

TELEPODS: TAKING VIRTUAL CARE AHEAD

In an effort to advance virtual care further, the team from Tan Tock Seng Hospital (TTSH)'s Telehealth Office started the search for portable pods to be placed around the hospital, which will allow healthcare providers to take calls or conduct video consultations with patients.

By Tjut Rostina, CHI

Telehealth has paved the way for virtual care where the community gains greater access to healthcare remotely, enabling patients to consult with their healthcare provider in the comfort of their homes. Four factors drive the increased demand for virtual care:

· Accessibility to Care

Increase accessibility to care for both patients and next-of-kin beyond the walls of the hospital

Need for Virtual Space

Growing hospital workload will eventually overtake available clinic spaces

• Telemonitoring as Enabler

Existing technology such as photoplethysmography (PPG) and Artificial Intelligence (AI) for remote monitoring and video analytics

· Readiness of Stakeholders

Virtual care encounters have steadily increases over the years with patients and clinician uptake

In an effort to advance virtual care further, the team from TTSH's Telehealth Office started the search for portable pods that will allow healthcare providers connect with patients virtually.





These "TelePods" were fitted with equipment for a seamless telehealth experience, including a laptop, monitor, all-in-one webcam, speaker and microphone and a height-adjustable table.

Installed as a Proof of Concept earlier this year, the soundproof TelePods were set up at the CHI Reimagination Plaza on Level 4, and next to TTSH's Centre for Geriatric Medicine. We catch up with the team to find out their innovation journey.

Office Booth Inspired

While there was a growing demand for virtual care, healthcare providers faced challenges such as the long preparation time required to set up devices for teleconsults in clinic room.

As resources in clinic rooms are not equipped for telehealth, clinicians face technical issues such as interferences due to unstable internet connection and background noise, and the difficulty in sharing materials (eg: test results) with patients during video consults.

These challenges prevented Telehealth from being leveraged as a resource multiplier. These barriers to conducting teleconsults limit uptake, and hence reduces the possibility of greater access to healthcare.

Inspired by common office booths, the team consulted clinicians from various disciplines and fitted the pods to form private workspaces specifically designed to conduct teleconsults.

The telepods would:

 Free up clinic resources for patients requiring physical care

- Address pain points faced by providers of teleconsults
- Increase value to patients (eg: save on travel time and cost)

To ensure a space ideal as a healthcare utility, the team spent a considerable amount of time to visiting showrooms, testing out the different brands of pods for soundproof quality, lighting, and ventilation.

The team also sought advice on infection control to ensure that the pods were suitable for healthcare use, and obtained inputs from clinicians of various disciplines regarding the equipment required, as well as frosted glass for patient confidentiality.

Into the Future

"SEAMLess Care is about enabling access and care provision that is not constrained by physical or functional boundaries, facilitated by technology and digital tools. The launch of the Telehealth Pods brings us closer to this goal," shared Dr Ravinder Singh Sachdev, who leads the initiative.

Looking ahead, the team would like to deploy similar pods in the community, and equip them with tele-monitoring devices, so that patients would be able to walk into a pod and have their vitals measured and transmitted to their healthcare provider / dial-in with their doctor.

Interested to try out the Telepods?

Email the team to find out more: telepods@healthgrp.com.sg