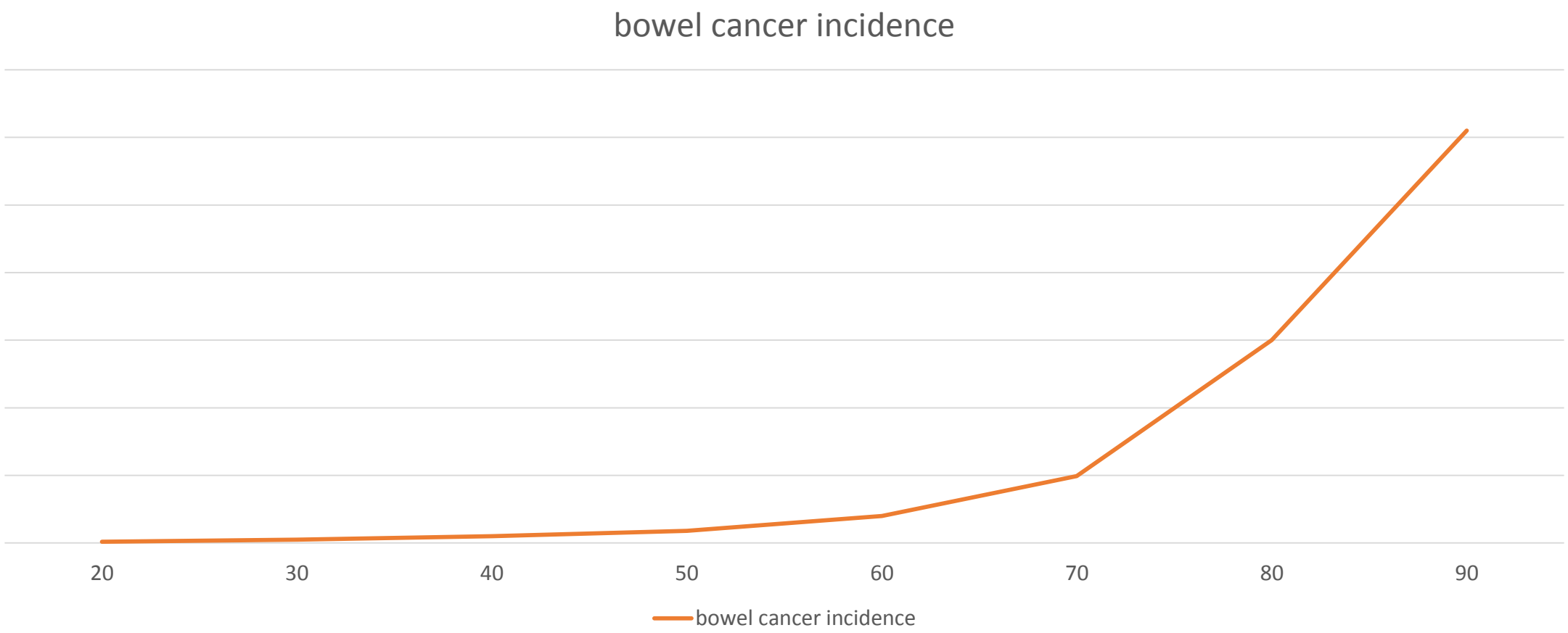

Summary

- established bowel cancer screening programme runs separately
  - evolving screening technology and expansion of Bowelscope
- surveillance protocols for polyp follow up and family history
  - in association with local genetics service
- fast track cancer pathways
  - 62 day pathway to become 28 days?
- maintaining quality of service paramount
  - under pressure of large increase in numbers referred

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