Public Health Strategies for Responding to Pandemics: A Perspective from Asia Pacific

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Covid-19: What to do Now, What to do Next
The COVID-19 pandemic has turned into a global health crisis, evolving at unprecedented speed and scale. The priority of governments and organisations everywhere is to take decisive action to protect their people.

The reality is that modern healthcare systems are already under substantial pressure due to demographic changes and long-term affordability constraints. Countries are at different levels of capabilities and readiness to deal with a pandemic.

Nonetheless, public policy makers and health administrators face a common challenge now: to articulate and execute a health response that mitigates public harm from an entirely new virus.¹
Unprecedented pressure on public health is expected to continue

Early success in containing the outbreak and delaying community-to-community spread is evident in some Asian countries, thanks to a vigilant, quick and coordinated crisis response, drawing on lessons learned from previous virus outbreaks. A novel virus didn’t mean a novel experience.

But the COVID-19 health crisis in Asia Pacific is by no means over. A second wave of cases is already flooding some Asian countries, and “lockdowns” are increasingly embraced as a new measure across the region. A “lockdown” seeks to slow the spread of the virus by breaking the chain of transmission, but such a measure comes with high economic and social impacts that likely cannot be sustained indefinitely.

To avoid a resurgence of the virus when lockdowns are lifted, additional public health measures need to be defined and put in place now.
This health crisis needs a rapid, strategic response

The public policy makers and health administrators are confronted with a challenge that requires a response outside of the existing modes of operating. Thus, the imperative is to learn and adapt rapidly in the current environment.

It seems likely that the course of this pandemic will involve repeated cycles of outbreaks and containment until a vaccine is available. While there are global efforts to accelerate development of a COVID-19 vaccine, an effective therapy may not be available for another 12-18 months. Therefore, what is needed right now is a strategic response to this health crisis that considers both near-term and long-term needs.

Accenture has identified three characteristics of a strategic crisis response. This document outlines what healthcare decision makers need to do now and what they need to do next, as part of such a strategic response.

1. Strong sensemaking capabilities to enable a rapid and effective response
   - Develop capabilities to generate shared understandings and coordinated action in conditions that are fast-moving and frightening
   - Recognize that excessive optimism can create blind spots. Adapt the response as new information becomes available

2. An emphasis on intelligent actions across the entire health system
   - Focus on strengthening supply chain resilience in order to better forecast demand / plan fulfilment
   - Leverage technology-enabled innovations to achieve better healthcare outcomes during the crisis

3. Embrace open innovation
   - Don’t try solving novel, complex problems alone
   - Enact new ways of innovating and teaming across sector & geographic boundaries: leverage the entire ecosystem
1. Strong **sensemaking** capabilities to enable a rapid and effective response

The difference in sensemaking and subsequent speed of response underlies the divergent infection curves evident in different countries.

Identifying the threat early is the key to pre-emptive action. Some Asia Pacific nations quickly recognised the cues and rapidly engaged experts to better understand the nature of the virus and inform their testing and containment strategies. They acted effectively in the face of significant uncertainty by focusing on making sense of an unfamiliar problem and devising a common map to enable coordinated action, rather than seeking “definitive answers”.

Their approach highlights the importance of anticipating rare events and having a plan (even if it is not the perfect plan), that can serve as a springboard to action.

Source: Accenture analysis of ourworldindata.org (based on European CDC – Latest Situation Update Worldwide)
Significant confusion and community adjustment are inevitable during a pandemic. This gives rise to a lot of activity in the healthcare sector, leading to unwanted duplication and delays, as well as wider, unintentional consequences.

What is needed instead is a well-coordinated health response. Key to this is recognising the systemic nature of healthcare – and the need to coordinate activities across care settings to achieve specific objectives (such as broad-based containment of virus transmissions).

Implementing an effective health response strategy during a pandemic also requires focus on intelligent action (which hinges on acquiring and harnessing timely information). Our analysis highlights the need to apply intelligent action in prevention, triage & treatment, critical care, and recovery & support efforts during the health crisis (Exhibit 1 P. 7).
Exhibit 1: An effective health response is well-coordinated and enabled by intelligent action

Coordination and Intelligent Action across the Healthcare System

**PANDEMIC OUTBREAK**
(Active cases over time)
Illustrative trajectory

**PREVENTION**
- Regular communication and advice by public health agencies / government
- Social distancing and compliance monitoring
- Rumour detection (i.e. social media)
- Demand forecasting

**TRIAGE & TREATMENT**
- Infrastructure for symptom detection & testing at scale
- Online symptom checker
- Virtualisation of primary care network (general practitioners)
- Health-lines (advisory)
- Diagnostic centres

**CRITICAL CARE**
- Hospital care for critically ill patients
- Virtualisation of secondary / tertiary care (virtual wards)
- Surge capacity management (e.g. extra clinicians, hospital beds)

**RECOVERY & SUPPORT**
- Frontline worker care (e.g. clinician trauma/ burnout management)
- Rehabilitative care for recovered patients
- Community mental health services

- Strategic planning based on pandemic modelling
- Rapid sourcing of critical resources (surge)
- Intelligent stockpiling and distribution based on medical need

Source: Accenture analysis of effective health crises responses, and direct client experience.

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Prevention

What to do now: Mobilise the public to slow transmission while preventing community panic.

Public alarm tends to increase with the rising infection rates, but timely dissemination of information from trusted sources is an effective counterbalance in public health crises management. Building public awareness and encouraging cautious behaviours can slow transmission and mitigate the unnecessary consumption of limited medical resources by the “worried well”.

What to do next: A rising mitigation strategy is the use of analytics, social listening algorithms, and fact-checking platforms to detect rumours that are circulating on social media and other channels. In addition, once transmission is detected, contact tracing needs to be activated to identify the source of infections and the potential clusters.

Community Monitoring

Early and speedy contact tracing and monitoring of affected individuals is key to containing disease spread and reducing pressure on public healthcare. Such aggressive interventions are particularly important but challenging for nations with large socio-economically dispersed populations such as Indonesia, where many of the 270 million population don’t have access to the technology typically used for monitoring.

Information Integrity

Educate the public quickly on facts such as symptoms and what individuals need to do differently to reduce the risk of contracting the disease. To suppress transmission early, consistent and frequent communications from government agencies and public health experts are vital.

Proactively manage the proliferation of misinformation through the use of analytics, social listening algorithms, and fact-checking platforms.
**Triage and Treatment**

**What to do now:** Double down on testing, triage and early treatment interventions to manage the outbreak and limit hospital loads.

How many people are contagious but not isolated because they are asymptomatic, or unable to be tested because services are not accessible? This is particularly acute in countries where most of the people live in rural areas.

In many countries, shortages in healthcare capacity such as doctors, medical facilities and testing kits, as well as technology to detect and monitor the disease outbreak continue to prevent an accurate understanding of the pandemic’s trajectory.

**What to do next:** Create the right infrastructure for symptom detection and testing at scale. Fully mobilise crisis management centre to enable decision makers to model demand across the care continuum (e.g., home, general practitioners, hospitals, labs, telemedicine, pharmacies) using real-time data.

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**South Korea**

Health authorities have been testing hundreds of thousands of people and tracking potential carriers like detectives, using smartphone and satellite technology. Makeshift testing centres are a critical part of the infrastructure that was created - one hospital in Seoul developed a “walk-thru” test where people sit in a transparent cubicle as a medical worker collects a sample using gloves attached to the front panel – speeding testing and minimising risk to medical staff.
Triage and Treatment

**What to do now:** Double down on mass testing, triage and early treatment interventions to limit hospital loads.

Primary care practitioners play a critical role in triaging and treating patients in most health systems, providing a gatekeeper function to more specialised and limited diagnostics and treatments. However, many countries struggle to recruit, deploy and sustain sufficient primary care practitioners in the face of a pandemic. Frontline healthcare workers can easily succumb to infections as the pandemic accelerates. Accordingly, telemedicine is an essential element of an intelligent health response.

**What to do next:** Technology-enabled innovations, such as AI powered virtual agents, can help alleviate capacity constraints in telehealth services. Virtualisation of the primary care network can be extended to expand the reach to more people, while reducing infection of medical staff.

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**New Zealand**

New Zealand provides an excellent example here. It has leveraged its National Telehealth Service to respond to a massive surge in public interest and concerns associated with COVID-19, providing accurate clinical advice and support at scale. The service was remodelled and expanded in 2015 to provide a flexible, integrated service platform across health and counselling services. As such, it provides New Zealanders with free access to health information, advice and support (24 x 7) from trained professionals working in partnership with wider care and emergency services.⁴
Critical Care

**What to do now:** Provide high quality hospital care safely, and at scale to critically ill patients to save lives.

Public health infrastructure can’t expand and modernise overnight – it requires years of investment in people, systems and capacity to deliver consistent high-quality care.

When faced with a situation like COVID-19, medical resources need to be reallocated or repurposed to create surge capacity for infectious disease or intensive care needs. Hospital capacity must be balanced between pandemic demand and other critical illness needs.

**What to do next:** Sharing how different countries are building surge capacity will give the global community a better chance at being ahead of the curve in future crises – including strategies for ensuring sufficiently trained personnel, protocols, equipment and medication to meet the needs of a rapidly shifting health crisis.

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**Singapore**

Drawing lessons from its SARS experience in 2003, Singapore has been strengthening its public health system to be ready for a future pandemic. The country underwent a thorough review of its infrastructure, hospitals, isolation wards, and the scientific testing and capabilities during the post SARS period. It has since directed investments to boost healthcare capacity and advanced research capabilities. This includes the 330-bed National Centre for Infectious Diseases and 3 new hospitals. All public hospitals now have isolation rooms as well.14

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**Malaysia**

New partnerships between private and public sectors, or even makeshift facilities, are being formed to provide surge capacity. For example, the Association of Private Hospitals of Malaysia announced in March that private hospitals are ready to coordinate the management of COVID-19 patient care in terms of equipment and manpower, so as not to overwhelm the public healthcare sector.15
Recovery and Support

What to do now: Focus on recovery and support from the start, to mitigate longer term harm.

A truly effective response must extend beyond urgent care to address the needs and concerns of frontline workers and their families, as well as the wider community impacted by the pandemic. First responders and frontline carers are inevitably exposed to higher risk of infection, as well as physical and mental stress. Support must be provided to avoid such workers being overwhelmed.

Containment measures can lead to social isolation and increased anxiety. As such, the mental harm of a pandemic can exceed the clinical harm. Wider community support is required to mitigate this.

Continued monitoring and testing may be required to ensure that recovered patients remain free of contagion. Given limited understanding of the pathogen, there remains uncertainty in what long-term controls are needed to prevent further outbreaks.

What to do next: Re-engage and re-prioritise patients whose medical procedures were delayed during the pandemic, in a compassionate and structured way. Address wider social determinants of poor health in the community. The burden of severe influenza illness falls unevenly across society. Recognising and addressing the factors underlying this supports both community recovery in the near-term and increased resilience in the long-term.

Australia

As a crisis, pandemics can be traumatising at individual and collective levels. Traumatic events can impair our ability to grasp or cope with what is happening, which can lead to a range of responses such as stress, distress, panic, confusion, despair, anxiety and depression. Demand for mental health support will therefore rise: this is evident already and needs to be addressed.

Beyond Blue is an Australian non-profit organization dedicated to mental healthcare. It recently announced the launch of a new “COVID-19 Mental Health Support Service,” in partnership with Medibank Health Solutions and Accenture. This new service offers 24/7 free coping and wellbeing advice, professional counselling, referrals, and digital self-help tools to all Australians.
There are limits on the extent to which policy makers and healthcare administrators can plan, manage, and control all necessary actions for an effective response - notwithstanding the value of a crisis management centre.

Health systems are typically designed to respond well in a crisis with well-defined routines. However, the nature of a pandemic crisis requires a degree of flexibility that may not exist within the existing protocols – hence the need to embrace open innovation and distributed learning.

The complexity and uncertainty of the pandemic highlights the pressing need to formalise new ways of innovating more widely and effectively. Response methods must keep pace as the problems facing organisations and societies become more challenging. In particular, there is likely to be increased need in the future for extreme teaming\(^2\) that is, cross-sector and cross-national innovation to address major public health challenges.

3. Embrace open innovation
Solving health problems together

While borders between countries are closing, the level of collaboration between public and private sectors, and across national borders must increase to meet the pandemic challenge. There is a pressing need to come together and solve complex problems more rapidly, through open innovation and distributed learning.

**Global**

**Vaccine testing**

A notable example of collaboration on the global stage is the rapid mobilization involving scientists, pharmaceutical companies and government agencies to launch tests of over 50 vaccine candidates in parallel, against the novel coronavirus.22

**South Korea**

**Corona 100m**

Authorities invited companies23 to develop applications and real-time dashboards to increase public awareness of the outbreak, using anonymised data from the Ministry of Health and Korea Centres for Disease Control and Prevention.24

This has led to innovations such as the Corona 100m mobile app that alerts users when they are within 100m of the latest tracked whereabouts of a coronavirus patient.25

**Singapore**

**TraceTogether**

The TraceTogether digital app requests the public to volunteer for contact tracing.26 A community-driven app, it uses Bluetooth to record close contacts of citizens – people they have come within 2 meters of and spent at least 30 minutes with. The app was developed by a team of 40 engineers in eight weeks and more than 620,000 people have installed it.

The government has made the underlying software available to developers around the world.27

**Australia**

**Accelerated Learning**

Open innovation is also accelerating progress in helping frontline healthcare workers to identify not only whether patients are infected, but how severe the infection is, using new COVID-19 diagnostic tools.

Sydney scientists have developed a free online program that trains doctors to spot COVID-19 in CT scans of patients’ lungs, enabling them to triage patients more effectively.28
Looking Beyond the Immediate Crisis

While many lessons will be learnt from the current crisis, there is an opportunity to harness the pandemic as a catalyst for a deeper, long-term transformation of healthcare systems. This opportunity should not be missed.

Healthcare systems need to become considerably more intelligent, responsive and resilient. Decision makers across governments and businesses need to act to remake the healthcare systems at speed and scale for a modern age. Citizen privacy and trust will be crucial here – acting in a way that shapes and reflects evolving community attitudes to deal with new threats and opportunities.

What’s built must endure both present and future shocks. This will ultimately dictate our ability to save and improve lives now, and in the future.
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To help our clients navigate both the human and business impact of COVID-19, we’ve created a hub of all of our latest thinking on a variety of topics.

Each topic highlights specific actions which can be taken now, and what to consider next as industries move towards a new normal.

From leadership essentials to ensuring productivity for your employees and customer service groups to building supply chain resilience and much more, our hub will be constantly updated. Check back regularly for more insights.

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