Health Emergency Action Plan: Roadmap to Recovery from Covid-19

An open-source document with ideas and suggestions made freely available for anyone's use| 18 July 2021

This Health Emergency Action Plan (HEAP) was built based on two key needs for Malaysia: COVID-19 is becoming endemic, and most national strategies so far are demonstrably failing. The HEAP is based on three guiding principles: trust is crucial to fight pandemics and is based on transparency; there must be an all-of-society approach; and we need a set-of-solutions that are not based on lockdowns. We call for urgent effective action backed by political will and competence.

Key suggestions are summarised below.

Area	Strategy	Specifics
Interrupting Community Spread of Covid-19, especially in Klang Valley and other hot spots	Trace All Contacts	Electronic notification of all contacts of positive cases, via MySejahtera. We need a more robust and automated case notification system that is linked to epidemiological investigation, home case monitoring and HC facility response planning and preparedness (example number of ICU beds required).
	Create a clear and comprehensive National Testing Strategy	The Testing Strategy must be appropriate for the phases of intervention (containment and mitigation), with clear objectives and defined approaches and methods, suited to the epidemiological context of the testing. The Strategy must have an appropriate combination of PCR and RTK tests. In Klang Valley, mass testing is irrelevant now and the focus should be to prevent death and identify symptomatic cases either by RTK or clinical diagnosis (with prior close contact). Use RTK-Ag tests to rapidly test all close contacts with a clear plan for home quarantine (including those negative) supported by strong community empowerment and participation. The Testing Strategy must be accompanied by a robust IT infrastructure with near-real-time alerts to citizens.
	Enable public to Self-Test	Make available cheap saliva-based RTK-Ag tests at commercial pharmacies and government health centres for any member of the public to do home testing. This must be connected to the national system for contact tracing and case reporting, with citizens being educated to inform the authorities for positive tests. Citizens must home quarantine if positive and inform local GP or HCP (via a national list of relevant contacts).
	Monitor Home Quarantined Individuals	Mobilise General Practitioners (GPs) to monitor patients on home quarantine daily or twice a day with video calls. Anyone with symptoms or signs of deterioration (clinical stage 3 to 5) must be brought to hospital for care. If hospitals are over-run, selected NGOs can be empowered to offer appropriate support (including home oxygen therapy and monitoring).
	Centre Quarantine	Offer quarantine in PKRC only for those who do not have the facilities for home quarantine.

		NGOs to be empowered to set up additional quarantine facilities which have single rooms, good ventilation and food supply. These must be connected to the MOH PKRC network.
	Limit Non-Critical Social Interaction	Avoid opening up social, travel and religious activities until much later. To consider a two-week lockdown of Greater Klang Valley, if needed, to allow for a strategic refocus.
Monitoring Covid-19 Variants	Ramp up Genome Testing	Genome testing should be taken over by the universities and coordinated by IMR. Aim for genomic testing for >1% of all positive cases. Aim to understand which variant is circulating in which state by doing genomic sequencing of representative samples from sentinel sites throughout Malaysia.
Support of MOH Hospitals & Clinics	Supporting Contract Staff	Provide durable and fair solutions to all contract staff (doctors, pharmacists, nurses, etc), with immediate effect. This will require a combination of more permanent posts, longer contracts, equal benefits, and clearer career progression pathways.
	Growing Ventilation (IPPV) Capacity	Optimise military and private hospitals better to decant non-COVID-19 cases from MOH hospitals. Dramatically increase the number of field hospitals manned by army, MOH, private and retired health staff. All volunteers must be paid. Proactively request essential equipment (portable ventilators, monitors, infusion pumps, etc) from other nations.
	Growing ICU & HDU Capacity	Appeal to the private sector (wealthy benefactors) to rapidly construct (within 2-4 weeks) purpose-built ICU facilities (with HDUs) located near major hospitals. This construction should be totally under the control of the private sector and given over to MOH once completed (Build-Transfer system) Request expertise from other nations with experience in rapid construction of hospitals, to assist with the design and construction of additional field hospitals in Malaysia.
	Good PPE for Staff	Ensure personal protective equipment (PPE) supply is adequate at all times and made sufficiently available to staff on the ground. All staff working in Covid-19 areas and those seeing high volumes of patients (clinics) should be routinely offered N95 protection. There should be mechanisms for staff to speak up if supply is short.
	Respite for Staff and Ensure multi-sectoral approach	Deploy staff from other government agencies to help with clerical, transport and manual tasks for MOH. Work towards a minimum of one full-day day rest for all MOH staff (on rotation) in a week.
	Civil Society Support	Appeal to private sector, civil society and the public to band around each MOH Cluster hospital to provide support and resources. Target to generate equipment, support staff

		(including clerical and transport staff), emotional support, food, etc for hospital staff. Appoint a small core team of recognised, reliable civil society members to coordinate and run activities, and to liaise closely with the Health Ministry.
	Non-Covid Hospitals and Care	Designate selected hospitals (MOH or Private) as non-Covid hospitals to offer continued support to individuals who require care for other acute and chronic conditions.
Data & Transparency	Open Data Sharing with Public	Full transparent data sharing so that the true situation is communicated to and understood by the public. Data shared must be granular, down to district level (unique identifiers of the patients should be removed to maintain confidentiality). This will encourage an all-of-society involvement. Report data on Covid-19 intelligently and comprehensively to the public so that test numbers are linked to daily cases. Be transparent about the delay in reporting data (data lag).
	Media as Partners	Use the media proactively to communicate the data and vital messages to the public. This will also help reduce rumours and fake news circulating in peer to peer groups. Have media liaison health officers that can answer all questions posed by the media.
	Better Metrics	Increase the number and nuance of metrics (the current 3 metrics of "daily cases, ICU utilisation and vaccination rates" are not enough for a complex pandemic). Use 7-day data averages to monitor trends. Make decisions based on the enhanced set of metrics.
	Identifying Hotspots	Use data trends to identify or predict potential Covid-19 hotspots to intervene early and pre-empt them.
	Empower MOH Staff to Speak Up	Create effective channels for all MOH staff to highlight weaknesses in the system. Senior MOH leadership must be open to responding appropriately.
Leadership	Co-operative Leadership	Malaysia needs a coordinating unit (whether an agency, task force, council or other entity) that can provide over-arching strategic leadership during an endemic COVID-19. This coordinating unit should have two direct reporting lines: to Cabinet and to Parliament. This coordinating unit must identify capable persons with relevant skillsets to implement this Health Emergency Action Plan. Solo decision-making is not relevant during an endemic Covid, and HEAP requires a coordinating unit with relevant skills.
	Decentralised Decision Making & Rapid Local Action Capacity	Empower state-level and district-level disaster management teams lead by a state-level health team to act rapidly to deal with local situations. Share local success and failures with all states as quick learning points to emulate or avoid.
Vaccination	Ramping up Vaccination Sites	Utilise existing vaccination infrastructure (Maternal & Child Health clinics, School Health teams, GPs, Private Hospitals) to grow vaccination sites and delivery. Avoid mega PPVs as they can be sites for Covid-19 spread.

	Vaccination of those 'not-able' to registration	Some individuals, especially poor and rural, are not able to navigate the vaccine registration mechanism. Offer same day (walk-in) or on-site vaccination (community outreach programmes) of those over 60 years, adults with chronic illness, adult disabled and parents of children with disabilities.
	Vaccinate all Non-Citizens	Vaccinate all adult migrant workers, refugees, stateless & those in detention. Carry out the vaccination at their work place (large factory) or organise vaccination centre in an industrial park. The PIKAS program can be expanded in appropriate ways. Offer a 1 or 2 year amnesty to all non-documented migrants to encourage vaccination.
	Single Dose Vaccines	Use WHO and NPRA approved vaccines that have a single dose schedule for hard to reach and mobile communities.
	Help Vaccine Hesitant Individuals	Sufficient vaccination rates in the community cannot be achieved without engaging vaccine hesitant individuals. Offer honest and transparent locally and international data on vaccine side effects to the public. This includes putting online all the serious vaccine side effects reported locally and their investigation findings. Improve the mechanism for the public to report serious vaccine side effects.
	Equitable Vaccination Distribution	Current vaccine supply distribution is inequitable with larger supplies being sent to Klang Valley, Negeri Sembilan, Melaka, Labuan & Sarawak to reduce the risk in hot spots (and possibly to meet political needs). While this is appropriate within the context of staggered vaccine supplies, this inequitable vaccine distribution may leave the rest of the country open to a massive Delta variant wave with dire consequences. A balance must be found between these two imperatives of "targeted vaccination in hot-spots" and "vaccine equity against Delta". It is vital to bring the whole country's vaccination rates up by sharing all the vaccine supply as quickly as it arrives.
Community Responsibility & Support	One Standard for All	Critical to have one standard for all Malaysians. Stop punitive actions against the public without enforcing the same action against ministers and the rich.
	Standardised Colour Coded SOPs	Current SOPs are extremely confusing. Move to a simple colour code system that can be upgraded or downgraded depending on the 7-day average of metrics monitored.
	Mask Etiquette	Continue to encourage good mask usage – filtration, fit and etiquette.
	Workplace Ventilation	Have a national ventilation plan to improve ventilation in all buildings (offices, schools, hospitals, etc) to reduce Covid-19 airborne transmission. Promote good ventilation practices at workplace and at home to minimise risk of work place and household cluster. Over time, the relevant agencies should perform appropriate monitoring/auditing and building certifications.

	Weekly RTK-Ag Testing	Promote reliable, cheap, saliva-based RTK-Ag test availability for use in offices and workplaces. This will enable staff to test at home and reduce workplace spread. Clear guidelines should be built and communicated (for frequency of testing, what to do with positive tests, and mechanisms for reporting).
	Safety Net for the Poor & Avoiding Lockdowns	Lockdowns have serious consequences on the poor, the unemployed, and migrant workers. Lockdowns should not be used endlessly or as first choice. The current safety net for the poor, unemployed and migrant workforce is poor. This must be strengthened by civil society coordination and support of government agencies. Failure to do this will mean that the community transmission will not be halted.

Disclaimer: The guiding principles and contents of Health Emergency Action Plan are written and endorsed by the following individuals and organisations. However, HEAP itself must draw more comments from other stakeholders, to make it truly inclusive, realistic and implementable. We have provided overall objectives and some elaboration for HEAP, but for space and data constraints we are unable to elaborate in granular detail. Therefore, all HEAP recommendations must be accompanied by more detail by relevant agencies before operationalising them.

We welcome all those who would seek to implement our recommendations, and make this document freely-available to all parties.

Prepared by (alphabetical order):
Dato' Dr Amar Singh-HSS
Dr Khor Swee Kheng
Prof Datuk Dr Lokman Hakim Sulaiman
Dato' Dr Zainal Ariffin Omar

Endorsed by (alphabetical order):

Associations
1. Academy of Medicine Malaysia (AMM)
2. Association of Malaysian Optometrists (AMO)
3. College of Anaesthesiologists, Academy of Medicine Malaysia (COA, AMM)
4. College of Physicians, Academy of Medicine Malaysia (COP, AMM)
5. Malaysian Association of Dental Public Health Specialists
6. Malaysian Association of Environmental Health (MAEH)
7. Malaysian Medical Association Public Health Society (MMA PHS)
8. Malaysian Pharmacists Society (MPS)
9. Malaysian Society of Anaesthesiologists (MSA)
10. Malaysian Society of Clinical Psychologists (MSCP)
11. Malaysian Society of Intensive Care (MSIC)
12. Malaysian Society of Occupational Safety and Health (MSOSH)
13. Medical Assistants Association of Malaysia (PPPM)
14. Medical Practitioners Coalition Association of Malaysia
15. National Cancer Society of Malaysia (NCSM)
16. Obstetrical & Gynaecological Society of Malaysia (OGSM)
17. Perinatal Society of Malaysia (PSM)

18. Persatuan Dermatologi Malaysia (PDM)
19. Public Health Physicians Association of Malaysia (PPPKAM)
20. Malaysian Health Coalition (MHC)

Individuals

1. Prof Dr Ahmad Hata Rasit
2. Dr Andre Das
3. Mr Amrahi Buang
4. Dr Azlina Firzah Abdul Aziz
5. Prof Dr Asri Said
6. Dr Christopher Ho Chee Kong
7. Dr Hung Liang Choo
8. Dr Khor Swee Kheng
9. Dr Koh Kar Chai
10. Dr Margaret Leow Poh Gaik
11. Prof Dr (Mr) Lim Kean Ghee
12. Prof Dr Roslina Abdul Manap
13. Prof Dr Sharifa Ezat Wan Puteh
14. A/Prof Dr Shireen Nah
15. Dr Siow Sze Li
16. A/Prof Dr Uma Devi Palanisamy
17. Prof Dr Zaleha Abdullah Mahdy
18. Datuk Dr Zulkifli Ismail

18 July 2021