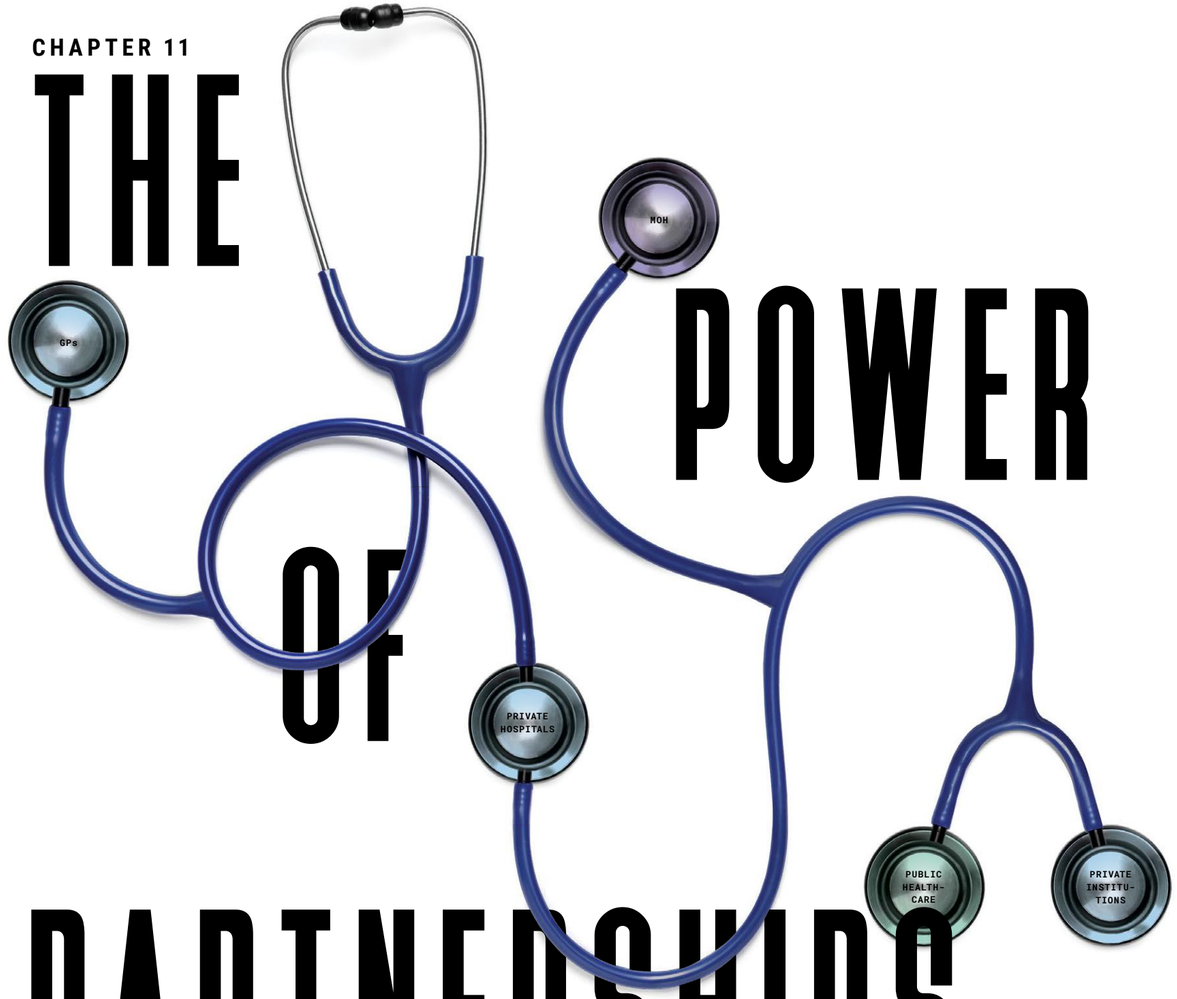
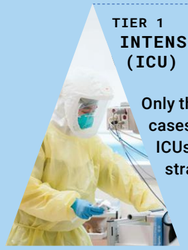
CHAPTER 11

THE POWER OF PARTNERSHIPS



FOUR-TIER SYSTEM

AS THE NUMBER OF CASES surged to 3,000 a day during the Delta wave, Singapore adopted a four-tier system to cope with the high volume of patients.



TIER 1
INTENSIVE CARE UNIT (ICU)

Only the most severe cases were sent to ICUs to reduce the strain on hospitals.

TIER 2
COVID-19 TREATMENT FACILITIES (CTFs)

CTFs took in patients at risk of developing severe illness, and had medical capabilities such as oxygen supplementation. There were nine CTFs with a combined capacity of 3,700 beds by end-October 2021.

TIER 3
COMMUNITY CARE FACILITIES (CCFs)

CCFs house patients who were mostly well but needed to be isolated. By October 2021, there were 4,300 CCF beds.

Examples of locations of CCFs and CTFs were Connect@Changi at the Singapore Expo, D'Resort NTUC, Tuas South, former Ang Mo Kio Institute of Technical Education, Village Hotel Sentosa, Civil Service Club @ Loyang and Bright Vision Hospital.

In April 2022, there were 31 CTFs and CCFs islandwide with a capacity to accommodate about 13,500 patients in total.

TIER 4
HOME RECOVERY

At the height of the Delta wave, about half of COVID-19 patients recovered at home.

PHOTOS: NATIONAL UNIVERSITY HEALTH SYSTEM (TOP); INTEGRATED HEALTH INFORMATION SYSTEMS PTE LTD (THIRD FROM TOP); STOCK.ADOBE.COM/STEVE LOVEGROVE (BOTTOM)

PHOTO: THE STRAITS TIMES © SPH MEDIA LIMITED

The Changi Exhibition Centre, repurposed as a CCF to house patients with mild symptoms.

IT WAS EARLY APRIL 2020, AND THERE WERE NO SUCH FACILITIES THAT PROVIDED CLINICAL CARE TO COVID-19 PATIENTS WHO WERE STABLE OR HAD MILD SYMPTOMS...

THE CCF WAS THE IDEAL SOLUTION.

It was a phone call that Professor Fong Kok Yong remembers clearly. On the other end of the line was Professor Kenneth Mak, Director of Medical Services at the Ministry of Health (MOH), asking if he could help set up Community Care Facilities (CCF).

Prof Fong agreed without hesitation. But the sobering reality soon hit. "The moment I put down the phone, I realised there were no prior models of the CCF. We had to start from scratch," said SingHealth's Deputy Group Chief Executive for Medical and Clinical Services.

It was early April 2020, and there were no such facilities that provided clinical care to COVID-19 patients who were stable or had mild symptoms. They still required medical monitoring, but did not necessarily need to be in hospitals. The CCF was the ideal solution, and also helped to free up hospital space for urgent cases.

While no one really knew how to start a CCF, everyone could count on each other. When MOH announced on April 5 the setting up of the first CCF at the EXPO Convention Hall in Changi, hundreds of people from various agencies were brought together to work on the project. Working around the clock, they turned an empty hall into one that could care for 480 COVID-19 patients within five days. For Prof Fong, he focused on three things at the start:

1. Providing appropriate care to patients with proper governance
2. Protecting the welfare of people in the CCF, and treating them all equally
3. Ensuring adequate protection for staff in an infectious environment

The process was further refined when more CCFs were launched across the island. Another example was Big Box in Jurong East, which started operations in July 2020. This CCF was set up in the vacant warehouse mall by representatives from the clinical, operations and nursing teams, including Ms Clarice Wee, Assistant Director, Nursing Administration, at Ng Teng Fong General Hospital (NTFGH).

In two months, Ms Wee and her team planned the entire layout for the CCF. But they faced numerous difficulties. "The number one challenge was that the situation was quite fluid. We could set up protocols and workflows according to instructions and they might change next week, so we had to adapt accordingly and communicate the changes to the team as well," she said.

With the CCF blueprint drawn up by the public sector, the private sector would later use it to build more facilities. The industry's support was crucial, especially when the highly contagious Delta wave hit a year later.

Never before had Singapore's public health system been stretched to this extent. Without the private sector stepping in to lend help, the healthcare system could have been overwhelmed. Many private hospitals opened up their beds to COVID-19 patients, while others set up and led care and treatment facilities to alleviate the burden on the public healthcare system.

General practitioners (GPs) were also roped in as important eyes and ears on the ground – not just as first responders and telemedicine providers but also in relaying community feedback to MOH.

The pandemic sparked a national response made possible through the power of public-private partnerships, setting up alternative healthcare facilities that eased the strain on public hospitals.

COMING HOME TO A PANDEMIC

A BIG PART OF DR TAN'S WORRY WAS RECRUITING ENOUGH MANPOWER... THE FACILITY WAS TO BE SET UP IN JUST TWO WEEKS.

A YEAR BEFORE COVID-19 turned lives upside down, Dr Tan Joo Peng was enjoying his sabbatical in Brisbane as a "house-husband". But in mid-March 2020, his wife received an urgent message from SingHealth to return to Singapore.

The family physician had relocated with his family to Australia for a year as his wife was pursuing her subspecialty training. But eight months in, the couple was urgently needed back home.

In a "burst of action", Dr Tan described how they broke their home lease, sold the car and hopped on the last flight back to Singapore on March 28, 2020, before the borders closed. For him, it was simply a matter of duty calling and the reason why he became a doctor.

He was immediately thrust into the thick of the action when he touched down in Singapore, working as one of the airport doctors involved in border screening, helping out with swabbing in dormitories during the migrant worker outbreak, before carrying out more swabs at the Marina Bay Cruise Centre.

As Director of Operations at Raffles Medical Group (RMG) then, he was tasked to run Connect@Changi, which was meant to be a business traveller's hotel, but was turned into a Community Care Facility (CCF) in just two weeks in August 2021.

"The leadership at Raffles concurred that it was a very meaningful project to serve the nation," said Dr Tan, who is now RMG's Assistant General Manager. But it soon dawned on him that he had to plan for a capacity of 1,200 patients – that was larger than the private hospitals in Singapore, with the bigger ones having a capacity of about 400 beds.

"There was a lot of trepidation," he revealed. A big part of his worry was recruiting enough manpower. This was especially pressing as the facility was to be set up in just two weeks. He had to scour the company's resources to find 16 doctors and 320 healthcare workers to tend to the patients.

But even with such resources at hand, he said the virus always seemed to be "one step ahead". The onslaught of cases during Delta meant that what was supposed to be a CCF taking in low-risk patients slowly evolved to cater to older patients with existing health conditions, or what was called Stepped-Up CCFs.

This required a ramping up of staff numbers. At the peak of the Delta wave in September and October 2021, there were eight to 12 emergency cases daily at his CCF. Dr Tan and his staff had to be on constant high alert for critical cases which needed to be transferred to Changi General Hospital for more intensive care.

The manpower was so stretched that even operations managers – who were tasked to run the administrative side of things like stocking protective supplies – also voluntarily gowned up and entered the "red zones" where the patients were.

"In the job description, I had told them they would be in the back room, but in the tough times they went into the red zone with us," said Dr Tan. He shared that these managers, who were healthcare-trained, would even step in to help change patients' diapers.

As the numbers continued swelling when the Omicron wave hit, Dr Tan was also tasked to set up a COVID-19 Treatment Facility (CTF) at Hall 9 and 10 of the EXPO Convention Hall in Changi. While CCFs catered to patients who were mostly well, CTFs were for those with potentially severe symptoms.

RMG worked with infrastructure consultancy Surbana Jurong, whose architects and engineers supervised the conversion of the halls into a medical facility. The CTF at EXPO eventually became the largest in Singapore, with over 2,500 beds.

At meetings with MOH and leaders of the public hospitals, Dr Tan said he was given feedback that RMG was able to help relieve the public system with the CTF. This encouraged him.

"I saw the importance of public-private partnerships in a national crisis," he said. "No one can do it alone. I saw the spirit of Singapore and how we showed this insidious enemy we could stand up to it."

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The typical layout of a CCF.

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Orange zones at CCFs are where patients have alighted from or were waiting to be picked up by ambulances.

Fully staffed and equipped with medical facilities, CCFs were touted as the ideal solution to free up hospitals for more severe or urgent cases.

CCFs were organised by zones, and the blueprint drawn up by the public sector was later used by the private sector to build more facilities.

PHOTO: MOUNT ALVERNIA HOSPITAL

Dr James Lam, Chief Executive of Mount Alvernia Hospital, received a request from the Ministry of Health to take in COVID-19 patients in mid-2021.

PARTNERING TO FREE UP PUBLIC HOSPITAL BEDS

Dr James Lam, Chief Executive of Mount Alvernia Hospital, recalled the surreal experience of watching the first batch of COVID-19 patients enter the private hospital in mid-2021.

"We were in the lobby watching the movement," he said, describing how the patients, partially hidden by hoardings, made their way to St Clare Ward on Level 5, which was chosen due to its isolated location.

Just two weeks before, Mount Alvernia had received a request from MOH to take in COVID-19 patients. "When the call came, our first reaction was 'yes, we must do our part. Let's jump in'," said Dr Lam. "But after the excitement, worries kicked in."

First, the hospital had to make sure it was operationally ready in its ventilation and patient routing to ensure the safety of other patients. Second, Dr Lam had concerns that his manpower and costs might be stretched.

Dedicating dozens of beds – up to 86 at one point, or almost one-third of its 300 beds – to COVID-19 patients could have impacted the hospital's revenue, especially with the increase in costs due to regular cleaning and disinfection as well as the deployment of more manpower at entry points and regular tests.

He understood the strain his workforce was under. Yet he also made sure that at-risk nurses, such as older ones with health conditions, were not at the frontline wards.

Over at Mount Elizabeth Hospital, which is run by IHH Healthcare Singapore, wards were also being converted into COVID-19 facilities to house patients with less severe symptoms. This was done from March 2021, to free up capacity at public hospitals.

Ms Lee Ann Aquino Carino was a nurse at Ward 5E, which received the first 29 patients. For her, it meant a different workflow, such as having to don and remove her personal protective equipment (PPE) each time she tended to another patient to prevent cross-infection. Also, the ward's manpower was split into two teams to ensure continuity of care in the event of an outbreak.

Keeping the N95 masks and face shields on also made it onerous to even take a sip of water, but Ms Lee Ann was determined to be hydrated. "I still tried to take care of myself. I'd rather repeat the process of gowning up and drinking water so I can take care of my patients well," she said.

Besides taking in patients from the National Centre for Infection Diseases (NCID) and public hospitals, IHH Healthcare Singapore also ramped up capacity at its Parkway Laboratories, the first private laboratory approved by MOH to process Polymerase Chain Reaction (PCR) tests for COVID-19. In the first eight months, it had processed more than 350,000 PCR tests and close to 16,000 serology tests.

For Dr Noel Yeo, then-Chief Operating Officer of IHH Healthcare Singapore, it showed the importance of unity. "The pandemic taught me there is no need for division between private and public healthcare. This is how we got through it," he observed.

"The camaraderie we have built with MOH and other providers has made us stronger. It is far easier for me now to pick up the phone to call someone from the public system or another private provider."

But it was not enough for public and private healthcare institutions to have smooth working relationships. There was another crucial group who would prove pivotal in the battle against COVID-19: GPs. They were relied on to relay policies to the community as well as reflect their concerns.

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>
> – DR NOEL YEO, FORMER CHIEF OPERATING OFFICER OF IHH HEALTHCARE SINGAPORE

PHOTO: IHH HEALTHCARE SINGAPORE

Dr Noel Yeo, then-Chief Operating Officer of IHH Healthcare Singapore, said that the pandemic underscored the importance of unity and collaboration between public and private healthcare.

PHOTO: CHINESE MEDIA GROUP © SPH MEDIA LIMITED

The Ministry of Health activated about 900 Public Health Preparedness Clinics (PHPCs) through the pandemic to provide subsidised treatment and medication for people with respiratory symptoms.

PARTNERING TO SERVE THE COMMUNITY

With her infant child just a few months old, Dr Elaine Chua, a GP, was determined not to bring any germs home. To do this, she was meticulous in maintaining strict safety precautions when she opened her doors for testing COVID-19 patients at her clinic along Bedok South Road.

The irony of keeping things clean and sanitised was that she looked like "a rubbish bag the whole day", she jested, as she was "fully gowned up" and "wearing double gloves".

With a nurse for her mother-in-law and an anesthetist as her sister-in-law, her family was supportive of her soldiering on even at the height of the pandemic during the Delta wave. "I don't think we considered not doing it," she said matter-of-factly.

With her clinic, Bedok Medical Centre, on the Public Health Preparedness Clinic (PHPC) scheme, Dr Chua knew she was someday going to be at the frontline in the event of a pandemic.

It was for such events that MOH introduced the PHPC scheme, where clinics under the scheme would provide treatment and medication to infected patients during outbreaks. PHPC clinics provided swab tests for eligible symptomatic patients during COVID-19 at no charge.

Through the pandemic, about 900 PHPCs were activated and took on roles such as administering vaccinations and testing. This meant that doctors at PHPC clinics were spearheading vaccination and testing efforts. About 300 clinics also participated in the Home Recovery Programme.

More importantly, GPs like Dr Chua were a primary source of assurance and information for the community. Patients with medical conditions, who were unsure if they could get vaccinated and had queries that could not be answered at vaccination centres, felt assured when they could discuss their concerns with doctors they trusted.

Dr Chua recalled how she took a year to convince an 85-year-old woman to get vaccinated, just before safe distancing measures were relaxed. When the senior did get infected, her condition was less severe. "We were in constant contact with her; her questions could not be addressed in one sitting," she shared.

MOH's Primary and Community Care Division (PCC), which oversees the primary care providers such as GPs and polyclinics, knew the importance of getting them to offer ground support.

The groundwork was laid in 2018 when the Primary Care Network (PCN) scheme was introduced, and built on earlier primary care transformation efforts in the past decade. The aim was to organise GPs into networks to support more holistic care closer to the community, especially for those with chronic conditions. All PCN clinics were a part of the PHPC scheme, also allowing MOH to better support GPs in funding and administration.

This network proved timely and useful for the pandemic, which required closer communication than ever. MOH's interactions with PCNs deepened through COVID-19.

Dr Ruth Lim, Director of PCC, said the PCNs enabled MOH to quickly reach out to the dozen or so leaders of the various networks, easily transmitting messages to around 600 clinics. This allowed the Ministry to quickly relay changes in protocols and also receive feedback on them.

Dr Tham Tat Yean, Chief Executive Officer of Frontier Healthcare, which runs 17 clinics, said the PCN made a big difference in providing timely information and guidance compared to during the SARS outbreak. "There was peer leadership, support and coordination," he said.

Doctors even used the PCN platforms, whether via WhatsApp or Telegram groups, as an outlet when they felt overwhelmed. "It was therapeutic – to use a medical term – to 'ventilate' and discuss things in the chat group. It was helpful to face the crisis as a community," added Dr Tham.

Such close collaboration, not just among GPs but between MOH and GPs, would prove crucial for clinical outcomes as well.

The efficacy of testing kits was another area where MOH required results on a mass scale. The primary care space would provide that, especially through GPs who would also give patients the results of their tests.

Dr Chua from Bedok Medical Centre recalled an instance when MOH reacted quickly to her feedback. She pointed out to the Ministry that there were some patients in the neighbourhood who were isolated due to the virus, and were living alone and not able to buy food.

In response, the People's Association was roped in to deliver food to such individuals. "GPs play many different roles,

PHOTO: THE STRAITS TIMES © SPH MEDIA LIMITED

General practitioners (GPs) were vital in providing frontline care to the public. They extended operation hours for two weeks amid surging COVID-19 cases during the Omicron wave.

and my priority is being a friend in the neighbourhood," said Dr Chua.

Dr Lim from PCC said that MOH was also keen to support GPs, especially as queues outside clinics started to form during the Delta wave. "A GP texted me and described it as a Toto queue," she quipped, referring to the lines that sometimes snake around lottery establishments.

Her department organised webinars to address concerns GPs had, set up IT systems, helped them procure protective equipment like N95 masks, and provided grants to help with different COVID-19 initiatives. "We had to send the troops out with the right defence and equipment to reassure them," she said.

Dr Tham from Frontier Healthcare added, "My number one concern was to get MOH's support in equipping GPs. Our MOH colleagues took these comments very seriously, which I'm grateful for. It was almost as if we were on the same team without barriers."

Reflecting on the collaboration with primary care providers, Dr Lim shared, "We hope they have seen MOH as good partners. We could not have tackled COVID-19 if we had just the hospitals."

From external care facilities to GPs, the substantial involvement of the private sector during the pandemic has paved the way for future deeper collaborations.

HOPE FOR HOSPITALS, WITH GPs PROVIDING FRONTLINE CARE

FOR VETERAN CLINICIAN Dr Tham Tat Yean, COVID-19 was the greatest challenge he faced in more than 20 years of managing his group practice, Frontier Healthcare.

"The pandemic surely ranks as the most stressful period in my career," said Dr Tham, who oversees a workforce of about 130. "There were concerns at multiple levels."

The priority was ensuring the health of his co-workers, being mindful that they had families waiting for them at home. This meant infection controls at the clinics had to be top-notch and workers had to spend long hours in uncomfortable, tight-fitting protective gear as they went about daily clinical duties.

Dr Tham made the call for mask-wearing to be mandatory at Frontier Healthcare before it became a nationwide requirement.

Still, there were instances when clinical staff had been infected, resulting in manpower issues. "There's a lot of strain on the healthcare ecosystem especially in a small setting. One person makes a lot of difference as there's no army of workers in the clinic," he said.

He also had to be extra sensitive to the well-being of his staff as they clocked long overtime hours during the Delta strain, remaining open at 11pm, up to two hours past closing time.

This was to accommodate the long queues of people that would stretch into neighbouring coffee shops. "At times, you weren't sure if someone was queuing to order food or for the clinic," quipped Dr Tham.

To address manpower issues, he tried to recruit more locums and clinic assistants, but this had varying degrees of success too.

At the same time, the constantly updated circulars on changing protocols complicated things as well.

Ultimately, there was one motivating factor which drove his team to power through the tough times – they had to support their peers in the public system.

"I had colleagues working in the hospitals saying, 'If the GPs cannot provide frontline care, there's no hope for the hospitals'," he said.

GPs like Dr Tham and many others were instrumental in fighting the viral enemy at the frontlines, holding the fort to keep patients from flooding the emergency departments and hospitals.

Veteran clinician **Dr Tham Tat Yean** found the pandemic to be one of the most stressful periods in his more than 20 years of managing his group practice, Frontier Healthcare.