



Colorectal Cancer Screening – current landscapes & challenges in Europe

International Agency for Research on Cancer
Lyon, France

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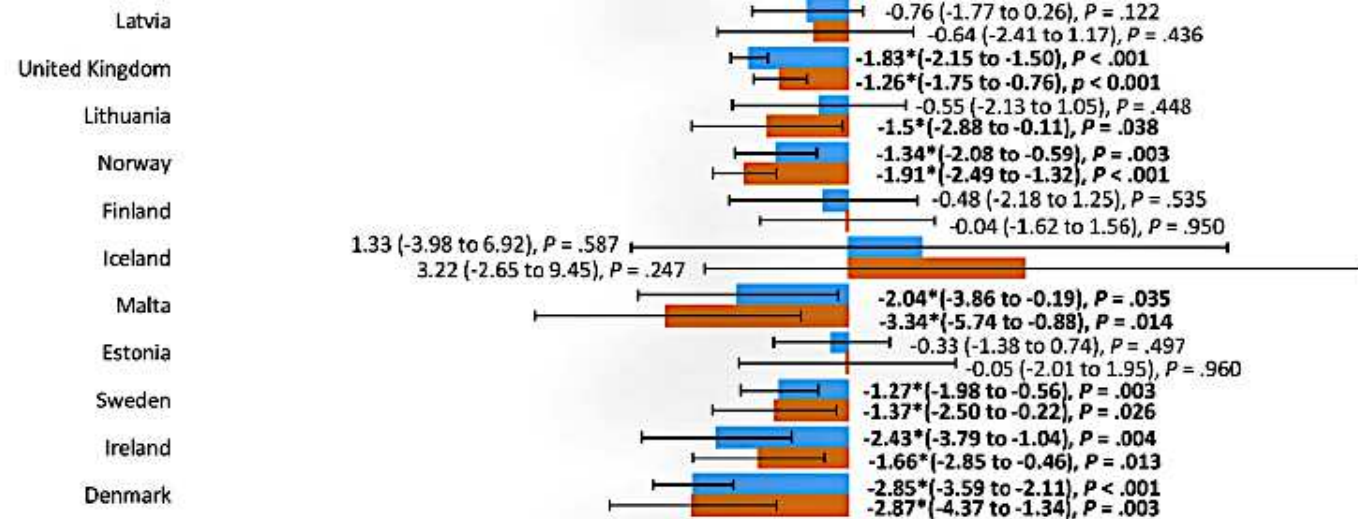
Head, Screening Group/Early Detection & Prevention Section

basup@iarc.fr

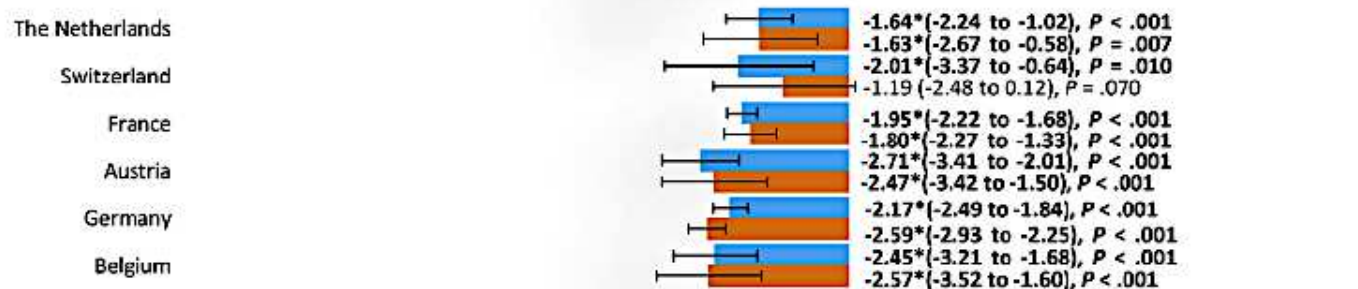
AAPC in CRC mortality both genders age 0-85 yrs (up to 2016)

■ male ■ female

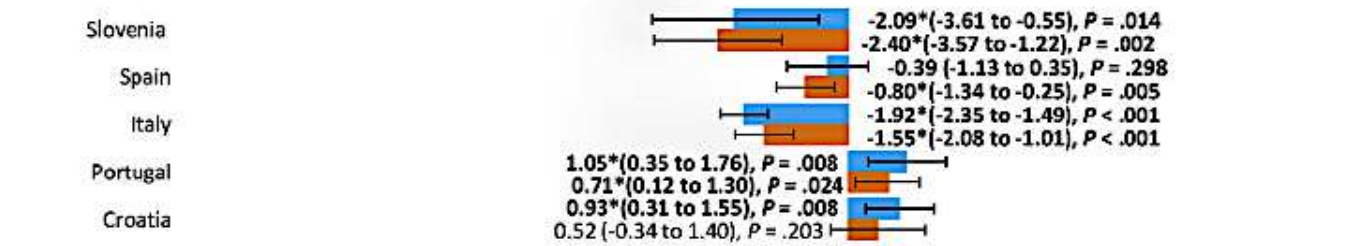
Northern Europe



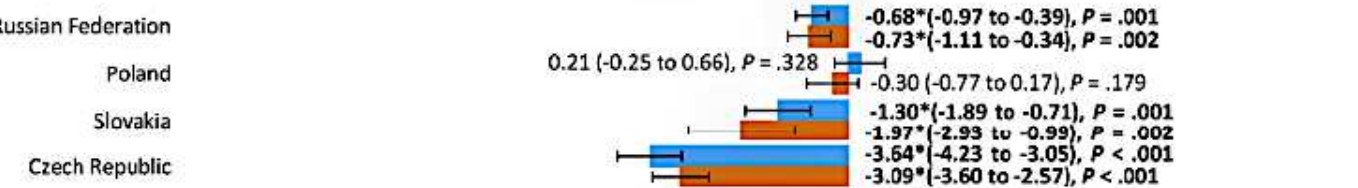
Western Europe



Southern Europe



Eastern Europe



-12.00 -10.00 -8.00 -6.00 -4.00 -2.00 0.00 2.00 4.00 6.00 8.00 10.00

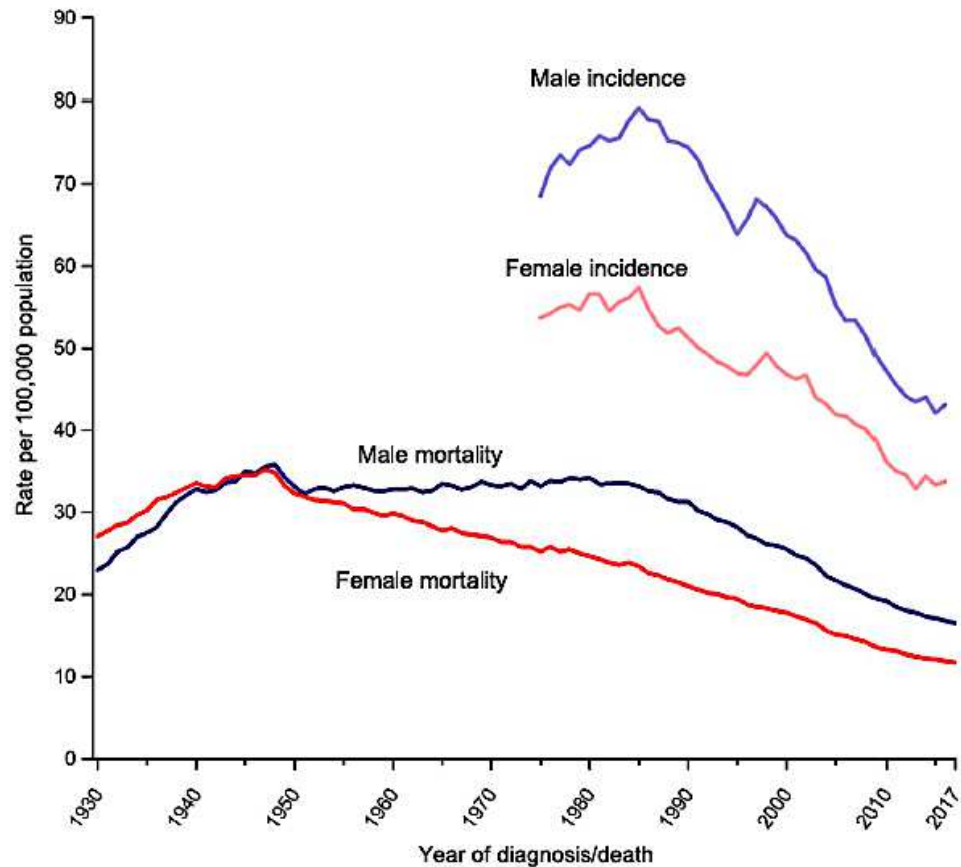
Wong et al. Clinical Gastroenterology and Hepatology 2020

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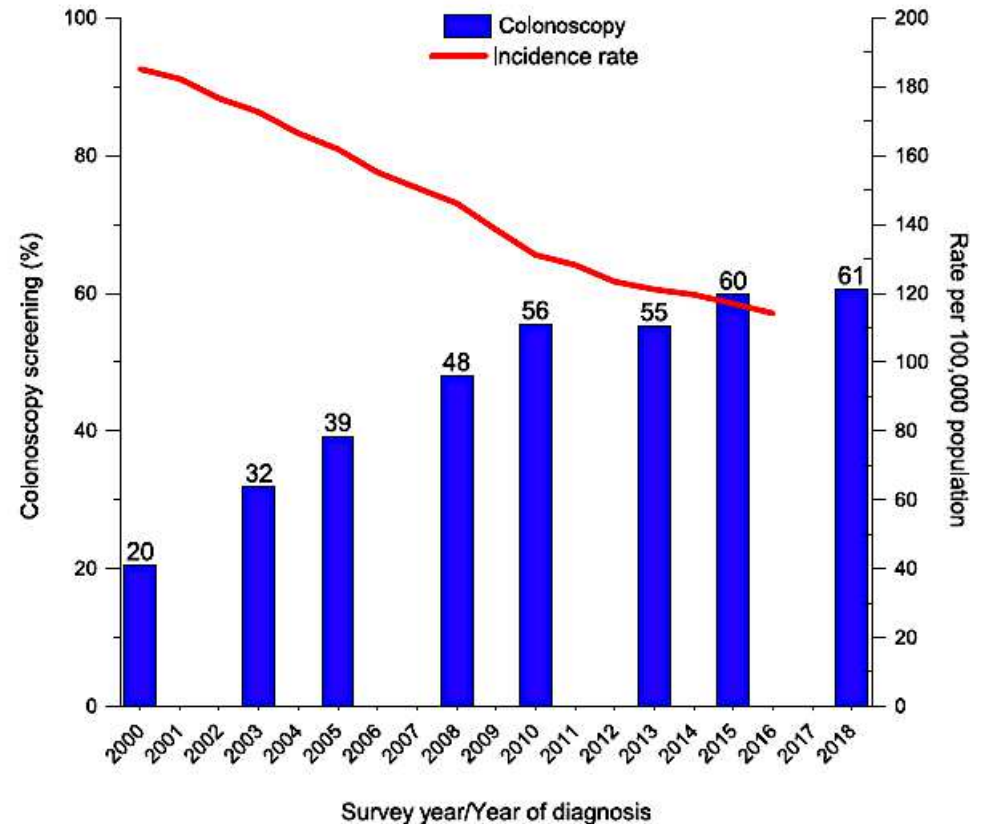


Screening colonoscopy reduced CRC incidence & mortality in the USA

Trends in CRC Incidence (1975- 2013) & Mortality (1930- 2014) Rates by Sex



Colonoscopy Prevalence (2000-18) & CRC Incidence Rates (2000 -16), Adults ≥ 50 Y

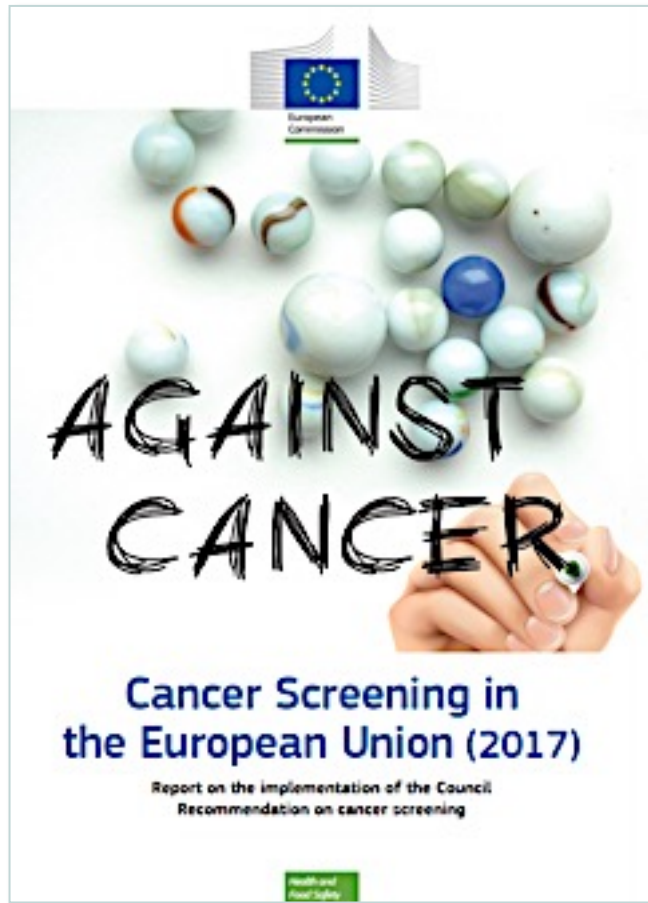


Impact of colorectal cancer screening on cancer-specific mortality in Europe: A systematic review

- Offering FS once in a lifetime was associated with a reduction in CRC mortality ranging from 21% to 30% when studies at high risk of bias were excluded
- There was much less evidence for the effectiveness of FIT and colonoscopy screening.

Cancer Screening in the European Union

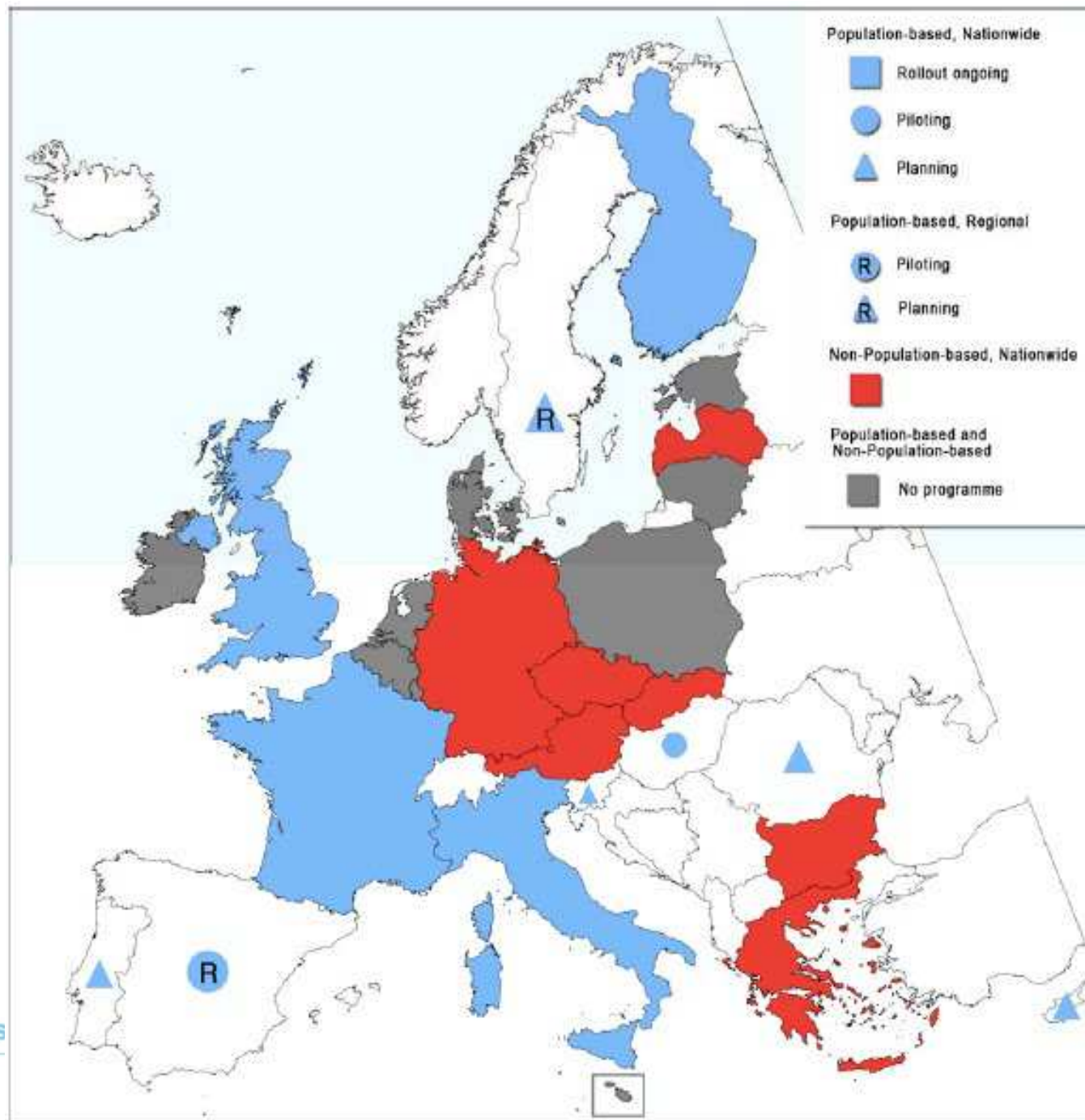
Evaluation of Breast, Cervical & Colorectal Cancer Screening



- To document changes in status to program implementation over a decade
- To collect more detailed information on program organization
- To estimate performance using process & outcome indicators

https://ec.europa.eu/health/sites/health/files/major_chronic_diseases/docs/2017_cancerscreening_2ndreportimplementation_en.pdf

Colorectal CA Screening Programs in the EU 2007

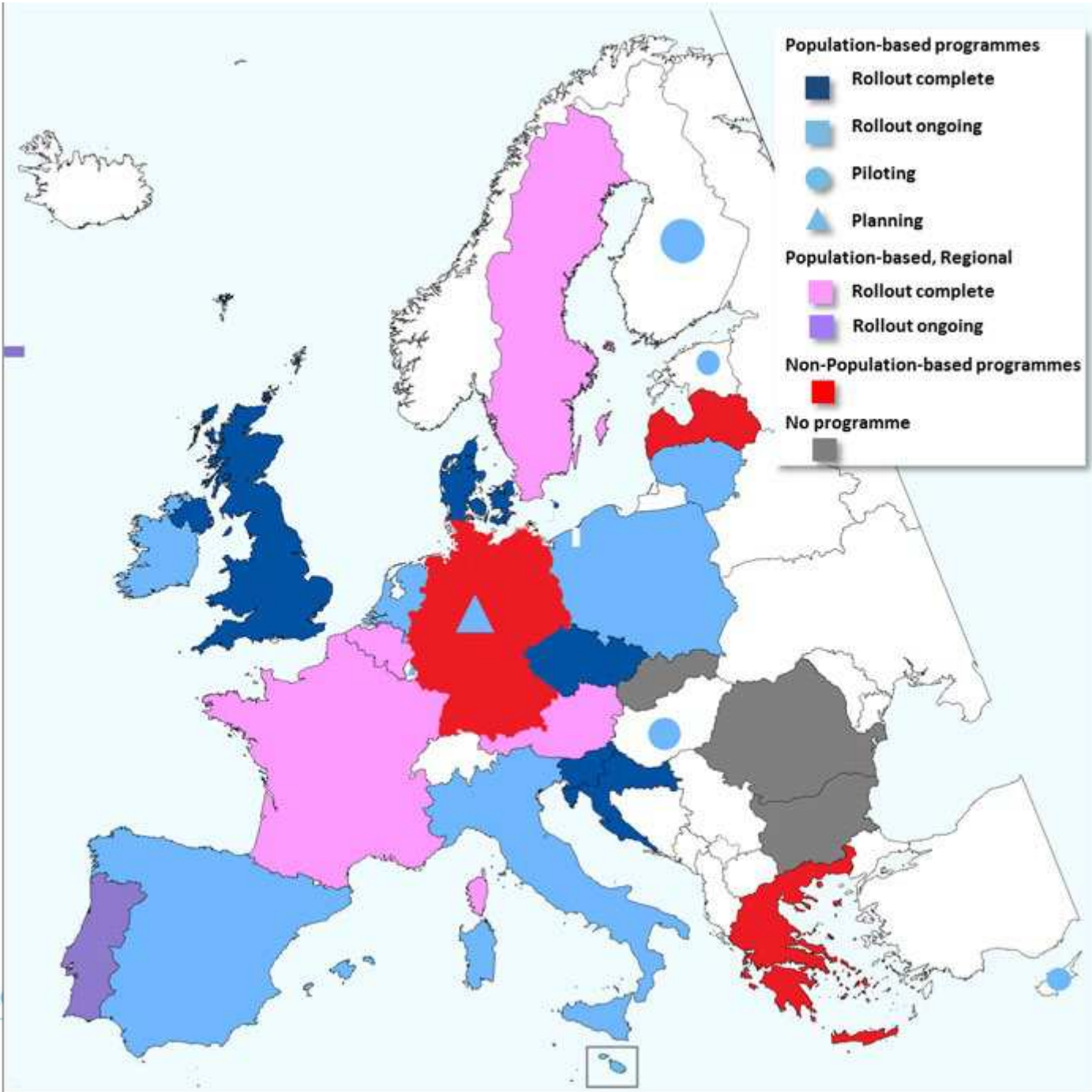


Pop-based screening in 12 MS

43% EU residents aged 50-74 yrs had access

Roll-out complete in 0 MS

Colorectal CA Screening Programs in the EU 2016



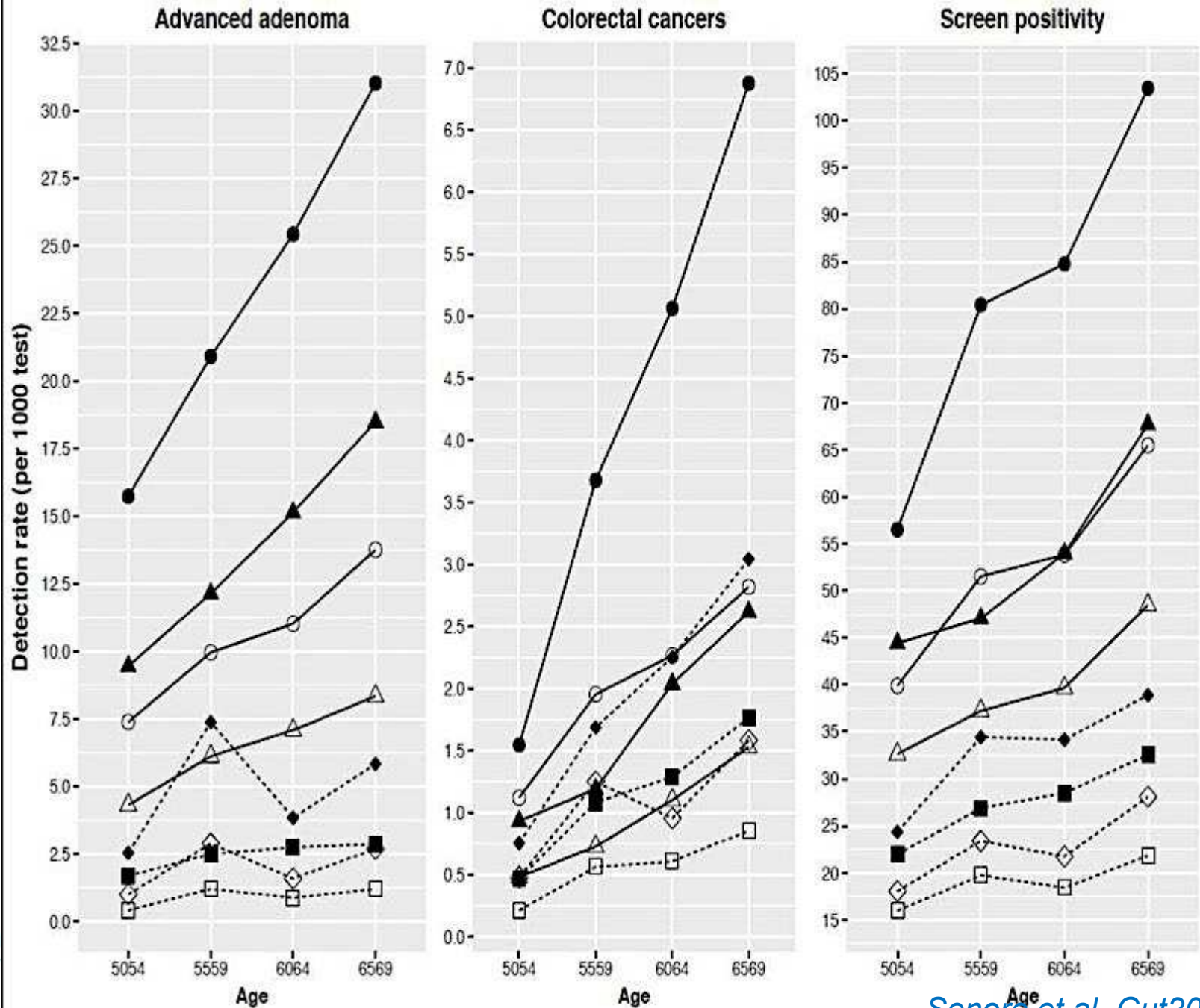
Pop-based screening in 20 MS

72% EU residents aged 50-69 yrs had access

Roll-out complete in 11 MS

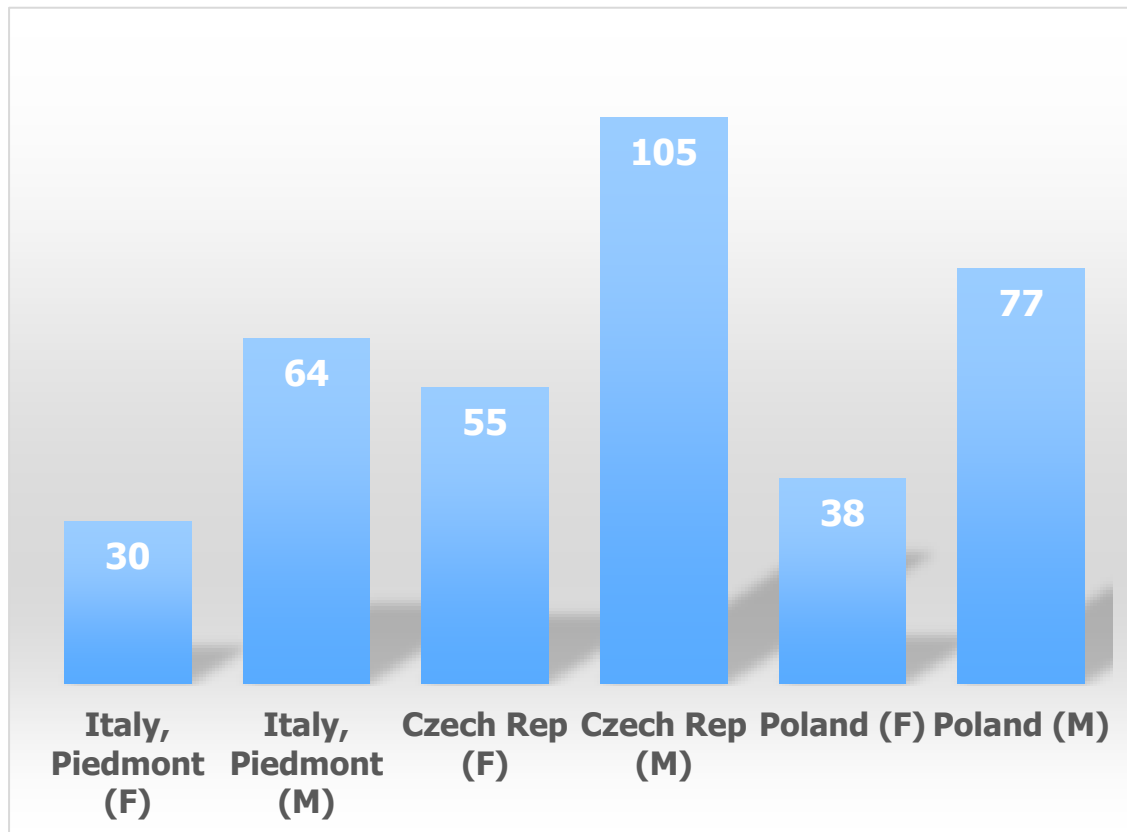
27% EU residents aged 50-69 yrs had access

Test positivity & detection rate of advanced adenomas & CRC by gender, age & screening test

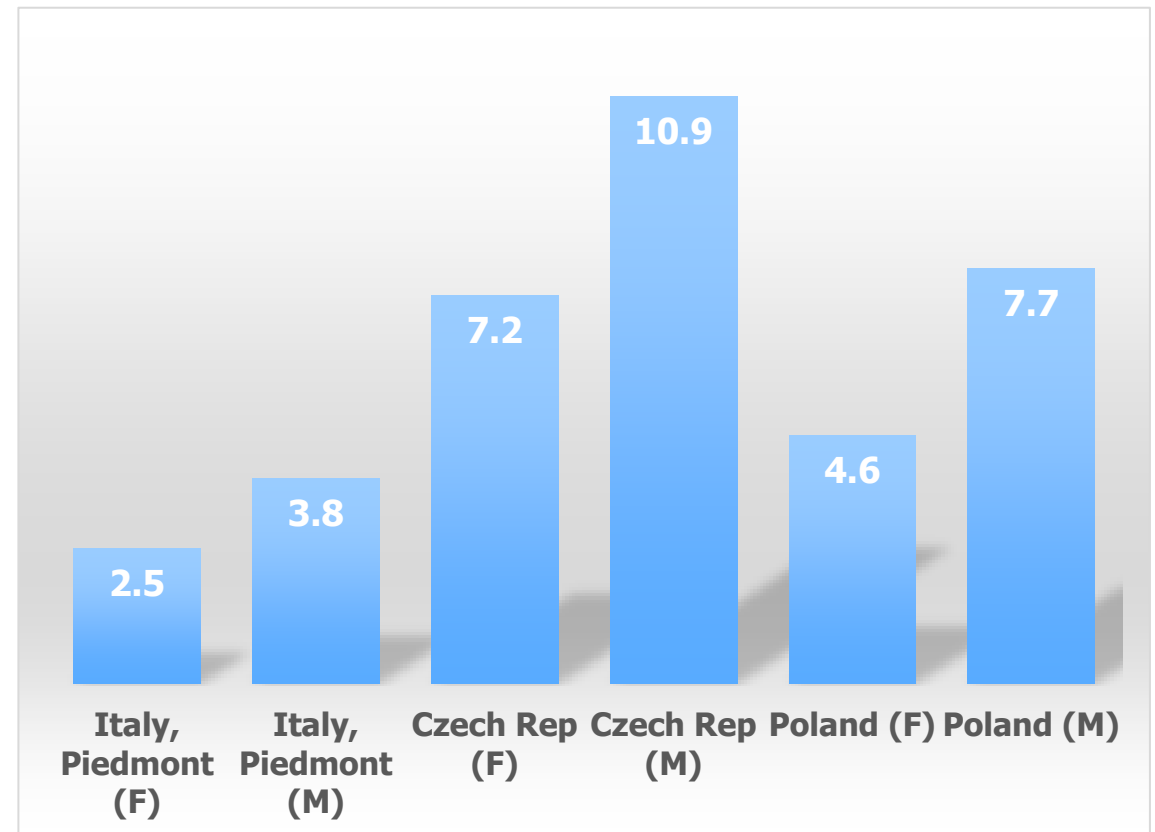


Endoscopy CRC screening programmes in the EU

Detection rate of advanced adenomas (/1000) by sex

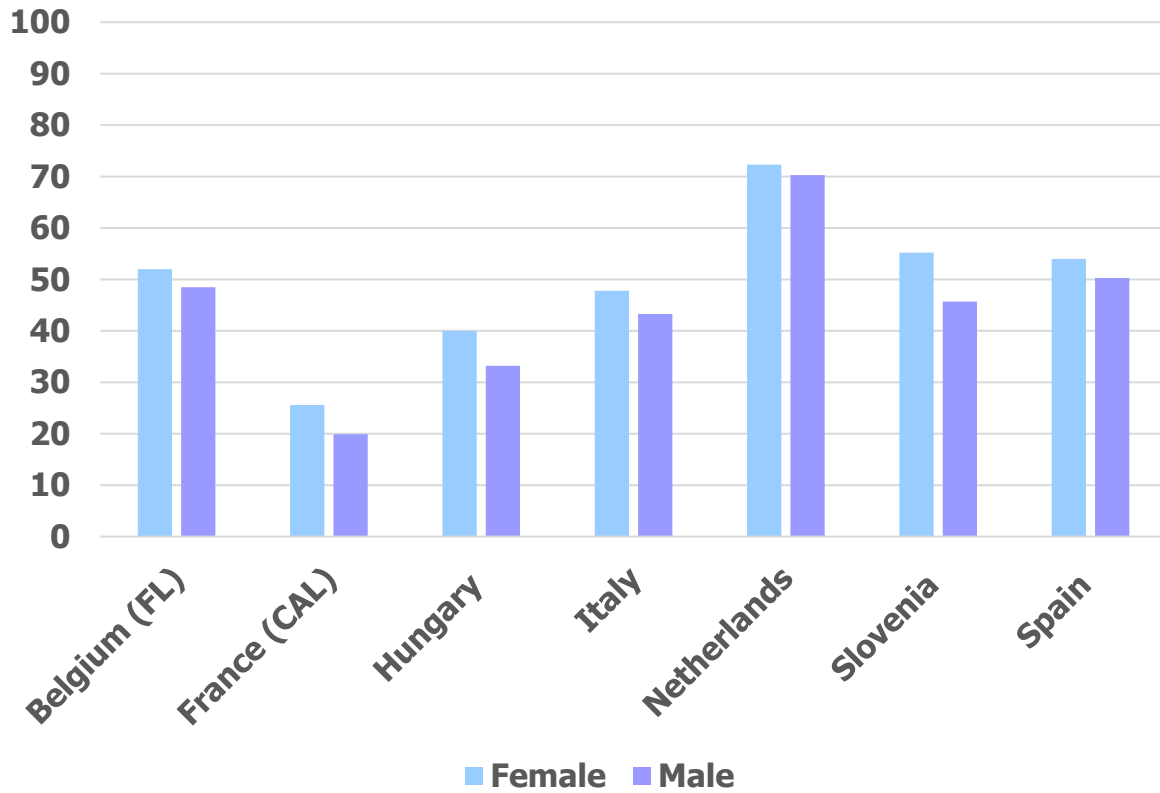


Detection rate of colorectal cancers (/1000) by sex

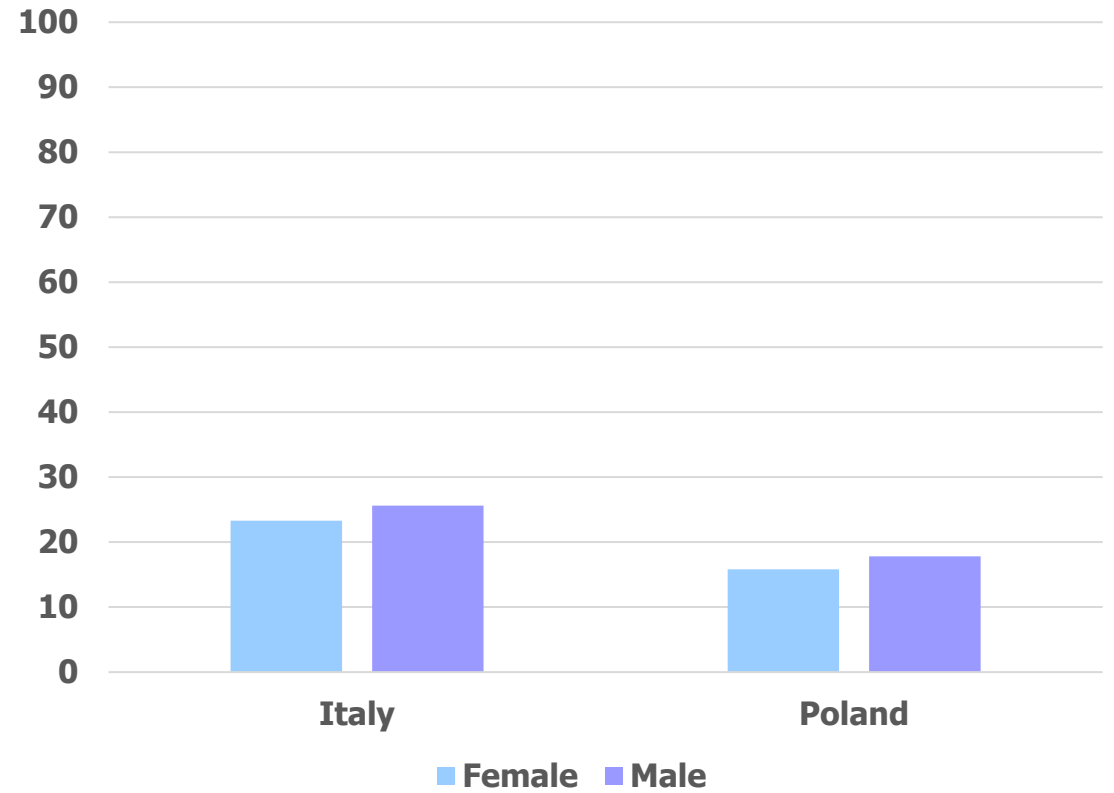


Participation rates in CRC screening in the EU

FIT based screening (%)



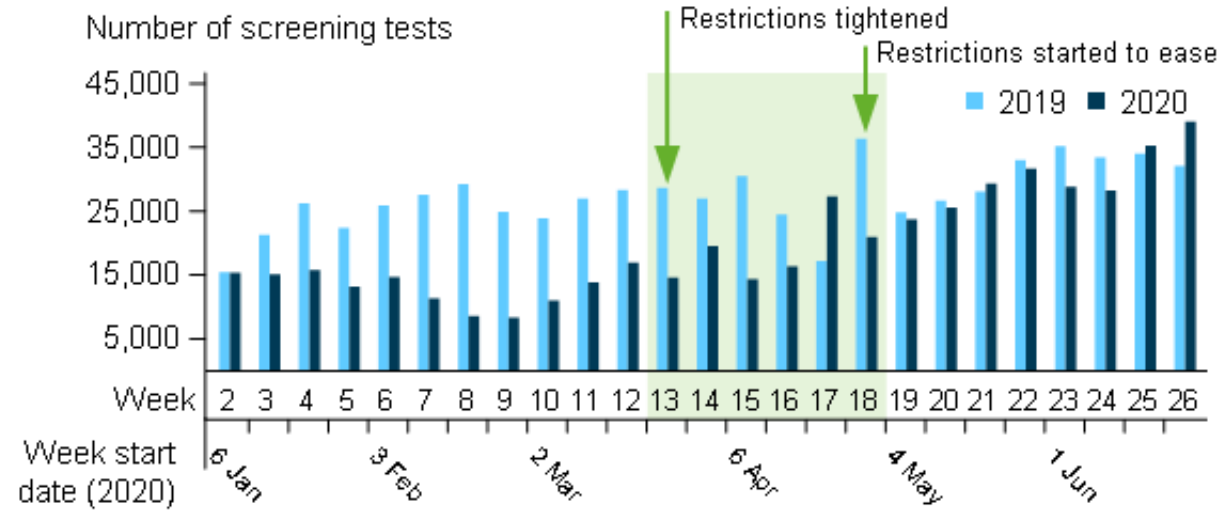
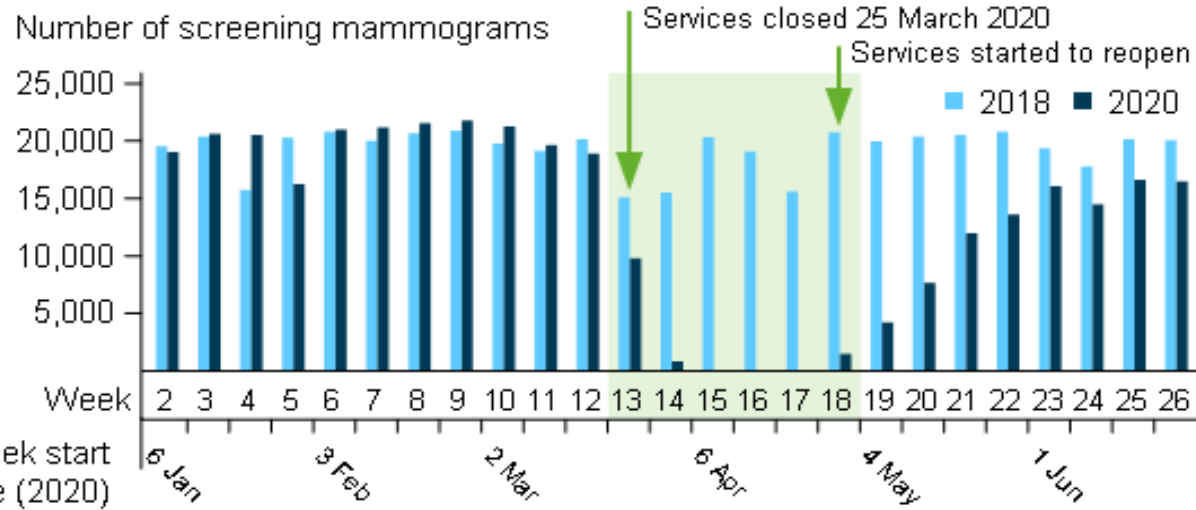
Endoscopy based screening (%)



PM: COVID-19 'Worst Public Health Crisis in a Generation'



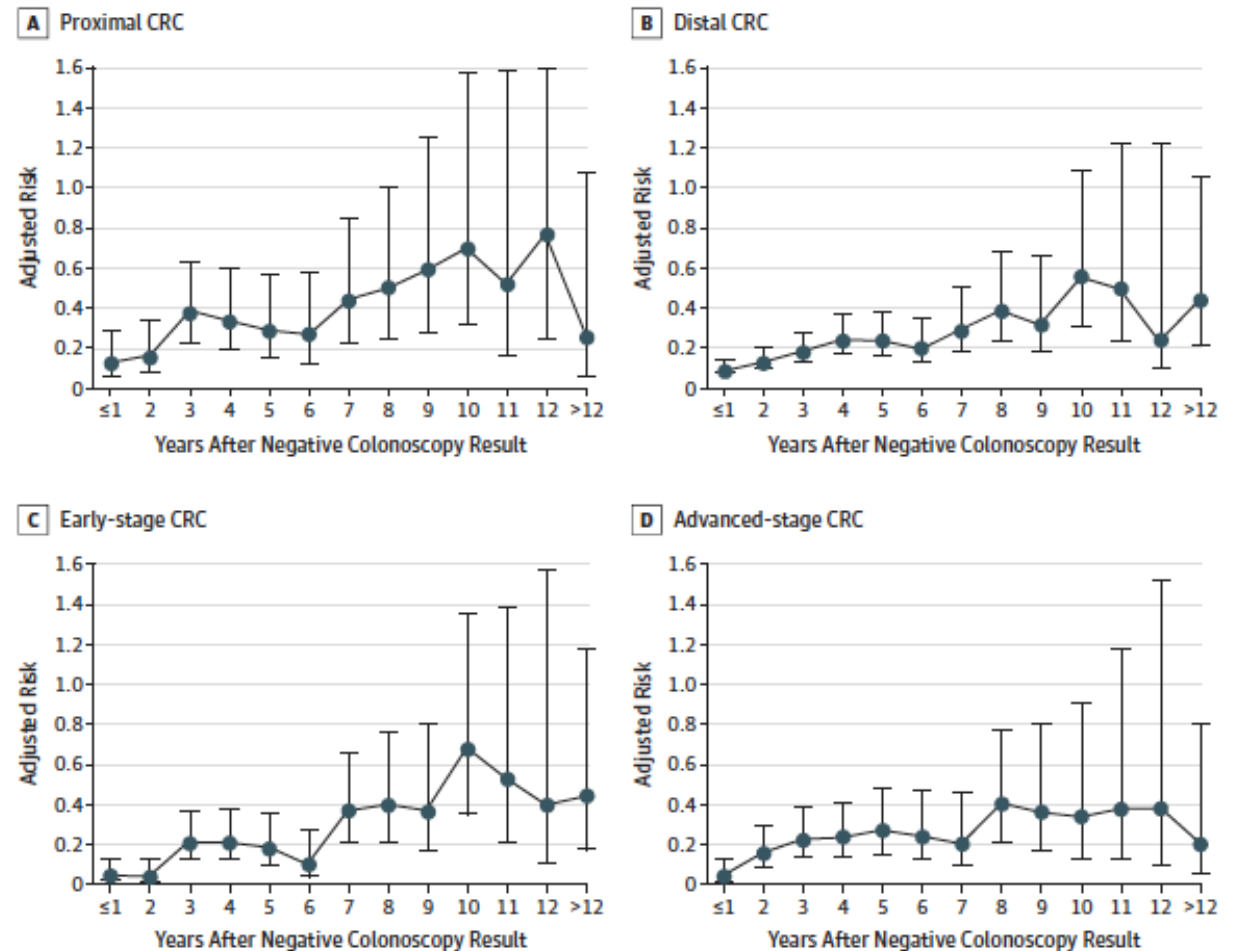
Impact of COVID on breast & CRC screening in Australia



Long-term Risk of Colorectal Cancer and Related Deaths After a Colonoscopy With Normal Findings

- A total of 1,251,318 eligible individuals (age 50-75 yrs) between 1998 & 2015, were included in the retrospective study
- Those with a negative colonoscopy result were compared with the unscreened participants,
- There was a 46% lower risk of CRC & 88% lower risk of related deaths

Figure 4. Adjusted Risks of Colorectal Cancer by Time Interval After a Negative Colonoscopy Result: Site- and Stage-Specific Analyses

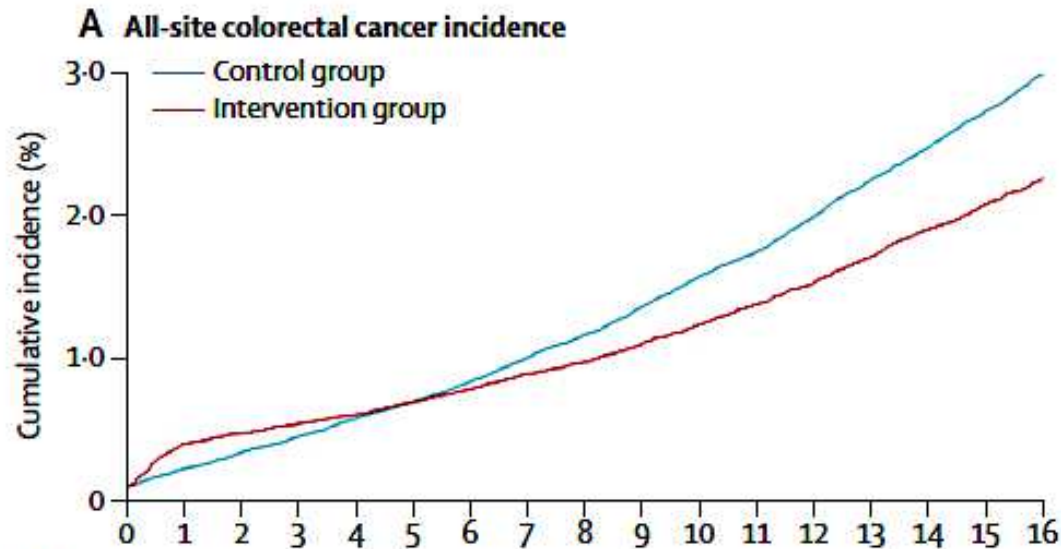


Long term effects of once-only flexible sigmoidoscopy screening after 17 years of follow-up: the UK RCT

26% reduced risk; $p < 0.0001$

30% reduced risk; $p < 0.0001$

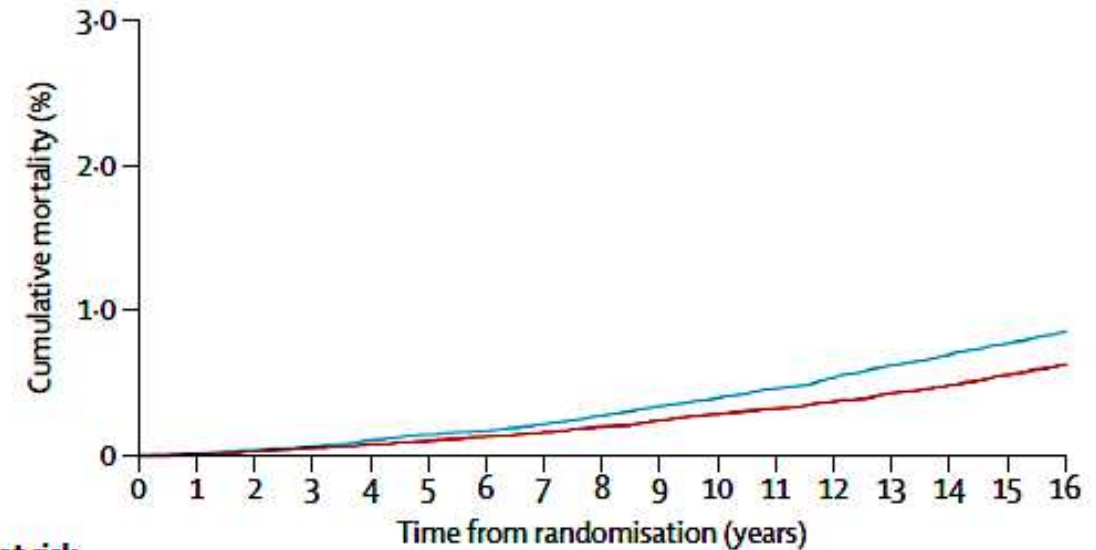
Invited to screening and control groups



Number at risk

Control group	112936	111103	108940	106353	103444	100234	96607	92599	87438
Intervention group	57098	56111	55102	53886	52488	50911	49113	47106	44525

G Colorectal cancer mortality



Number at risk

Control group	112936	111312	109309	106897	104173	101209	97771	93971	89007
Intervention group	57098	56300	55321	54158	52798	51291	49565	47649	45115

Increasing incidence of CRC in young adults in Europe over the last 25 years

