

# Adapting an Emergency General Surgery Service in Response to the COVID-19 Pandemic

Patrick Hickland, Joshua M Clements, Liam J Convie, Damian McKay, Kevin McElvanna  
Craigavon Area Hospital, Southern Health and Social Care Trust, Northern Ireland



## Introduction

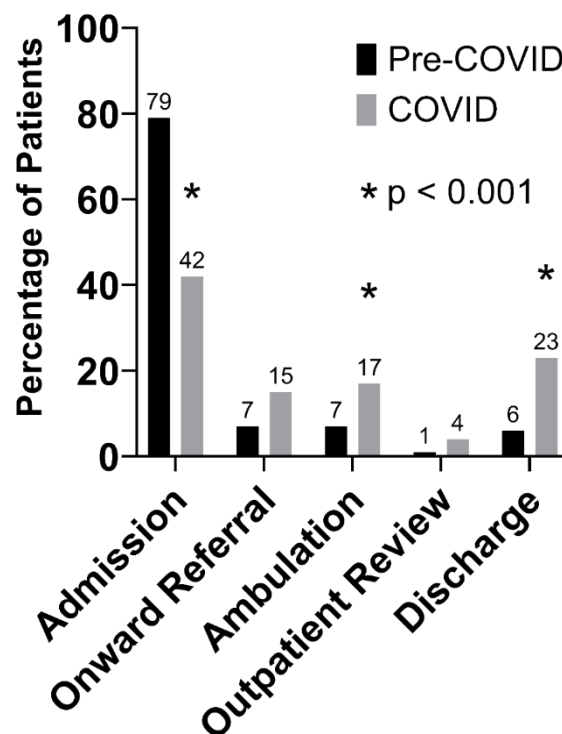
In response to the COVID-19 pandemic, our emergency general surgery (EGS) service was reconfigured, including establishing an enhanced ambulatory service, and undertaking non-operative management of selected conditions. This study compares the activity of our service before and after these changes.

## Methods

Patients referred to our EGS service by the emergency department were prospectively identified over a four week period beginning from the date of reconfiguration, (COVID; 29<sup>th</sup> March – 25<sup>th</sup> April 2020) and compared to patients retrospectively identified from the same period the previous year (Pre-COVID; 31<sup>st</sup> March – 27<sup>th</sup> April 2019), and followed up for 30 days. Data was extracted from handover documents and electronic care records.

## Results – Primary Outcome

There were 281 and 283 patients referred during the Pre-COVID and COVID periods respectively. The below figure demonstrates the resulting changes to how our patients were managed.



## Results – Secondary Outcomes

Outcome	Pre-COVID	COVID
Duration of Admission, days	6.9	4.8
Operative/Endoscopic Interventions, no.	78	40
Ambulatory Investigations, no.	11	39
Telephone Review, no.	0	39
Early CT Pre-Discharge, %	5.0	34.7
30 Day (Re)Admission, %	6.5	5.8
30 Day Mortality, %	3.0	2.7

## Conclusions

Adaptations made to our EGS service in response to COVID-19 led to increased use of ambulatory services, including imaging and telephone review. In this time there was a 62.7% decrease in use of inpatient bed days (1519 to 567), whilst maintaining patient safety. We have established safe standards that we advocate can be carried forward into the Post-COVID era.