

Symptomatic COVID-19 admissions in district general hospital: Maternal and Neonatal outcomes

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Background

Coronavirus disease 2019 (covid-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was declared a global pandemic by The World Health Organization in March 2020.¹ Pregnant women are not considered more susceptible to the infection than the general population. However, changes to the immune system puts pregnant women at a greater risk of severe infection leading to poor maternal and neonatal outcomes.² The UK Obstetric Surveillance System (UKOSS) is being used determine the incidence of hospitalisation with pandemic Covid-19 infection in pregnancy and to assess the outcomes of pandemic Covid-19 in pregnancy for mother and infant

Aims

To determine the incidence of hospitalisation of Covid-19 infection in pregnancy.
To assess maternal and fetal outcomes of Covid-19 in pregnancy, including severe disease, failing organ system support, second-trimester miscarriage, stillbirth, iatrogenic prematurity, NICU admissions, Neonatal SARS-Cov-2 infection and postnatal depression.

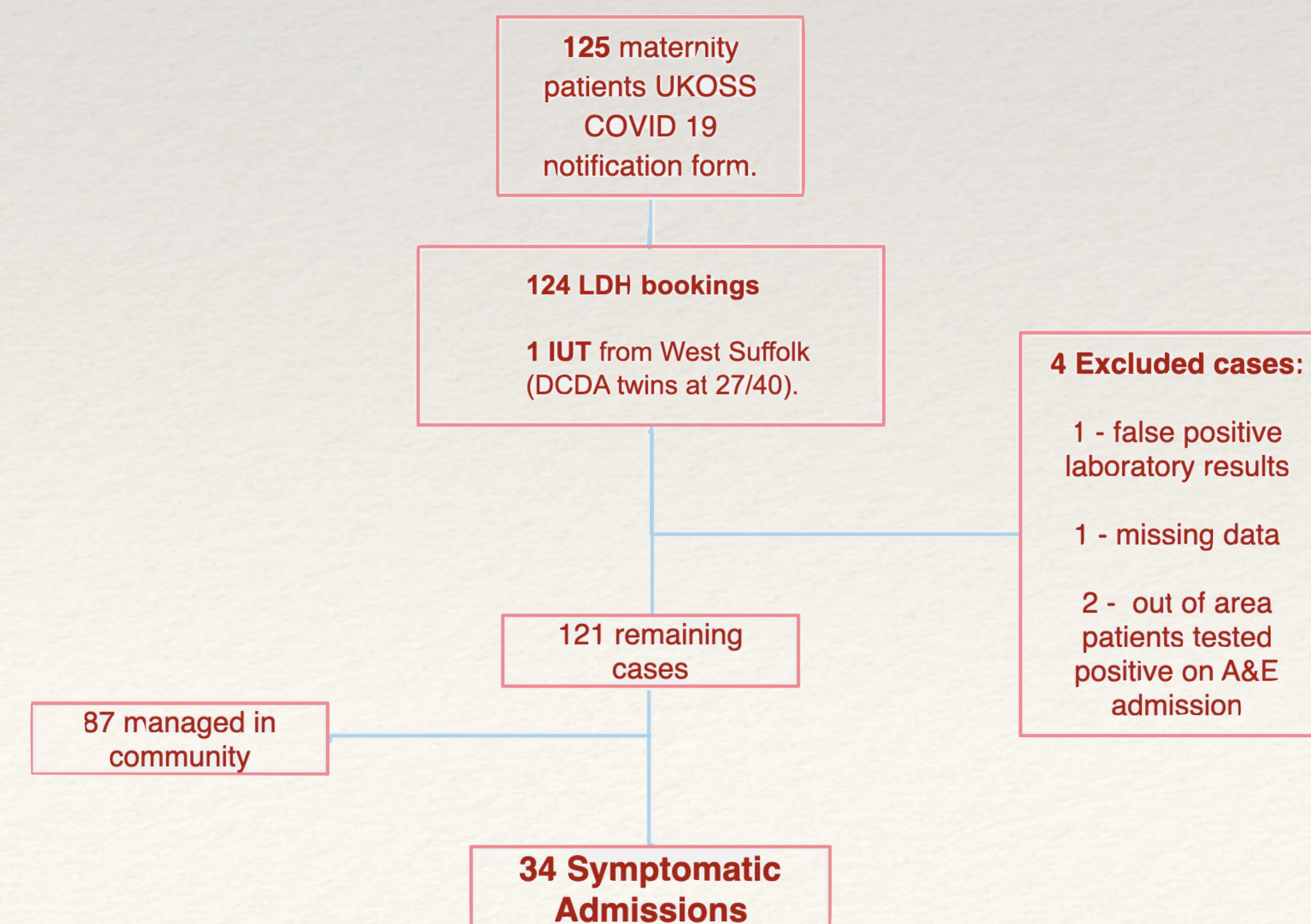
Methods

Service review through Retrospective analysis of patients with a completed UKOSS COVID-19 form at Luton and Dunstable University Hospital.

From **24th March 2020 - 29th December 2021**.

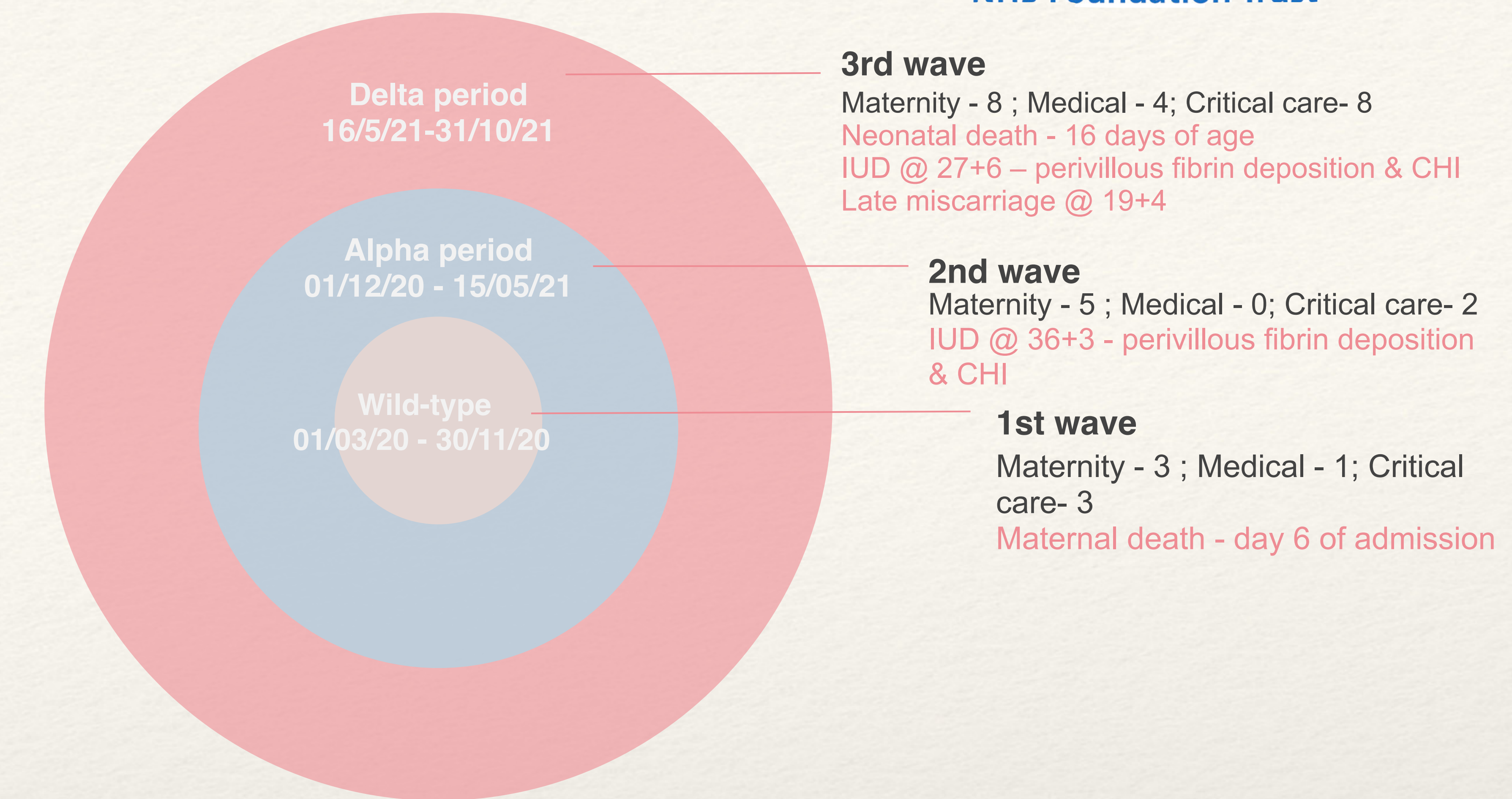
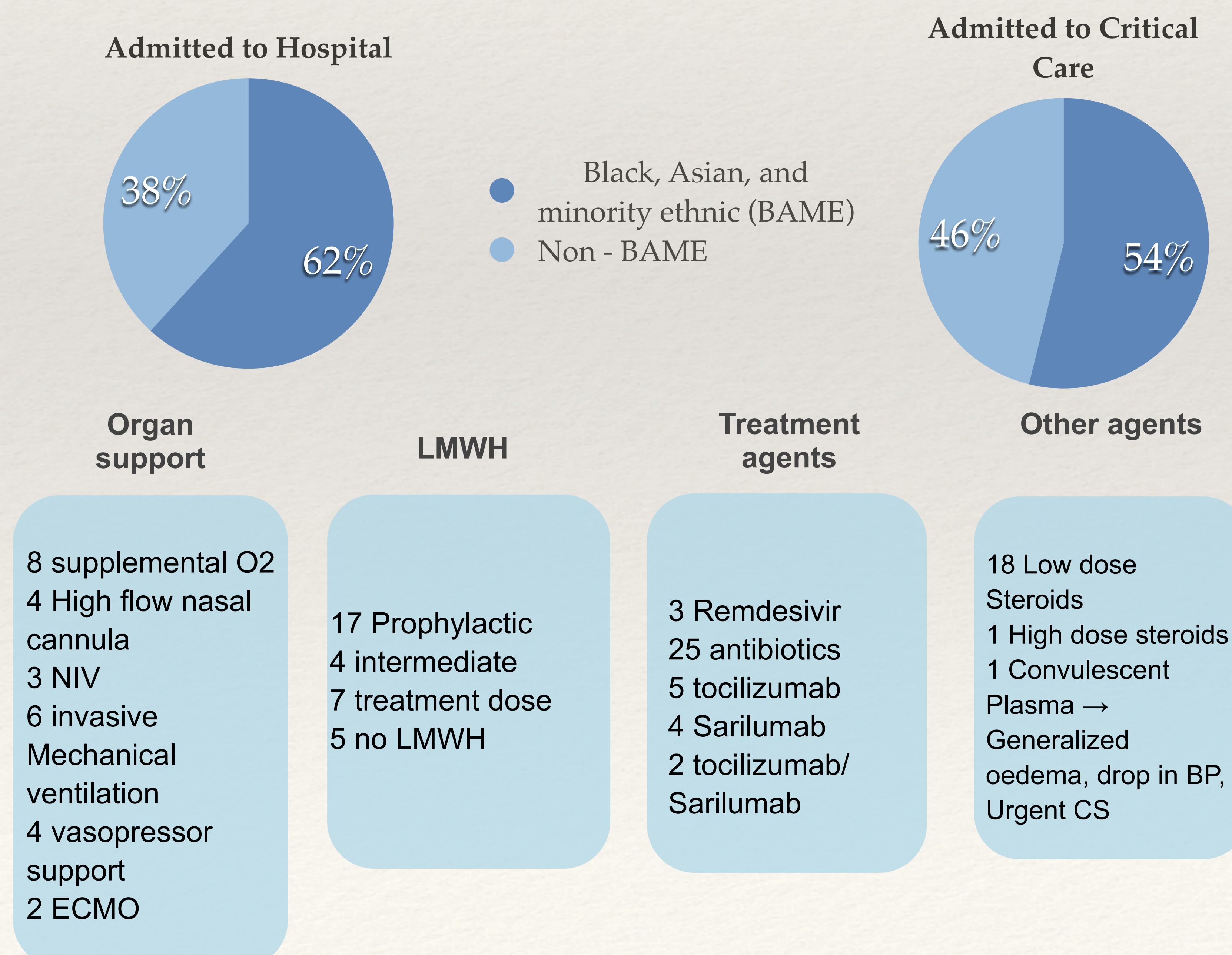
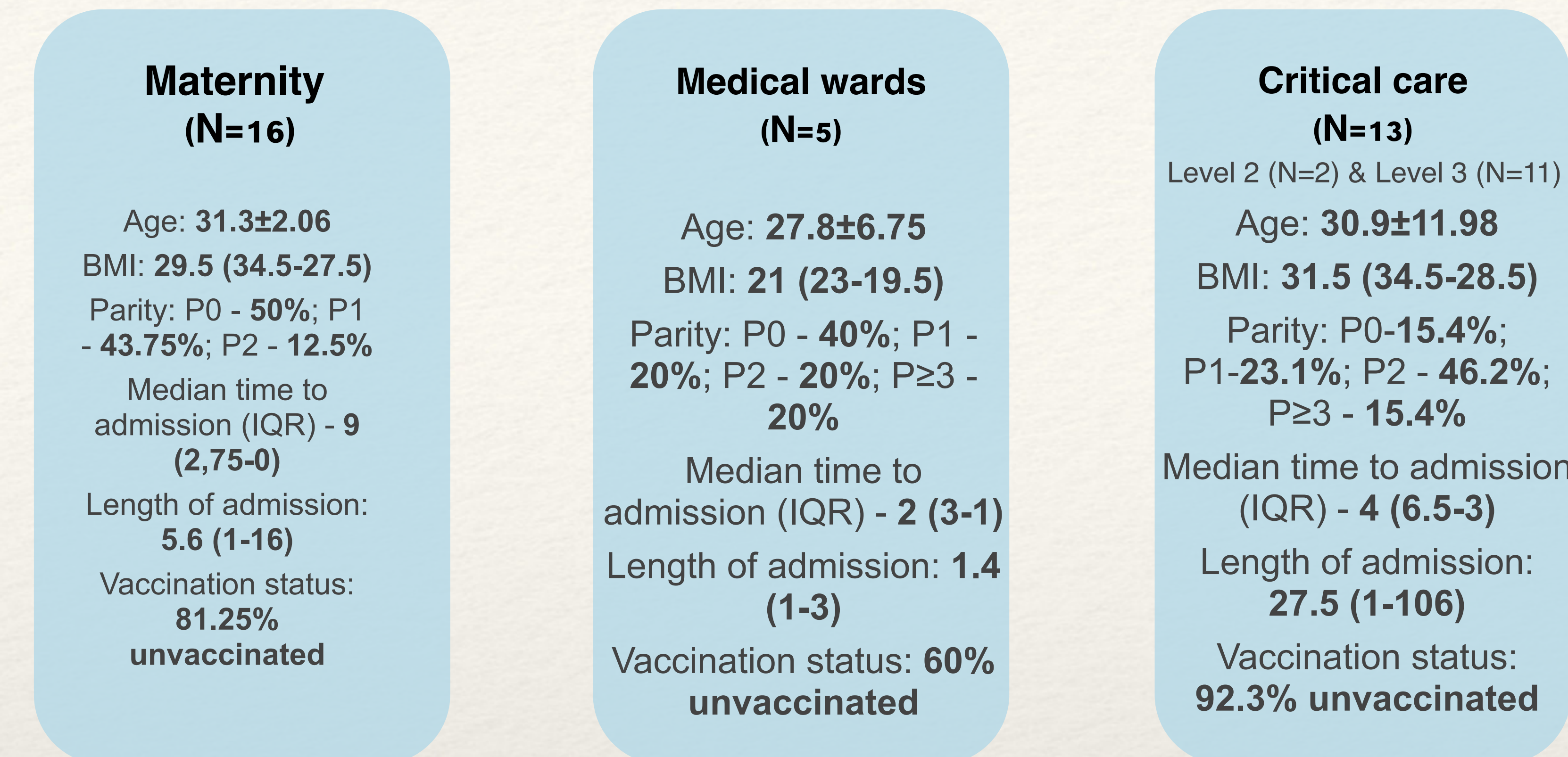
Data collected from uploaded electronic records on Evolve and ICE; Demographics, Vaccination status, Place and length of Care, Management, Intrapartum Care, Maternal and Neonatal Outcomes

Sample



Results

Place of care & Characteristics



Mode of delivery: SVD - 26.47%; Forceps - 8.82%; LSCS - 52.94%; N/ A - 11,76%

During COVID-19 admission, 14 maternity patients required expedited delivery via Caesarean section before term.

- 8 (57.1%) cases due to significant deterioration of respiratory function
- 6 (42.9%) due to fetal distress.
- Steroids: 3 - single dose, 9 - two doses, 2 - no steroids.
- 5 fetuses received MgSO4

Median gestational age at delivery was 32+5 (IQR - 34+3 - 29+4) weeks.

- 10 premature neonates required NICU admission.

Three women (8.8%) were commenced on antidepressants postnatally following a traumatic experience, including neonatal loss and prolonged hospitalisation.

Conclusions

- Delta wave resulted with the highest number of reported cases and ITU admissions.
- The vast majority of admitted patients remained unvaccinated.
- Patients presenting with severe COVID-19 symptoms demonstrated rapid deterioration requiring invasive respiratory support and iatrogenic preterm delivery.
- Addressing infection impact on mental health is a key part of holistic patient care.
- The BAME population had been more severely impacted by the COVID-19 Pandemic.

References

1. World Health Organization. Rolling updates on coronavirus disease (covid-19). 2020. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>.
2. Favre G, Pomar L, Musso D, Baud D. 2019-nCoV epidemic: what about pregnancies?*Lancet* 2020;395:e40. doi:10.1016/S0140-6736(20)30311-1