

## **Singapore develops non-invasive ventilation helmet for COVID-19 patients**

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**A prototype designed to replace the need for invasive ventilation support and as a stopgap measure in case of the shortage of ICU beds**

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With the COVID-19 pandemic, Singapore's healthcare system is faced with uncertainties and challenges including, providing healthcare to patients amidst a growing number of chronic diseases, along with a possible shortage of manpower and logistics in hospitals.

Innovation is key to addressing these issues and Ngee Ann Polytechnic (NP)'s team of innovators and engineers have worked with Temasek Foundation and Advanced MedTech to develop a **non-invasive ventilation helmet for COVID-19 patients**, as part of Temasek Foundation's ['Stay Prepared'](#) initiative.

A prototype was designed and built within 2 weeks to be used during interim treatment as a bridge to invasive ventilation support and a stopgap measure in case of the shortage of ICU beds.

It can also be used for the administration of non-invasive ventilator treatment in general wards as a contingency plan too. This ventilation helmet can be deployed in a non-hospital environment such as community isolation facilities and field hospitals and ASEAN countries with limited healthcare resources. Everything is tested and made in Singapore.