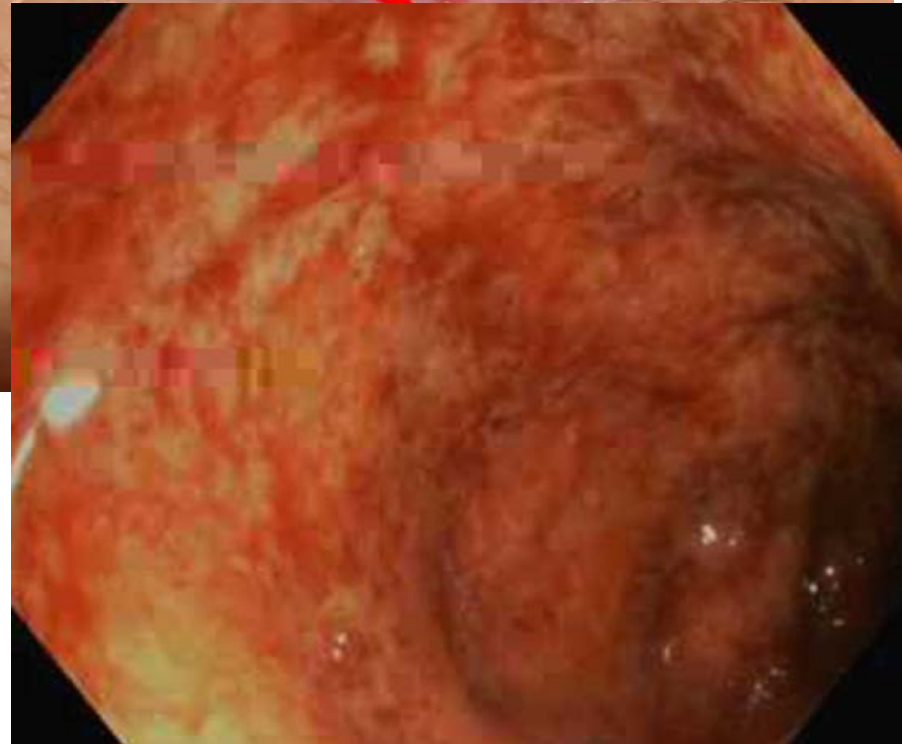
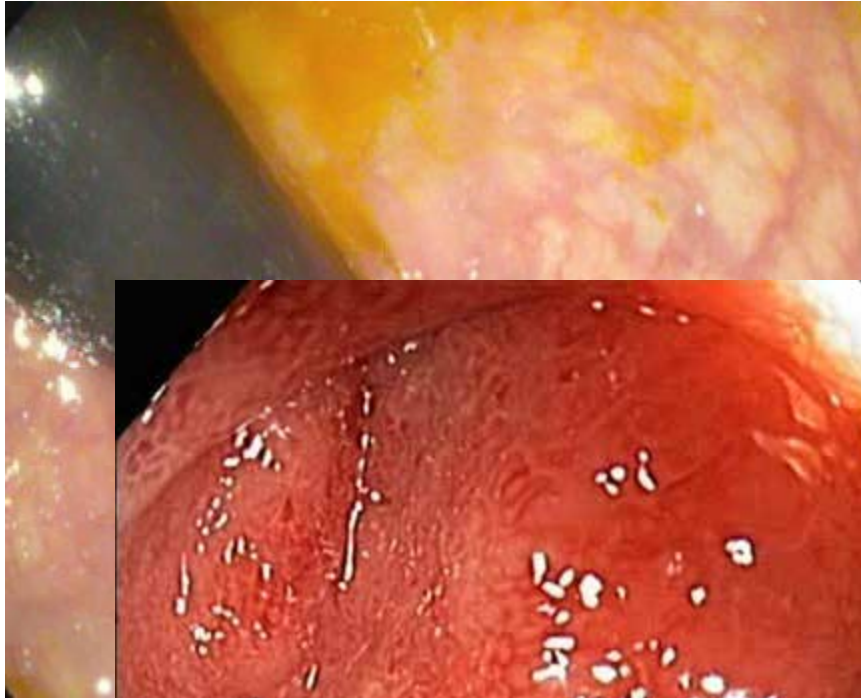


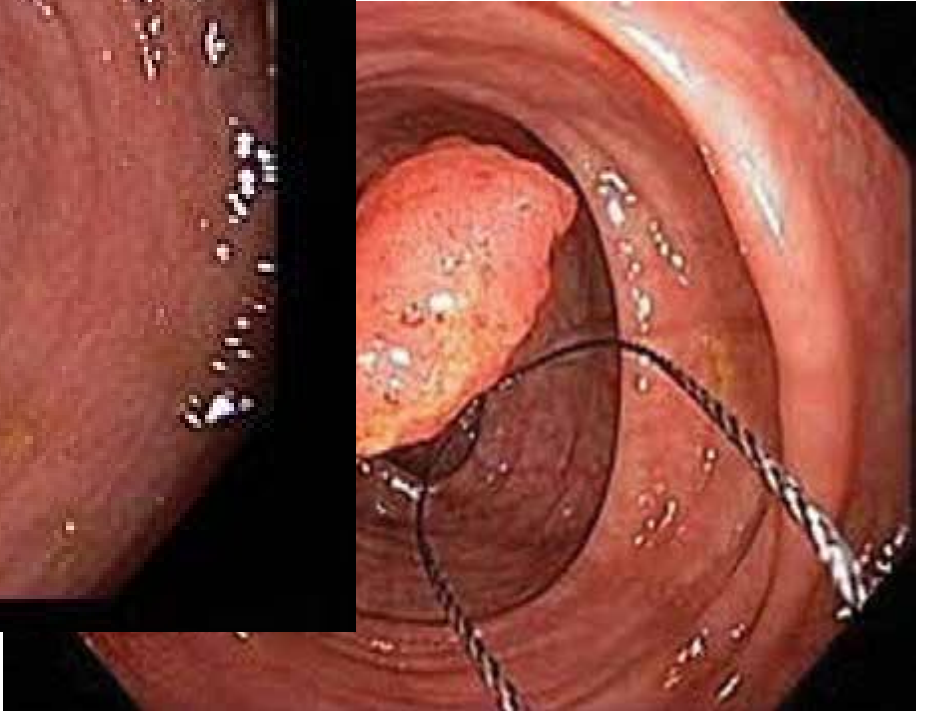
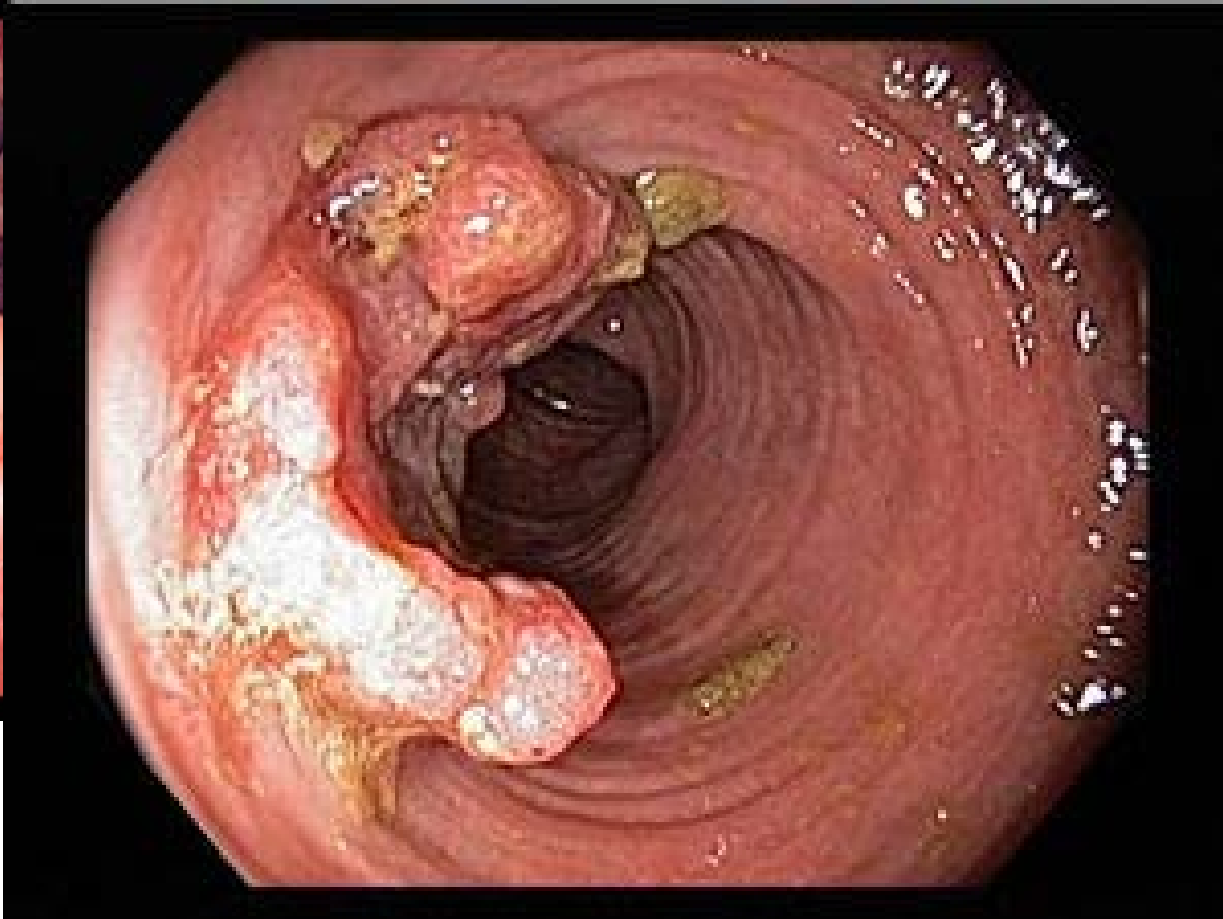
PR Bleeding

Mariko Howlett

Causes of PR Bleeding Age < 40



Causes of PR Bleeding Age > 40



CRC Statistics

Estimated number of new cases of colorectal cancer diagnosed in 2017

16,682 =  9,127 males +  7,555 females

Estimated % of all new cancer cases diagnosed in 2017

12.4%



Estimated number of deaths from colorectal cancer in 2017

4,114 =  2,136 males +  1,978 females

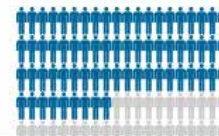
Estimated % of all deaths from cancer in 2017

8.6%



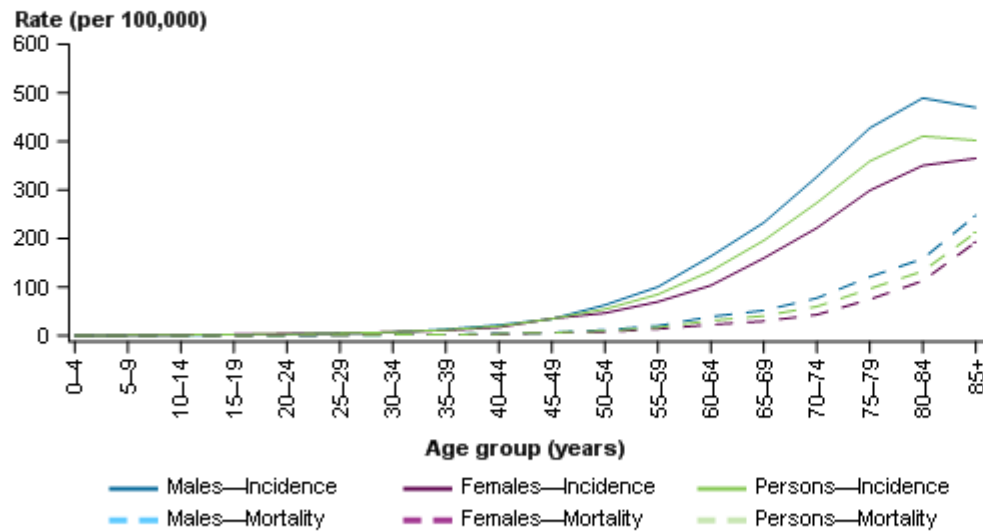
Chance of surviving at least 5 years (2009–2013)

69%



Risk of CRC Increases with Age

Figure 1: Estimated age-specific incidence and mortality rates for colorectal cancer, by sex, 2017



Source: AIHW [1].

Clinical Features and CRC Risk

Table 4. Clinical features that indicate increased risk of CRC

CLINICAL FEATURE	MEDIAN PPV, % (RANGE)
Palpable rectal or abdominal mass	NA*
Rectal bleeding combined with weight loss	13.0 (4.7-23)
Iron deficiency anemia	11.0 (7.7-41)
Rectal bleeding mixed with stool	11.0 (3.0-21)
Rectal bleeding in the absence of perianal symptoms	10.8 (6.9-18)
Rectal bleeding combined with change in bowel habits	10.5 (9.2-27)
Dark rectal bleeding	9.7 (7.4-17)
Rectal bleeding and diarrhea	9.0 (3.4-19)
Rectal bleeding and age ≥ 60 or ≥ 65 y	8.6 (4.6-20)
Rectal bleeding and age ≥ 70 or ≥ 75 y	7.9 (4.9-31)
Change in bowel habit or diarrhea	7.5 (0.94-14)
Rectal bleeding and male	7.5 (2.4-17)
Rectal bleeding and age ≥ 50 or ≥ 55 y	5.9 (4-11)
Rectal bleeding (undefined)	5.3 (2.2-16)
Rectal bleeding and abdominal pain	5.1 (1.7-23)
Rectal bleeding, first episode	5.0 (2.2-14)

CRC—colorectal cancer, NA—not available, PPV—positive predictive value.
*Median not available; individual studies reported PPVs > 15%.

Referral of a 54 yo female

- **Bowel habit change**
- **Episodes of bright red rectal bleeding**
- **Lethargic**
- **Nausea**
- **Abdominal cramp**
- **Strong FH for cancers**
- **Colonoscopy and gastroscopy ASAP please**

What family history is of most significance?

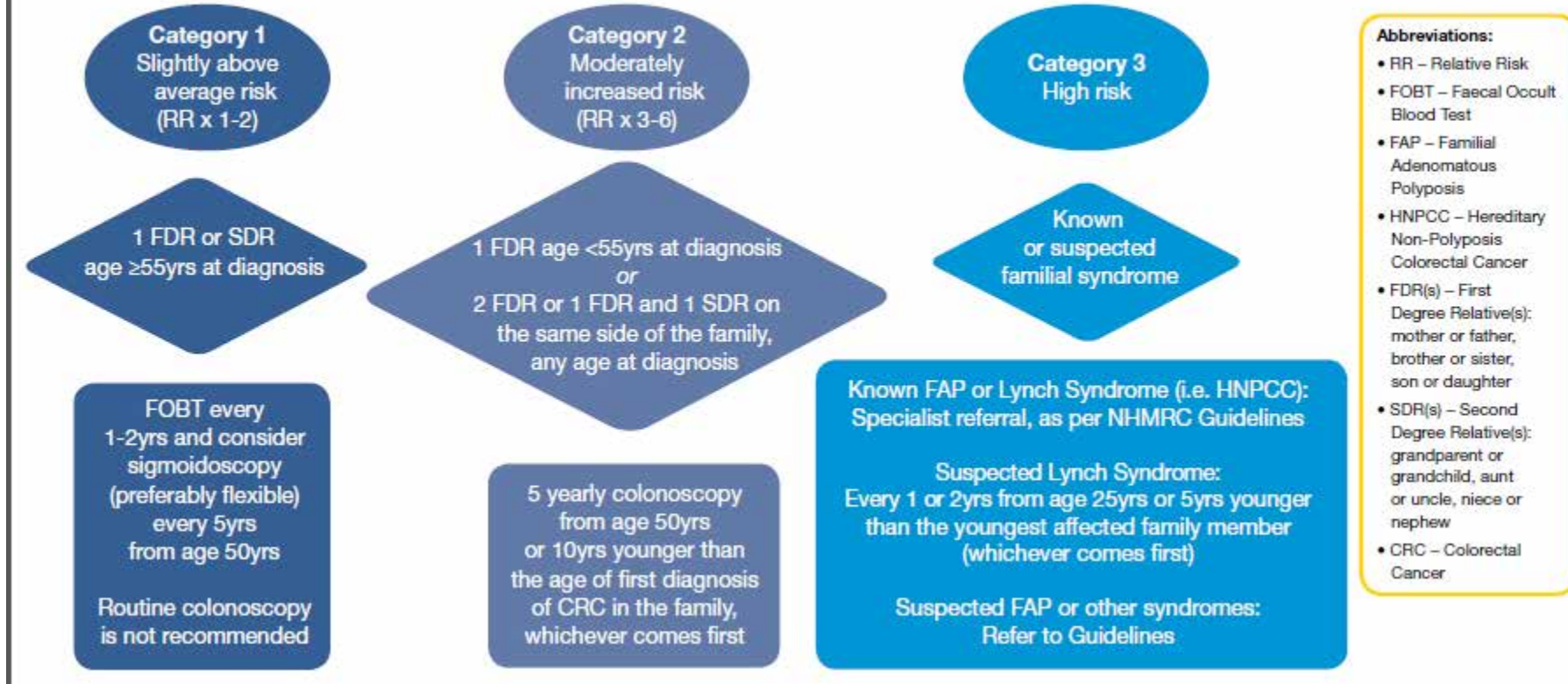
A) Parent with polyps

B) Uncle with CRC diagnosed at age 65

C) Grandparent with CRC diagnosed at age 60

D) Sister with CRC diagnosed age 53

GUIDELINES FOR COLORECTAL CANCER SCREENING – FAMILY HISTORY



What family history is of most significance?

A) Parent with polyps

B) Uncle with CRC diagnosed at age 65

C) Grandparent with CRC diagnosed at age 60

D) Sister with CRC diagnosed age 53

If a parent was diagnosed with CRC at age 57, at what age should the patient begin screening?

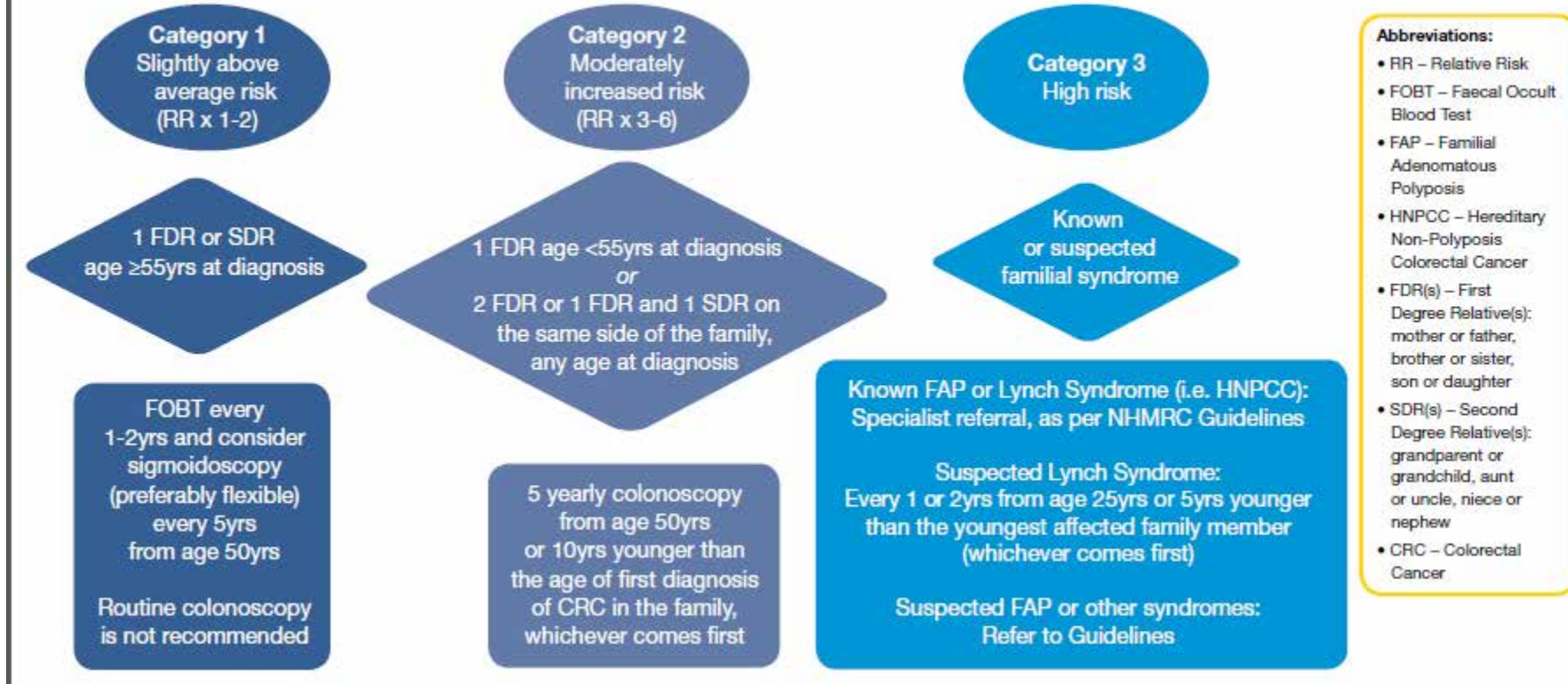
A) 35

B) 47

C) 50

D) 55

GUIDELINES FOR COLORECTAL CANCER SCREENING – FAMILY HISTORY



If a parent was diagnosed with CRC at age 57, at what age should the patient begin screening?

A) 35

B) 47

C) 50

D) 55

If a brother was diagnosed with CRC at age 49, at what age should the patient start screening?

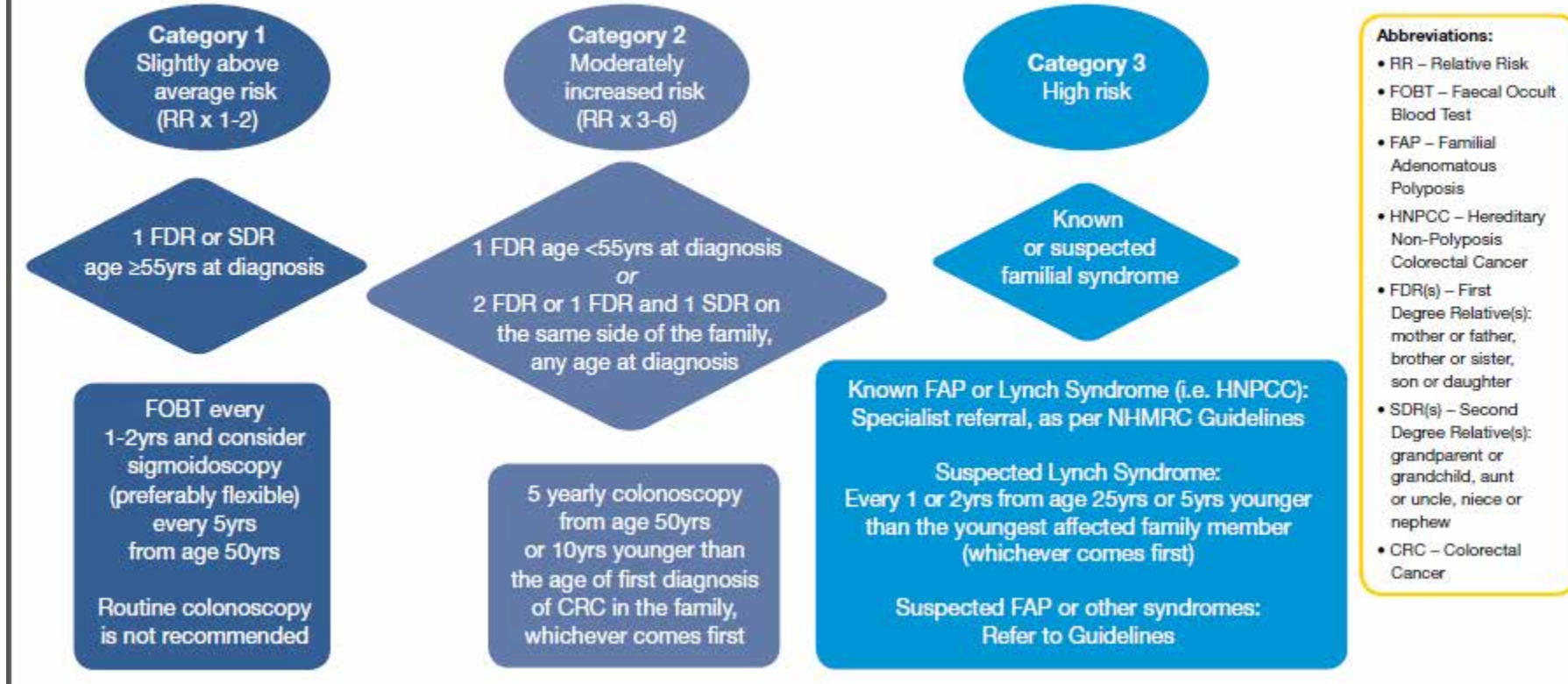
A) 49

B) 50

C) 45

D) 39

GUIDELINES FOR COLORECTAL CANCER SCREENING – FAMILY HISTORY



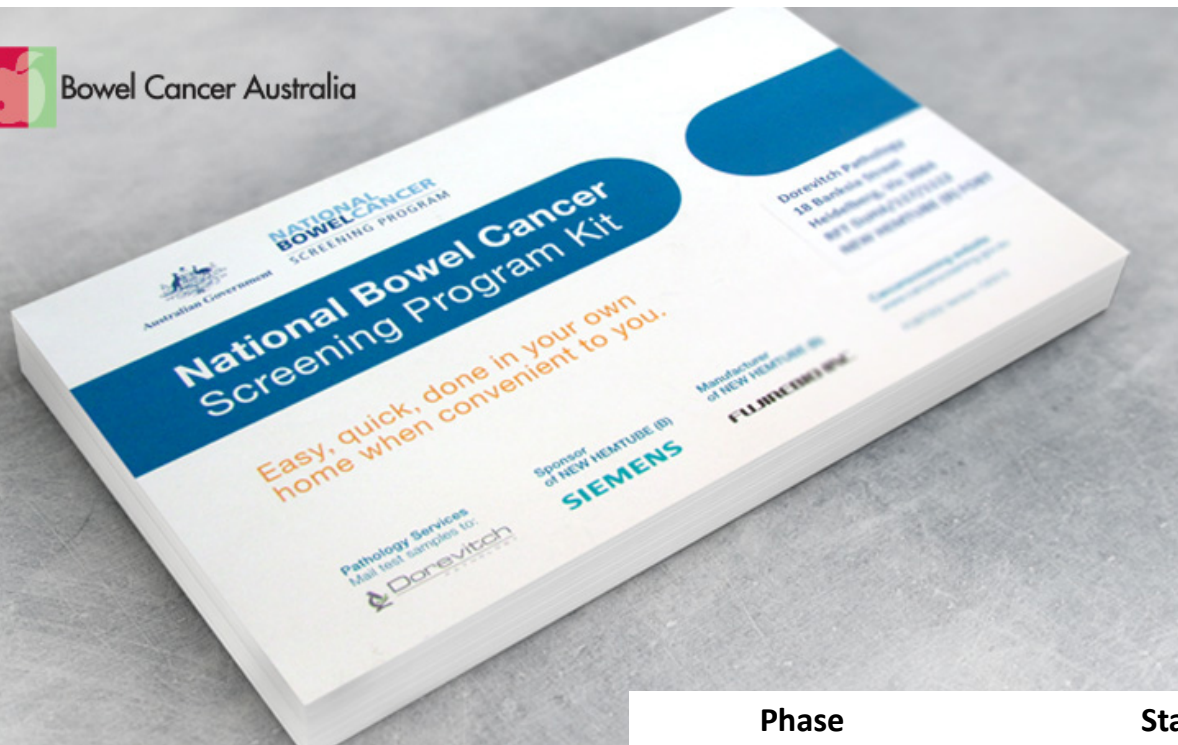
If a brother was diagnosed with CRC at age 49, at what age should the patient start screening?

A) 49

B) 50

C) 45

D) 39



Phase	Start Date	End Date	Eligible Ages
1	7 August 2007	30 June 2008	55 and 65
2	1 July 2008	30 June 2011 ^(a)	50, 55 and 65
2 ^(b)	1 July 2011	30 June 2013	50, 55 and 65
3	1 July 2013	ongoing	50, 55, 60 and 65
3	1 January 2015		50, 55, 60, 65, 70 and 74
3	1 January 2016		50, 55, 60, 64, 65, 70, 72 and 74
3	1 January 2017		50, 54, 55, 58, 60, 64, 68, 70, 72 and 74
3	1 January 2018		50, 54, 58, 60, 62, 64, 66, 68, 70, 72 and 74
3	1 January 2019		50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72 and 74

^(a) Eligible birthdates, and thus invitations, ended on 31 December 2010.

^(b) Ongoing NBCSP funding commenced.

What other history would be helpful?

A) Amount of blood lost

B) Weight change

C) Duration of PR bleeding

D) Frequency of bowel motions

What other history would be helpful?

A) Amount of blood lost

B) Weight change

C) Duration of PR bleeding

D) Frequency of bowel motions

Investigations

FULL BLOOD EXAMINATION

Haemoglobin		139	g/L	(115-160)
Red Cell Count		5.1	$\times 10^{12}$ /L	(3.6-5.2)
Haematocrit		0.42		(0.33-0.46)
Mean Cell Volume		84	fL	(80-98)
Mean Cell Haemoglobin		28	pg	(27-35)
Platelet Count		299	$\times 10^9$ /L	(150-450)
White Cell Count		6.3	$\times 10^9$ /L	(4.0-11.0)
Neutrophils	57 %	3.6	$\times 10^9$ /L	(2.0-7.5)
Lymphocytes	33 %	2.1	$\times 10^9$ /L	(1.1-4.0)
Monocytes	6 %	0.4	$\times 10^9$ /L	(0.2-1.0)
Eosinophils	3 %	0.19	$\times 10^9$ /L	(0.04-0.40)
Basophils	1 %	0.06	$\times 10^9$ /L	(< 0.21)

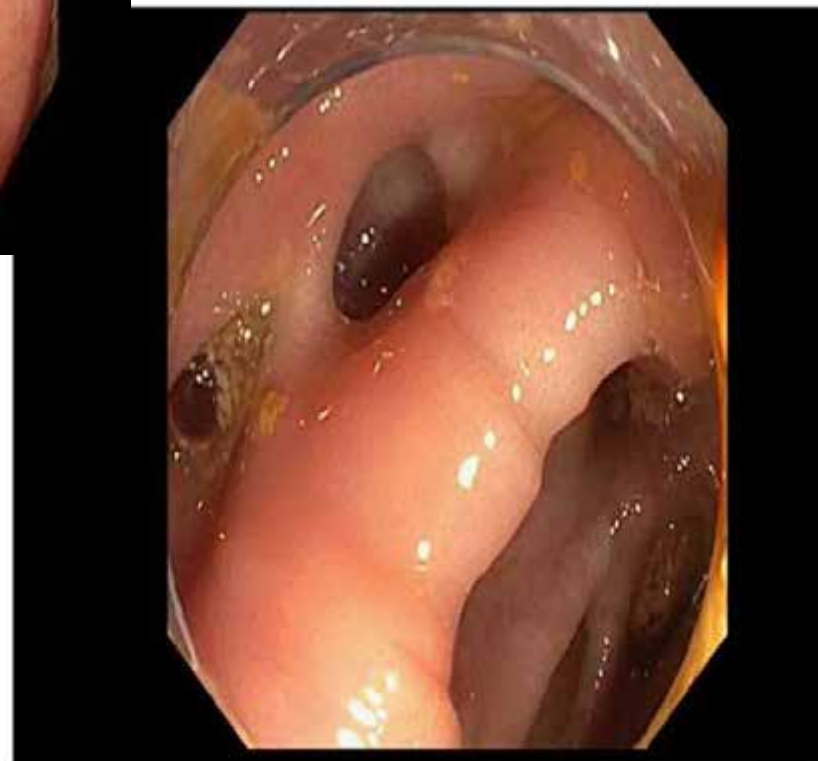
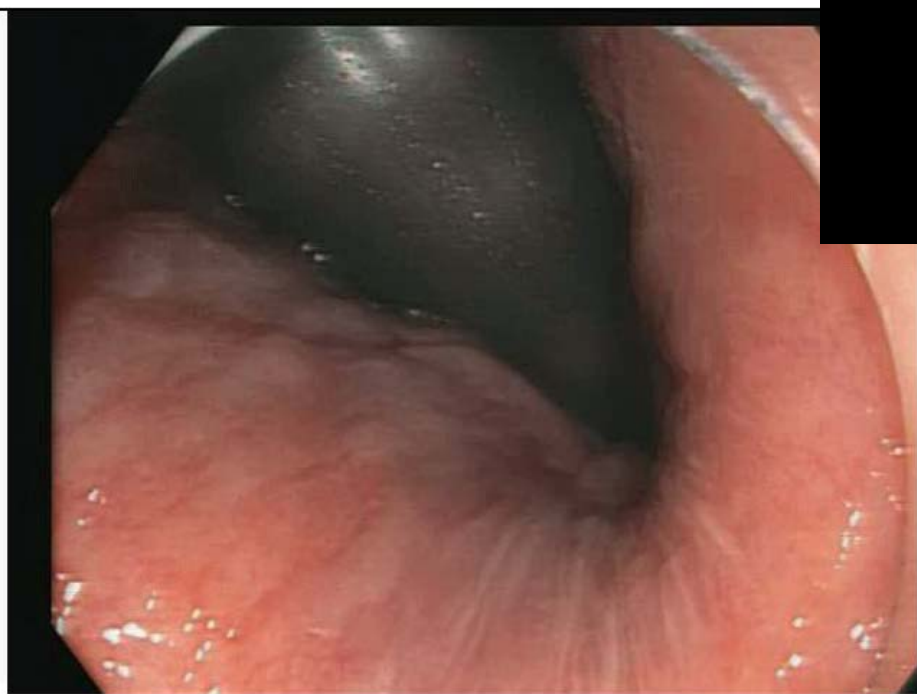
IRON STUDIES

Serum Iron		15	umol/L	(10-33)
Transferrin IBC		57	umol/L	(45-70)
Transferrin Saturation		26	%	(16-50)
Serum Ferritin Assay		44	ug/L	(20-290)

Colonoscopy



**5 small polyps
(3 adenomas +
2 hyperplastic polyps)**



When Is a Repeat Colonoscopy Due?

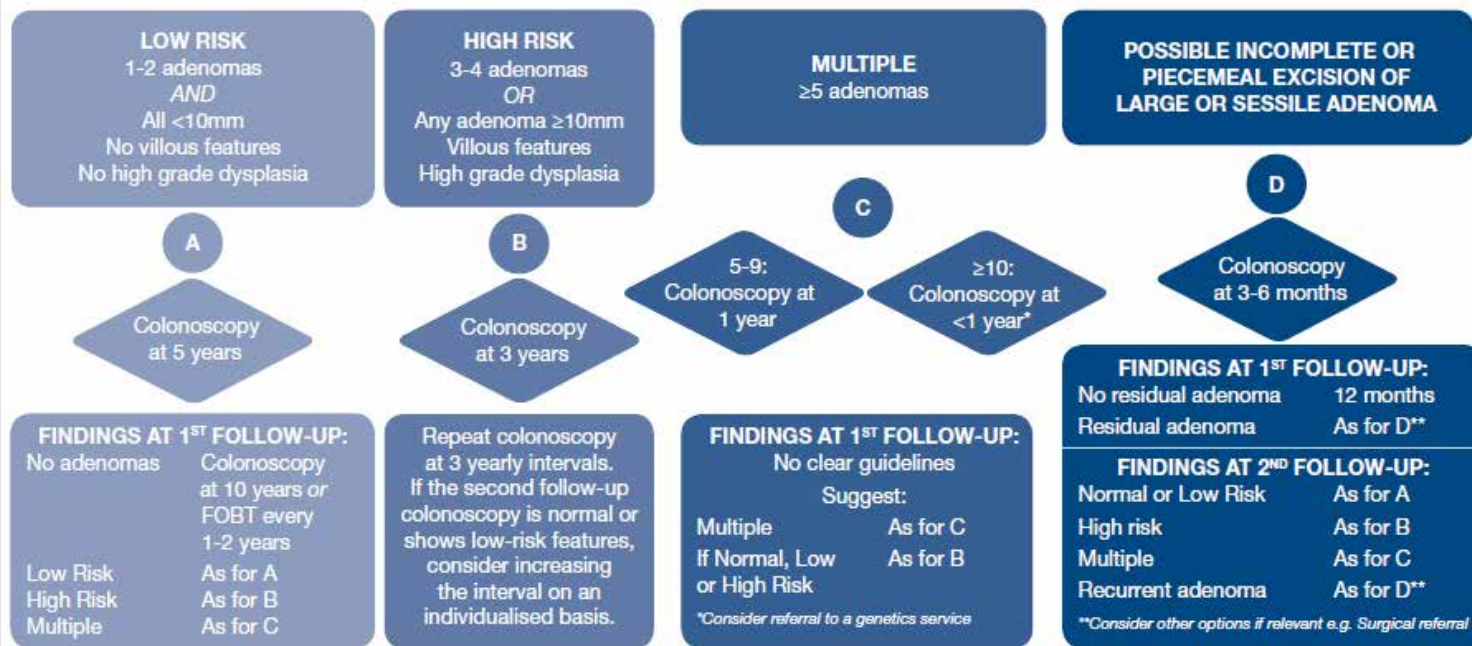
A) 6 months

B) 12 months

C) 3 years

D) 5 years

COLONOSCOPIC SURVEILLANCE INTERVALS – ADENOMAS



- This algorithm is designed to be used in conjunction with the NHMRC approved [Clinical Practice Guidelines for Surveillance Colonoscopy – in adenoma follow-up: following curative resection of colorectal cancer and for cancer surveillance in inflammatory bowel disease \(December 2011\)](#) and is intended to support clinical judgement.
- Surveillance colonoscopy should be planned based on high-quality endoscopy in a well-prepared colon using most recent and previous procedure information when histology is known.
- Sessile serrated adenomas and serrated adenomas are followed up as for adenomatous polyps given present evidence, although they may progress to cancer more rapidly.
- Most patients ≥75 years of age have little to gain from surveillance of adenomas given a 10-20 year lead-time for the progression of adenoma to cancer. The finding of serrated lesions may alter management.
- Small, pale, distal hyperplastic polyps only do not require follow-up. Consider sessile serrated polyposis if multiple proximal sessile serrated adenomas are found.
- In the absence of a genetic syndrome, family history does not influence surveillance scheduling which is based on patient factors and adenoma history.
- Follow-up of an advanced rectal adenoma by digital rectal examination, sigmoidoscopy or endo-rectal ultrasound should be considered independent of colonoscopic surveillance schedules.

Endorsed by:



Suggested citation: Barclay Karen, Cancer Council Australia Surveillance Colonoscopy Guidelines Working Party. Algorithm for Colonoscopic Surveillance Intervals – Adenomas. 2013.

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When Is a Repeat Colonoscopy Due?

A) 6 months

B) 12 months

C) 3 years

D) 5 years

Referral of a 68 yo male

- **Thanks for arranging a colonoscopy for this 68yo man who has 6 months of recurrent PR bleeding. He reports intermittent episodes of dark red PR bleeding, sometimes quite substantial in volume with no associated change in bowel habit or weight loss.**
- **Background history:**
 - **Dilated cardiomyopathy**
 - **Hypertension**
 - **Hypercholesterolaemia**

What examination findings are most helpful?

A) Pale conjunctiva

B) Abdominal tenderness

C) Rectal mass

D) Blood on PR

What examination findings are most helpful?

A) Pale conjunctiva

B) Abdominal tenderness

C) Rectal mass

D) Blood on PR

Which of these investigations are most helpful?

A) CEA

B) CRP

C) Iron Studies

D) FBC

Which of these investigations are most helpful?

A) CEA

B) CRP

C) Iron Studies

D) FBC

Investigations

Haemoglobin	160	N
White Cell Count	9.4	N
Platelet Count	283	N
Haematocrit	0.48	N
Red Cell Count	5.35	N
MCV	90	N
Neutrophils	6.13	N
Lymphocytes	2.10	N
Monocytes	0.81	N
Eosinophils	0.36	N
Basophils	0.03	N

Iron	9	L
Transferrin	2.5	N
Transferrin Saturation	15	L
Ferritin	123	N

What is the next most helpful investigation?

A) Flexible sigmoidoscopy

B) Abdominal USS

C) CT colonoscopy

D) Colonoscopy

What is the next most helpful investigation?

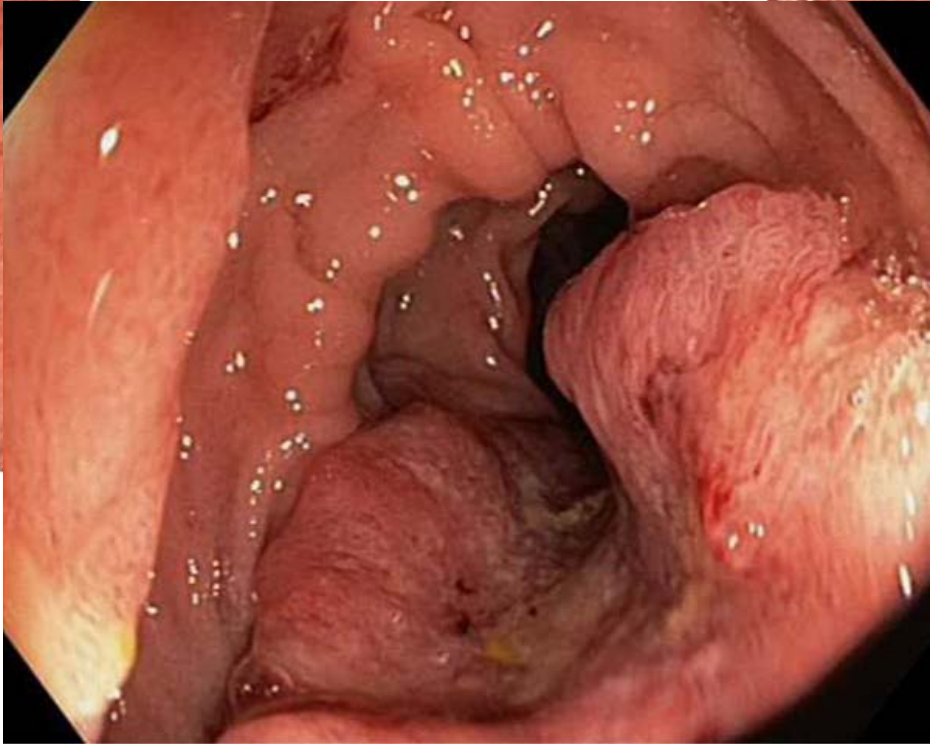
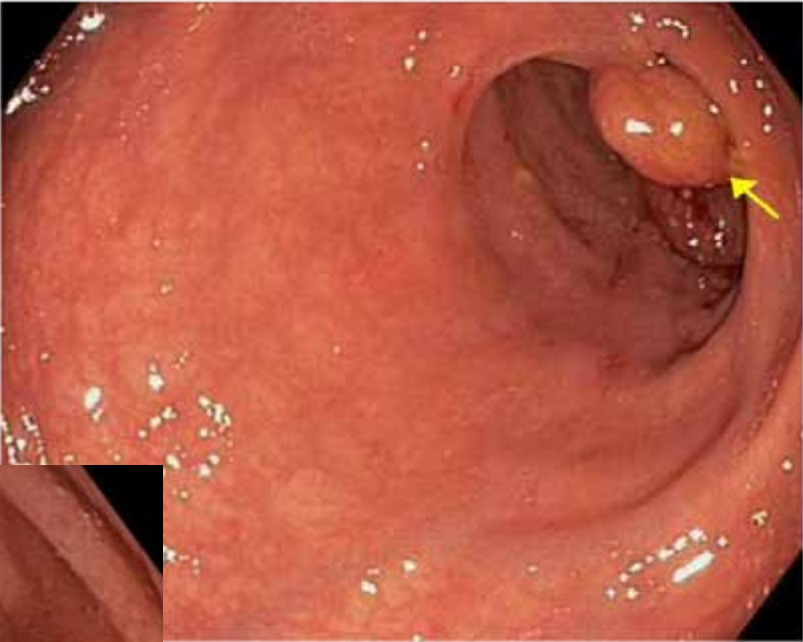
A) Flexible sigmoidoscopy

B) Abdominal USS

C) CT colonoscopy

D) Colonoscopy

Colonoscopy



Progress

- **Laparoscopic high anterior resection**
- **Histopathology: High-grade adenocarcinoma, 6 of 16 positive lymph nodes**
- **Course of adjuvant chemotherapy, complicated by mild peripheral neuropathy**
- **Follow up at 9 months post surgery: CT chest, abdomen and pelvis shows no evidence of recurrent or metastatic disease, CEA < 5**

Minimum referral criteria

Does your patient meet the minimum referral criteria?

Category 1

Appointment within 30 days is desirable

- Rectal bleeding with **Red flags**
- Presence of **Red flags**
 - Dark blood coating or mixed with stool
 - Weight loss, $\geq 5\%$ of body weight in previous 6 months
 - Abdominal / rectal mass
 - Iron deficiency in males and postmenopausal women or unexplained iron deficiency in premenopausal women
 - Patient and family history of bowel cancer (1st degree relative <55 years old)

Category 2

Appointment within 90 days is desirable

- Rectal bleeding without **Red flags**

Category 3

Appointment within 365 days is desirable

- No category 3 criteria

If your patient does not meet the minimum referral criteria

Consider other treatment pathways or an alternative diagnosis.

If you still need to refer your patient:

- Please explain why (e.g. warning signs or symptoms, clinical modifiers, uncertain about diagnosis, etc.)
- Please note that your referral may not be accepted or may be redirected to another service

If patient has haemorrhoids and no mass on digital rectal examination (DRE), refer if bleeding is recurrent or persists > 6 weeks