

Background

Severe Acute Respiratory Syndrome Coronavirus (SARS CoV-2, Covid-19) was declared a global pandemic in March 2020 (World Health Organization, 2021).

Early evidence suggested that NHF and CPAP could be safely delivered outside critical care, and may reduce demand for mechanical ventilation (British Thoracic Society, 2021; Calligro et al., 2020; Nightingale et al., 2020). In January 2021 regional modeling suggested an acute increase in demand for respiratory critical care beds. The existing unit did not have the capacity to manage the surge: an emergency plan was required

Solution

The Enhanced Respiratory Care Area was created:

8 bedded level 2 area adjacent to the Critical Care Unit

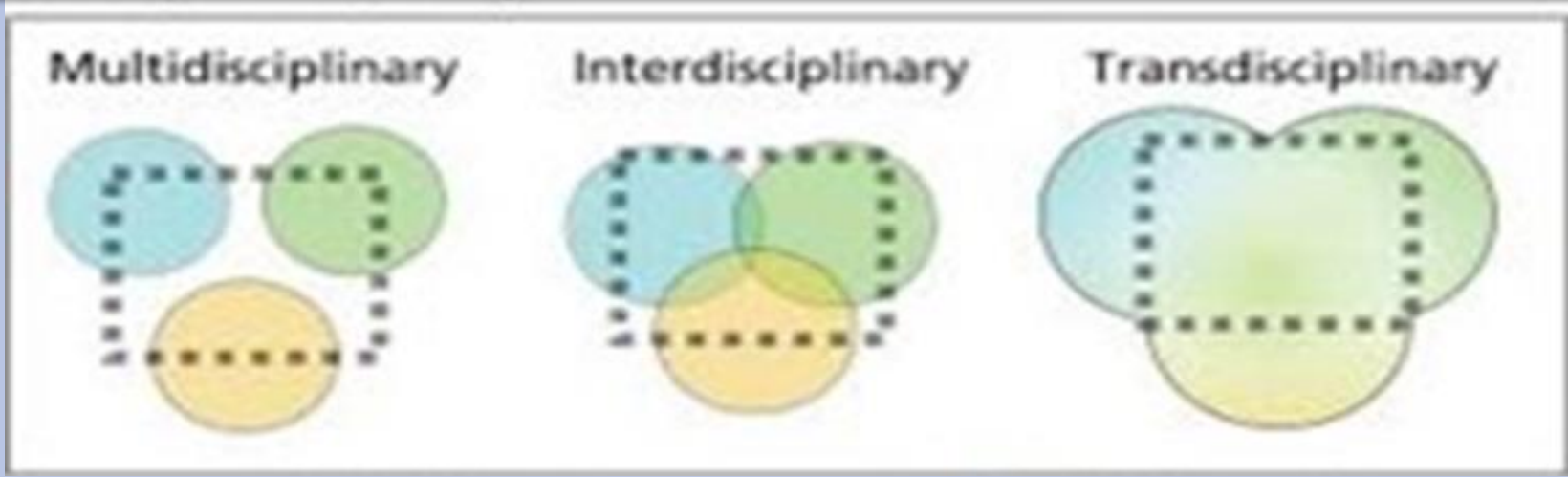
1:4 care model - 1 Acute Care Team (ACT) practitioner to 4 patients requiring CPAP or NHF

Junior doctor, physiotherapy & HCA support

Workforce Innovation

The Acute Care Team is a multi-skilled & multi-professional team with a range of valuable competencies. Together with the redeployed F3 medical team and physiotherapist an integrative and inclusive transdisciplinary approach to the workforce was adopted, where staff performed roles to their competence and capability rather than within the typical professional boundaries.

Working in this collaborative manner meant the team was more responsive to patient needs and could flex to meet surges in demand whilst learning from each other and gaining new skills.



Outcomes

Overall

247 critical care bed days saved

Median LOS 3.68 days

Patient Feedback

100% surety & trust in the care they received

Efficient, skilled & confident staff

Staff Feedback

Learning from each other

Strengthened relationships

Crossing professional boundaries

Directly improved outcomes

Fantastic learning opportunity

Swapping skills and knowledge

Great team-working

Enhancing each other's skill base

Innovative utilization of skills

Suggestions for Future Practice

Modern healthcare delivery is increasingly dependent on a complex and team-based approach (Dinh et al., 2019). Roles must be flexible with members being able to cross traditional professional boundaries (Academy of Medical Royal Colleges, 2020; Schmutz, Meier & Manser, 2019).

Enhanced care areas adopting flexible workforce modeling dependent on patient need and team skills could potentially bridge the gap between ward-based care and critical care provision whilst delivering positive patient outcomes and staff satisfaction.

References: Academy of Medical Royal Colleges. (2020). *Developing professional identity in multiprofessional teams*. Retrieved from: https://www.aomrc.org.uk/wp-content/uploads/2020/05/Developing_professional_identity_in_multi-professional_teams_0520.pdf; British Thoracic Society and The Intensive Care Society (2021). *Respiratory care in patients with acute hypoxemia respiratory failure associated with Covid-19*. Retrieved from <https://www.brit-thoracic.org.uk/document-library/quality-improvement/covid-19/btsics-guidance-respiratory-care-in-patients-with-acute-hypoxaemic-respiratory-failure-associated-with-covid-19>. Calligro, G.L., Lalla, U., Audley, G., Gina, P., Miller, M.G., Mendleson, M.,...Koegelenberg, C. F. N. (2020). The utility of high-flow nasal oxygen for severe Covid-19 pneumonia in a resource contained setting: A multicenter prospective observational study. *The Lancet Online*. doi: <https://doi.org/10.1016/j.eclinm.2020.100570>. Dinh, J.V., Traylor, A.M., Killcullen, T.M., Perez, J.A., Schweissing, E.J., Venkatesh, A. & Salas, E. (2019). Cross-disciplinary care: A systematic review on teamwork processes in healthcare. *Small Group Research*, 51,(1), 125-156. Nightingale, R., Nwosu, N., Kutubudin, F., Fletcher, T., Lewis, J., Frost, F.,Burhan, H. (2020). 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*, 7:e000639. doi: 10.1136/bmjresp-2020-000639; Schmutz J.B., Meier L.L., Manser, T. How effective is teamwork really? The relationship between teamwork and performance in healthcare teams: a systematic review and meta-analysis. *BMJ Open* 2019;9:e028280. doi:10.1136/bmjopen-2018-028280; World Health Organization (2021). *Listings of WHO's response to Covid-19*. Retrieved from <https://www.who.int/news/item/29-06-2020-covidtimeline>

