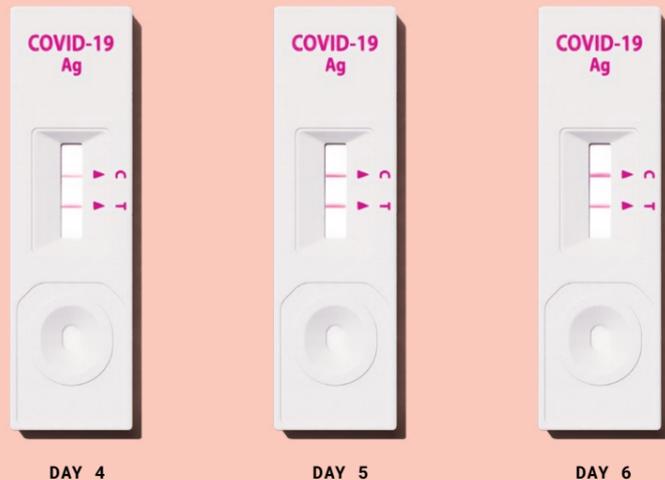
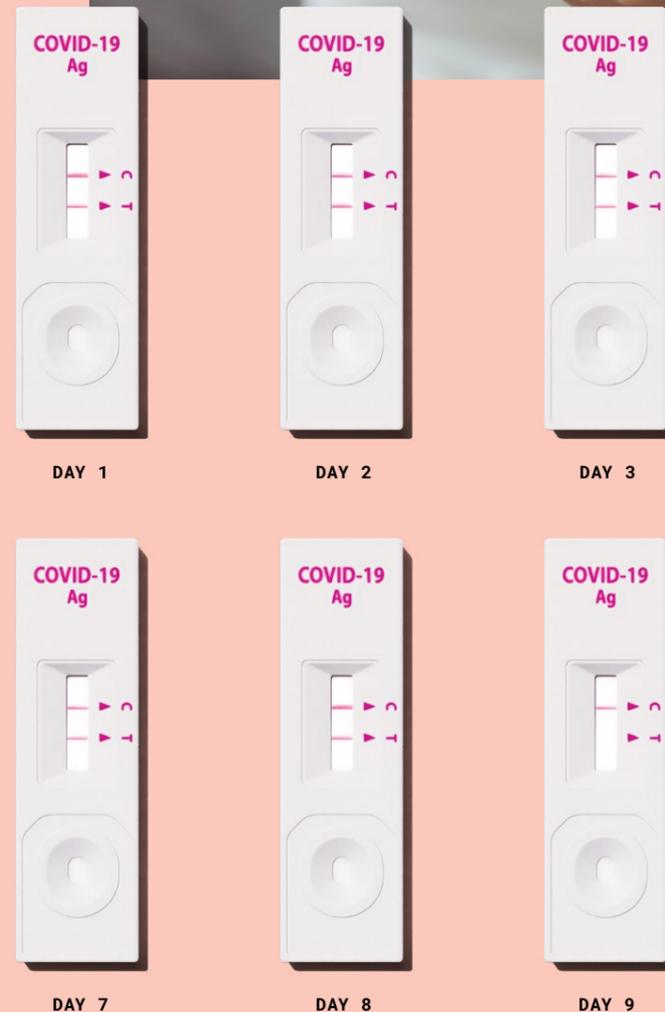


# THE HOME RECOVERY SOLUTION



PHOTO: STOCK.ADOBE.COM/SARAYUTSRIDEE



**FOR** most people, being infected with COVID-19 meant isolation in hospitals or healthcare facilities while close contacts were quarantined. Until September 15, 2021.

The date marked a turning point in how Singapore dealt with the virus, with vaccinated patients allowed to recuperate at home and close contacts no longer placed in quarantine facilities. It was the start of the Home Recovery Programme (HRP).

This move was critical in Singapore's shift towards living with COVID-19, as over 80 per cent of the population had been vaccinated by then and new cases

were mostly asymptomatic or had mild symptoms. It also relieved the burden on an already stretched healthcare system.

The HRP pilot started in August 2021, two months after the idea of endemicity was brought up to the public, with the aim of gradually rolling out the programme and refining it along the way.

But the Delta variant caused an unexpected surge in case numbers, resulting in HRP being ramped up quickly – to some consternation. Transiting to HRP was not so easy. It depended on whether the public was ready to treat COVID-19 as endemic like influenza.

## ROLLOUT OF THE HOME RECOVERY PROGRAMME (HRP)

2021  
AUG

30 AUG 21  
Pilot begins

SEP



PHOTO: CHINESE MEDIA GROUP © SPH MEDIA LIMITED

A vending machine deployed by the Ministry of Health at Block 714 Ang Mo Kio Avenue 6, where people could collect self-test kits.

**BOOSTING CONFIDENCE AMID CONCERNS**

In mid-2021, Singaporeans were still deeply cautious of the virus, with many unwilling to have patients in their neighbourhoods. The overriding belief was that COVID-19 patients should be confined to the hospitals.

Professor Kenneth Mak, Director of Medical Services at the Ministry of Health (MOH), said this prevalent view among the public was one consideration which delayed the implementation of HRP – an idea mooted as early as the first quarter of 2021 before the Delta wave hit.

“When this idea of home recovery was first floated, a lot of people were very worried, saying they didn’t want the patients in their communities,” he noted. “There were comments such as ‘when my neighbour comes home, how can I be sure he’s no longer infectious’. So we didn’t move on this at that time, because we felt the public wasn’t ready.”

This pivotal change was precipitated, ironically, by the emergence of the

Delta variant and the toll it took on the healthcare system. “That changed our paradigm,” said Prof Mak, adding that the shift to HRP was prompted “by the concern that our hospitals would be overburdened”.

“It was also driven by the development that many people were vaccinated and infections were not as serious as before. We could therefore make a fundamental change and move towards home recovery.”

This shift was effectively a confidence

booster for the nation. “HRP was a strong signal to the public that we were in a very different phase of the pandemic and it was not as fearsome as it was initially,” said Professor Tan Chorh Chuan, Chief Health Scientist at MOH.

But for some, having to recover at home led to some logistical challenges. For example, a worry was how infected seniors could cope if they were living alone and did not have the digital skills to order meal deliveries online.

“WHEN THIS IDEA OF HOME RECOVERY WAS FIRST FLOATED, A LOT OF PEOPLE WERE VERY WORRIED, SAYING THEY DIDN’T WANT THE PATIENTS IN THEIR COMMUNITIES.”

— PROF KENNETH MAK, DIRECTOR OF MEDICAL SERVICES AT THE MINISTRY OF HEALTH



**A BIRTHDAY SURPRISE AT THE GATE**

**EVEN AS THE NATION** went into home recovery mode, some still required special care and help with accessing essential supplies and services. For example, MOH worked with the People’s Association and the Silver Generation Office (SGO), the outreach arm of the Agency for Integrated Care, to attend to the needs of seniors who were on the Home Recovery Programme.

Ms Estty Natalie Lee was one of the SGO officers who sent meals and groceries to their doorstep. Based at the SGO East Coast office in Fengshan, Ms Lee

is a familiar face with many elderly residents in the area.

She and her colleagues also went the extra mile to bring cheer during COVID. When they noted from the records that a senior was quarantined on her birthday, they bought a slice of cake for the elderly woman.

“If I couldn’t leave home on my birthday, it would be very upsetting. When I showed up with the groceries and cake, she was shocked as she didn’t expect anything,” said Ms Lee. “I knew a slice of cake would brighten up her day.”

SEP

**10 SEP 21**  
Number of daily cases rises from an average of 76 to 288, and is expected to rise to more than 1,000.

**15 SEP 21**  
Home recovery becomes the default care model for fully vaccinated COVID-19 patients aged 12 to 50, who do not have vulnerable household members such as those above 80, pregnant or with a weakened immune response.

**18 SEP 21**  
HRP is further expanded to include fully vaccinated patients aged 51 to 69.

**23 SEP 21**  
MOH releases frequently asked questions (FAQs) for home recovery patients.

**24 SEP 21**  
Minister for Health Ong Ye Kung announces plans to prepare for 5,000 daily new cases, following consecutive days of record-high new cases of 1,457 and 1,504.

**29 SEP 21**  
The Singapore Armed Forces (SAF) sets up the Home Recovery Task Group to scale up and bolster HRP, deploying more than 450 personnel.



The Ministry of Health's COVID-19 hotline received as many as 7,000 calls per day at the peak of the Delta wave.

There was another challenge. Not everyone understood HRP instructions. This, and other concerns such as long wait times between testing positive and being brought to recovery facilities if they were not eligible for HRP, led to many callers inundating the COVID-19 hotline.

Some callers, for instance, were scratching their heads over the instructions in the home recovery pamphlet they had received. What if the room had no attached toilet? What if they had vulnerable individuals at home?

At the peak of the Delta wave, MOH's COVID-19 hotline handled a whopping 6,000 to 7,000 calls a day. The number of agents tripled to 250 at its peak to handle the volume.

## HANDLING HALF-A-MILLION PUBLIC QUERIES

**THE MINISTRY** saw a more than tenfold increase in feedback volume as compared to before the pandemic. Prior to COVID-19, questions centred on policies such as MediShield. During HRP, most queries were related to the implementation of the programme.

VOLUME OF FEEDBACK RECEIVED BY MOH:

2019  
27,000

2020  
250,000

2021  
500,000



OCT

9 OCT 21

Prime Minister Lee Hsien Loong addresses the nation and cites HRP as central to Singapore's "path forward to a new normal".

11 OCT 21

Simplified protocols for HRP are rolled out.

27 OCT 21

Singapore's daily new cases reach 5,000 for the first time, with 10 dying from virus complications, bringing the total death toll to 349. A total of 20,895 patients, or 74.3 per cent of COVID-19 community cases, are in home recovery.

**"WE NEVER CONSIDERED STOPPING THE HOME RECOVERY PROGRAMME, OR OUR HOSPITALS COULD NOT HAVE COPEd."**

— ADJ ASSOC PROF RAYMOND CHUA,  
DEPUTY DIRECTOR OF MEDICAL SERVICES  
(HEALTH REGULATION GROUP)  
AT THE MINISTRY OF HEALTH

"Indeed, this was a paradigm shift, and so people were worried and asked many questions on what they needed to do to monitor themselves or their loved ones at home. Some would even say 'wait, my father or sister wants to talk to you too', and the hotline became more like a hotline for families to ask their questions," said Adjunct Associate Professor Raymond Chua, Deputy Director of Medical Services (Health Regulation Group) at MOH.

"But we never considered stopping HRP, or our hospitals could not have coped. Our priority was to avoid going into a circuit breaker and a standstill again."

However, more effort was needed to regain the confidence of the public, which was affected by the confusion around HRP. Some may say it took an army.



**Adj Assoc Prof Raymond Chua**, Deputy Director of Medical Services (Health Regulation Group) at the Ministry of Health, saw the move to home recovery as a paradigm shift that would cause considerable concern among the public, but was significant nonetheless in ensuring that hospitals could cope and preventing another circuit breaker from happening again.

# IT TAKES A CALLING



**WITH THOUSANDS OF CALLS AND EMAILS** flooding in daily, how did the MOH Service Excellence team cope?

Leading the team was MOH Service Excellence Department's Senior Assistant Director Mr Max Liew, who had never witnessed feedback numbers of such scale in his more than 20 years of experience.

Queries that came in could be on the government's mask policies, whether children could go to their grandparents' home during the circuit breaker, or appeals to get vaccinated earlier before travelling overseas for work or studies.

The increase in volume of public queries prompted him to beef up his team of five at the start of 2020. Besides bringing in temporary staff and enlisting MOH

colleagues from other divisions to respond to email queries, he also sought manpower support from other government agencies.

When the lines were overwhelmed during HRP, the Singapore Armed Forces stepped in to help man the Home Recovery Hotline, offloading some of the calls that would otherwise be directed to the MOH General Hotline, COVID-19 Hotline and Quality Service Manager Hotline.

Ms Lam Wy-ning, Director for Case Management Contact Centre at MOH's Crisis Strategy Operations Group said the surge in cases required a change in the training regime for about 250 people who might not have the necessary skills to support the call centre operations.

The training programme was reduced

from five to two days to expedite operations. "Instead of ensuring each agent knew everything, we focused on each agent being well-versed with the most important and common questions," she said. "This worked as our customer satisfaction score went up."

Still, more manpower was required. Bolstering the manpower were personnel from the Public Service Division (PSD). Mr Mohammed Jalees, Director of the Access to Justice Programme at the Singapore Judiciary, was leading the PSD team then.

He helped to set up a call centre with about 15 experienced operators from the Central Provident Fund Board. Supplementing the team were volunteers from other public agencies. The centre started with about 50 agents, with numbers increasing to about 90, handling roughly 1,200 calls a day.

"Everyone in the team knew there was a crisis and wanted to get the job done," he said. "They were all very willing to chip in and learn without complaints."

At the same time, Mr Liew was looking to hire for the Service Excellence team, but recruitment was challenging. "Some were hesitant to join because of the high workload," he said.

Eventually, he managed to increase his team's size from five to 10. One of the staff he recruited then was Senior Manager Ms Lim Shi Ping, who came from the private sector.

Ms Lim had said she was prepared to work after office hours when she took up the

job. "It was expected. We just had to tide over that demanding period, and the team really bonded in the course of it."

For Mr Liew, there were many trying times, especially during the circuit breaker period when he had to supervise his children in their home-based learning while clocking hours on weekends to clear his backlog of work.

"Even while trying to fall asleep, I had thoughts of how to handle a case better," he shared.

At times, some cases and situations were heart-wrenching when he had to reject appeals from the public to visit critically ill loved ones. "You could sense their distress. But sometimes difficult decisions had to be made in the interest of public health," he noted.

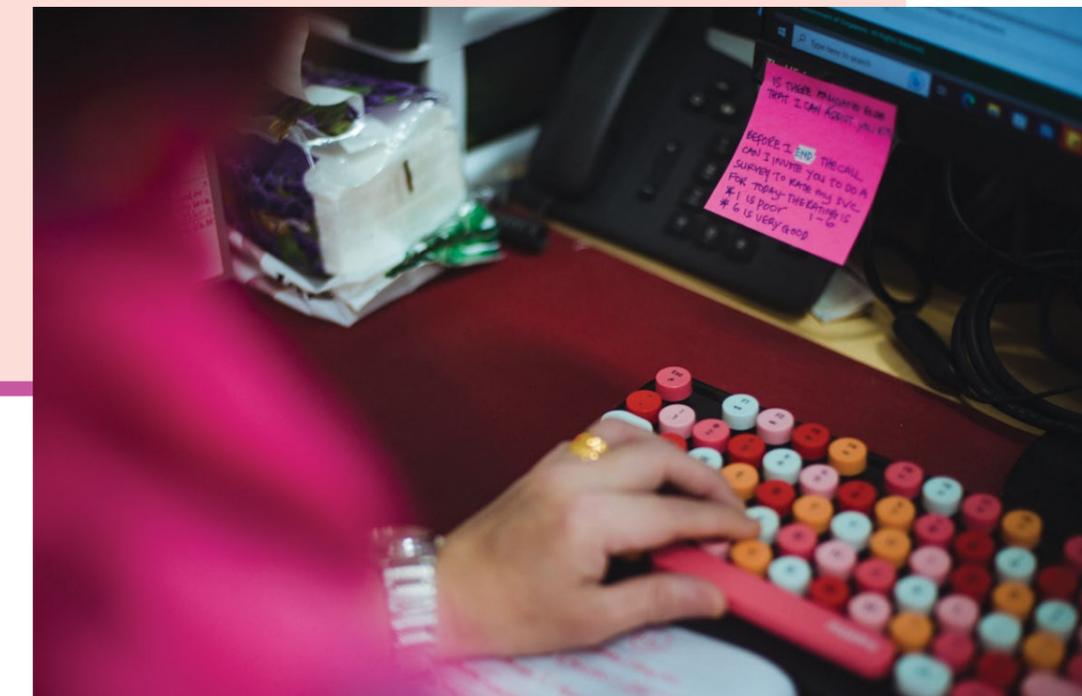
"But we would always see how best we could help our members of public by looking at alternatives such as video calls with their loved ones, which was a compromise that still aligned with public health objectives," he added.

Apart from calls, the MOH team also received a peak of 1,000 emails daily. MOH Service Excellence Department's Senior Manager Mr Daniel James Koh was tasked to oversee the team responding to emails.

"It was hard to explain the Home Recovery Programme sometimes," he revealed, adding that they also had to explain to people how to isolate themselves from their family members within the confines of a small flat. "But this had to be done so that the country could transition from COVID-19 being almost taboo when you got it, to one where it was normal for people to recover at home."

(From left) Mr Lee Jie Fei, Ms Vanessa Pang, Mr Daniel James Koh, Ms Yusnita Helmi, Ms Lim Shi Ping and Mr Max Liew.

Senior Assistant Director of the Ministry of Health's Service Excellence Department Mr Max Liew had to beef up his original team of five (pictured) when the volume of public queries escalated at an unprecedented rate since the start of the pandemic.



NOV

**24 NOV 21**  
SAF announces that it will return management of HRP to MOH.



Group Director of the Ministry of Health's Crisis Strategy and Operations Group **Mr Dinesh Vasu Dash** sought help from Singapore Armed Forces personnel to plug gaps in the delivery of the Home Recovery Programme, such as handling phone calls.

### REINFORCEMENTS ARRIVE

A week after HRP was implemented, social gatherings were restricted to two and work-from-home became the default practice once again starting from September 27. That period was termed the Stabilisation Phase, a response to the Delta variant that was infecting exponentially more people than before.

“We got counter-attacked,” exclaimed Mr Dinesh Vasu Dash, a former Brigadier-General who had spent 27 years in the military before joining MOH as Group Director of the Crisis Strategy and Operations Group in July 2020.

“We thought that with high levels of vaccinations, there shouldn't have been a spike of that magnitude.”

To fight back, Singapore Armed Forces (SAF) troops were rallied. In total, more

than 450 SAF personnel, most of them full-time national servicemen, were roped in to plug gaps in the delivery of HRP as cases rose exponentially.

Mr Chan Yeng Kit, Permanent Secretary for Health, who was previously the Permanent Secretary for Defence, knew that the SAF was up to the task. “SAF did not just have the manpower, but a whole command structure. I could give them an assignment, and they could take it and run,” he said.

The SAF Commander for the Home Recovery Task Group, Colonel Tong Yi Chuen, remembers the call from the then-Chief of Army on the evening of September 24. He agreed to activate the Combat Engineers Formation to assist MOH.

“At that point, I was somewhat apprehensive given the mammoth

tasking,” said Col Tong. “We hoped that our involvement would provide fresh perspectives, energy and much-needed relief.”

His team laid out a four-point battle plan. First, the rules for home recovery were streamlined to sort out patients eligible for home recovery.

Second, rapid onboarding was conducted, to promptly establish touchpoints to assist patients.

Third, patients were assigned to

care managers, who were single points of contact to provide end-to-end support.

Fourth, the SAF set up more phone lines and helped to coordinate with telemedicine providers and grassroots volunteers, giving assurance to residents that they had ready and quick access to help.

As the patients' first line of contact, the soldiers worked 12-hour shifts from 9am to 9pm, with one rest day every two working days. The training included

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— COLONEL TONG YI CHUEN, SINGAPORE ARMED FORCES COMMANDER FOR THE HOME RECOVERY TASK GROUP

DEC

27 DEC 21

Cases with mild or no symptoms are allowed to recover under HRP.



PHOTO: MINISTRY OF DEFENCE

**Colonel Tong Yi Chuen** from the Singapore Armed Forces chairing a meeting of the Home Recovery Task Group, set up to augment the Home Recovery Programme.



PHOTO: MINISTRY OF DEFENCE

**Corporal Luth Danish Bin Zani** was one of the personnel deployed by the Singapore Armed Forces to man hotlines that provided information to home recovery patients.

familiarising themselves with the HRP protocols, handling phone calls as well as a cloud-based workflow system to manage cases.

“These 18- or 19-year-old soldiers went through rigorous training to be call operators. Their level of maturity was quite amazing and everyone knew the mission,” recounted Mr Dinesh.

Alongside the SAF, the People’s Association would also send necessities like

**“THE HEALTHCARE PROTOCOLS BEFORE PROTOCOLS 1-2-3 WERE COMPLICATED BECAUSE THE COURSE OF THE DISEASE DEPENDED ON FACTORS SUCH AS A PATIENT’S VACCINATION STATUS AND AGE.**

**IT WAS NOT POSSIBLE TO ADVISE THE PUBLIC ON THOSE TERMS.”**

– MR NG HOW YUE, PERMANENT SECRETARY FOR HEALTH DEVELOPMENT AT THE MINISTRY OF HEALTH

groceries to HRP patients in need, while the Silver Generation Office, part of the Agency for Integrated Care, would visit and call elderly patients too.

It was with much effort that 90 per cent of HRP patients could be contacted within 24 hours of submitting their details online, before being assigned a Home Recovery Buddy and guided step by step till they were well again. Yet, more had to be done.

**AS SIMPLE AS 1-2-3**

Apart from enlisting help from the army, the HRP protocols also had to be clarified. Many became more afraid of the rules and repercussions than the virus itself.

Ms Lim Siok Peng, Director of Corporate Communications at MOH, recalled how the general approach from the start of the pandemic in early 2020 was to tweak the protocols incrementally, even if that made the directives more befuddling during HRP.

It required someone with a macro view to unknot the twists and turns. That person was Minister for Health Mr Ong Ye Kung, who had just assumed the role a few months before in May 2021.

“He decided to just dismantle the old structure of protocols,” said Ms Lim. “That helped a lot. You have to credit him with coming up with the new idea, he simplified it and made it very elegant.”

Mr Ong introduced Protocols 1-2-3 on October 9 at a Multi-Ministry Taskforce press conference. The protocols, presented in the form of a flowchart, gave clear directions on what individuals should do if they were unwell (Protocol 1), or well but tested positive (Protocol 2), or were identified as a close contact (Protocol 3).

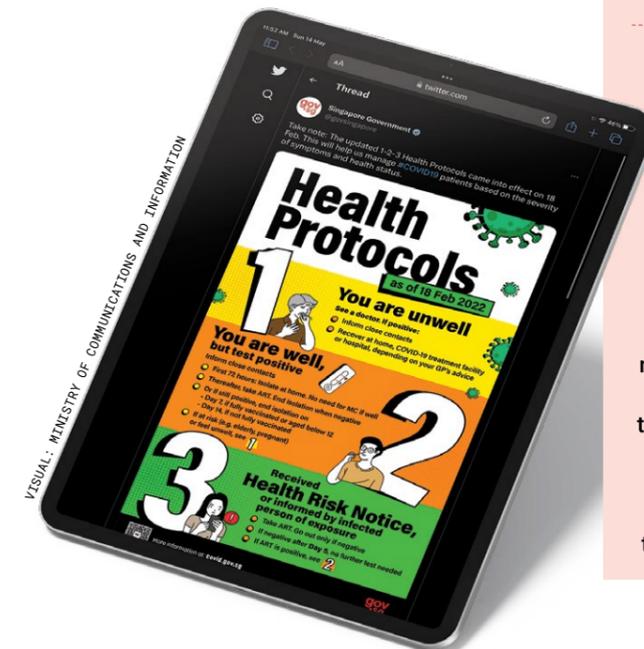
This brought greater clarity to the public, as compared to initial protocols

that were more complicated and difficult to remember and navigate.

By the end of October, a month since the SAF started steering the operations, HRP was running smoothly without the hiccups that plagued its initial stages.

When Singapore’s daily new cases reached 5,000 on October 27, 2021, 20,895 patients – or 74.3 per cent of COVID-19 community cases – were in home recovery, significantly lightening the burden on the healthcare system.

Another month later, SAF handed over management of HRP back to MOH. The mission of stabilising the situation was accomplished.



VISUAL: MINISTRY OF COMMUNICATIONS AND INFORMATION

# PROTOCOLS 1-2-3

## 1 INDIVIDUALS WHO ARE UNWELL

These individuals are to see a doctor to get tested. If they are tested positive, they are to stay at home and isolate themselves from others.

## 2 INDIVIDUALS WHO ARE WELL BUT TESTED POSITIVE

These individuals have to stay at home and isolate themselves for 72 hours. If they test negative on their ART tests after that, they can end their isolation.

If they feel unwell at any point in time, they should see a doctor.

## 3 INDIVIDUALS WHO ARE IDENTIFIED AS A CLOSE CONTACT

Close contacts must immediately take an ART test, and can continue with daily activities if they test negative. For the next five days, they must test negative on the same day if they wish to go about their daily activities, after which testing is no longer required.

If they test positive, they should refer to Protocol 2.

# PRESSING THE RESET BUTTON

**IN CHINESE MYTHOLOGY**, there is a character named Zhou Chu, a gangster greatly feared by the people. However, there were two other “evils” which terrified villagers: a fierce tiger in the mountains and a ferocious dragon in the seas.

After Zhou Chu eliminated these two dangers, he realised he was also a threat feared by the people, and decided to turn over a new leaf. The same could be said of the complicated COVID-19 protocols in Singapore. While they were meant to eradicate the virus, they were also a source of frustration at times.

Drawing the parallels between the ancient Chinese parable and the COVID-19 battle in the modern Republic, Minister for Health Ong Ye Kung said that people had perhaps come to view the restrictive quarantine measures and complicated protocols almost as enemies – or “evil” – even as they helped to rid the virus.

If those were the first two evils, the third evil of Zhou Chu reforming himself was akin to MOH doing away with restrictive quarantine protocols due to the changing situation.

“Zhou Chu killed all three disasters and when it was all done, the villagers all heaved a huge sigh of relief,” said Mr Ong, comparing it to the day Singapore pivoted towards home recovery and thousands were released from their isolation.

“Everyone just felt ‘phew, I will no longer get an SMS and lose my freedom for 14 days,’” he said, referring to the isolation

notification COVID-19 patients would receive.

As for the “evil” of complicated protocols, Mr Ong also sought to remove it. He had earlier acknowledged in Parliament the confusion and delay surrounding HRP in terms of conveyancing and contacting patients.

He subsequently shared how his staff recommended tweaks to the home recovery policy in the transition to living with COVID.

“I said, ‘No, that’s not good enough.’ We needed to press the reset button, forget about the SARS playbook,” he shared.

He scribbled four initial rules on a piece of paper which would be the first early draft of the 1-2-3 health protocols, and handed it to MOH staff.

“They came back and said, ‘Minister, your rules are too complicated. We only need three rules.’ So that is how Protocols 1-2-3 came about,” he disclosed with a smile.

Just like in the ancient Chinese parable, where Zhou Chu realised that the third scourge he had to eradicate was his own fearsome behaviour, the Ministry of Health similarly sought to eliminate its complicated home recovery protocols. The result was the familiar, and simplified, Protocols 1-2-3.

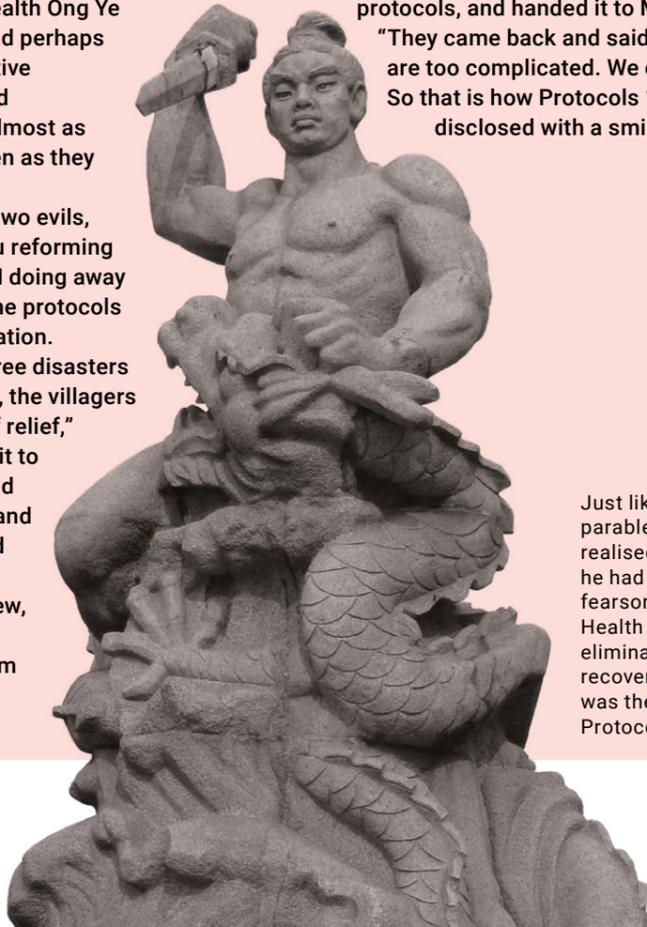


PHOTO: 瑞興的日記本, CC BY-SA 3.0, VIA WIKIMEDIA COMMONS

## NOT A SOLO EFFORT

After a shaky start, HRP got on steady ground with help from partners like SAF, the Silver Generation Office, and the hospitality sector when hotels were used as isolation and quarantine facilities.

For Adj Assoc Prof Chua, MOH’s Deputy Director of Medical Services (Health Regulation Group), it was such partnerships and camaraderie that fuelled MOH through the extra laps.

“Looking back, I never expected to work hand-in-hand with someone from the airline or hotel industry,” he said. “Some of them now joke that they can be pseudo-doctors asking medical questions as they helped with the ‘triaging’ of patients at the call centre.” Triage refers to the preliminary assessment of patients or individuals to determine if they are eligible for HRP or should be conveyed to a care facility.

In return, MOH staff “learnt service skills from them – how to deal with complaints, exercising patience in adversity and remaining calm during a crisis”.

Besides underscoring the importance

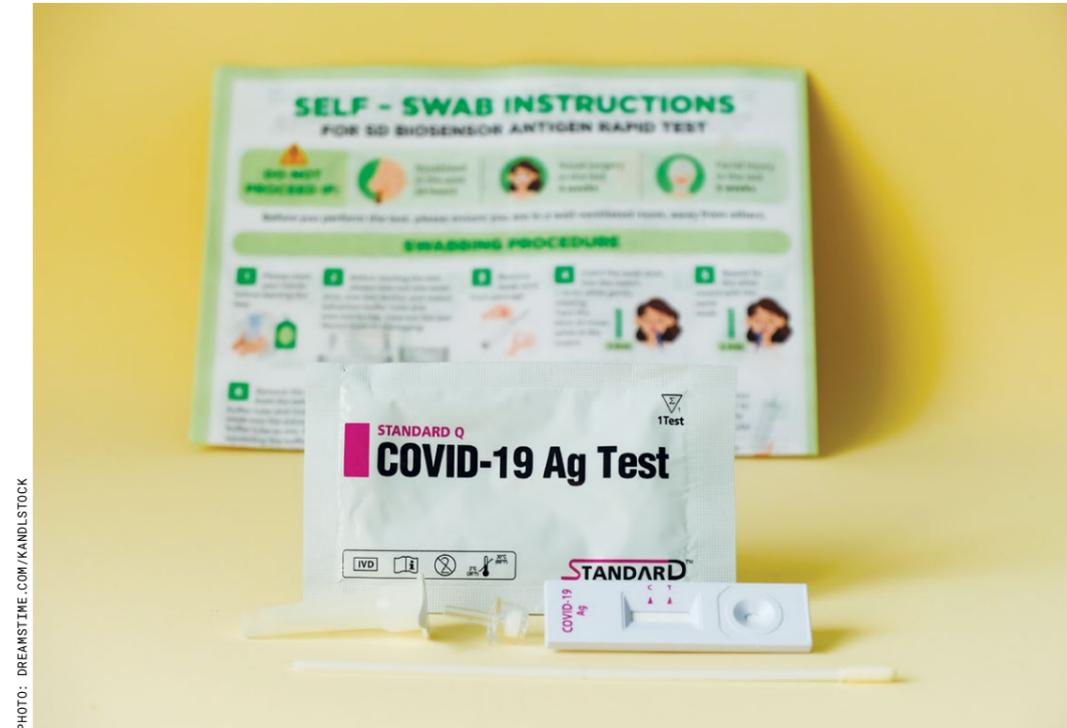


PHOTO: DREAMSTIME.COM/KANDLSTOCK

Individuals on the home recovery programme could self-test at home, enabling precious healthcare resources to be diverted to those in urgent need.

of partnerships, HRP was also a step in the right direction ensuring that the nation’s healthcare system would not be overwhelmed.

By mid-December 2021, Delta cases were reduced from a peak of over 5,000 to below 500 a day, with numbers gradually falling further. Hospital beds and COVID-19 treatment facilities could finally operate within a healthy capacity.

Announcing this in Parliament then, Mr Ong said: “Right-siting COVID-19 patients is important, so that acute healthcare resources are kept available to those who truly need them. That is why we implemented HRP.”

It was based on the ability to adapt and collaborate that Singapore would improve its healthcare system and become more pandemic-resilient.