DIGESTIVE CANCERS EUROPE

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# CRC screening programmes in Europe under COVID 19


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No conflict of interest to declare

# Screening Programme Stopped


**February**
Hong Kong

**Early March**
Italy 8th
Spain *(Basque)* 9th
Poland - 16th
Slovenia - 16th
Guernsey - 16th
Norway 16th

**Late March**
Finland -
Netherlands - 18th
Argentina - 19th
Canada *(Ontario)* - 23th
England - 23th
S Ireland - 23th
Wales - 20th
Scotland - 30th
New Zealand - 23th
USA *Kaiser Permanente*
Belgium

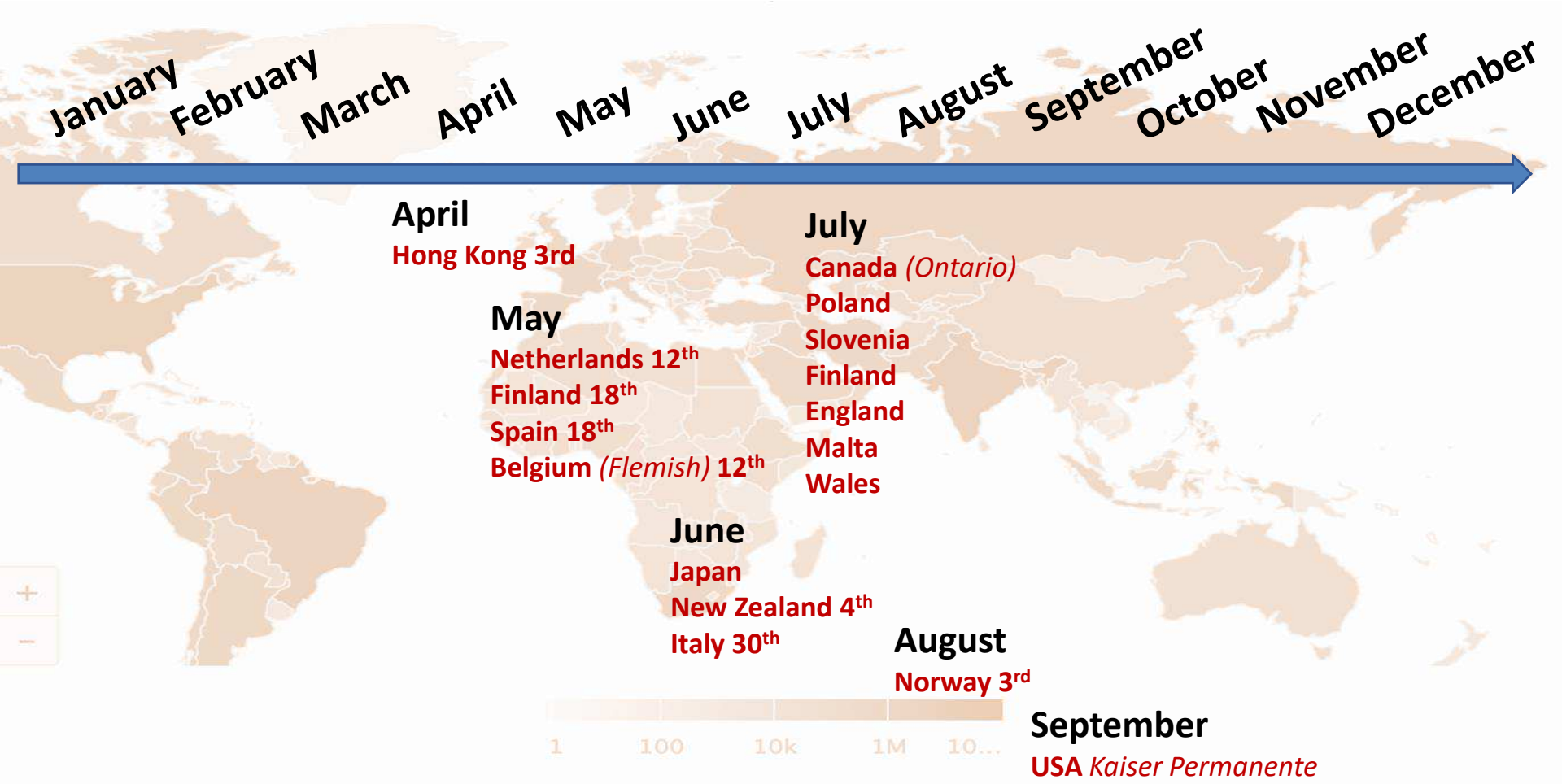
**April**
Sweden
Chile
N Ireland
Japan

**Did Not Stop!**
Denmark

**No National Screening Policy**
Germany

Courtesy. Prof. S Halloran

# Screening Programme restarting




Courtesy. Prof. S Halloran

# The impact of disruption

Programmes were often **not able to restart at full capacity**, as the **volume of procedures was lower** even without restricting the opening time, as a result of **more stringent infection control and physical distancing** measures

**A part of the population will have a longer delay than the duration of the disruption**

Number of exams (**2020/2019** January – May) **42%**

Number of exams (**2020/2019** January – September) **47%**

Number of exams (**2020/2019** January – December) **56%** **5.5 months**

- 1,110,582 exams (January - December)

**Missed cases** (Delayed diagnosis)

**CRC: 1299** **Advanced adenomas: 7744**

# The impact of disruption

Real world data about the impact of screening delays on morbidity are lacking and therefore indications to inform decision making for screening programs are coming in this first phase mainly from well-established and validated decision models.

Modellers from all around the world have joined forces in the **COVID-19 and Cancer Global Modelling Consortium (ccgmc.org) to simulate different scenarios of disruption and recovery strategies** and predict both long-term outcomes of CRC cases and deaths as well as short-term and long-term costs and savings.

# Modeling the impact of disruption

Modelling results are suggesting that screening interruptions

- would increase the number of late stage cancers
- would increase the number of CRC deaths
- may have a higher impact in the older age groups

Policy makers are also interested in the screening capacity requested per restart strategy.

# Modeling the impact of disruption

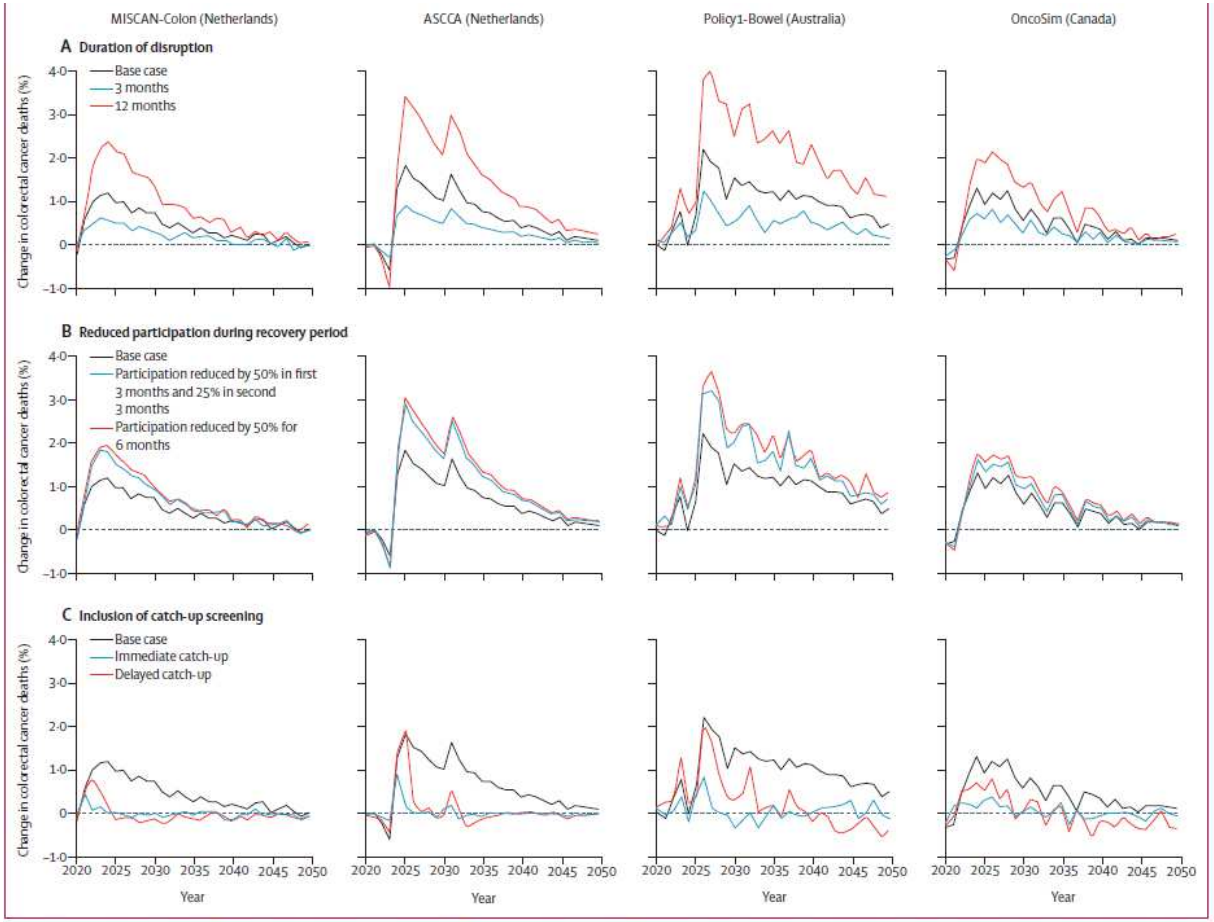



*Figure 2:* **Projected changes in colorectal cancer mortality among individuals aged 50 years and older relative to the comparator scenario according to MISCAN-Colon, ASCCA, Policy1-Bowel and OncoSim models**

For the base case scenario, a 6-month disruption period from April to September, 2020, was assumed, with no catch-up or changes to participation in the recovery period. The predicted number of colorectal cancer deaths in 2020 in the comparator scenario was 4112 according to MISCAN-Colon, 5208 according to ASCCA, 6198 according to Policy1-Bowel, and 8134 according to OncoSim. MISCAN-Colon=MIcrosimulation SCreening ANalysis for colorectal cancer. ASCCA=Adenoma and Serrated pathway to Colorectal Cancer.

**Impact of the COVID-19 pandemic on faecal immunochemical test-based colorectal cancer screening programmes in Australia, Canada, and the Netherlands: a comparative modelling study**

*Lucie de Jonge*, Joachim Worthington*, Francine van Wifferen, Nicolas Iragorri, Elisabeth F P Peterse, Jie-Bin Lew, Marjolein J E Greuter, Heather A Smith, Eleonora Feletto, Jean H E Yong, Karen Canfell, Veerle M H Coupé, Iris Lansdorp-Vogelaar, on behalf of the COVID-19 and Cancer Global Modelling Consortium working group 2*

*Lancet Gastroenterol Hepatol*
2021; 6: 304–14

Impact related to

- Duration of disruption
- Participation during the recovery period
- Catch-up strategy

# Monitoring

Close monitoring of established early outcomes and short-term indicators of screening performance may provide

- input to inform and validate modelling and to assess the effect of measures implemented to restart programs and possibly increase the screening uptake
- information to estimate the long-term impact of the delay

**COMMENTARIES**

## Colorectal Cancer Screening in the Novel Coronavirus Disease-2019 Era

**Table 1.** Proposed Indicators to Assess the Impact of the COVID-19 Pandemic on Screening and Outcomes for Colorectal Cancer

| Process Indicators | Outcome Indicators |
|---|---|
| Percentage of delayed screening invitations (3–6, 6–12 months and ≥12 months) | Response rate to screening invitation |
| Positivity rate of FIT/gFOBT | Detection rate of CRC and advanced adenomas |
| Interval between positive FIT/gFOBT result and colonoscopy | Stage distribution of detected cancers |
| Proportion of refused/rescheduled appointments related to COVID-19 | Interval cancer rate |
| Rate of SARS-CoV-2 infections associated with CRC screening and diagnostic follow-up | CRC-related mortality |

COVID-19, coronavirus disease-2019; CRC, colorectal cancer; FIT, fecal immunochemical test; gFOBT, guaiac fecal occult blood test.

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On behalf of the Expert Working Group on COVID-19 of the WEO Colorectal Cancer Screening Committee

# Monitoring screening during the COVID-19 emergency

## International Cancer Screening Network

**Colorectal Cancer Screening Interest Group**
Iris Lansdorp-Vogelaar Co-Chair
Carlo Senore Co-Chair

ICSN
International Cancer Screening Network

The ICSN CRC interest group has designed a project, aimed to collect aggregated quantitative data about screening activity and outcomes, using a standardized data template, to calculate key indicators of activity and performance

The project is part of a coordinated effort to monitor the impact of the pandemic emergency on screening, including

- a survey aimed to collect qualitative information about the measures adopted by different programs in different jurisdictions to face the emergency and to eventually restart the programs,

- a collaboration in the COVID-19 and Cancer Global Modelling Consortium

# Data collection

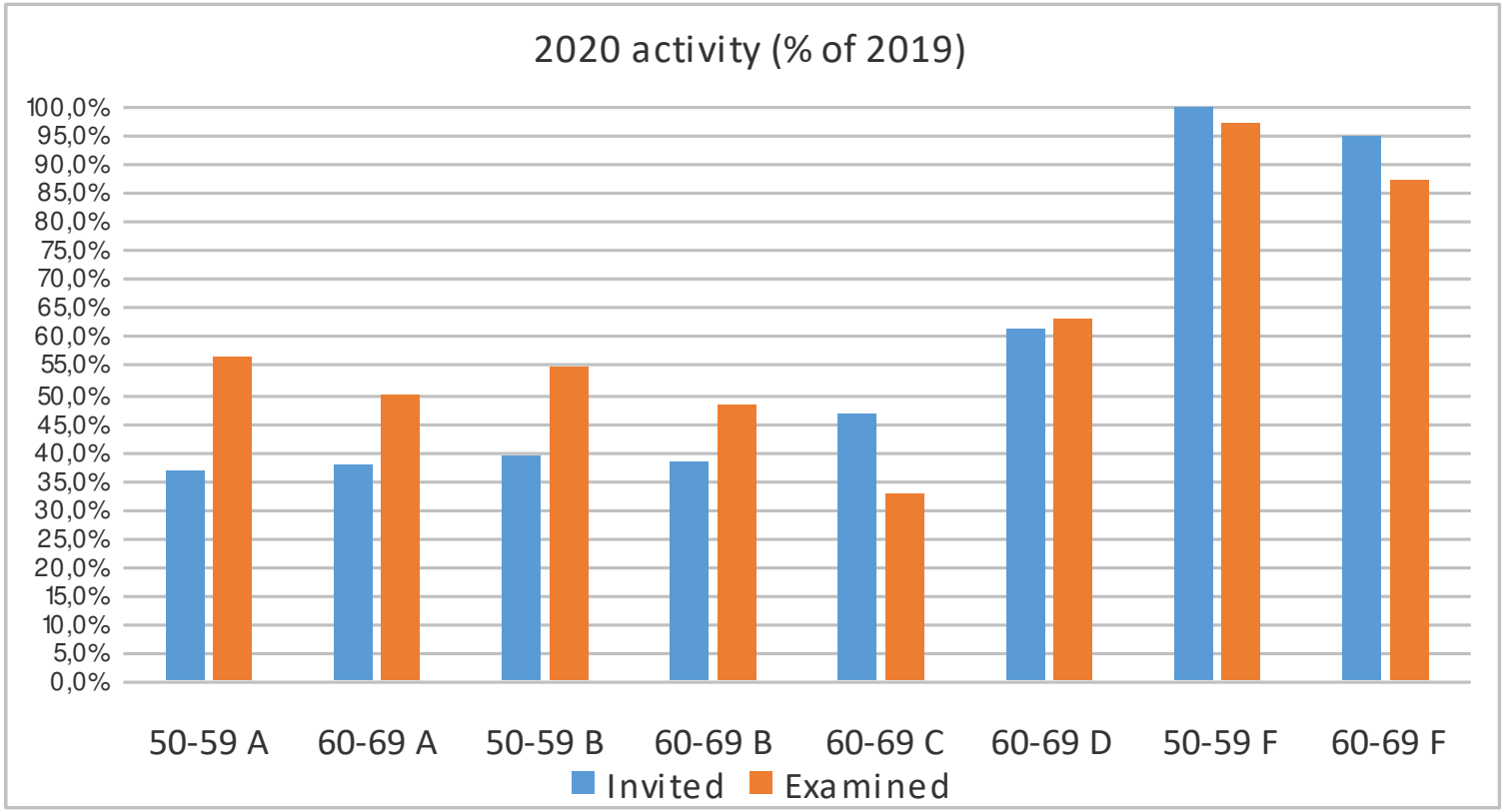
- Volume of activity: invitations and examinations
- Participation
- Screening tests results
- Compliance with colonoscopy assessment
- Waiting time for colonoscopy
- Screening outcomes
    - neoplasia yield
    - stage distribution of screen-detected CRCs
- Interval cancer rate

Collected for 2020 and for the corresponding period in 2019 or 2018 (reference year for comparison)

Data collection will be repeated using the same template to monitor the progression of screening activity and performance during the restarting phase

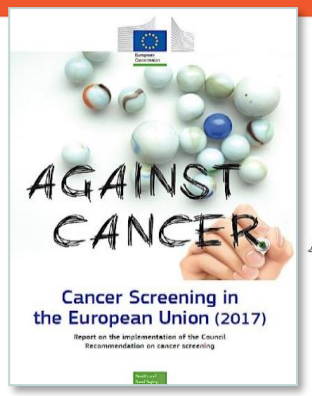
# Preliminary results

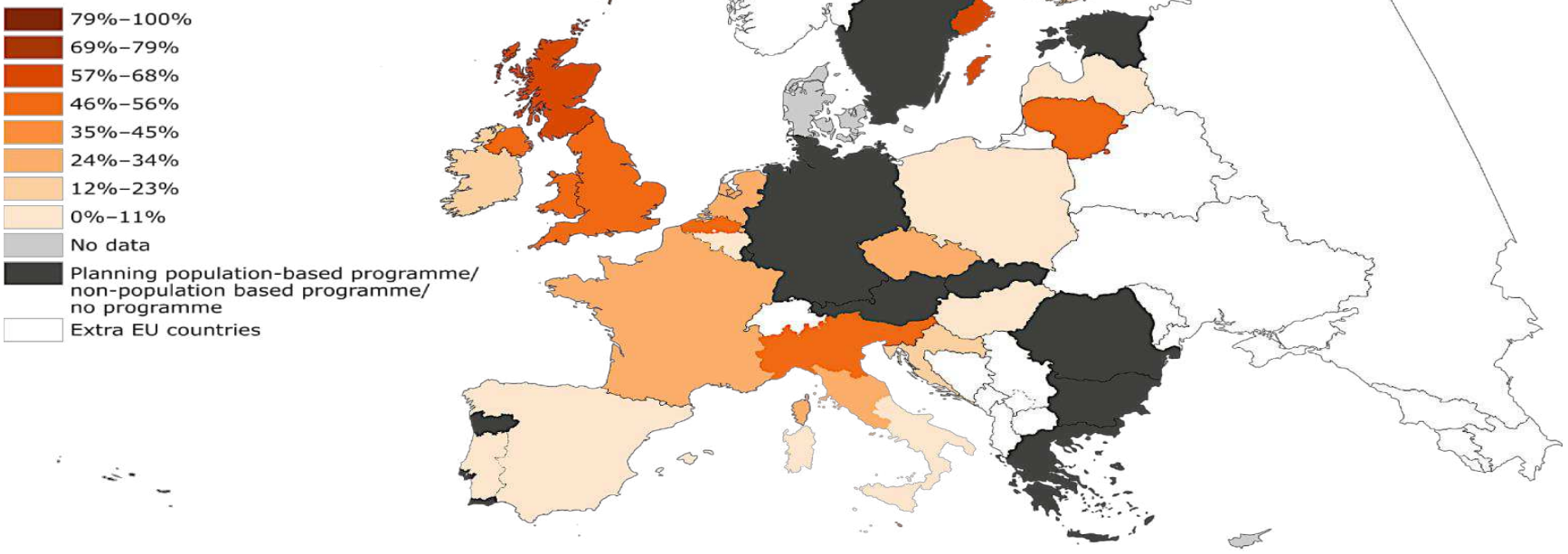
**7 programs** provided data until now : Slovenia, Basque country, Barcelona, Northern Ireland, Czech Republic, Italy (Piedmont and Lombardia Regions)




**3 programs** provided data for the activity over the entire year 2020:

2020 activity ranged between 62% and 87% as compared to 2019




Population based programs **25.1%** (target age range)

Opportunistic screening **4.2%**

EU·TOPIA towards improved cancer screening

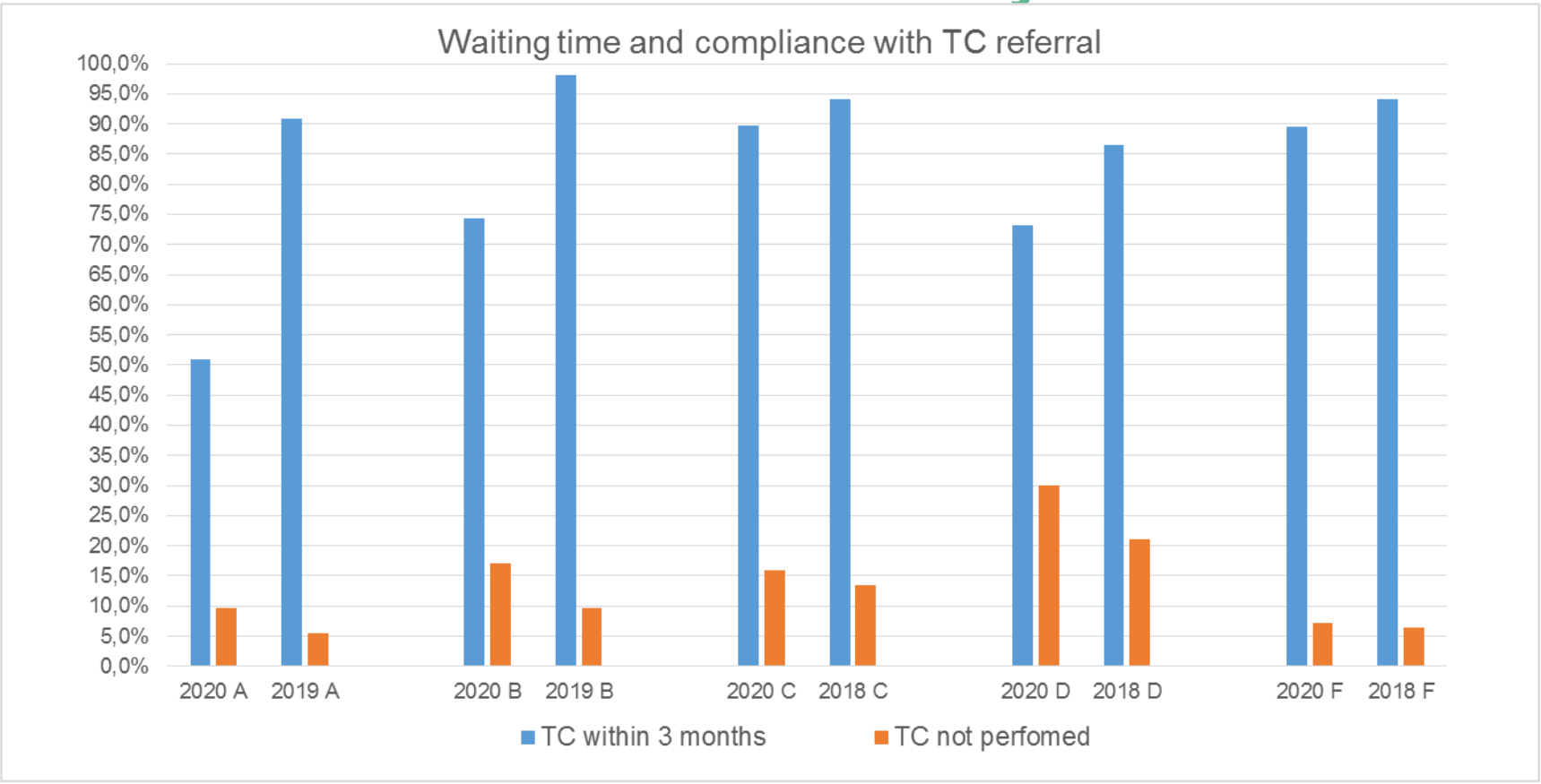
Monitoring tool

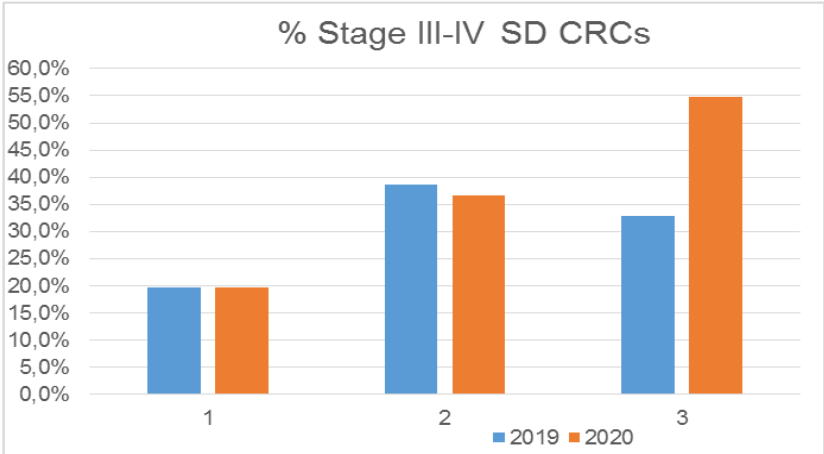
Population based programs **29.3%**

http://eu-topia.org

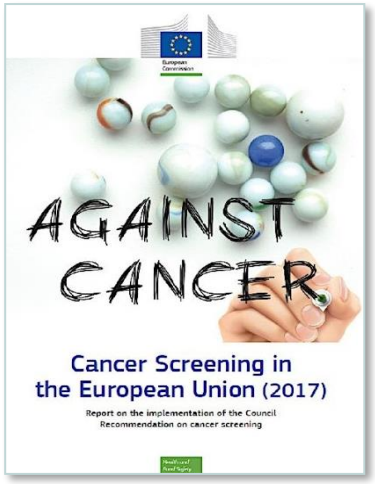
Erasmus MC University Medical Center Rotterdam

# Preliminary results



# Complicance with TC referral among screenees with a positive screening test




**FIT :** **80.9%** (range: 64.1%-92.2%)

**gFOBT :** **83.1%** (range: 72.6%-89.4%)

Non-population based programs (2 countries): **50%.**

**18 out of 21** population based program providing **data about compliance with TC referral**

**12 out of 21** providing **data about outcomes of colonoscopy**

**7 out of 21** providing **data about outcomes of treatment**

# Restarting strategies and opportunities for improving quality

The need to optimize the utilization of limited available endoscopy resources during the recovery period may offer opportunities to improve the quality of the programs

- Implementing interventions aimed to reduce the proportion of **inappropriate surveillance** colonoscopies

- Introducing **risk based protocols**, aiming to use scarce resources in individuals that benefit most and to reduce the intensity of screening in individuals that benefit less, thus optimizing the balance between the benefits and harms and costs of screening

# Communication

Explicit transparent communication of uncertainties and of the rationale for the policies adopted

Collaboration with patients and citizens organisations will be important

# We need data

The pandemic emergency is highlighting the importance of regular monitoring of the activity

The preparation of a third report on the Council recommendation on cancer screening has been indicated among supporting actions to flagship initiatives on early detection of the Europe's beating cancer plan

Implementing systematic monitoring can provide comparative information about screening performance, as well as about the impact of policies adopted to respond to the emergency, and it may support quality assurance efforts

## Thank you to

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**The data providers**

# Thank you for your attention

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