

(continued Page 5: A Day in the Life of Doctors working at St. Andrew's Migrant Worker Medical Centre)

on for the migrant workers who are at the heart of all we do.

**CM:** What advice would you give to doctors who are keen to do similar work as yourself?

**PN:** Migrant worker work is meaningful and fulfilling. We do not expect monetary gains as we serve workers and employers with financial constraints. If we are motivated by our concern for migrant workers, then it is easier to serve for a long time in this sector. One must also be ready to face challenging situations because there are too many external factors affecting our patients' choices of treatment.

**OHY:** One must be prepared that the healthcare system for migrant workers is less well-established and hence not as systematic and organized as our public healthcare sector. We constantly have to navigate through uncharted territories which is daunting but yet fulfilling. While there may not be much financial gain as compared to that of the private healthcare sector, the spiritual and emotional gains, as well as unique job challenges and experiences, are abundant.

**CM:** How do you foresee the landscape of primary care provided to migrant workers evolve in the future?

**PN:** This landscape is rapidly evolving because of the government's current focus on the new health system for migrant workers. I foresee it developing into a more comprehensive system where workers can readily access quality and affordable healthcare. It will be a fulfilment of the dreams of many who have strived hard to serve the migrant workers.

**OHY:** I hope that we can strive towards providing the workers with the same standard of medical care that the rest of the general population enjoy at an affordable rate.

**CM:** Thank you very much for your sharing and nuggets of wisdom for those who wish to join you in your work.

■ CM

## The Singapore General Hospital COVID Virtual Ward

by Dr Tan Woei Jen, Michelle, Family Physician

The Singapore General Hospital (SGH) COVID Virtual Ward is an initiative by the Department of Family Medicine and Continuing Care (FMCC) and the Population Health Office and Integrated Care Office (PHICO), to support the safe recovery of higher risk COVID-19 patients in their own homes. The programme serves to expand the capacity of COVID-19 isolation wards in SGH, whether through early discharge of existing inpatients, or through direct admission of community cases into the Virtual Ward. In order for patients to recover at home, our medical staff remotely monitors these patients for signs of deterioration, and manages minor medical issues that would otherwise compel these patients to return to the hospital. Our focus is on patients who are not eligible for the current Home Recovery Programme (HRP) or Community Isolation Facilities (CIF).

The FMCC, in partnership with the PHICO, have long been the drivers for transitional care services in SGH. In fact, the COVID Virtual Ward is an extension of SGH@Home, our existing "hospital at home" service. The pivot to COVID-19 patients was made at the request of the Ministry of Health

(MOH) in mid-September 2021, in the face of an exponential increase in the number of SARS-CoV-2 infections in the community due to the Delta variant. The COVID Virtual Ward was opened on 6th October 2021 and the first patients were admitted into the programme shortly after. The primary team for the Virtual Ward has the capacity to care for up to 100 patients simultaneously, and currently includes a Consultant Physician, Four Resident Physicians and Medical Officers, as well as a Nurse Clinician and five Staff Nurses.

The inclusion criteria is deliberately broad (see table 1), and encompasses patients 18 years or older with mild-to-moderate COVID-19 symptoms and otherwise stable comorbid medical issues. Conversely, the exclusion criteria is quite narrow, barring patients with active medical issues that requires inpatient care or those with logistical issues that cannot be managed in the community (eg hemodialysis). SGH inpatients may be referred to FMCC for an assessment on their suitability, based on the patient's medical condition, social support and home environment. Patients must also be keen and ready to return home, and informed consent

to participate in this programme is required. Selected patients in the community are highlighted to our service on a daily basis by the COVID-19 Case Management Task Group Operations (CMTG) office, and our Virtual Ward staff conducts screening of these patients to determine suitability.

A home monitoring package is provided to all patients enrolled in the Virtual Ward; the package includes a digital thermometer, a pulse oximeter, and written information about the Virtual Ward. A digital blood pressure machine and glucometer are also issued to selected patients that required these parameters to be monitored. At home, an "admission assessment" is conducted by a doctor and a nurse from the Virtual Ward via video consultation, and the patient and caregivers are instructed on the remote monitoring requirements as well as the escalation protocols in event the patient becomes unwell. Our medical staff performs a daily telephone and/or video consultation, to monitor patients' general condition and changes to their symptoms. Patients also check and submit their vital signs three times a day to us. This is done via the Telegram Messenger app to our "DrCovid+", a clinical dashboard that automates the collection, organisation and display of patients' vital signs during their time in the Virtual Ward.

Currently, there is a time-based discharge criteria from the Virtual Ward – patients are discharged from the Virtual Ward without the need for a PCR test on Day 7 of their infection if they have been fully vaccinated, or on Day 14 if they have not been fully vaccinated.

Exceptions are immunocompromised patients, who are discharged upon reaching Day 21 of infection. However,

**TABLE 1.** Inclusion and Exclusion Criteria for the SGH COVID Virtual Ward

Inclusion Criteria	Exclusion Criteria
Age 18 and older	End-stage renal failure on hemodialysis
No severe symptoms of COVID-19 infection (eg shortness of breath, chest pain)	Active cancer requiring close inpatient treatment or monitoring
Assessed by the patient's primary physician to be medically fit for transfer to the COVID-19 Virtual Ward	Cognitive Impairment (moderate to severe)
Functional status: capable of carrying out Activities of Daily Living (ADLs) independently, or otherwise has a dedicated caregiver if assistance is required for ADLs	Medical issues requiring daily inpatient treatment (e.g. intravenous antibiotics)
Access to a home internet connection and a smart device or phone, to facilitate telemonitoring and teleconsultations	Persistent fever (T≥38.0) ≥ 3days
Home and social environment suitable for home recovery	Residents of intermediate or long-term care facilities (e.g. nursing homes)

50 patients, only 2 required a return to hospital for non-COVID related symptoms. Since then, the Virtual Ward has admitted and managed more than 200 patients, and the percentage requiring re-hospitalisation has remained at a low with no mortality while at home.

At the time of this writing, the Omicron variant of COVID-19 infections once again threatens to stretch the capacity of our healthcare system. The SGH COVID Virtual Ward will continue to be an important component of COVID-19 care in Singapore, as we seek to free up inpatient hospital resources for the severely ill, while allowing mild-to-moderately affected patients to recover in a familiar environment without compromise in their care.

■ CM