



ICS17839-91. Short and mid-term impact of the COVID-19 pandemic on a population-based screening programme for colorectal cancer in Catalonia (Spain)

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INTRODUCTION

In Catalonia (Spain), after the first confirmed case of COVID-19 on 24 February 2020, the rapid spread of the pandemic struck the health system capacity. In response, colorectal cancer (CRC) screening programmes were suspended from March to September 2020.

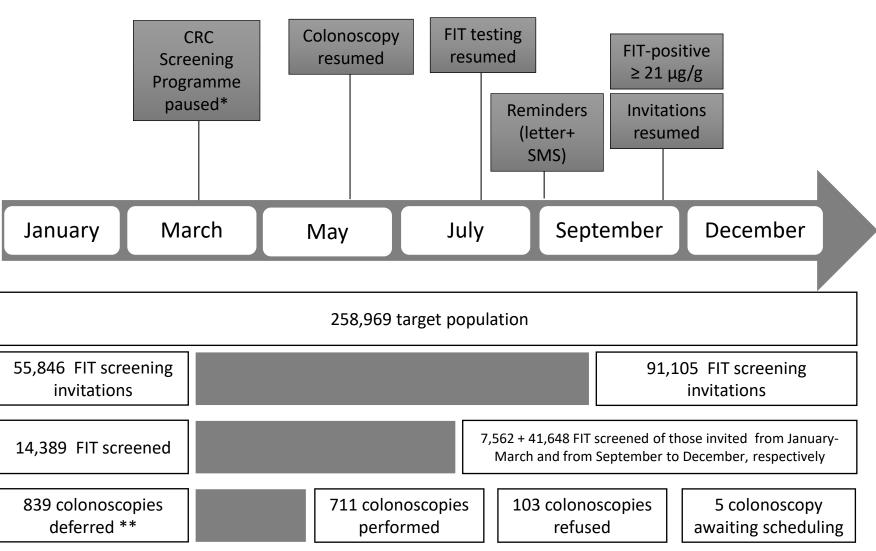
OBJECTIVE

To assess the short and mid-term impact of the COVID-19 pandemic and describe strategies implemented to minimize the harm caused by the disruption of a FIT-based CRC screening in the Metropolitan Area of Barcelona (Catalonia).

METHODS

CRC screening data between 2019 and 2022 were extracted. Short-term outcomes calculated: proportion of invitees, participation rate, colonoscopy adherence rate, and time to diagnostic colonoscopy. Mid-term outcomes calculated: CRC and advanced adenoma detection rates, proportion of CRC with advanced stage. Recovery strategies implemented: SMS reminders to invitees between January and March 2020; prioritisation of colonoscopy for individuals with a FIT result greater than 160 μ g Hb/g faeces and an increase in the FIT cut-off point from 20 to 31 from September 2020 to July 2022.

Flowchart of CRC screening in the Metropolitan Area of Barcelona at the onset of the COVID-19 pandemic in 2020



*Invitations, FIT distribution and colonoscopies; **N=20 non referred to colonoscopy

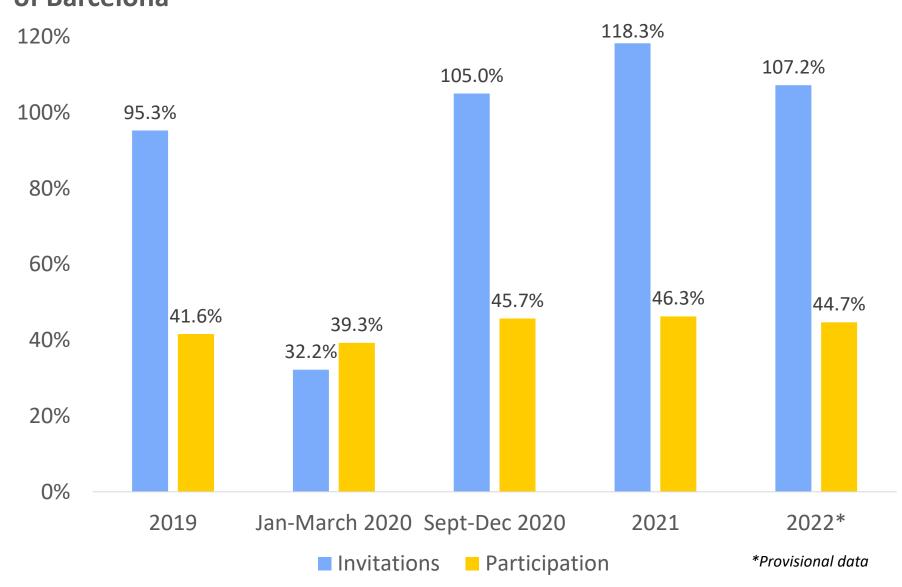
RESULTS

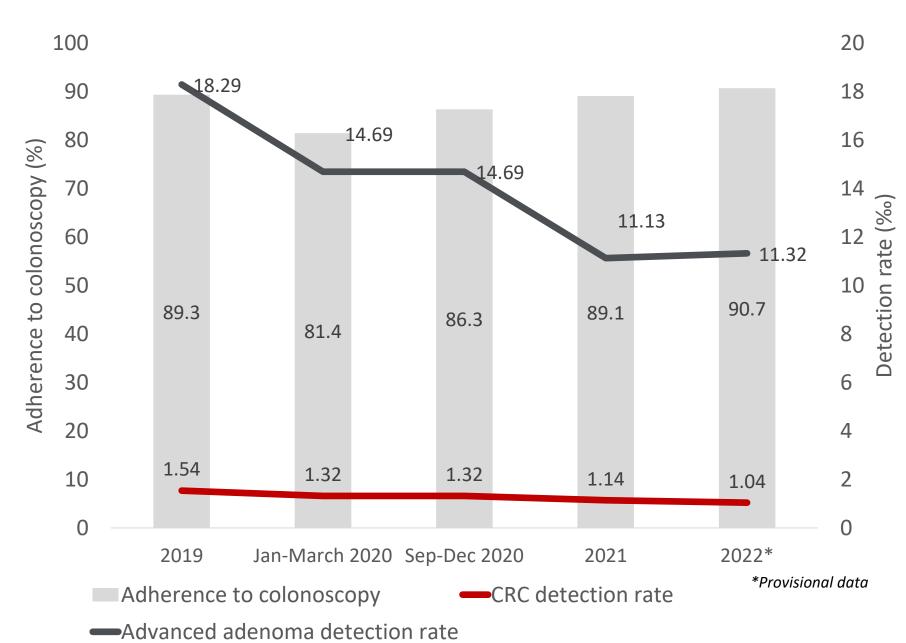
Four in ten individuals did not receive their screening invitation by December 31st, 2020. The COVID-19 backlog for those awaiting a screening invitation was solved in 2022.

A decrease of 5.1% in participation and 8.9% in colonoscopy adherence among invitees between January - March 2020 was observed, with a recovery to 2019 levels with the restart of the screening activity. Increasing the FIT cut-off to alleviate the endoscopic unit's workload helped restore the interval time to colonoscopy in 2021.

A decrease in CRC and advanced adenoma rates was observed in 2020 and maintained until 2022. A 17% increase in the most advanced stages of CRC was followed in 2020 but not in 2021 or 2022.

Main screening outcomes of CRC screening before and after the disruption of the CRC screening programme in the Metropolitan Area of Barcelona





70% 62.3% 60% 56.4% 55.1% 50.0% 50% 38.5%40.0% 40% 30.7% 30% 19.2% 18.5% 20% 12.9% 10.0% 10% 6.4% 0% CRC stage I-II Not classified CRC stage III-IV **■** 2019 **■** 2020 **■** 2021 **■** 2022* *Provisional data

CONCLUSIONS

The disruption of screening due to the COVID-19 pandemic had a transient impact on invitations, participation and adherence to colonoscopy. When programmes were resumed, the accurate planning and prioritisation of the workload of the population to be invited were critical to minimising the impact of the pandemic on delays in cancer diagnosis.