



Impacts of the “Winter Crisis” and Covid on Scotland’s Hospital Sector

Public Health Scotland - Dashboard and Analysis

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Overview



Overview

Topics to explore:

- What impact has the winter had on the hospital (acute care) sector?
- What impact has covid had on the hospital sector?
- What are the risks of winter during covid?

Data & related ethics:

- Open Source Data from Public Health Website
 - Free to be analysed by anyone for any purpose
- Data is aggregated in a way which anonymises individuals
- Analysis presents the actual data and any metric calculated from this data

PHS - Dashboard

How has covid affected Scotland's Hospitals?

Inputs

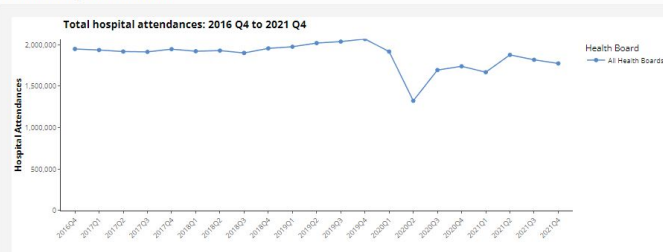
Select Health Board(s)

Ayrshire and Arran, Borders, Dumfries and Galloway

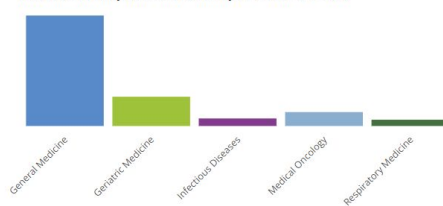
all Update



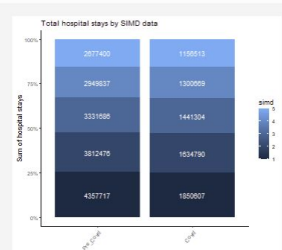
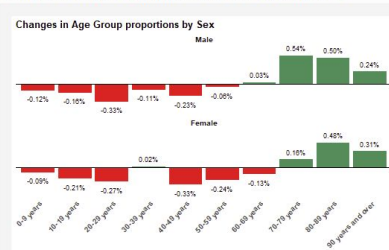
Trends in hospital admissions



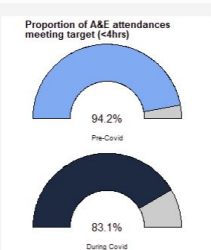
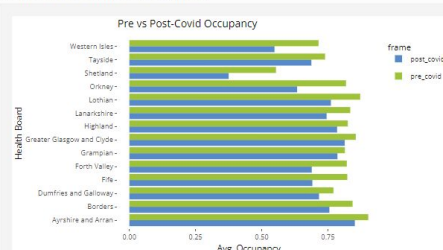
Increase in hospital admissions pre-Covid vs Covid



Change in Patient Demographics: Pre-Covid vs During Covid

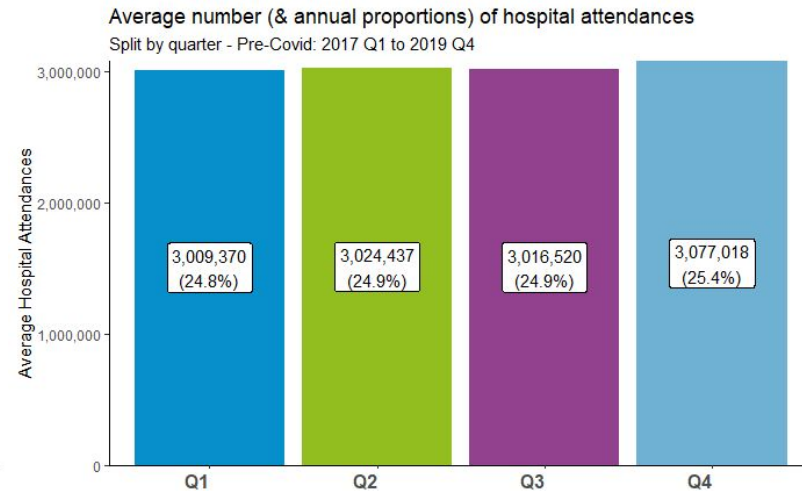
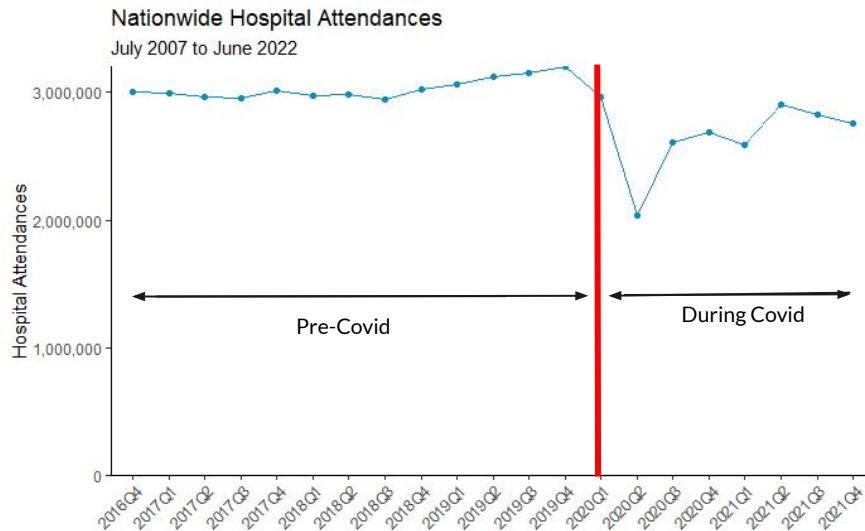


Hospital Performance Metrics (KPIs)



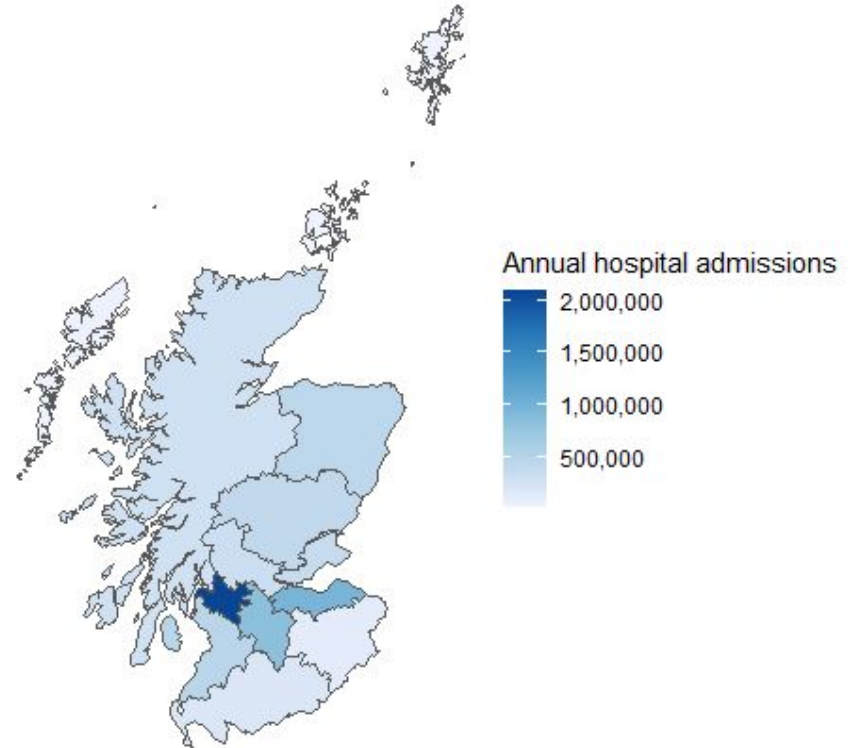
Demographics

Total Hospital Admissions

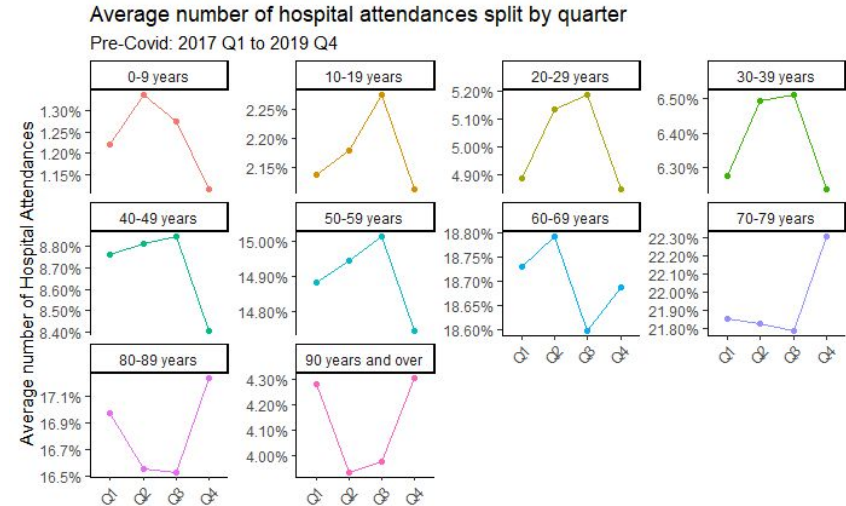
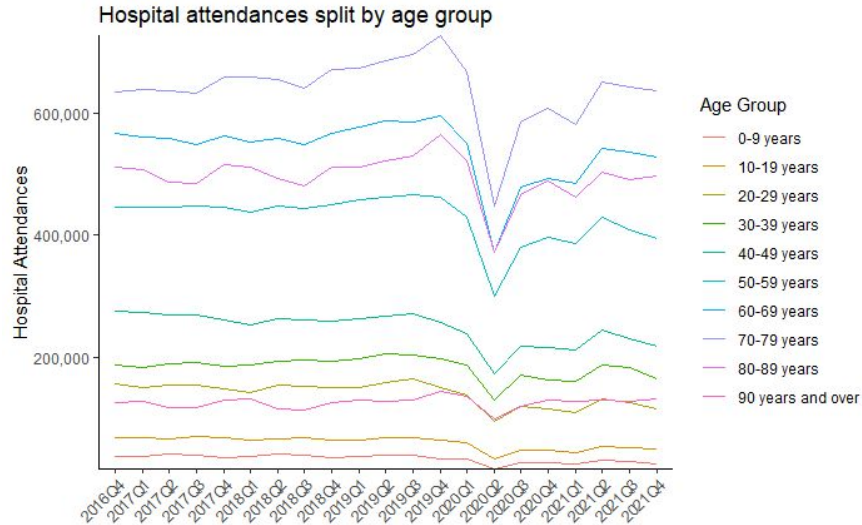


Geographic

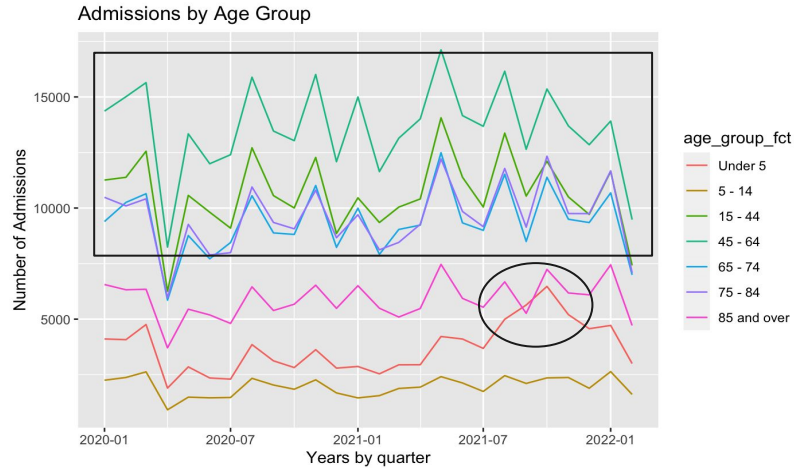
- Largest number of hospital admissions in the Central Belt:
 - Greater Glasgow & Clyde
 - Lothian
 - Lanarkshire
 - Arran and Ayrshire



Demographics: Who gets admitted to hospital...



Demographics: Who gets admitted to hospital...



Age Brackets spanning 15 - 45's largest cohort being infected and being being admitted to hospital

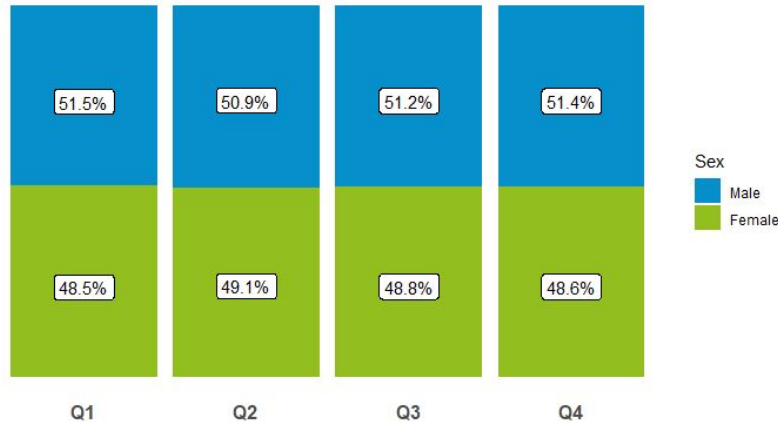
Spike in Under 5's

Linked to second Covid "wave"?

Increase in births?

Demographics: Who gets admitted to hospital...

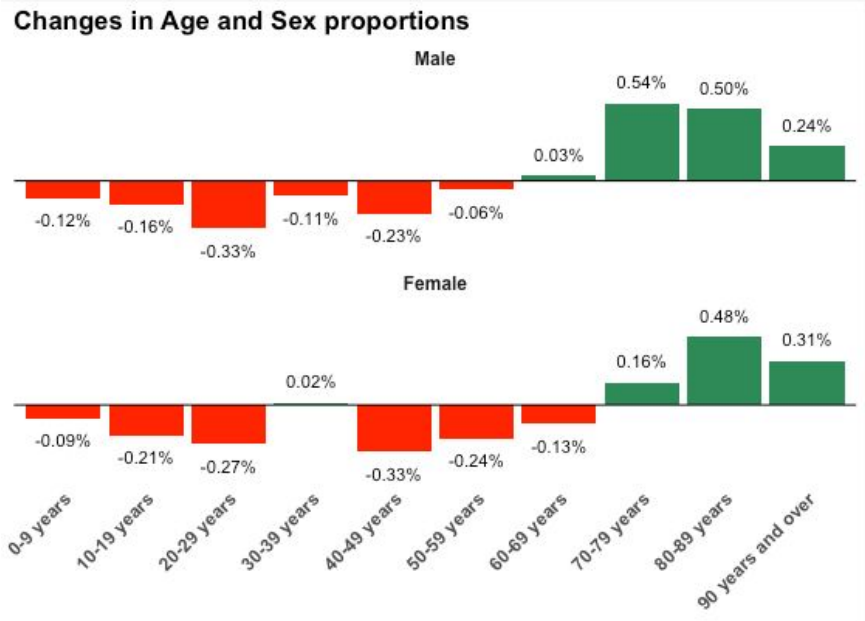
Gender split by quarter
2016 Q4 to 2019 Q4



Roughly even split of Males and Females

Though it should be noted that there are fewer men in the older age groups (over 75's).

Demographics: Who gets admitted to hospital...

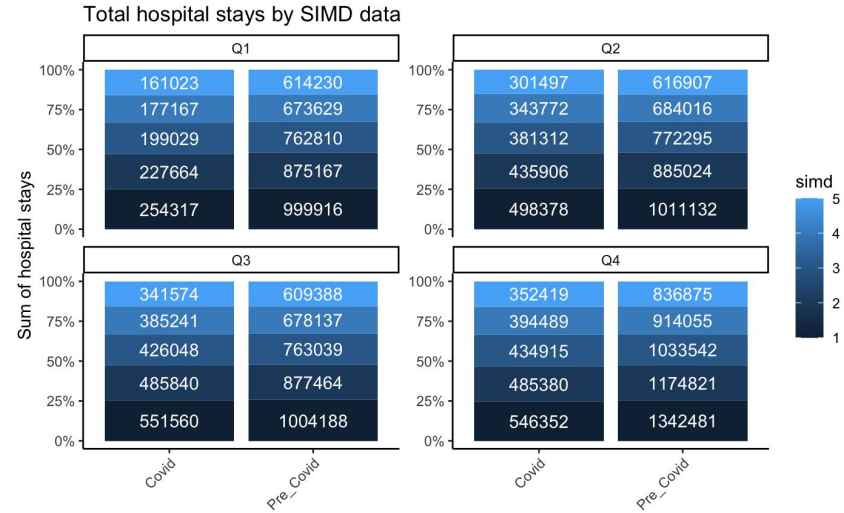
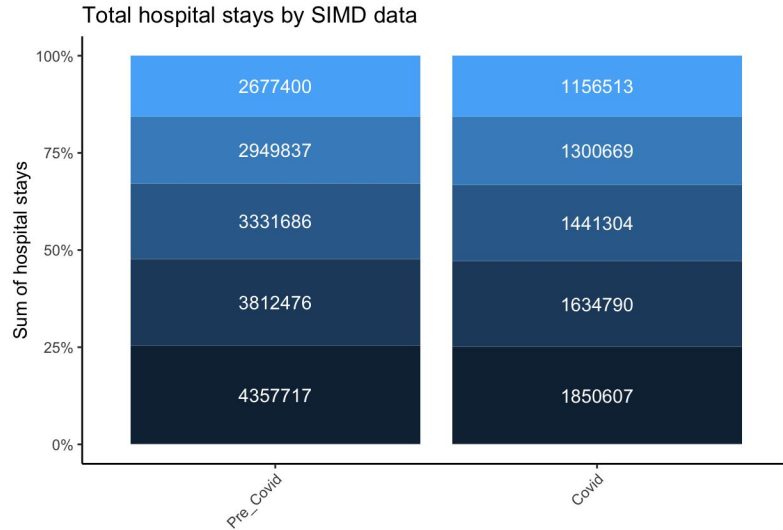


Increase amongst older age groups overall.

Predominantly males in the 70-79 and 80-89 age bracket; over 90's increase is in the female cohort (is this due to females living longer?)

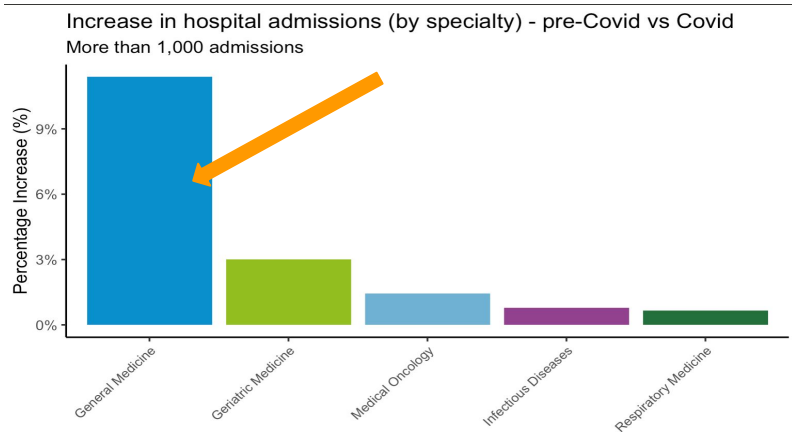
What time from does this cover? Is it only covid or pre-covid/covid? admissions?

Demographics: Who gets admitted to hospital...



Impact on Hospitals

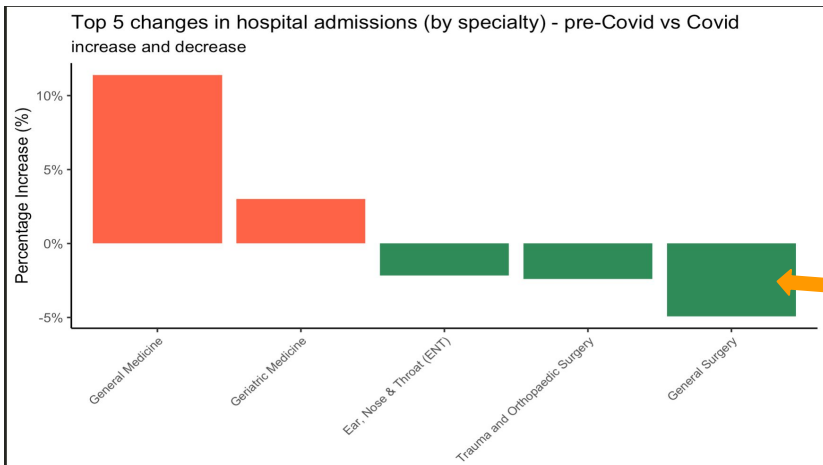
Admissions by specialty: pre-covid vs covid



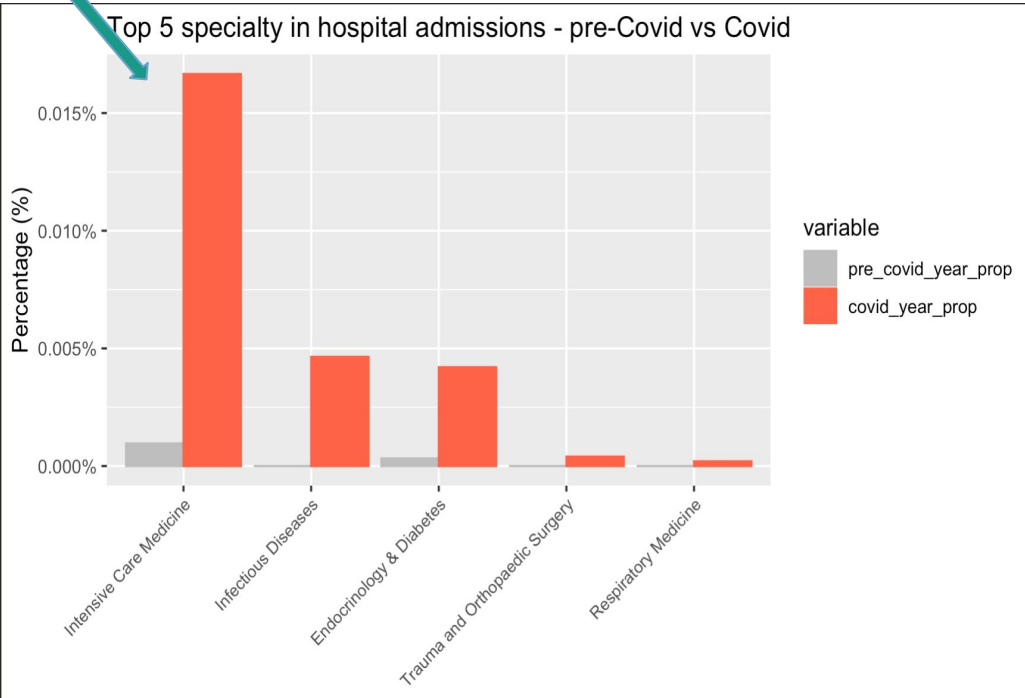
-Measurement used : Changes as a percentage of total admissions

-Increase and decrease

- Why do we use this one in our dashboard



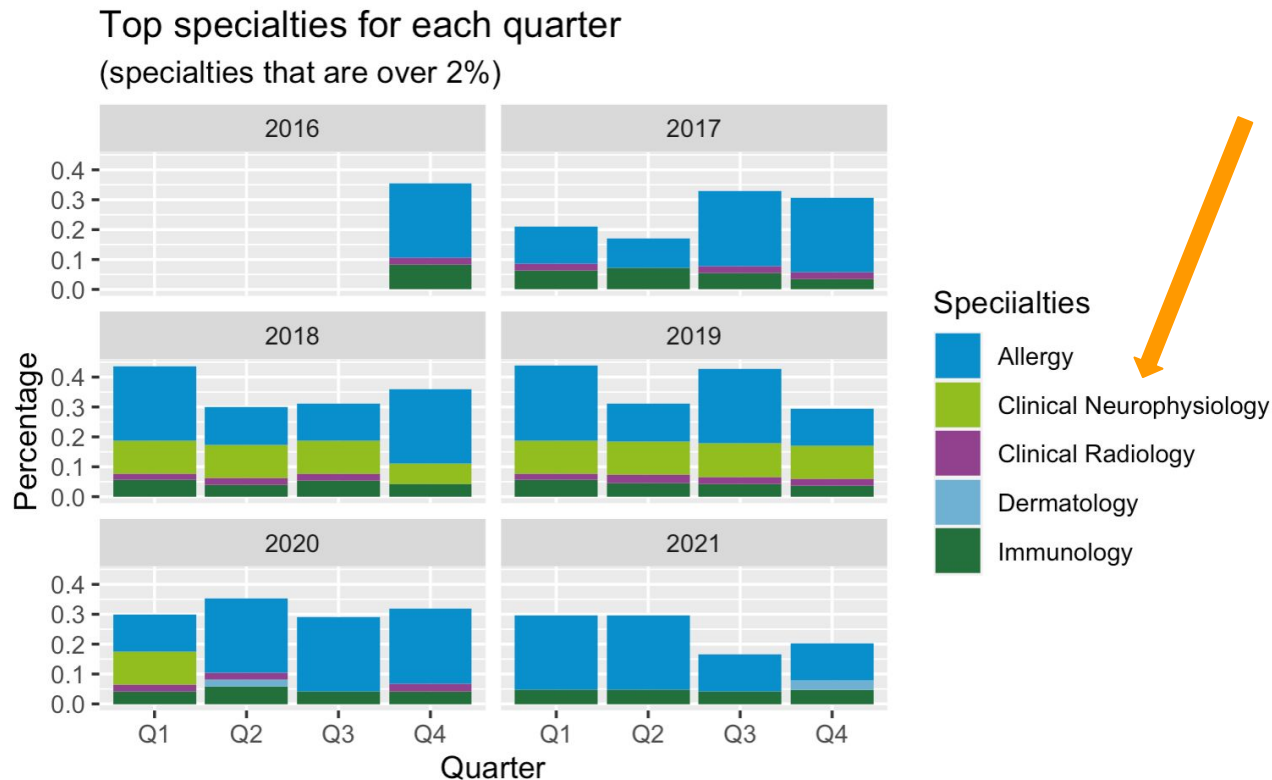
Top 5: covid time vs pre-covid



-Different measurement (changes as a percentage of pre-covid year)

-Why is this graph important too?

Specialties by quarter



-Measurements used

-Not much difference

-Clinical
Neurophysiology, no
data before 2018?

Hospital KPIs

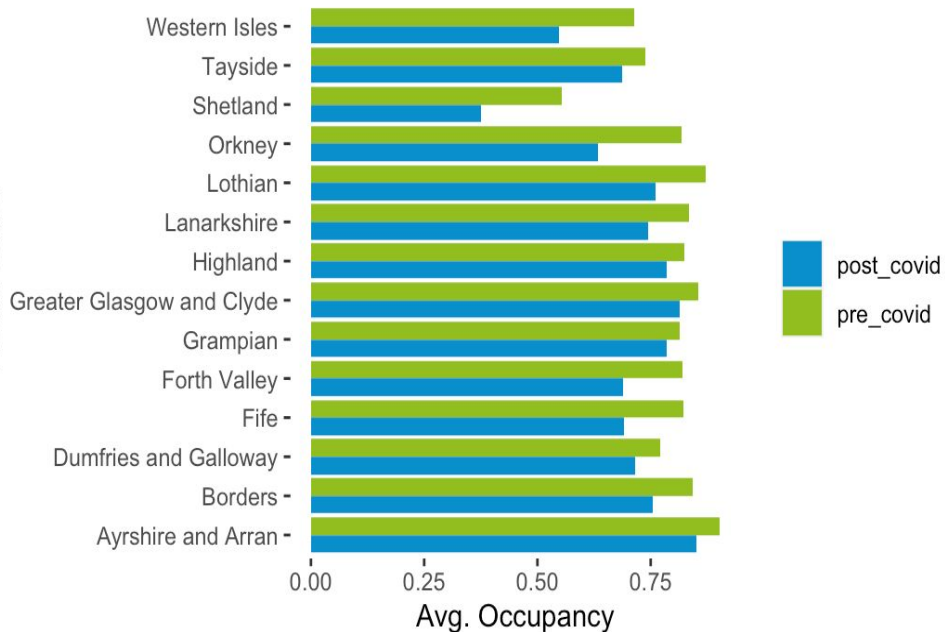
Hospital Performance Indicators

Lower occupancy since covid-19

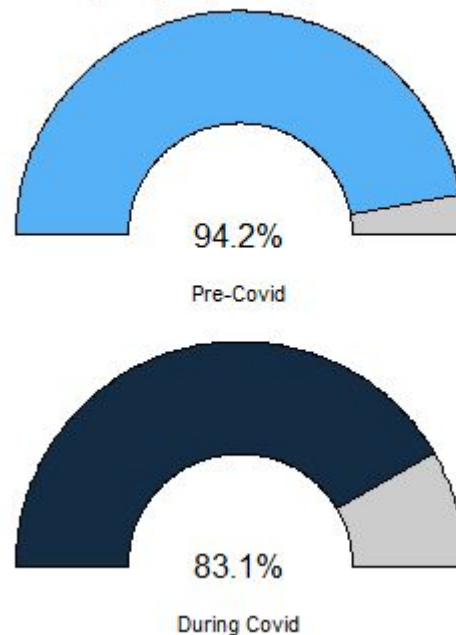
vs

Longer wait times since covid-19

Pre vs Post-Covid Occupancy

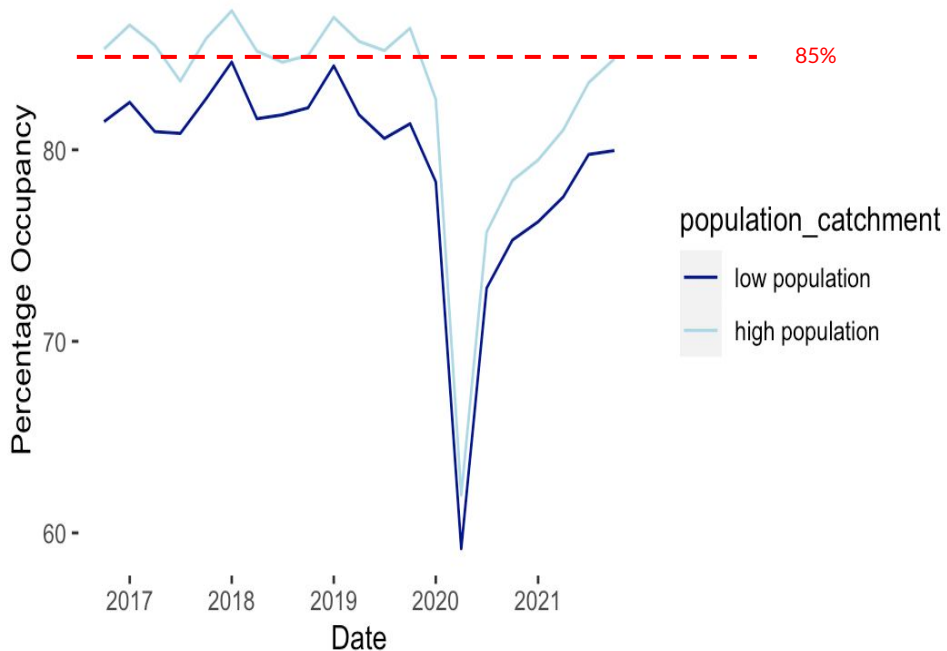


Proportion of A&E attendances meeting target (<4hrs)



Future of Hospital Performance

Avg. Beds Available by Population Status



- High occupancy rates returning post-covid
 - ◆ more stress on already underperforming wait times?
- What's driving the return of high occupancy & wait time performance?
 - ◆ Admissions from deprived areas
 - ◆ IC admissions increase
 - ◆ Age of admissions
- Covid's effect on seasonal fluctuations

Summary

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Seasonal trends:

- Higher proportion of males attending hospitals in winter (51.4%)
- Older age groups (over 60s) represent a large proportion of hospital visits

Impact of Covid:

- On demographics
 - Total attendance has reduced
 - Higher attendance rates of males and females over the age of 70
- On hospitals:
 - Proportions of specialties relating to covid treatment have increased significantly
 - Bed occupancy is on the rise
 - A&E waiting times are getting longer