Trends and clinical characteristics of 57.9 million COVID-19 vaccine recipients: a federated analysis of patients’ primary care records in situ using OpenSAFELY

Our paper in the BJGP describes COVID-19 vaccine coverage in the first 100 days of the NHS vaccination campaign in England on 57.9 m people, with detailed data on vaccination rates in specific clinical and demographic subgroups. As COVID-19 is an unprecedented and evolving situation we have developed a regularly updating report on a 24 m subset of the population (all patients whose GP practice uses SystmOne EHR software) at reports.opensafely.org, which additionally includes data on non-priority groups down to ages 16–17 years.

Current data show sustained progress in vaccination across all clinical and demographic subgroups. As of 24 November 2021, 96.8% of people over 80 years currently alive and registered had received a first dose. Vaccination coverage has remained slightly higher in people with most physical health conditions, and improved over time among those with long-term mental health conditions, remaining only slightly lower, for example, serious mental illness, 94.0% (Figure 1), learning disability, 94.5%. However, coverage remains substantially lower in some demographic subgroups, for example, 78.9% in black people and 85.9% in Pakistani people. These patterns are generally reflected throughout each demographic subgroup, for example, 45.4% in black people aged 18–29 years vs. 71.2% in white people.

Additionally we have created a detailed report on second doses of COVID-19 vaccines, allowing 14 weeks for these to be administered. These data show that ethnic and other inequalities in first-dose coverage persist, or become larger, at the point of second dose.

Finally we have added a report on third and booster doses to inform the NHS booster campaign. This report also indicates that inequalities which are already present in double-vaccination coverage grow even larger at the stage of receiving a booster. Overall, 86.8% of those already double vaccinated over the age of 80 years have received a booster dose as of 24 November 2021 (measured at 27 weeks since their second dose). We observe some noteworthy gaps in vaccine booster coverage in the ≥80 years group: housebound, 59.9% (60 949 of 101 689); broad ethnic groups: black, 68.8% (5145 of 7483), South Asian, 74.6% (16 891 of 22 638) vs. white, 87.6% (832 769 of 953 029); more detailed ethnic groups: Pakistani or British Pakistani, 57.3% (2961 of 5166); dementia 76.8% (60 816 of 79 233); and severe mental illness, 75.9% (5425 of 7140).

The NHS in England continues to administer COVID-19 vaccines at scale in general practice and other settings. Readers are encouraged to view the full updated COVID-19 vaccine reports to inform vaccination campaigns locally and address any inequalities in vaccination coverage.

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