

Reasons for non-follow up after a positive FIT in the Dutch CRC screening program

Preliminary results of the ARCUS study

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Dutch national CRC screening program

- Implemented in 2014
- Age 55-75
- Biennial FIT screening at cut-off 47 $\mu\text{g Hb/g}$
- Postal mail: invitation, information brochure & FIT
- Brochure: advise to see family physician in case of symptoms



Dutch national CRC screening program

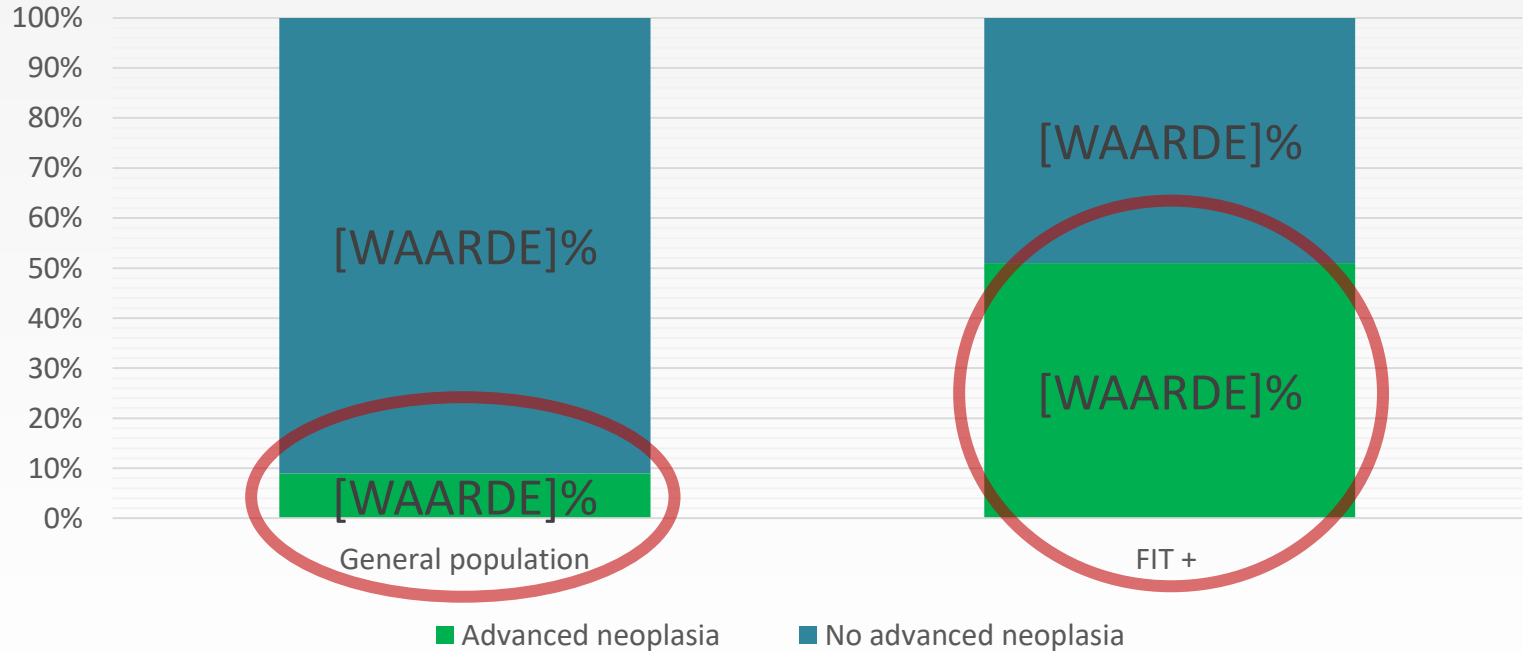
- FIT+ → letter with appointment for intake colonoscopy within 3 weeks
- Colonoscopy + pathology result within 7 weeks
- Accredited colonoscopy center within 40 km (25 miles)
- Possibility to change appointment
- High *participation rate*: 73.9% (2016)

program-adherence



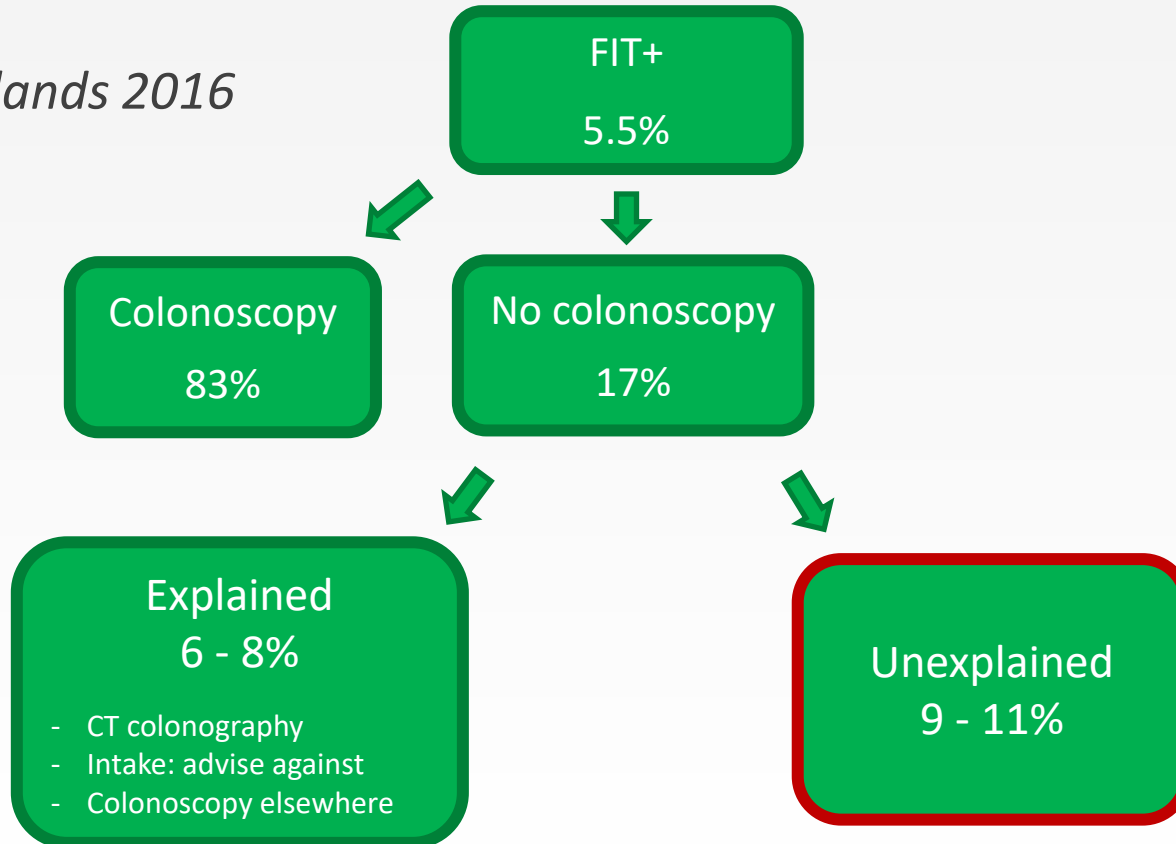
Findings at colonoscopy after positive FIT

Rates of advanced neoplasia in the Netherlands



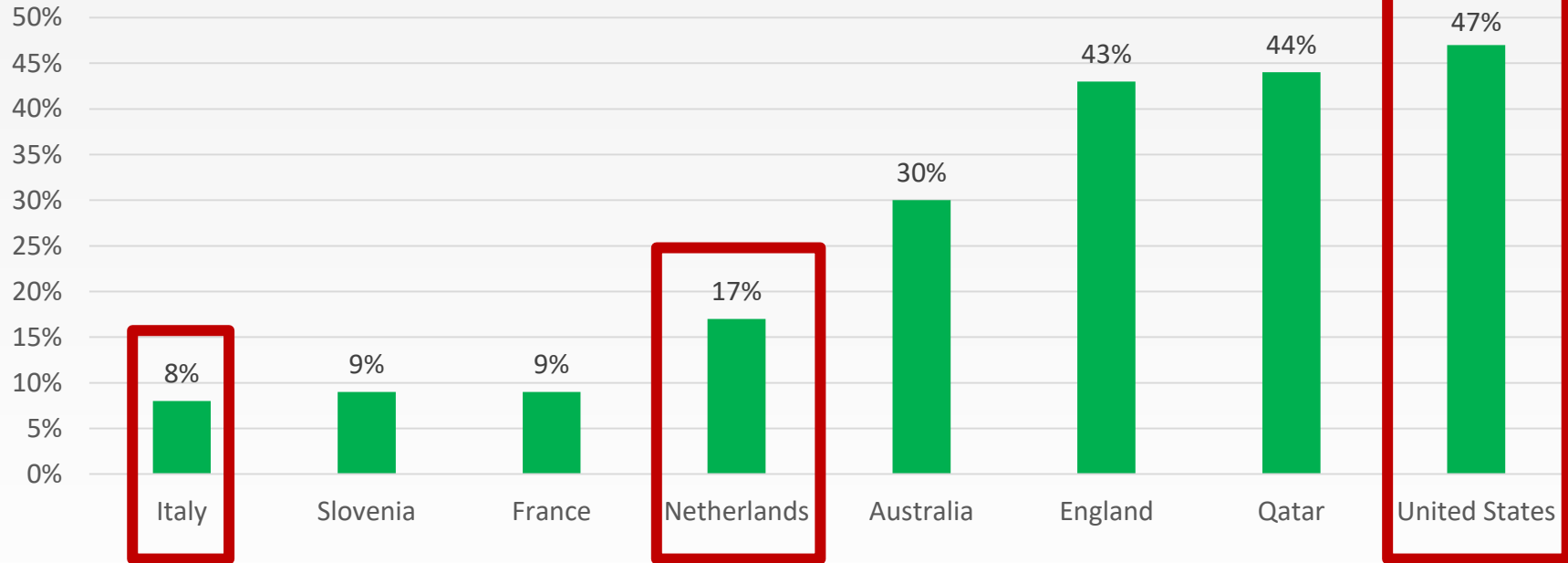
Program-adherence after positive FIT

Netherlands 2016



Rates non-adherence after positive CRC screening

Worldwide



Bojan et al. *Zdrav Vestn.* 2010;79(5).

Denis B, Gendre I, Perrin P. *Journal of Medical Screening.* 2015;22(2):76-82.

Erasmus MC –NKI/AvL. *BVO Darmkanker Monitor* 2016. 2017.

Gupta et al. *JAMA Intern Med.* 2013. Oct 14;173(18):1725-32.

Oluloro et al. *Journal of community health.* 2016;41(4):864-870.

Parente et al. *Endoscopy* 2013; 45(01): 27-34

Schreuders et al. *Gut* 2015;64:1637-1649.

Singh et al. *Digestive Endoscopy* 2015; 27 (Suppl. 1): 30–34.



Known factors associated with (non)adherence in CRC screening

- Socio-demographic factors
 - Minority ethnic group
 - Low socio-economic position
 - Remoteness
- Lifestyle and healthcare factors
 - Poor health behavior
 - Severe disability
 - Poor health insurance
- CRC and screening factors
 - Previous screening
 - Positive family history CRC
 - Positive health beliefs/knowledge



Quantitative
research
methods



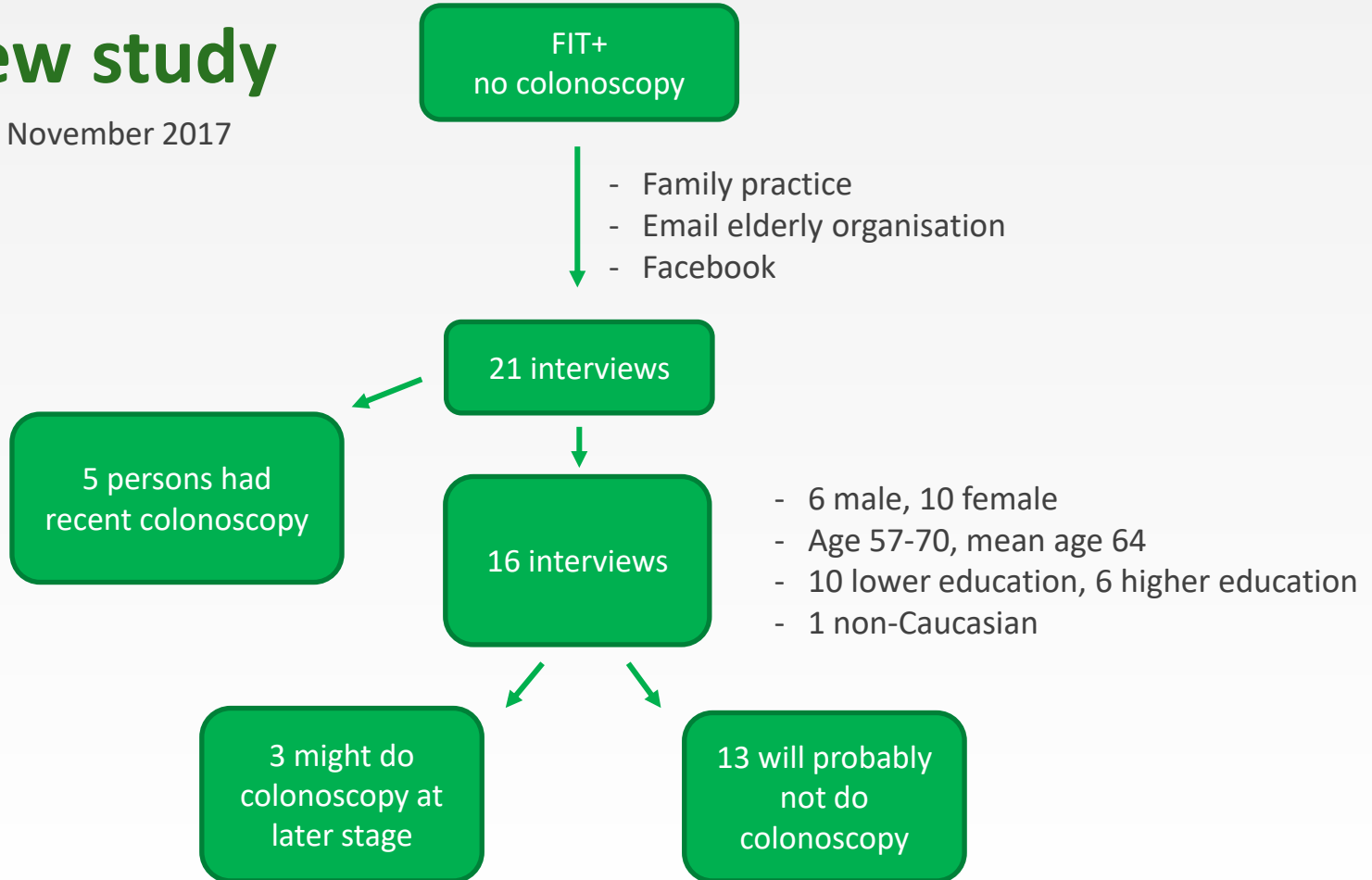
Qualitative research

- Understanding human behavior in its context
- Data is collected through interviews and participant observation
- Data is analyzed by themes from descriptions
- Data is reported in the language of the informant
- Often exploratory



Interview study

December 2016 – November 2017



Methods interview study

- Analysis
 - Interviews transcribed verbatim
 - Data saturation
 - Thematic analysis
 - Open coding using MAXQDA (1 researcher)
 - Discussion of results (3 researchers)
- Preliminary results



Preliminary results: often found motives



Reasons are always complex and multifactorial

- Low risk perception for CRC

“I’m convinced I don’t have cancer”

- Often related to bodily experiences:

“I don’t feel sick”

“I don’t have any symptoms”

“I know my body”

- And/or influential factors:

“I exercise and I eat well”

“It doesn’t run in my family”



Preliminary results: often found motives

- Alternative explanation for blood loss

“Hemorrhoids”

“I had a hard stool”

- Had expected negative FIT / not realized consequences of positive FIT

“I didn’t expect anything to come out of it”

- Resentment against colonoscopy

“My neighbor told me it was very unpleasant”

“I heard it is very embarrassing”



Preliminary results: often found motives

- Aversion against the way the screening was set up

“Distant”

“Cold”

“Unfriendly”

“Coercive”

- Unwilling to visit a hospital that’s unknown and far away

“I don’t like to go to an unknown hospital”



Preliminary results: less often found motives

- Other things on mind – major life events

“My life was very hectic with the passing of my friend”

- Fatalism / not wanting treatment

“Nobody goes before their time”

- Fear of complications

“I’m afraid it will cause me to have another fistula”

- Distrust towards screening organisation

“It’s in their financial interest to do the investigation”



Preliminary results: unexpected finding

- 3 women (of 10) took unfavorable FIT result less serious than unfavorable mammography in breast cancer screening

“With a mammography there really is something to see so I can really imagine it. This I find a bit vague. That’s the difference”

(female, 57, lower education)



Conclusion

- Dutch program with low threshold for participation resulting in 9 – 11 % unexplained no follow-up colonoscopy after FIT+
- Low risk-perception for CRC might be most relevant underlying cause
- This knowledge could help optimize program-adherence rates



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