

# Persons Diagnosed with COVID-19 in Linked Clinical Practice Research Datalink (CPRD) – Hospital Episode Statistics (HES) Data: A Cohort Description

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## INTRODUCTION

CPRD Aurum captures primary care electronic healthcare records for ~28% of the population in England and can be linked to HES secondary care data.

From August 2020 – March 2022, all SARS-CoV-2 PCR tests were reported back to the patient’s GP, making the CPRD a closed system for COVID research questions.

## OBJECTIVE

To describe the demographic and clinical characteristics, as well as social deprivation, of persons **hospitalized with COVID in England between August 1, 2020 - March 31, 2021**.

## METHODS

We defined persons with COVID as those recorded in primary care from August 1, 2020-March 31, 2021.

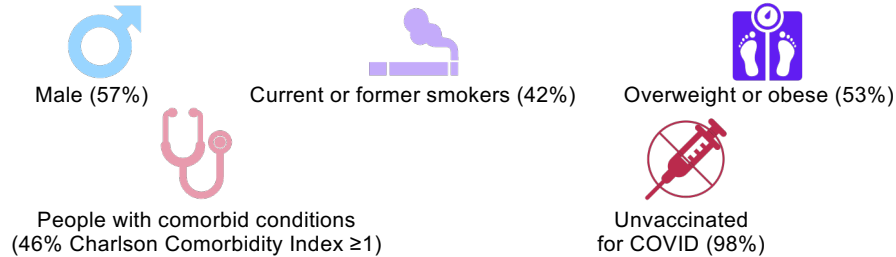
We required continuous GP practice registration for ≥365 days prior to diagnosis, and eligibility for linkage to HES Admitted Patient Care data.

**Hospitalizations for COVID were defined as persons admitted with a primary diagnosis of COVID (ICD-10 U07.1) within 12 weeks of the primary care diagnosis record.**

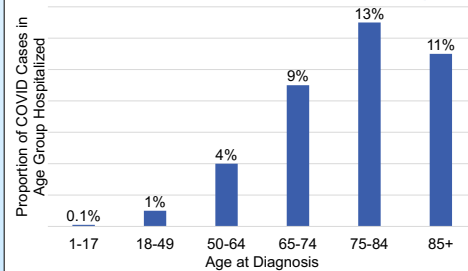
## RESULTS

Our cohort included 535,453 persons diagnosed in primary care (outpatient setting) with COVID, **with 2% later hospitalized for COVID**.

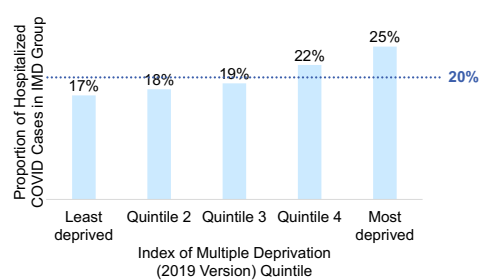
Consistent with other studies, hospitalized COVID patients were disproportionately:



### Hospitalizations increased with age.



### Persons living in socially disadvantaged areas were overrepresented.



## CONCLUSION

This study sample showed comparable characteristics to other published evidence of hospitalized COVID patients and thus indicates this CPRD-HES linked dataset is a valid source of data for studies on COVID.

This work can contextualize future efforts to describe healthcare utilization and costs in persons diagnosed with COVID in England.

## LIMITATION OF HES DATA

Hospitalizations have changed since Spring 2021, with periods of increased (delta variant) & decreased (omicron) risk of hospital admission, as well the availability of therapeutics.

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## Disclosures

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