

# Service Review of an Enhanced Respiratory Care Area Developed in Response to the Covid-19 Pandemic

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## Introduction

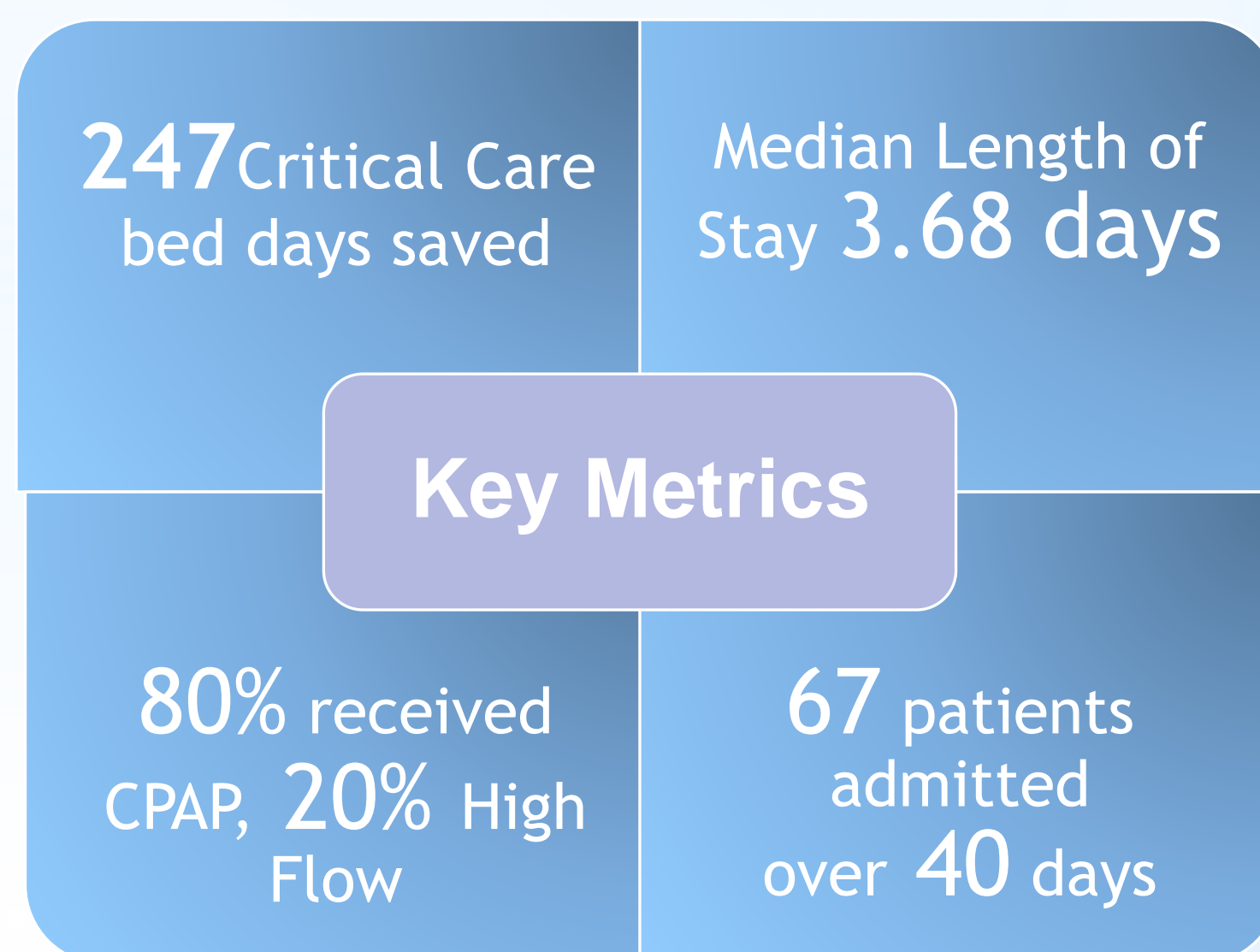
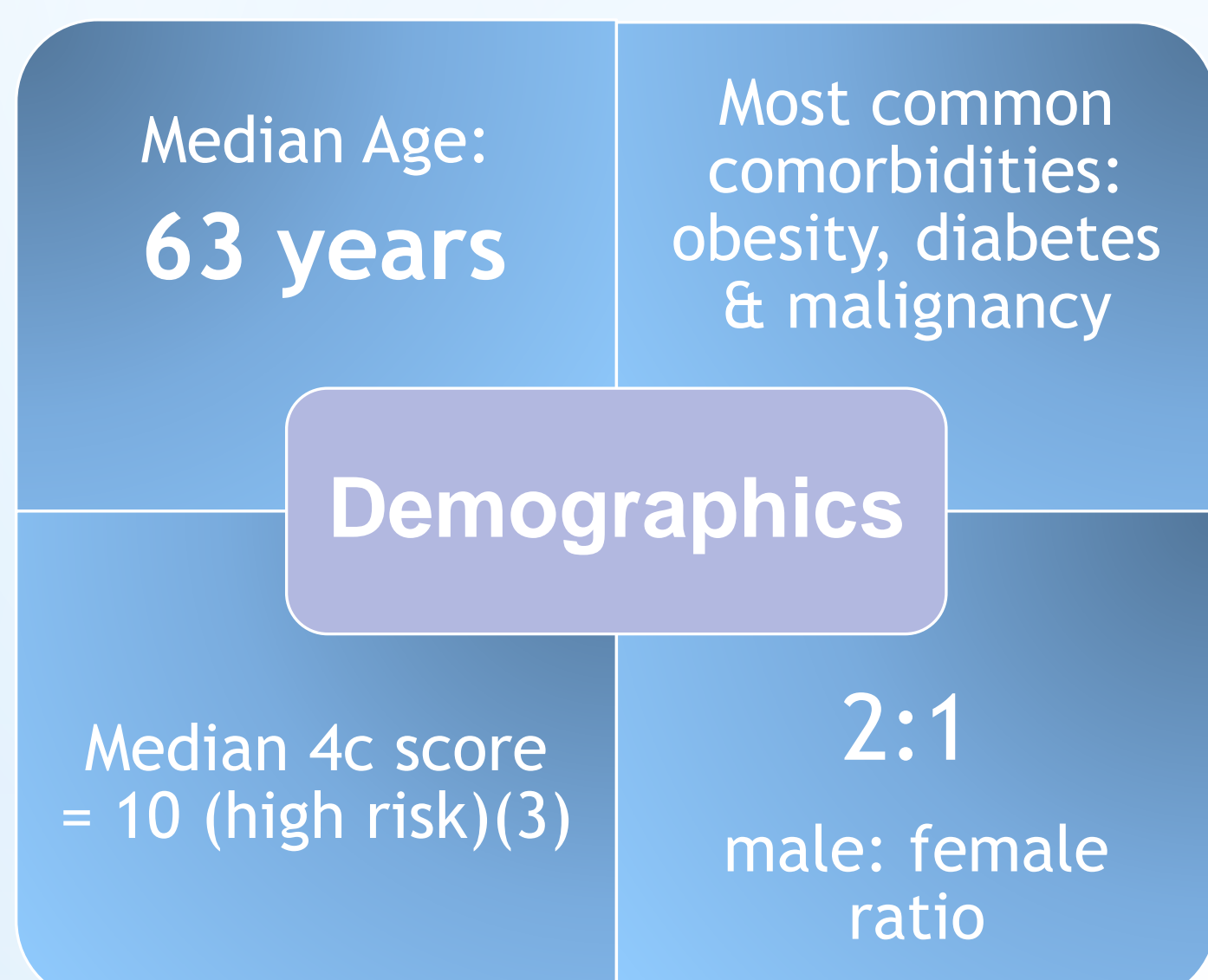
During the second wave of the Covid-19 pandemic, regional modeling predicted an acute surge in demand for level 2 respiratory beds. Locally, these patients were cared for on the Critical Care Unit. Capacity had been expanded from 20 to 42 beds in response to the pandemic, but the anticipated demand could not be met in the existing Critical Care footprint. Early evidence suggested that CPAP and high-flow oxygen could reduce the requirement for mechanical ventilation by up to 50% for patients with Covid-19. (1,2)

## Intervention

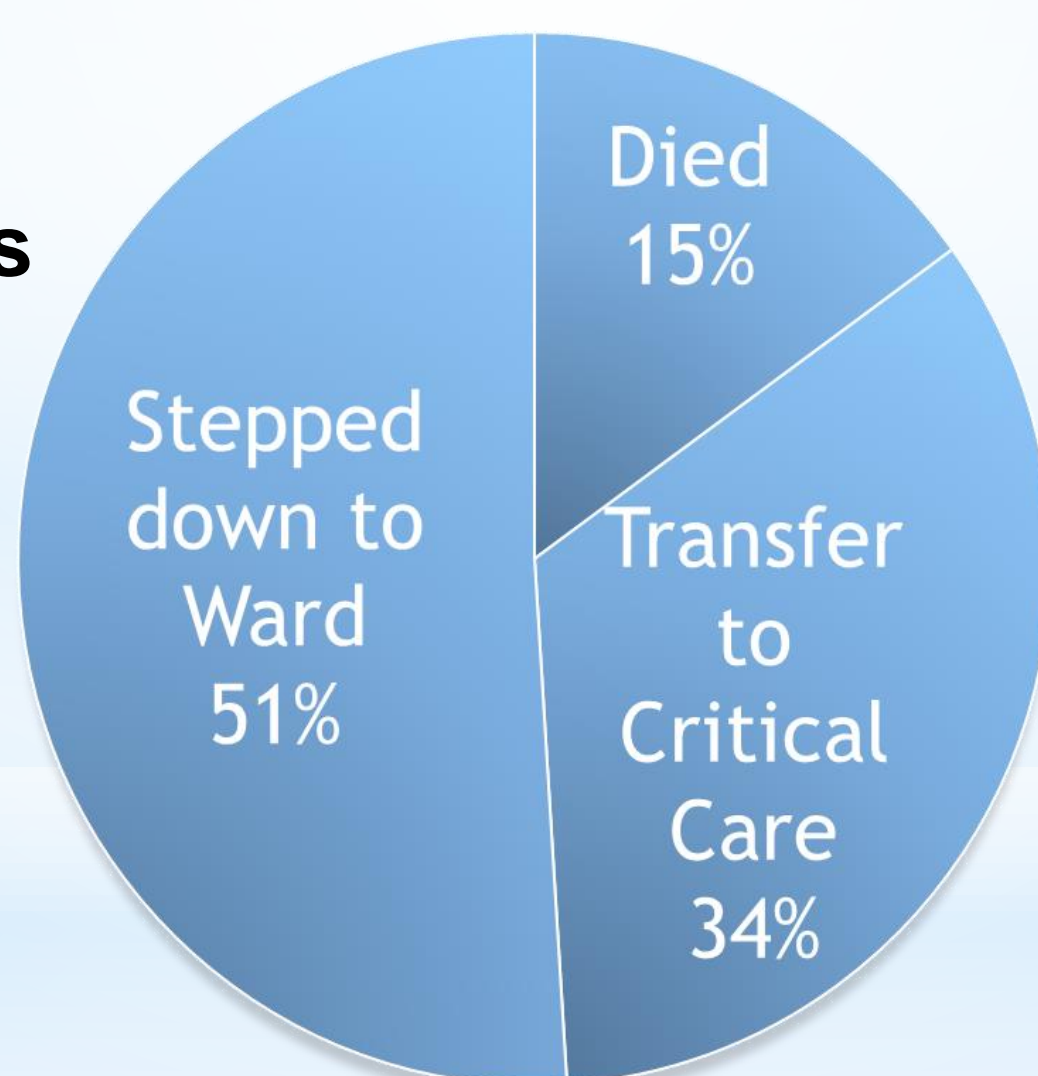
An Enhanced Respiratory Care Area was created for a cohort of level 2 respiratory patients to provide CPAP and high-flow oxygen on a 1:4 practitioner to patient ratio.

The area was staffed by an Acute Care Team; a team of practitioners who normally provided the Trust's Critical Care Outreach and Acute Care support through Advanced Clinical Practitioners, non-medical prescribers, practitioners and specialist HCAs. Physiotherapists and junior doctors were assigned to the unit and supported with their typical professional roles and bedside care.

Daily Critical Care Consultant ward rounds occurred. Patients had continuous SpO2 monitoring, 4 hourly observations and timed positional changes with the intention to maintain prone/ lateralized positions for as long as possible. A retrospective audit and service review was undertaken.



## Outcomes



## Conclusions

The Enhanced Respiratory Care area provided an innovative response to the local Critical Care Covid-19 crisis by cohorting level 2 respiratory patients and transformational workforce planning and care modeling. This enabled a rapid and targeted response to the crisis which provided quality care that was at least equivalent to the length of stay and mortality outcomes of the local Critical Care unit, whilst significantly reducing Critical Care bed and workforce pressures.

## References

**References:** 1. Calligaro G, Lalla U, Audley G, Gina P, Miller M, Mendelson M et al. The utility of high-flow nasal oxygen for severe COVID-19 pneumonia in a resource-constrained setting: A multi-center prospective observational study. The Lancet Online. 2020  
2. Nightingale R, Nwosu N, Kutubudin F, Fletcher T, Lewis J, Frost F et al. Is continuous positive airway pressure (CPAP) a new standard of care for type 1 respiratory failure in COVID-19 patients? A retrospective observational study of a dedicated COVID-19 CPAP service. BMJ Open Respiratory Research. 2020;7(1):e000639. 3. Harrison E. 4C Mortality Score for COVID-19 - MDCalc [Internet]. Mdcalc.com. 2021 [cited 9 August 2021]. Available from: <https://www.mdcalc.com/4c-mortality-score-covid-19>

