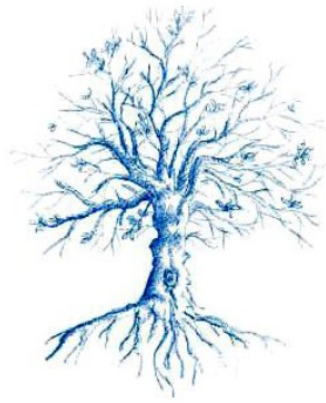




and Familial Colorectal Cancer FIT for Lynch Syndrome in Denmark

- Rescue of individuals not attending colonoscopic surveillance?

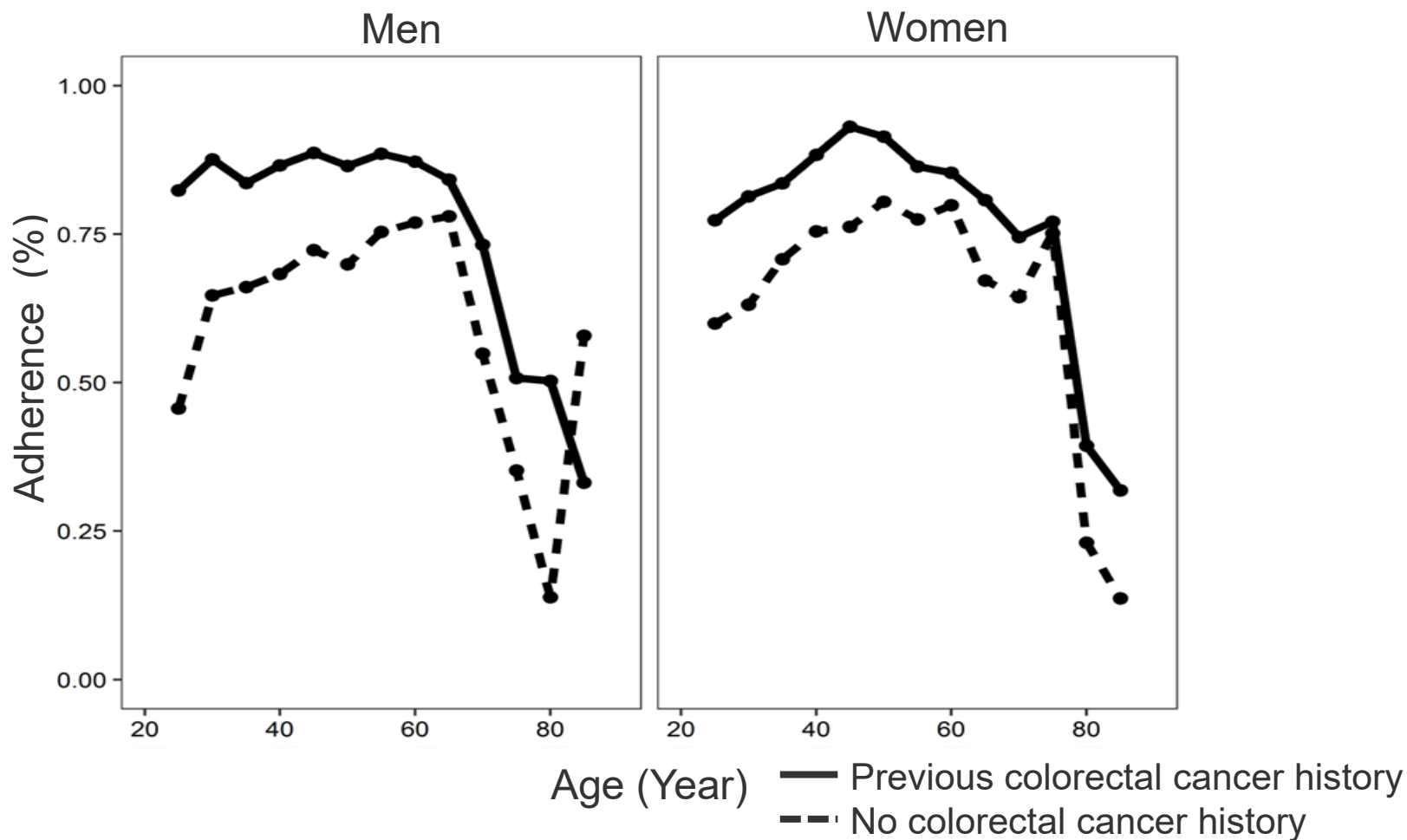


Maria Rasmussen, PhD

Post doc at the Danish HNPCC Register and the Colorectal Cancer Research Unit, CCRU
Gastro Unit, Hvidovre Hospital

Factors associated with adherence to on-time or extended surveillance

Women ($p < 0.009$)
Age < 75 ($p < 0.001$)
Previous cancer history ($p < 0.001$)



Study rationale

People with HNPCC are advised to undergo regular colonoscopic surveillance for colorectal cancer

This can be burdensome and impact adherence

Fecal Immunochemical Testing (FIT) has been explored as a non-invasive tool in population screening and high-risk groups (symptomatic patients) with promising results

Its role in HNPCC surveillance remains unclear

Attitudes, barriers and acceptance of FIT for people with HNPCC are not well understood

FIT can be used to prioritize patients with symptoms

Received: 10 October 2024 | Accepted: 18 October 2024

DOI: 10.1111/codi.17255

SYSTEMATIC REVIEW



Faecal immunochemical tests for patients with symptoms suggestive of colorectal cancer: An updated systematic review and multiple-threshold meta-analysis of diagnostic test accuracy studies

Gastroenterology 2025;168:795–797

Sue Harnan¹ | Jean Hamilton¹ | Emma Simpson¹ | Mark C
Sophie Whyte¹ | Shijie Ren¹ | Katy Cooper¹ | Muti Abulafi²
Richard Booth² | Rachel Carten⁵ | Stephanie Edgar⁶ | Willie Har
Louise Merriman⁶ | Kevin Monahan⁸ | Laura Heathcote¹ | Hay

RESEARCH LETTERS

Use of Fecal Immunochemical Testing for Risk Stratification of Patients With Symptoms of Colorectal Cancer Referred for Diagnostic Colonoscopy



Mees Mansvelders, Jakob Kleif, Malene R Andersen, John G Karstensen, Christina Therkildsen

FIT and colonoscopy for Familial Colorectal Cancer

Combining Colonoscopy With Fecal Immunochemical Test Can Improve Current Familial Colorectal Cancer Colonoscopy Surveillance: A Modelling Study

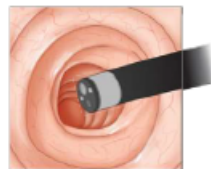


Francine van Wifferen,¹ Marjolein Marcel B. W. Spanier,⁴ Evelien D Karen Canfell,⁷ Gerrit A. Meijer,⁸ Veerle M. H. Coupé¹

Combining colonoscopy with FIT can improve current familial colorectal cancer surveillance – a modelling study

Current practice

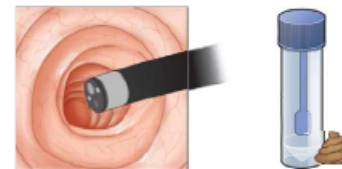
Age 45-75:



5-yearly colonoscopy

Optimal strategy:

Age 40-80:



10-yearly colonoscopy with 2-yearly FIT in between

	Compared to current colonoscopy practice
Nr. of colonoscopies	↓
Costs	↓
CRC incidence	=
CRC mortality	=
Quality of life	↑

Gastroenterology

FIT was used to prioritize Lynch syndrome patients during COVID-19 in UK

OXFORD

Risk-stratified faecal immunochemical for urgent colonoscopy in Lynch syndrome during the COVID-19 pandemic

Anne G. Lincoln¹, Sally C. Benton², Carolyn Piggott², Shama Riaz Sheikh¹, Andre James E. East^{6,7}, Pete Sanders^{6,7}, Michael Lim^{6,7}, Donal Sheehan^{6,7}, Katie Snape⁸, John Burn¹⁰, David Nylander¹¹, Menna Hawkins¹², Fiona Laloo¹³, Kate Green¹³, Terry Rutherford¹⁶, Peter Sasieni¹  and Kevin J. Monahan^{12,17,*} 

558 invited (over 10 months)



384 (68.8%) returned a FIT



339 (88.3%) eligible for analysis



60 (17.7%) had FIT > 10 µg/g (50 ng/ml) → Urgent Cancer Pathway



295 (87%) received a colonoscopy

FIT was used to prioritize Lynch syndrome patients during COVID-19 in UK

558 invited (over 10 months)



384 (68.8%) returned a FIT

BJS Open, 2023, zrad079
<https://doi.org/10.1093/bjsopen/zrad079>
Original Article

OXFORD

Risk-stratified faecal immunochemical testing (FIT) for urgent colonoscopy in Lynch syndrome during the COVID-19 pandemic

Anne G. Lincoln¹, Sally C. Benton², Carolyn Piggott², Shama Riaz Sheikh¹, Anne James E. East^{6,7}, Pete Sanders^{6,7}, Michael Lim^{6,7}, Donal Sheehan^{6,7}, Katie Snary^{6,7}, John Burn¹⁰, David Nylander¹¹, Menna Hawkins¹², Fiona Laloo¹³, Kate Green¹⁴, Terry Rutherford¹⁶, Peter Sasieni¹ and Kevin J. Monahan^{12,17,*}

102 adenomas (19 advanced) and 3 colorectal cancers were missed by a FIT cutoff of 10 ug/g (50 ng/ml)

FIT threshold (µg/g)	Total	Overall instances of participants with adenomas*	AAs	CRC	Urgent Cancer Pathway
<6	258 (76.1)	99 (38.4)	19 (7.4)	3 (1.2)	
6 to <10	21 (6.2)	3 (14.3)	0 (0.0)	0 (0.0)	
≥10	60 (17.7)	28 (46.7)	8 (13.3)	4 (6.7)	
Total	339	130 (44.5)	27 (9.2)	7 (2.4)	

Can FIT be used as a rescue tool for Lynch syndrome individuals not attending colonoscopy?

And can it be used for Familial Colorectal Cancer individuals as well?

Study design – Amendment to the Endoscopy V study

ENDOSCOPY V – Part 1 and 2



Tumor DNA,
miRNA,
proteins



FIT,
Microbiota,
tumor DNA



Tumor DNA,
hematuria

People in colonoscopic surveillance
RETROSPECTIVE

ENDOSCOPY V – Part 3



FIT
(Microbiota)
(tumor DNA)

People with no colonoscopic data
PROSPECTIVE

Inclusion flow

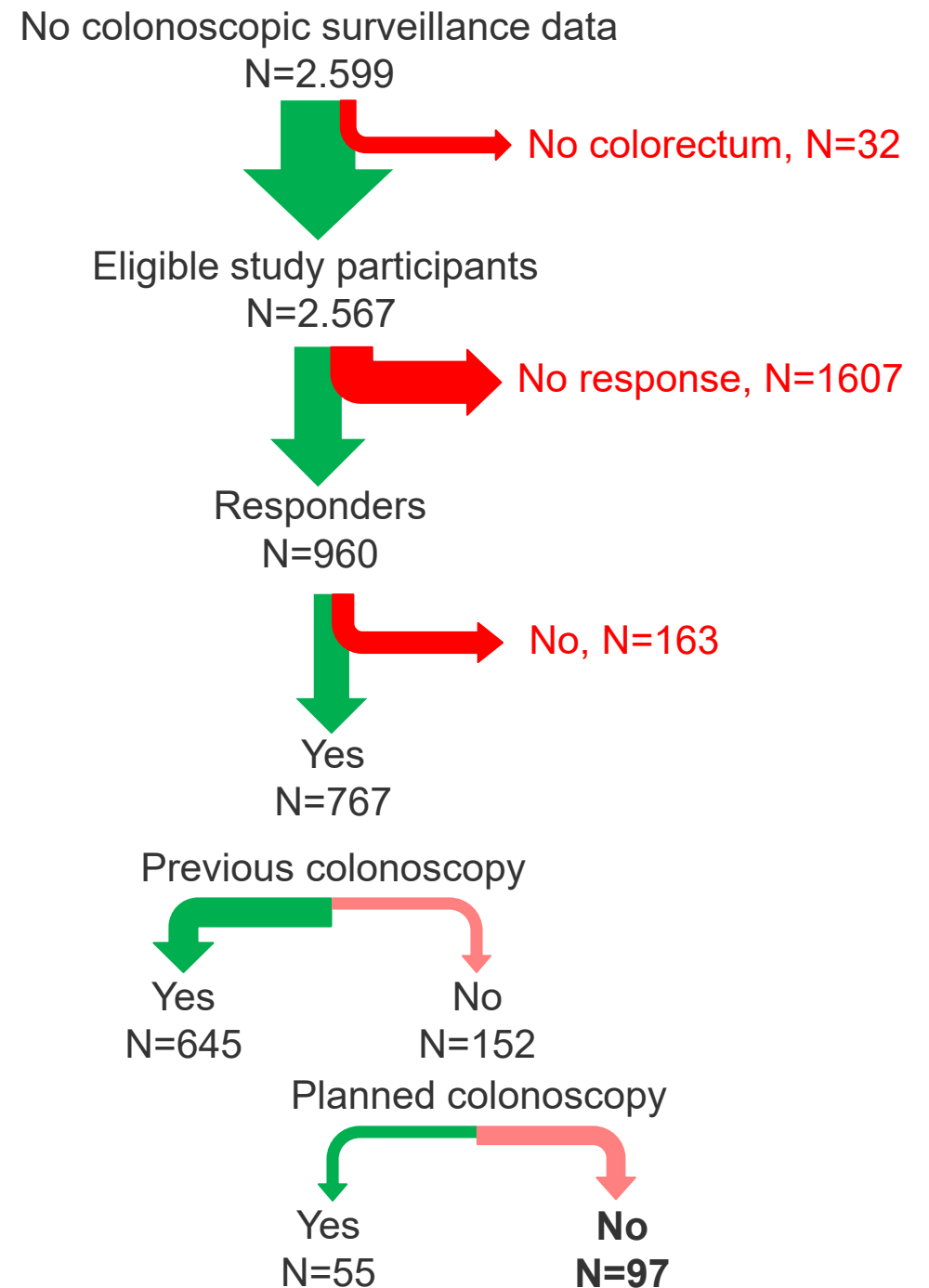
No FIT prior to oral
information and written
consent

REDCap invitation

Lack of colonoscopy data
in the HNPCC Register

97 possible rescues

**Only 1 with Lynch
syndrome**



Bias and limitations

People eager to try alternative screening tools like FIT will likely already be in some sort of colonoscopic surveillance

It is difficult to recruit people who for some reason do not attend colonoscopic surveillance

People responding on the study invitation might be resourceful individuals with a higher educational level, higher income, and higher level of health literacy

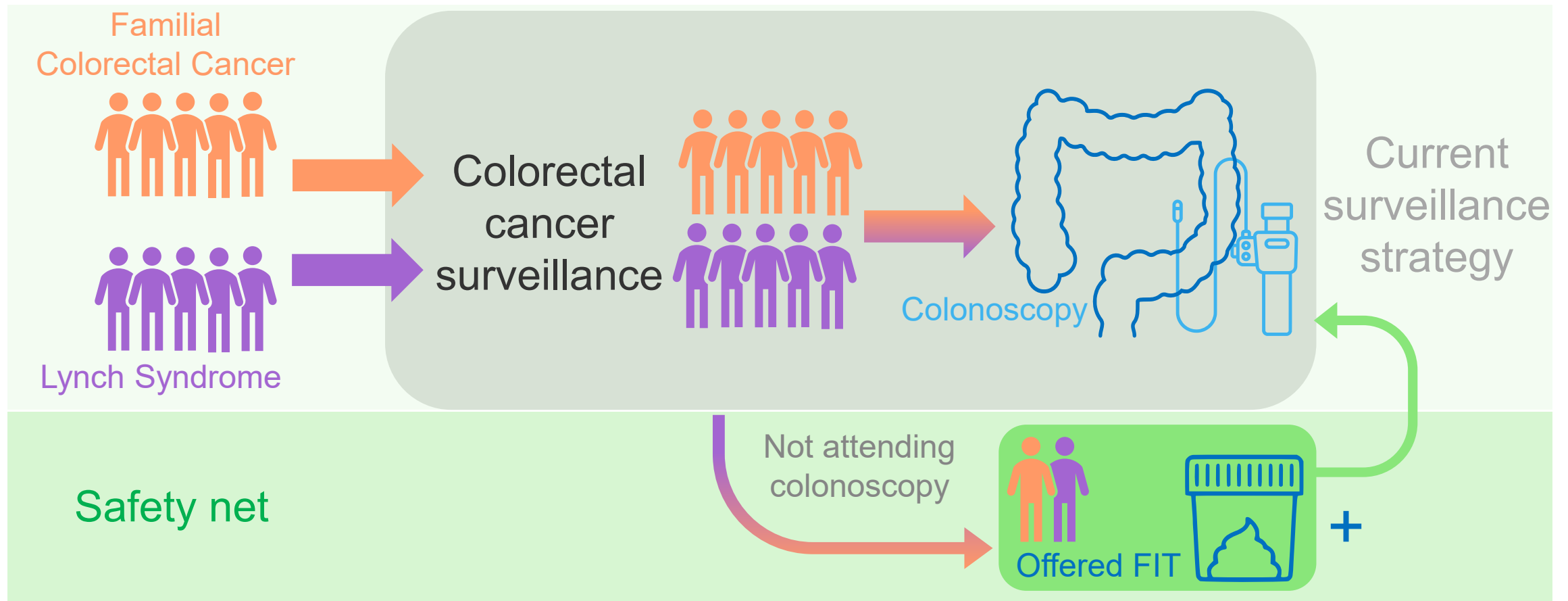
Likewise these factors impact compliance in general cancer screening programs^{1,2,3}

¹Thomsen et al., 2018. PMID: 30538577

²Clarke et al., 2020. PMID: 32286136

³Gram et al., 2021. PMID: 33417705

Safety net



Barriers to taking a FIT test



Colorectal cancer

BMJ
Open
Gastroenterology

Evaluation of user experiences, perceptions and attitudes towards faecal immunochemical testing (FIT) for risk-stratified colonoscopy in people with Lynch syndrome

Anne Lincoln,¹ Jo Waller,² Sally Benton,³ FIT for Lynch Study
Peter Sasieni,² Kevin J Monahan ^{4,5}

WHAT THIS STUDY ADDS

⇒ This study shows that FIT is generally well-accepted by people with LS, with most finding it easy to use. Significant differences in user experiences were observed, with women reporting higher levels of anxiety related to CRC surveillance, while older respondents expressed greater confidence in FIT.

89% liked the FIT test, but only 74% trusted it

How confident are you that the result you will receive for the FIT kit will be accurate in detecting any potential precancer or cancer?

Variables	N	Very/fairly confident*, n (%)	Not very/not at all confident*, n (%)	χ^2	P value
All participants	272 (97.1)	201 (73.9)	71 (26.1)		
Sex				0.597	0.440
Male	97 (35.7)	69 (71.1)	28 (28.9)		
Female	175 (64.3)	132 (75.4)	43 (24.6)		
Age (years)				3.372	0.066
≥ 55	125 (46.0)	99 (79.2)	26 (20.8)		
<55	147 (54.0)	102 (69.4)	45 (30.6)		
LS genotype‡				3.736	0.053
MLH1/MSH2/EPCAM	172 (65.4)	121 (70.3)	51 (29.7)		
MSH6/PMS2	91 (34.6)	74 (81.3)	17 (18.7)		

Worth noting that 31.2% did NOT take the FIT test in the study

Continuous lack of knowledge

Do Lynch syndrome and Familial Colorectal Cancer individuals feel safe using the FIT?

Are they willing to use this as an alternative? Or what are the barriers?

Can FIT be used to catch and rescue Lynch syndrome and Familial Colorectal Cancer individuals *not* attending colonoscopies?

Endoscopy V – Part 6: Barriers and attitudes

In this part of our study we invite **all** participants – *not* just those who *accepted* the FIT testing – to answer questions regarding:

Barriers towards home-sampling for the FIT

Their trust in the FIT

Willingness to exchange the colonoscopy for a FIT

To be continued...

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Inclusion

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Købmand Inger Bonnén's Fond
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Inge og Jørgen Larsens Mindelegat
Familie Erichsens Mindefond
W. Christensen og hustrus fond
Torben og Alice Frimodts fond
Inger Hertz fond
Niels Lindeskov Hansen og hustrus
Familiefond
Sven Hansen legat
Henrik Henriksens fond
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Kornerupfonden
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Axel Muusfeldts fond
Juchumfonden
Region H's forskningsfond

FIT Collaborators

