



Conference Paper

Singapore's Approach to Crisis Management: From Whole-of-Government to Whole-of-Nation

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The Institute of Governance and Policy (IGP) is a node for research on strategic policy issues facing Singapore. It aims to further new insights, catalyse thought leadership in the Public Service, and advance Singapore's public governance model.

ABSTRACT

Public administration literature seldom focuses on crisis management, yet the lives and well-being of citizens in civil disasters to terrorist attacks depend on effective crisis response. This paper examining the Singapore Public Service's management of the COVID19 pandemic expands the crisis management discourse and offers references on crisis preparedness for policymakers. Reviewing pre-COVID19 literature, Low (2016) was one of the few works on Singapore's whole-of-government (WOG) crisis management approach. It argued that a WOG-mindset among public officers was key in enabling inter-agency coordination intended by the Homefront Crisis Executive Group (HCEG) structure. This paper updates with Singapore's handling of the COVID19 crisis. Through interviews with key officers and analysis of relevant records, it examines two aspects of the Singapore bureaucracy's management of the COVID19 crisis. Firstly, how did the HCEG structure provide effective inter-agency coordination responding to the crisis? Was there coherent WOG-mindset among Public Service leaders and officers, and how did it facilitate a coordinated response? Secondly, how was the HCEG structure adapted to coordinate the initiatives of citizen volunteers and private companies? Reflecting on the lessons in conclusion, the paper focuses on the role that leadership and a Whole-Of-Government mindset played in Singapore's adaptation of its HCEG structure to coordinate a whole-of-Singapore crisis response.

KEYWORDS

Crisis Management, Crisis Response, Homefront Crisis Executive Group, HCEG, Whole-of-Government, Whole-of-Nation, Whole-of-Singapore, COVID19, pandemic.

Singapore's Approach to Crisis Management: From Whole-of-Government to Whole-of-Nation

1. Significance, Scope and Approach of Paper ¹

Strong leadership and ethos among officers enabled the Singapore Public Service to organise government agencies and volunteers in mounting a whole-of-nation response to the COVID19 crisis. This thesis contributes to the literature on Singapore's crisis management and provides insights on crisis preparedness for policymakers and practitioners.

Singapore's COVID19 response was acknowledged as among the most effective in the world. The World Health Organisation (WHO) was "very impressed with the efforts [Singapore was] making to find every case, follow up with contacts and stop transmission" in early 2020 and complimented the country's "all-of-government approach" (*Straits Times*, 2020a and 2020b). Singapore was among the first to begin COVID19 vaccination in December 2020; it achieved one of the highest vaccination rates in the world within a year. When the WHO declared an end to the pandemic in May 2023, Singapore's COVID19 fatality rate was one of the lowest globally.

Literature review suggests that public administration writings on Singapore's management of the COVID19 crisis are limited, despite its effective handling of the COVID19 pandemic. Public administration discourse rarely dwell on crisis management, concentrating on subjects from budgeting to policymaking. Works on the Singapore bureaucracy similarly spanned subjects from personnel management to organisational reforms (Quah, 1996; Jones, 2002; Quah, 2010; Ang and Soon, 2024; Cinar et al., 2024). Yet effective crisis management is crucial to the lives and well-being of citizens during civil disasters and terrorist attacks. Before 2020, Low (2016) was among the few articles on Singapore's whole-of-government (WOG) crisis management approach.

There were many writings on how Singapore handled the pandemic, but less on the Public Service's WOG crisis management. Some were published even before COVID19 ran its course (Abdullah and Kim, 2020; Christensen, Lim and Lim, 2022; Woo, 2022). Others were in specialist fields like medicine (Quah et al., 2024; Wei et al., 2024) and communications (Huang, 2024; Sheng, 2024). A few studied Singapore as a foil to compare responses by other jurisdictions (Cheung and Low, 2023; Nair and Garg, 2024). Evidently a gap remains in public administration literature on the Singapore Public Service's WOG response to the COVID19 crisis.

¹ The views in this paper are the author's and do not reflect those of the Civil Service College. The paper is for conference presentation and not to be cited without permission from James.Low@CSCollege.gov.sg.

The scope of this paper is aimed at expanding the literature in the area and closing the gap. The research draws from three primary sources: interviews with public officers who provided insights into decision-making processes and WOG coordination; official government records; and media reports that contextualised these responses. Secondary publications offered both verification and retrospective analysis. Through these sources, this study reconstructs and analyses the Public Service's coordination of the pandemic response.

This paper is not meant to be a comprehensive discussion of crises or WOG in and of themselves. It begins with a brief history of crisis management in the Singapore Public Service which outlines the impetus for setting up a crisis management structure and its evolution till 2019. The intention is not to offer a detailed coverage of each crisis.

The paper then focuses on the Singapore Public Service's response to the COVID19 pandemic, examining two aspects of its management of the crisis against the framework in Low (2016). Firstly, how did the WOG structure provide effective inter-agency coordination? Was there coherent WOG-mindset among Public Service leaders and officers, and how did it facilitate a coordinated response? Secondly, how was the WOG structure adapted to coordinate the initiatives by citizen volunteers and private companies towards a whole-of-Singapore response? Was this effective? The paper concludes by discussing the role leadership and a WOG-ethos among officers in Singapore's adaptation of its HCEG structure to coordinate a whole-of-Singapore crisis response.

2. Whole-of-Government Crisis Management: A Brief History for Context

When foreign terrorists hijacked a ferry named Laju in 1974 and took its crew hostage, Singapore did not have the capabilities to deal with the situation (Nathan, 2011; Tee, 2011). The hijackers eventually released the hostages in exchange for safe passage out of Singapore. The Singapore Police Force (SPF, 2002) acknowledged that, "The Laju incident exposed the weakness of not having a sufficient reserve of trained officers who could be relied on to supplement regular officers during a security crisis". Questions over whether the Ministry of Home Affairs (MHA) or Ministry of Defence (MINDEF) should lead the crisis management was resolved after the political leadership placed MINDEF in charge (Nathan, 2011; Yoong, 2014). The incident highlighted the need for dedicated capabilities and coordination among different agencies during such crises.

The Executive Group (EG) was subsequently set up and provided a structure to handle hijacking and hostage-taking (Cheong, 1995). It identified the Permanent Secretary of the MHA as Chairman of the EG which comprised senior officers from security forces to communications and diplomatic ministries. The EG was able to effectively coordinate the multi-agency rescue efforts when the Hotel New World collapsed in 1986. Agencies involved included the SPF, Singapore Armed Forces (SAF), Singapore Civil Defence Force (SCDF), Ministry of Health (MOH) and other agencies. Although 33 died in the incident, 17 lives were saved. The EG became regarded as an effective inter-agency crisis coordination platform across the Singapore Public Service (Cheong, 1995; National Security Coordination Centre, 2004; Low, 2015).

By 1991, when four Pakistanis hijacked Singapore Airlines Flight SQ117, the EG's frequent drills allowed it to exercise leadership over the crisis (Singh, 2015). The Permanent Secretary of MINDEF assumed Acting Chairman of EG as part of earlier scenario planning, when PS/MHA was overseas. Specially trained officers and psychologists negotiated with the hijackers. When the hijackers threatened to kill the hostages after fruitless talks, the EG ordered a storming of the plane. In 30 seconds, commandos eliminated all four terrorists and freed all hostages. The quick and successful resolution of the hijack vindicated investments in specialised capabilities and regular cross-agency crisis preparedness exercises.

EG was again activated during the 2003 severe acute respiratory syndrome (SARS) outbreak. SARS was initially contained within hospitals but spread to the community. EG mobilised the SAF, SCDF, SPF and other agencies to shut down the vegetable wholesale centre which was the source of the spread, tracked down 2,500 staff working there and monitored the health of 55,000 contacts. On 30 May 2003, after 20 days without new cases, the WHO took Singapore off its 'SARS list', concluding that "Singapore's handling of the crisis [was] exemplary" (Lambert, 2006).

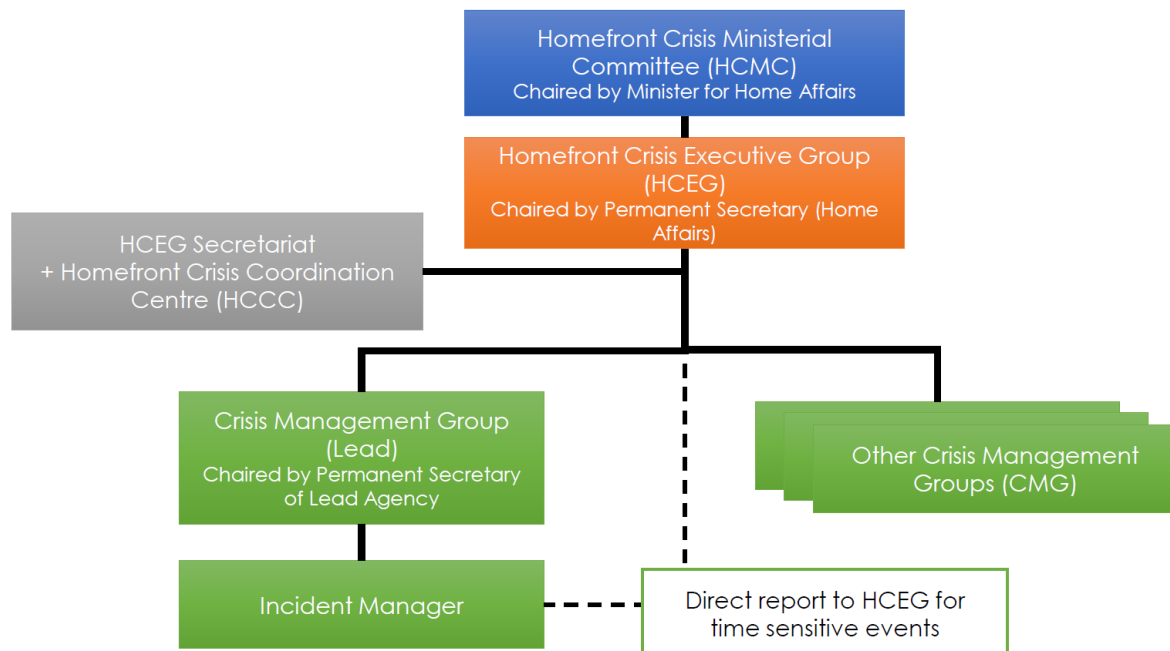
SARS highlighted that national crisis management extended beyond military security and was important for health-related crises that could cripple Singapore economy and society. In the aftermath of SARS, the concept of 'whole-of-government' was also entering into the lexicon of the Singapore Public Service. 'Joined-up government' and 'network government' were gaining traction in countries like Britain and New Zealand, to tighten coordination among government agencies arising from fragmentation of public services stemming from new public management reforms. Singapore too corporatised some government functions to enhance efficiency and encountered similar issues. Indeed, Ow (2003) observed a weakening of some operational capabilities during SARS after few years of outsourcing.

In 2004, the EG was renamed and reorganised into the Homefront Crisis Executive Group (HCEG). It comprised senior representatives from all ministries and oversaw several sectoral Crisis Management Groups. The HCEG's capabilities were tested during the 2013 transboundary haze crisis, when it mobilised thousands of public officers across the Public Service to address the domestic impacts and diplomatic challenges. While the crisis ultimately resolved with changing wind patterns, the haze episode revealed the importance of well-rehearsed processes and cross-agency coordination capabilities.

3. Singapore's Whole-of-Government Response to the COVID19 Pandemic

3.1 HCEG: WOG Crisis Coordination Structure and Emergency Preparedness

Figure 1 Homefront Crisis Management Structure



Singapore had a structure for inter-agency crisis coordination when COVID19 struck (see Figure 1). The HCEG was chaired by the PS of the MHA and comprised permanent secretaries of all government ministries. It reported to the elected leadership for political direction and oversaw sector-specific Crisis Management Groups (CMGs) each led by the PS of the respective lead agencies. The HCEG thus provided an institutional structure to coordinate a WOG crisis response as COVID19 struck Singapore.

The HCEG was a standing organisation; the Joint Operations Group in the MHA served as the HCEG Secretariat. Through scenario planning, contingency development, and regular inter-agency exercises—notably attended by permanent secretaries—the HCEG cultivated a culture of emergency readiness across the Public Service. This sustained investment in preparedness enabled the HCEG, when activated for actual crises, to operate like a “well-oiled machinery” (Tee, 2024).

3.2 Leadership: Decisiveness and Adaptability

The high level of leadership capacity aggregated in the HCEG, comprising permanent secretaries of all ministries, allowed it to act decisively. The HCEG Secretariat was already tracking news of a rapidly spreading virus when it emerged in Wuhan, China; HCEG constantly monitored threats as a routine, including risks of overseas outbreaks entering Singapore (Tee, 2024). At the same time, the MOH was receiving similar alerts from Singapore officers at the WHO, as part of regular attachments requested by WHO to support its work, of the virus in Wuhan (Mak, 2024).

Even though the severity of the outbreak was not fully known at that time, the HCEG was decisive in standing up government resources to prepare for a WOG response (White Paper, 2023; Mak, 2024). As the virus spread rapidly across China and then Asia, the MOH activated CMG Heath on 21 January 2020 and the Disease Outbreak Response System Condition (DORSCON) was raised to Yellow. DORSCON was developed after SARS to prepare the country's healthcare infrastructure and related government agencies for various contingencies (see Figure 2). On 22 January 2020, the HCEG was formally activated as the spread of the virus across Asia worsened. The HCEG reported to a Multi-Ministry Task Force (MTF) co-chaired by then Minister of Health Gan Kim Yong and then Minister of National Development Lawrence Wong, which provided political leadership.² The following day, the first case of what would be known as COVID19 was detected in Singapore.

The immediate responses from various agencies upon the HCEG's activation validated the investment in emergency preparedness. Officers had exercised frequently on drawer plans for various scenarios. In fact, a HCEG exercise was conducted in August 2019 and an emergency preparedness exercise to test multiple agencies' command and control capabilities, as well as a ground deployment exercise to test readiness for a small-scale pandemic outbreak was conducted from September to November 2019 just before COVID19 (Tee, 2024; Foo, 2024). This preparedness enabled swift implementation of contingency plans: airport health screening was expanded, facilitated by the Ministry of Transport and Civil Aviation Authority and Immigration and Checkpoints Authority officers reinforced by SAF and SCDF personnel (Soh, 2023). SAF, SPF and anti-narcotics officers bolstered MOH's contact tracing operations (White Paper, 2023). The CMG Housing and Social Support, led by the Ministry of National Development, initiated its contingency plans to convert holiday chalets and government training centres into quarantine facilities (Foo, 2024).

Figure 2 DORSCON Framework, January 2020

Colour	Nature of Disease	Impact on Daily Life	Advice to Public
Green	Disease is mild OR Disease is severe but does not spread easily from person to person (e.g. MERS, H7N9)	Minimal disruption e.g. border screening, travel advice	- Be socially responsible: if you are sick, stay home - Maintain good personal hygiene - Look out for health advisories
Yellow	Disease is severe and spreads easily from person to person but is occurring outside Singapore. OR Disease is spreading in Singapore but is (a) typically mild i.e. only slightly more severe than seasonal influenza. Could be severe in vulnerable groups. (e.g. H1N1 pandemic) OR (b) being contained	Minimal disruption e.g. additional measures at border and/or healthcare settings expected, higher work and school absenteeism likely	- Be socially responsible: if you are sick, stay home - Maintain good personal hygiene - Look out for health advisories
Orange	Disease is severe AND spreads easily from person to person, but disease has not spread widely in Singapore and is being contained (e.g. SARS experience in Singapore)	Moderate disruption e.g. quarantine, temperature screening, visitor restrictions at hospitals	- Be socially responsible: if you are sick, stay home - Maintain good personal hygiene - Look out for health advisories - Comply with control measures
Red	Disease is severe AND is spreading widely	Major disruption e.g. school closures, work from home orders, significant number of deaths	- Be socially responsible: if you are sick, stay home - Maintain good personal hygiene - Look out for health advisories - Comply with control measures - Practise social distancing: avoid crowded areas

² Minister of Health Ong Ye Kung joined the MTF as a 3rd Co-Chair from 15 May 2021.

The HCEG leaders exercised remarkable adaptability responding to quickly changing situations during the crisis. Initially deploying a 'SARS-playbook' that emphasised border temperature screening and community trace-and-quarantine protocols, leaders quickly pivoted when COVID-19's characteristics—particularly asymptomatic transmission—rendered this approach insufficient (Mak, 2024; Tee, 2024). The HCEG's willingness to review and then adjust the 'zero-COVID19' approach exemplified this flexibility (Tee, 2024). Fortuitously, early development of a diagnostic test allowed COVID19 to be quickly identified, unlike SARS where this was not available (Mak, 2024).

As the pandemic transcended pre-planned scenarios, the HCEG's deliberations embraced diverse viewpoints. Pang Kin Keong, PS/MHA and Chairman/HCEG recounted that discussions among the permanent secretaries at the HCEG included "conflicting considerations", which he welcomed: "If there were no disagreements, I'd be worried: Am I only hearing one perspective" (quoted in Tan, 2022). Once decided, the HCEG would recommend options to the MTF for political direction. Pang pointed out that the MTF, rather than unquestioningly accepting the HCEG's recommendations, typically raised more questions: "The MTF brings in its own perspectives, its own judgment, its own political lens to it." (quoted in Tan, 2022)

3.3 Circuit Breaker: HCEG Recommendations, MTF Decision, WOG Implementation

Among the most significant dilemmas faced by the HCEG and MTF was over national lockdown. By April 2020, COVID19 cases were rising to 1,000 and four people had died of the virus. But the HCEG leaders were hesitant to recommend lockdown because of the possible economic and social impact. Pang, PS/MHA and Chairman/HCEG, recalled, "I sensed the MTF, after a while, felt that it had to be done." (quoted in Tan, 2022)

The emergence of COVID-19 clusters in migrant worker dormitories and nursing homes posed a critical threat, with communal living arrangements risking mass outbreaks and community spread. Initial response relied on SARS-era protocols, operating under the assumption that asymptomatic transmission was not possible which proved flawed. The true extent of asymptomatic spread was further masked by migrant workers seeking treatment from different healthcare providers, including charitable organisations,

"the situation in the dormitories turned out to be much more serious than believed. The speed and scale of outbreaks within the migrant worker community, plus concurrent clusters in nursing homes and other high-risk settings, threatened to overwhelm Singapore's healthcare system and spiral out of control." (White Paper, 2023)

MTF Co-chair Lawrence Wong explained that "we considered very carefully before we decided to implement the circuit breaker":

"The impact is likely to be felt disproportionately by the lower-income and vulnerable groups. They are also less likely to be able to tele-commute for work. So staying home will clearly affect their incomes and livelihoods.... It was a difficult decision to make because we knew businesses and workers are already hurting. In the end, we decided we had to proceed to break the transmission chain, and slow down the spread of the virus."

On 3 April 2020, Prime Minister Lee Hsien Loong announced a Circuit Breaker lockdown. To implement Circuit Breaker, the HCEG called for volunteers from the Public Service to carry out the many necessary functions. Many officers from different agencies across the WOG readily stepped forward to enforce safe distancing measures, expand COVID19 testing, and undertake wide range of diverse duties (White Paper, 2023).

Containing the transmission among the migrant workers required the full WOG coordination of officers from multiple agencies. The scale of the operation was not trivial: infections were spreading rapidly among the 320,000 workers living in 43 dormitories scattered across different parts of the island (MOM, 12 Apr 2020; MOM, 14 Dec 2020). Officers from Ministry of Manpower (MOM) overseeing the dormitories had to be reinforced by personnel from the SAF, Home Team and other agencies. Together they worked with private sector dormitory operators, healthcare providers and logistic companies, as well as volunteers from the community to manage the situation in the dormitories. Officers had to ramp up COVID19 testing of the workers, setup accommodation to quarantine those infected, arrange safe transportation, establish medical facilities within the dormitories, bring in supplies of food and necessities, and care for the mental wellbeing of these migrant workers. These “large-scale complex operations” succeeded with the tight WOG coordination among officers across agencies, as well as their partnerships with the private and people sectors (White Paper, 2023).

The Circuit Breaker succeeded in reducing COVID19 cases and lockdown measures were gradually lifted. While effective, it exacted a heavy economic toll: S\$11 billion (2.2% of GDP) in losses and unemployment rising to 3.8% from a pre-pandemic average of 2%. To mitigate the impact of the pandemic, the government introduced four rounds of budgetary reliefs: 90% subsidies for business digitalisation, wage support covering 75% of the first \$4,600 of monthly salaries for 10 months to help companies retain jobs, \$1,000 monthly payments to self-employed persons for nine months, and targeted assistance for retrenched workers and vulnerable households.

4. From Whole-of-Government to Whole-of-Singapore

While the HCEG did not have existing crisis roles for citizen volunteers and private companies, public trust in government facilitated the adaptations which allowed their quick mobilisation. The Government's transparent approach in managing the crisis thus far, reinforced the underlying strong trust in government. Even prior to the COVID19 pandemic, the 2019 Edelman Trust Barometer recorded 67% trust in government among citizens to rank Singapore among the top five in the world. The Government's forthcoming yet calm manner in sharing crisis information with the public, including COVID19 case numbers and fatalities, and its reasoned approach in explaining measures such as Circuit Breaker lockdown, reinforced the sense of trust in the Government. This reservoir of trust lubricated the adaptations the HCEG made to coordinate volunteers and private companies towards a whole-of-Singapore response.

4.1 Coordinating Volunteers

Prior to COVID19, volunteer groups like Team Nila sport enthusiasts and Youth Corps were not planned with emergency roles (Chen, 2024; Teo, 2024). Some Team Nila and People's Association (PA) community volunteers were trained to administer first-aid but not equipped for large-scale contingencies. Nevertheless, when the HCEG needed manpower to distribute COVID19 essentials to citizens, the PS of the Ministry of Culture, Community and Youth (MCCY) drew on the agencies under its organisational structure to call for volunteers (Chen, 2024; Pattiselanno, 2024). Through Sport Singapore, National Youth Council, PA and MCCY volunteers from Team Nila, Youth Corps, PA and SG Cares Volunteer Centres were deployed to community support activities, such as distribution of masks and hand sanitisers (Chen, 2024; Teo, 2024; PA, 2021). Although no pre-COVID19 crisis roles were intended for these volunteers, this practical adaptation connected the HCEG with the resources for crisis response.

Similar adaptations facilitated the MOH's mobilisation of healthcare volunteers. The MOH did envision mobilising retired nurses for contingencies, but "there was no actual firm plan" prior to COVID19. Professor Kenneth Mak, MOH's Director of Medical Services, recalled that,

"So, when [COVID19 struck] we had to work a lot of things in place. Reached out to the professional boards, the nursing associations, asked them to reach out to in turn to their own members.... We set up a structure, a hotline, people can sign up online... all you have to do is volunteer, we'll arrange for training, and then we'll start deploying you." (Mak, 2024)

The enthusiastic response – 3,000 former healthcare professionals joined up within three weeks of the call for help – led the authorities to assess that, "[with] so many people who were willing to support, it wasn't too challenging." (Mak, 2024; MOH, 28 Apr 2020)

The MCCY also strengthened coordination as voluntary initiatives proliferated.

Singaporeans, businesses and voluntary organisations started ground-up initiatives to deliver food and essentials to the elderly, migrant workers and others under quarantine; many also offered small gifts to thank and encourage healthcare workers and frontline staff such as those operating quarantine centres. But some beneficiaries were receiving too many gifts which could benefit groups overlooked by donors. Some volunteers were also unaware of the funds available to expand their work. The National Volunteer and Philanthropy Centre, an agency under the MCCY, set up an online platform to connect offers of help to needs of communities, to facilitate ground up efforts (Pattiselanno, 2024).

4.2 Partnering with the Private Sector

The HCEG coordinated with the private sector through various agencies though such contingency roles and structural relationships were neither anticipated nor formalised pre-COVID19, (Tee, 2024). Sam Tee, MHA's Senior Director of the Joint Operations Group and HCEG Secretariat, explained that the relationships officers in various agencies cultivated with corporate contacts in the course of routine work facilitated public-private-partnerships during COVID19. This was exemplified when CMG Housing and Social Support secured hotels as quarantine facilities through the Singapore Tourism Board's well-established hotel industry networks (Tee, 2024; Foo, 2024).

The MOH also drew on pre-COVID19 relations with the private sector. MOH's Mak explained that,

"We had [pre-COVID19] a Public Health Preparedness Clinics scheme where we accredited some GPs [general practitioners, i.e., private family doctors] We originally designed this for [the transboundary haze crisis] ... to give resources to the GPs to manage increased people with respiratory problems. We activated the same system for COVID19. We stood up all these GPs. We gave them [for] free all the protective gear they needed. We gave them test kits and told them that they would be our trip line. You help us pick up these cases." (Mak, 2024)

This partnership with private sector doctors, coordinated through the MOH and with senior MOH leaders like Mak also sitting in the MTF and HCEG, provided the crisis management leadership with early sense-making of the state of COVID19 transmission in the community.

MOH also approached the private sector to create additional capacity as the growing cases filled up the public healthcare system. Mak recalled speaking with chief executives of several private medical groups, "We will buy services from you, we will pay for your wards, you support us. And they stepped up.... There was never a concern about wanting to withhold support from us." (Mak, 2024) Hence, hospitals from Gleneagles to Raffles took in patients to relief the load from the public hospitals.

Temasek Holdings, with its wide range of companies, supported the authorities' crisis response significantly. Temasek is a sovereign wealth fund of the Singapore Government, although its commercial "decisions are fully independent of any Government interference or influence." Temasek's companies converted an exhibition centre into an 8,000-bed facility within a month. It also sourced and distributed to the population, masks and other essentials. While HCEG might not have formal crisis roles with Temasek, existing relationships between government and Temasek leaders would have facilitated Temasek's crisis response efforts.

4.3 Public-Private-People Partnership to Vaccinate the Population

The arrival of COVID19 vaccines in Singapore in December 2020 culminated from the partnership between the public sector and scientific community. Early in the pandemic, some civil servants and scientists already recognised that vaccines would be key in the eventual exit from COVID19. By April 2020, a Planning Group led by the Head, Civil Service Leo Yip and a Therapeutics and Vaccines (TxVax) expert panel were working towards procuring COVID19 vaccines. The Economic Development Board (EDB), among the various agencies represented at the Planning Group, leveraged its pharmaceutical industry relationships to access development data for assessment and enabled Singapore to secure contracts with multiple manufacturers within three months.

Securing early access of the vaccines was crucial as countries hosting vaccine developers began imposing export embargoes. Access to the technical data allowed the TxVax experts, led by Dr Benjamin Seet and including 18 scientists and clinicians across Singapore's public and private hospitals and research institutions, to evaluate and recommend safe and efficacious vaccine candidates. Updates on technical data also let the regulator (i.e., Health

Sciences Authority) to evaluate the vaccine candidates and, where safety and efficacy criteria were satisfied, approve their use (White Paper, 2023). This coordinated public-private-people partnership, while outside the ambit of the HCEG, allowed Singapore to be among the first countries in the world to secure a COVID19 vaccine for its population on 21 December 2020.

The vaccination campaign exemplified further public-private-people partnership. By February 2021, MOH had setup 24 neighbourhood vaccination centres operated by private healthcare providers like Raffles Medical and Parkway Shenton (White Paper, 2023). Medically trained and ordinary Singaporeans responded to the call for volunteers by the MOH to assist in vaccinations and operations at these centres (Mak, 2024). At the peak of the programme, 40 vaccination centres, 60 private clinics and 20 public polyclinics were vaccinating the population across the island. By August 2021, the efforts of 2,000 personnel from the public and private healthcare sectors and citizen volunteers managed to cover 80% of the population (4,309,977) with the full two-dose vaccination regime.

On 24 March 2022, Singapore transitioned to “living with COVID19” and relaxed most pandemic measures. 80% of the population was fully vaccinated and the healthcare system had withstood the worst of the COVID19 outbreak. Having weighed the cost of stringent COVID19 measures on the economy and impact on society, the authorities decided that “we are now ready to take a decisive step forward towards living with COVID-19.” In April 2022, the DORSCON level was lowered to Yellow from Orange as COVID19 cases continued to fall. In February 2023, Singapore lifted all COVID19 restrictions.

5. Effectiveness of Singapore's COVID19 Response: Whole-of-Government to Whole-of-Singapore

When the WHO declared an end to the pandemic in June 2023, Singapore's goal of saving lives and livelihoods appeared to have succeeded. The country's COVID19 fatality rate of 32 deaths per 100,000 population was among the lowest in the world, less than 0.1% compared with the 1.0% global average (White Paper, 2023).³ 82% of the population was fully vaccinated, one of the highest vaccination rates around the world.⁴ Singapore's economy rebounded to 8.9% growth in 2021 following a 3.9% recession in 2020. Unemployment recovered to the pre-COVID19 average of 1.9% by 2023 following a peak of 3.1% in 2020.

³ COVID19 fatality rate/100,000 in United States (US) was 329, European Union 275, Australia 81, South Korea 67, Japan 60. China's figure was 8. [Mortality Risk of COVID-19 - Our World in Data](#), [WHO chief declares end to COVID-19 as a global health emergency | UN News](#); [2,102 people in S'pore have died from Covid-19 since start of pandemic to June 2024: MOH | The Straits Times](#).

⁴ This compares with 89% in China, 85% in South Korea, 81% in Japan, 78% in Australia, 76% in Britain and 71% in the US. [Share of people who received at least one dose of COVID-19 vaccine, Jan 2, 2022 \(ourworldindata.org\)](#).

Public confidence in Singapore's pandemic response was notably high, with 88% of Singaporeans approving of their government's crisis management according to a Pew Research Centre survey (see Figure 3).⁵ This approval rating ranked among the highest internationally. The sustained public trust was further evidenced by Edelman Trust Barometer surveys, which showed consistent 'trust in government' levels of 74-76% throughout the three-year pandemic period.

The Singapore Government's post-pandemic review (White Paper, 2023) identified as key successes, healthcare system resilience, effective vaccination rollout, and economic support measures that prevented more severe business failures and job losses. The White Paper assessed that,

“Public and private organisations worked hand-in-hand to offer additional **financial, social and mental well-being support to the vulnerable....** there was a **high level of trust** in fighting this pandemic together – between the government and people, amongst individuals and communities.” (White Paper, 2023)

Key areas the government “could have done better” included delayed detection of dormitory outbreaks: “We should have probed deeper and conducted better and earlier ground surveillance” given the communal living conditions (White Paper, 2023). Borders could have been tightened at signs of the virus spreading rapidly overseas and eased earlier once imported cases did not pose major risks.

5.1 Whole-of-Government

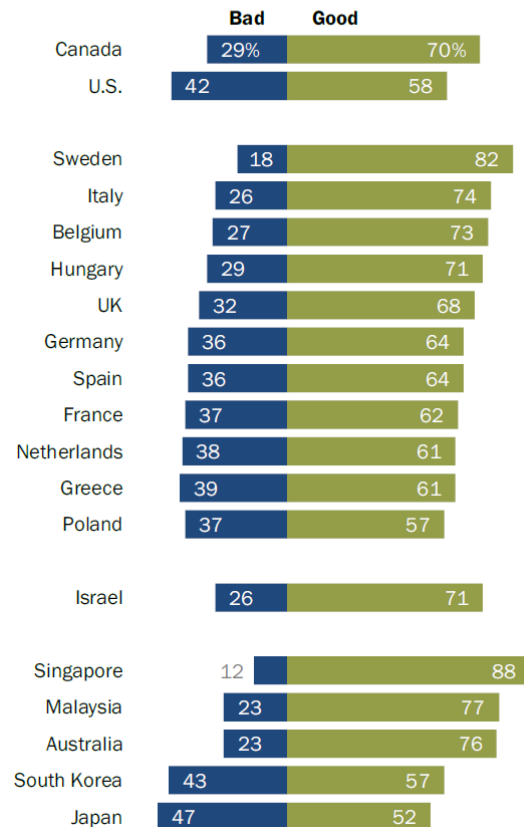
The White Paper assessed that,

“Officers from many departments volunteered to support ground operations, including in migrant worker dormitories, as safe distancing ambassadors or as call centre agents. These vital responses [of the Public Service and its officers] came almost instinctively and validated the decades-long effort to build a whole-of-government mindset and approach.” (White Paper, 2023)

Figure 3 Pew Survey, August 2022

At least half say their country has dealt with the pandemic well

% who say their country has done a ___ job dealing with the coronavirus outbreak



⁵ Pew surveyed 20,944 adults from 19 advanced economies across the world between February and June 2022. [pewresearch.org/wp-content/uploads/sites/20/2022/08/PG_2022.08.11_COVID_FINAL.pdf](https://www.pewresearch.org/wp-content/uploads/sites/20/2022/08/PG_2022.08.11_COVID_FINAL.pdf).

Prime Minister Lee thought that,

"Compared to previous times, including in SARS, I think the whole-of-government approach has worked a lot better.... The permanent secretaries talk to one another, they're on the same page, there's a process for them to engage and to thrash out issues. Sometimes it doesn't happen as quickly as you would like, but there is a process and everybody is doing their best and busting their guts in all of the ministries and way above their call of duty." (quoted in Tan, 2022)

Pang, Chairman/HCEG, while acknowledging that the HCEG had not planned for a crisis with such severe impact on Singapore, assessed that public officers stepped up to respond as a WOG:

"Short of a war or national emergency scenario, none of the scenarios that we planned for envisaged us having to shut our borders to the outside world.... It was such a complex operation that affected practically every aspect of life.... officers step up to the plate to be counted, work across agency lines and conduct ourselves as one unit." (Challenge, 2022)

Gabriel Lim, PS/Ministry of Trade and Industry, remembered that "everyone stepped up for each other [at HCEG] I didn't think there were any egos at all." (quoted in Tan, 2022) One director thought that, while agencies and officers largely cooperated with one another, "the WOG-mindset of leaders and officers might be influenced by the sizing of resourcing." (Director A, 2024)

To illustrate effective WOG crisis response, Tee who oversaw the HCEG Secretariat recounted efforts to repatriate home Singaporeans overseas. Mindful of the safety of citizens stranded abroad by foreign lockdowns, multiple agencies from the Ministries of Foreign Affairs, Home Affairs, Trade and Industry and Transport and others worked closely with one another across structural boundaries to bring citizens home: "This was an example of WOG at its best." (Tee, 2024)

5.2 Leadership and Shared Ethos

The HCEG's COVID19 response reaffirmed the importance of leadership and shared ethos in empowering inter-agency coordination structures (Low, 2016). The HCEG, to begin with, provided the platform for coordination across the government (i.e., WOG). However, strong leadership was the catalyst that empowered the HCEG into a structure for effective crisis coordination. The presence of permanent secretaries—the most senior civil servants—concentrated executive authority within HCEG, enabling decisive action and rapid resource mobilization in anticipation of escalating risks. The leaders in HCEG demonstrated adaptability, readily departing from established SARS-protocols when circumstances required

Noteworthy was the strong leadership permeating across the various levels of the Public Service and not limited to the top leadership. Tee, who as Senior Director of the MHA's Joint Operations Group, oversaw the HCEG Secretariat, was described by Pang, PS/MHA and Chairman/HCEG, as "a really critical pillar who organised, coordinated and decided on the tempo of the work." (quoted in Tan, 2022) Dr Benjamin Seet, Chair of the Therapeutics and

Vaccines expert panel, could draw upon his networks with international organisations, research institutions and private healthcare groups in his earlier career stints. Leaders across the Public Service drew on their relationships with private companies and volunteers to operationalise the WOG – the whole-of-Singapore – crisis response intended by the establishment of the HCEG structure.

The shared ethos of purpose and mission among the leaders and officers of the Public Service operationalised the HCEG as a concept. Officers, having over time identified with the Public Service and its values of “Integrity, Service and Excellence”, implemented the contingency plans and adapted to unplanned situations. (Singapore Public Service (2025). This “shared language and culture” among the leaders and officers of the Public Service (Ow, 2003) was reinforced by the familiarity – almost an esprit de corps – among many leaders built through shared experiences, as highlighted by Mak:

“At HCEG and MTF, two-thirds of the people actually knew [one another] before COVID. Part of it was because of the CSC [Civil Service College], SMP [Senior Management Programme, CSC’s leadership development programme], and the networking, they were very invaluable.” (Mak, 2024)

Shared experiences, including through National Service (NS) which all Singaporean males underwent, “sped up WOG comms and coordination by fostering a common language, concept of operations and organisational culture across WOG.” (Pattiselanno, 2024) Mak concurred:

“you know them, you talk to them, you are friends, it's easy to pick up the phone and just *cham-siong* [discuss to forge consensus], sort it out. So that informal working style, as a result of the networks ... helped to under-pin its success at the HCEG level.” (Mak, 2024)

The WOG ethos forged through these shared experiences among leaders and officers over the years cultivated “a shared sense of mission agencies that were not built expressly for pandemic operations chipped in, working hand-in-hand with private sector partners.” (White Paper, 2023)

6. Conclusion

This paper plugs a gap in public administration discourse on Singapore’s management of the COVID19 pandemic and has updated the literature with the HCEG’s WOG approach on crisis management. It also analysed whether the HCEG structure provided effective inter-agency coordination during crisis response, whether there was coherent WOG-mindset among Public Service leaders and officers, and how the HCEG coordinated with volunteers and the private sector.

The HCEG's effectiveness stemmed from three key factors. First, the commitment to emergency preparedness strengthened the HCEG structure. Structures in bureaucracies could be nominal without proper resourcing. In contrast, the Public Service made conscious decisions to commit resources into the HCEG, to plan responses for various crises scenarios and regular exercises among agencies and personnel. The participation at these regular drills of permanent secretaries, senior leaders whose time could be applied to other

priorities, demonstrated the commitment of the Public Service to crisis preparedness. This investment in emergency preparedness exercises readied the HCEG and the Public Service, enabling it to operate effectively when activated during actual crises.

Second, the high level of leadership involvement and participation aggregated in the HCEG allowed it to act decisively. The concentration of permanent secretaries who were the most senior civil servants at the head of all government ministries facilitated timely crisis activation and led the Public Service for whole-of-government response.

Third, a strong ethos of mission and purpose and WOG-mindset among leaders and officers provided the 'heartware' to operationalise plans and adapt to unplanned situations. They were mission-focused, quick in response and coordinated across multiple agencies to implement plans. Their adaptability allowed for the mobilisation of volunteers despite not previously planned for, and facilitated the engagement of the private and people sectors to expand capacity in healthcare, quarantine and other COVID19 measures. Working together through public-private-people partnership, Singapore was able to procure COVID19 vaccines once they were available, vaccinate the population towards 'herd immunity', and exit from the crisis.

Singapore emerged from the pandemic with low COVID19 fatalities and a high population vaccination rate of 80%. Apart from the role played by the Government, remarkable too was the cooperation and willingness of citizens to abide by COVID19 measures and volunteer various support despite their fears. The high level of citizens' confidence in the government's management of the crisis in the Pew survey, and consistently high trust in government by citizens in the Edelman Barometer throughout the three years of the pandemic, attested to the instrumental role of the HCEG in WOG coordination – and whole-of-Singapore coordination – in crisis response. As Leo Yip, the Head of the Civil Service, reflected, "The pandemic is really about the solidarity, cohesiveness of society, and about trust. Government and people, but people and people, too, and the public service is at the heart of making that happen." (Yip, quoted in Tan, 2022)

Immediately after the crisis, the Singapore government began extracting lessons to enhance future crisis preparedness. The government's after-action review identified key areas for improvement: increasing adaptability to evolving situations, strengthening national resilience across economic, social, and institutional dimensions, and building deeper expertise in public health and science and technology.

The White Paper review also reflected,

"We can do more to harness the strengths of the people and private sectors. To do so, the government must develop an eco-system to support and nurture these relationships in peacetime." (White Paper, 2022)

This is an area the HCEG would undoubtedly be studying, given that much of pre-COVID19 plans did not provide for emergency response roles involving volunteers in the private and people sectors. Pang, PS/MHA and Chairman/HCEG, also spoke of setting-up

"a unit within the HCEG structure that would not have any day-to-day responsibilities in managing the crisis, but whose job is simply to watch from the side

and focus on scenario planning for the crisis. Then they could ... do some of the forward planning, telling us how the crisis could evolve, the kinds of risks that we may encounter further down the road and what should be factored into the operational plans that we come out with.” (Pang, 2024)

There is scope for future studies to study the effectiveness of Singapore's pandemic lessons in subsequent crises. Severe as it was, the COVID19 would unfortunately not be the last pandemic or crisis for Singapore. The HCEG, Public Service, and nation's response to future crises will test their ability to apply these lessons when anticipating and responding to new circumstances.

This paper also surfaced citizen participation and public trust as topics important in crisis response. Citizen voluntarism, already evident during the 2019 transboundary haze when citizens distributed masks independently, has grown increasingly significant. With rising civic consciousness and social media's mobilizing power, volunteer involvement in crisis response merits deeper investigation, as acknowledged in the Government White Paper. Similarly, future studies might want to explore the impact of public trust during crisis response. The trust between citizens, as well as trust between citizens and government could reduce the sense of uncertainty and fear which could significantly affect crisis response.

Glossary

CMG	Crisis Management Group
CSC	Civil Service College
DORSCON	Disease Outbreak Response System Condition
EG	Executive Group
GP	General Practitioners (family doctors)
HCEG	Homefront Crisis Executive Group
MCCY	Ministry of Culture, Community and Youth
MFA	Ministry of Foreign Affairs
MINDEF	Ministry of Defence
MHA	Ministry of Home Affairs
MOH	Ministry of Health
MOM	Ministry of Manpower
MND	Ministry of National Development
MTF	Multi-Ministry Task Force
MTI	Ministry of Trade and Industry
NS	National Service
PA	People's Association
PS	Permanent Secretary
SAF	Singapore Armed Forces
SARS	Severe Acute Respiratory Syndrome
SCDF	Singapore Civil Defence Force
SMP	Senior Management Programme (conducted at the Civil Service College)
SPF	Singapore Police Force
TxVax	Therapeutics and Vaccines Expert Panel
WHO	World Health Organisation
WOG	Whole of Government

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