

The effect of the Covid-19 pandemic on the use of, and outcomes for, surgery in England

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Introduction

- The Covid-19 pandemic has had a significant impact on the provision of emergency and elective surgery globally.

Aims

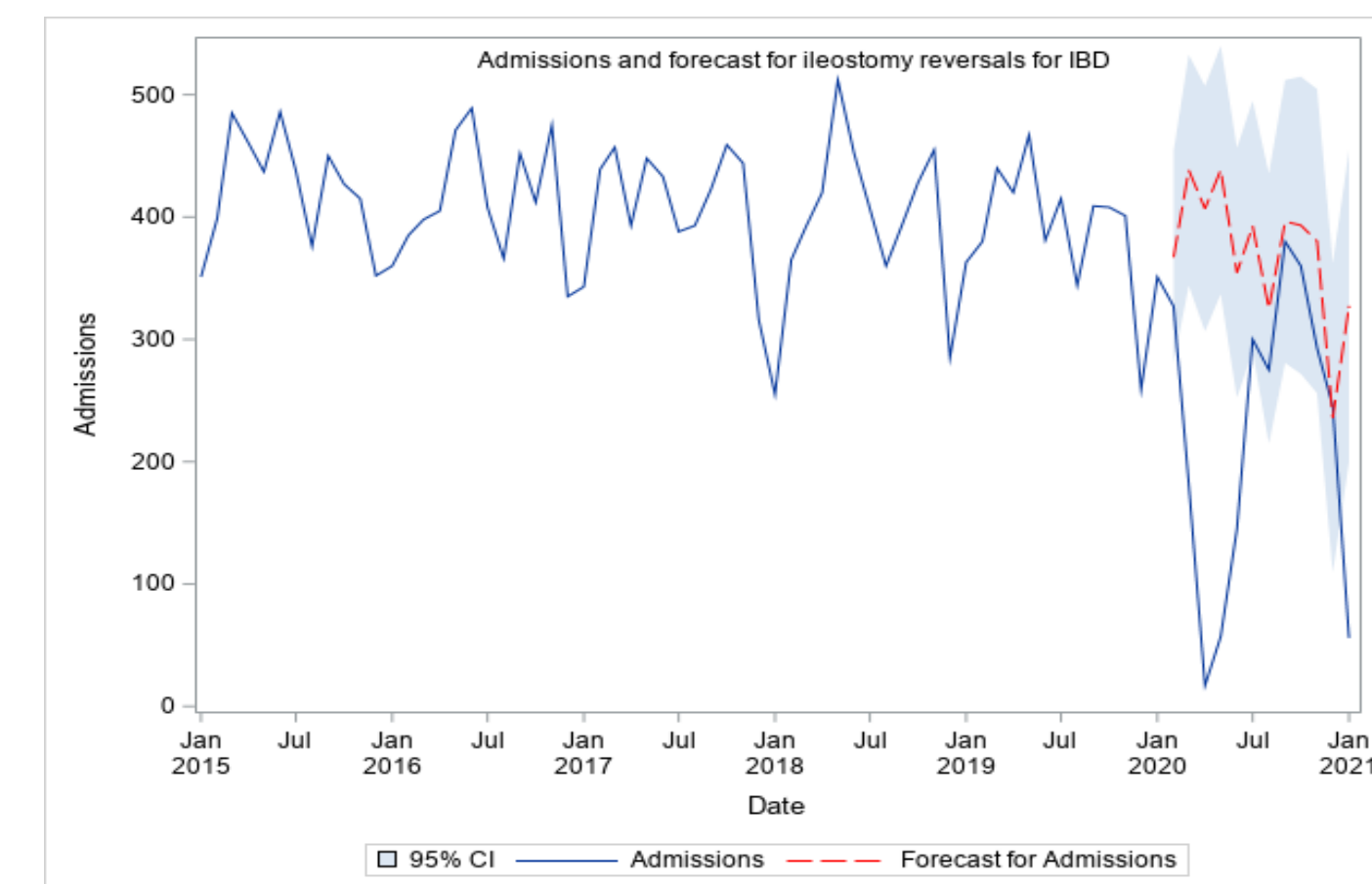
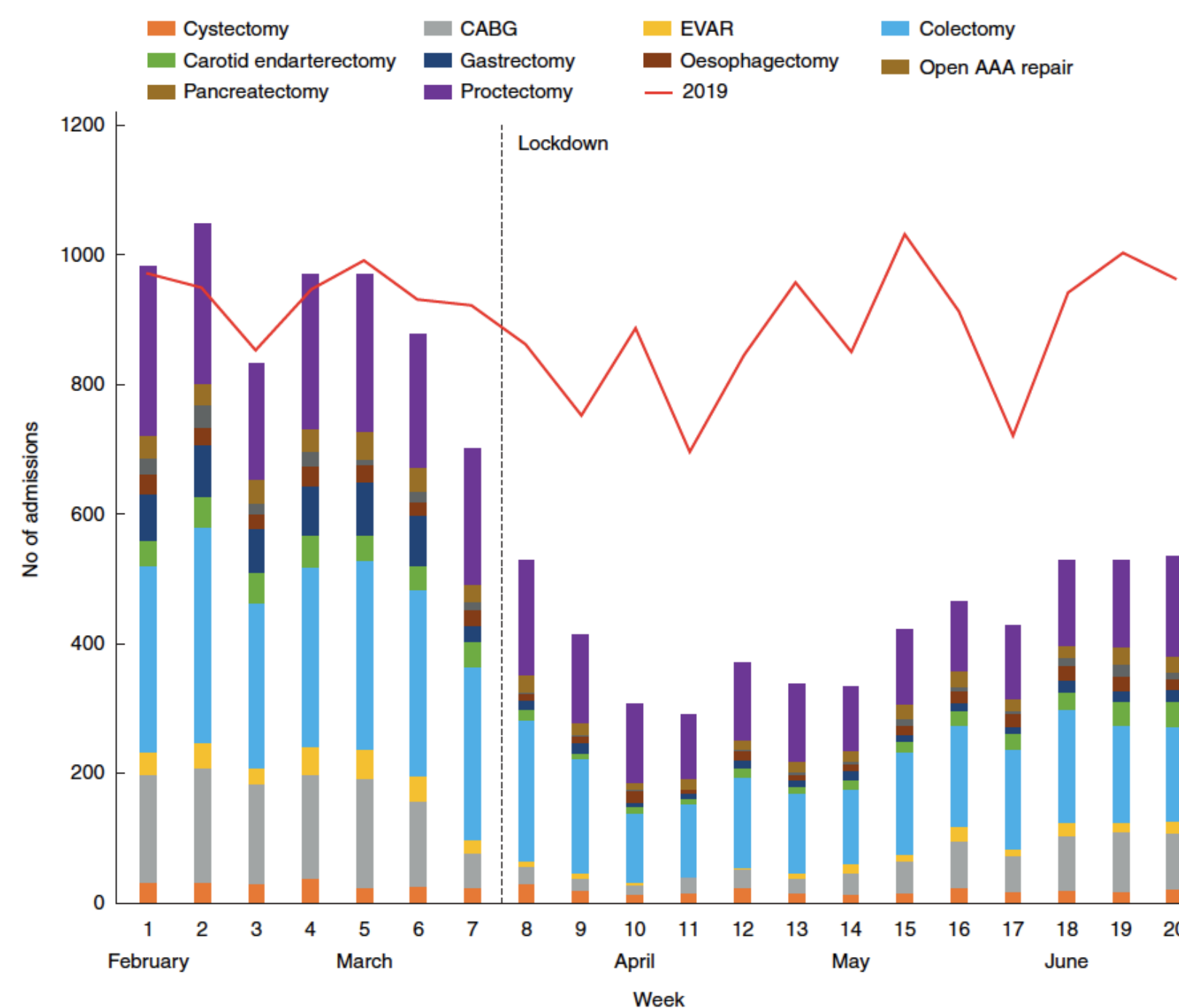
- Compare mortality for high-risk emergency general surgery (EGS) and major elective surgery in England before and during the pandemic.
- Quantify the reduction in IBD investigations and procedures during the pandemic.

Methods

- Nationwide observational studies using Hospital Episode Statistics (HES).
- 30-day in-hospital mortality between February and August 2020 was compared with a date-matched cohort from 2019.
- The effect on use of IBD surgery was estimated with autoregressive integrated moving average (ARIMA) forecast models.

Selected Results

- OR for death at 30 days after EGS admission with Covid-19 was **2.03** (1.70-2.43), $p < 0.0001$
- OR for death at 30 days after major elective surgery with Covid-19 was **18.23** (10.44-32.63), $p < 0.0001$



Discussion

- Covid-19 increases odds of death in surgical admissions
- IBD procedures show a marked decrease in volume during the pandemic
- Surgical volumes drop in pandemics due to:

Government policy (lockdown)

Fear of contagion

Decrease in surgical resources

Decrease in available healthcare staff