Results

Overall, 479/2100 (22.8%) had pre-existing airways diseases (346 asthma, 122 COPD and 21 bronchiectasis). At 1 year, 20.4% of the airways group reported full recovery vs 33.2% in the non-airways group (p<0.001). Likelihood of reporting full recovery was similar between patients with COPD and asthma. The airways group were more likely to have features of: anxiety (29.1% vs 22.0% p=0.002), depression (31.2% vs 24.7%, p=0.006), breathlessness (mean PSQ scale 3.7 (SD 2.7) vs 2.4 (SD 2.5), p<0.001), cough (mean PSQ scale 2.1 (SD 2.5) vs 1.3 (SD 2.1), p<0.001) and fatigue (mean PSQ scale 4.3 (SD 3.0) vs 3.3 (SD 2.9), p<0.001). The pre-COVID estimate of EQ-5D-5L (UI) in the airways group was lower than non-airways group, 0.74 (SD 0.27) vs 0.84 (SD 0.21) p<0.001 respectively, however the delta change difference was similar between the two groups at 1-year, -0.09 (SD 0.24) vs -0.11 (SD 0.22) p=0.351. Patients with COPD had lowest baseline HRQoL and the highest baseline burden of breathlessness, cough and fatigue but minimal delta change at 1-year compared to the asthma and non-airways groups.

Conclusion

Significant burden of symptoms observed in COVID-19 survivors with pre-existing airways diseases at 1-year post discharge. Only 1/5 of patients with pre-existing airways diseases felt fully recovered at 1-year and despite reduced baseline HRQoL, the magnitude of decline was similar to the non-airways group.
Results 1264 participants were included with 343 undergoing DXA and 921 undergoing BIA. Mean age was 57.7 (SD 12.7) years, mean BMI was 31.8 (SD 6.98) and 39.4% were female. Total body mass and fat mass was significantly greater among participants reporting being not recovered compared to those who reported being recovered (figure 1a and d), similarly body mass index was significantly higher among men who reported being not recovered (figure b). No differences were seen in lean mass between recovery groups in both sexes.

Conclusions Analysis of detailed body composition highlights adiposity as a predictor for non-recovery following hospitalisation for COVID-19 with no difference in lean mass seen. While further work is required to understand potential mechanistic explanations, this finding highlights the potential role for interventions targeting adiposity among individuals suffering persistent post-COVID-19 non-recovery including Long-COVID.

Introduction and Objectives Long COVID is a well recognised, if heterogeneous, entity. Acute respiratory infections (ARIs) due to other pathogens may cause long-term symptoms, but few studies compare post-acute sequelae between SARS-CoV-2 and other ARIs. We aimed to compare symptom profiles between people with previous SARS-CoV-2 infection, people with previous non-COVID-19 ARIs, and contemporaneous controls, and to identify clusters of long-term symptoms.

Methods COVIDENCE UK is a prospective, population-based UK study of ARIs in adults. We analysed data on 16 potential long COVID symptoms and health-related quality of life (HRQoL), reported in January, 2021, by participants unvaccinated against SARS-CoV-2. Symptoms analysed were coughing, sleep problems, memory problems, difficulty concentrating, muscle or joint pain, problems with sense of taste/smell, diarrhoea, stomach problems, changes to voice, hair loss, unusual racing of the heart, lightheadedness or dizziness, unusual sweating, breathlessness, anxiety or depression, and fatigue. We classified participants as having previous SARS-CoV-2 infection or previous non-COVID-19 ARI (≥4 weeks prior) or no reported ARIs. We compared symptoms by infection status using logistic and fractional regression, and identified symptom clusters using latent class analysis (LCA).

Findings We included 10,203 participants (1343 [13.2%] with SARS-CoV-2 infection, 472 [4.6%] with a previous non-COVID-19 ARI). When compared with no infection, both SARS-CoV-2 and non-COVID-19 ARIs were associated with increased prevalence or severity of most symptoms and decreased HRQoL. When comparing infection types, participants with SARS-CoV-2 infection had higher odds of taste/smell problems (odds ratio 8.06, 95% CI 4.52–14.35) and hair loss (2.10, 1.39–3.19) than participants without COVID-19 ARIs. Separate LCA models identified three symptom severity groups for each infection type. For SARS-CoV-2, the most severe group was characterised by an increase in overall symptom burden, with the greatest differences in memory problems, difficulty concentrating, and lightheadedness or dizziness. When comparing the most severe groups by infection status, SARS-CoV-2