

Rapid Policy Recommendation to the Philippine COVID19 Response Attaining Coherence in a Decentralized Low-Middle Income Country Healthcare Setting

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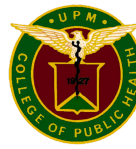
Executive Summary

Philippine COVID-19 situation

- The Philippines started to closely monitor the COVID-19 situation in early January 2020. By January 30, 2020, the country had its first confirmed case, the same day when the World Health Organization (WHO) declared COVID-19 as a public health emergency of international concern. Most of the cases since then were connected to international travel, until March 7, 2020, when local transmission was documented in Metro Manila. WHO declared COVID-19 as a pandemic on March 11, 2020. As of March 22, 2020, the Philippines had a total of 380 cases with 17 having recovered, and 25 having died. However, with limited testing, this number of cases is likely underreported.
- The Philippine Inter-Agency Task Force in Emerging Infectious Disease (IATF-EID) was convened on January 28, 2020. The IATF-EID implemented a mix of containment and mitigation measures that were mostly centered in Metro Manila. These were border control, testing, contact tracing, schools suspension and enhanced community quarantine (cordon sanitaire).
- Initially, COVID-19 cases were identified and managed by Level 3 hospitals. Confirmation of cases was solely done by the Research Institute of Tropical Medicine. However, the continuous rise of cases prompted DOH to identify a dedicated COVID-19 hospital. The increased demand for testing made it necessary to open 5 more sub-national laboratories and for the Food and Drug Administration to implement emergency certification of test kits.
- Neighboring countries demonstrated that COVID-19 can be effectively managed when evidence-driven policies are strictly enforced. Singapore, Taiwan, South Korea, and Vietnam implemented contact tracing, wide screening of exposed individuals including close contact

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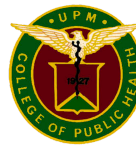
asymptomatics and quick quarantine of positive cases. Authorities typically exercised good coordination across government agencies. They were able to enforce quick steps to protect their borders as well as limit movement of people.

Recommendations

The Philippines is currently in the acceleration phase of the COVID-19 pandemic (DOH Red Alert). Cases are expected to rise at the national level. It is critical for the government to act swiftly while guided by evidence. A proactive stance at this stage is crucial so that the health system is not overwhelmed. At this stage, there are three main actions that must happen. **First**, the reach and scope of incident command must shift from a central, top-down governance, into a decentralized and agile structure. **Second**, recognize the need to de-link community mitigation measures from the decisions made in Metro Manila. Local government units must be capacitated to make proactive decisions based on their local data and context. **Third**, adopt the mindset of containing the disease closer to homes and empowering communities to understand how to protect their health facilities and healthcare workers from overburden. This will entail fast translation of technical guidance into operational format, making it easy for adoption and customization. Testing should be moved closer to the homes while quarantine away from these.

Recommendation 1: Increase the agility of incident command system

- Effectively link the IATF-EID authority with the NDRRMC assets down to the barangay levels. NDRRMC has deeper reach in the communities and has long experience in handling emergencies. NDRRMC has likewise established networks of volunteers that have been previously mobilized in an emergency situation.
- Mandate the activation of contingency plans of involved agencies. In activating the plans the process of resource gap identification and augmentation will commence.
- Review the findings and recommendations of the Philippine pandemic preparedness and response desktop simulation done last October 2019.
- Ensure regular assessment of national-level resources such as hospital equipment, personal protective equipment, testing kits, laboratory supplies, and other essential items, that will enable the central command to re-allocate these as necessary.
- Regularly assess the socio-economic impact of mitigation measures, both at the national and local levels. Protection for vulnerable populations is important in the overall success of outbreak mitigation.
- Adopt a harmonized national and provincial level dashboard of success. The dashboard can focus on operational targets and is helpful in encouraging continuous compliance in the long run.



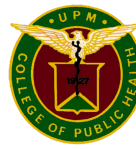
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Recommendation 2: Empower a localized approach to community mitigation

- De-link the community mitigation measures of other LGUs in the country from the policies implemented in Metro Manila. LGUs must be given autonomy to decide on their level of response because they are at different stages of the epidemic in relation to Metro Manila.
 - It is not too late for LGUs in the recognition and the initiation phases of the pandemic (equivalent to DOH Alert Level Blue) to aim for containment. Containment measures must be sustained and even enhanced following the national direction.
- Different LGUs across the countries could be in different stages of the pandemic. It is advisable that LGUs implement a calibrated community mitigation mechanism that is contingent to simple decision points. Pending the development of more sophisticated health system modeling for COVID-19, LGUs can use two indicators at the provincial level. These are the number of available CCU beds per 100,000 population and the progression of COVID-19 cases.

Scenario 1: LGU has no known local case of COVID-19 Alert level: Blue	
	<ul style="list-style-type: none"> ● Set-up and test surveillance and notification system ● Prepare the healthcare system by ensuring the supply of medical supplies, equipment, and hospital beds will be able to meet projected demand. ● Prepare plan for community quarantine and isolation and policies for social support in an event of enhanced community quarantine.

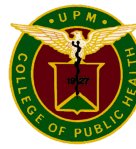
Scenario 2: LGU has first confirmed case of COVID-19 Alert level: Red sub-level 1	
	Containment (see Recommendation 3 below)
	Community Mitigation
	<p>DECISION POINTS: If the LGU is registering information within these provincial thresholds, implement the appropriate community mitigation measures.</p> <ul style="list-style-type: none"> ● Available CCU beds / 100,000 population ● Progression of COVID-19 cases <p>Assess the numbers in a 14-day cycle</p>



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	<p>When numbers breach the thresholds, immediately move to Sub-Level 2 When numbers show a decreasing trend, study which of the community mitigation can be slowly relaxed, according to the level of risk. Containment measures will continue and should be intensified.</p>
	<ul style="list-style-type: none"> • Suspend elementary schools. Open only if there is low or no new local transmission of cases, and if the school setting could ensure close screening and monitoring of the students and regular disinfection of the school premises. • Implement online platforms for high school and universities. • Workplaces should implement their business continuity plans, with work from home arrangements for most staff, and with skeletal staffing in the office. Face-to-face meetings should be minimal. Offices must observe strict protocol for attendance and health monitoring. • Public places must facilitate the practice of social distancing and observe regular disinfection of their venue. • Public gathering is strongly discouraged. If it could not be avoided, organizers must also follow the principle of social distancing. • Gatherings involving particularly the elderly and persons with comorbidities will be prohibited. • Public places to routinely check temperatures, ensure good handwashing facility • Encourage voluntary reporting of relevant information in each public place as appropriate. This is helpful in contact tracing. • Transportation must also follow social distancing policy. • Social safety nets for disadvantaged populations must be in place to ensure that everyone can comply with social distancing and limitation of movement.

<p>Scenario 3: LGU has documented community transmission Alert level: Red sub-level 2</p>	
	<p>Containment (see Recommendation 3 below)</p>
	<p>Mitigation: Enhanced Community Quarantine (Cordon Sanitaire)</p>
	<p>DECISION POINTS: If the LGU is registering information above these provincial thresholds, implement the appropriate community mitigation measures.</p> <ul style="list-style-type: none"> • CCU beds / 100,000 population • Progression of COVID-19 cases <p>Assess the numbers in a 14-day cycle</p>



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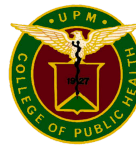
	<p>When numbers show a decreasing trend, study which of the community mitigation can be slowly relaxed, according to the level of risk. Containment measures will continue and should even be intensified.</p>
	<ul style="list-style-type: none"> • IATF Resolution 11, but with reduction of lockdown days. Communities can enforce partial lockdowns for five days (e.g., Wednesday to Sunday) and move to the Red sub-level 1 Mitigation for two days (e.g., Monday and Tuesday) • Implement clear policies on the accommodation and mobility of essential workers. • Ensure uninterrupted movement of food, medical, and essential supplies. • Emergency transport for medical care • Accommodation and support for disadvantaged populations must be in place to ensure that everyone can comply with social distancing and limitation of movement.

- The evolution of COVID-19 in a health system will be different for each country. To anticipate the complex questions and decisions in the coming weeks, it is recommended that the DOH Technical Advisory Group for COVID-19 (DOH TAG) be capacitated to utilize a COVID-19 systems dynamics model. Systems dynamics modeling is a tool for understanding how complex adaptive systems, such as health systems behave under the stress of this pandemic. It can provide insights on health system resiliency and inform decisions to prevent collapse.
- To encourage a decentralized situational assessment, provinces must be capacitated to utilize a COVID-19 simulation game, similar to *SimCity®* and based on the systems dynamics model. This will help them anticipate the effects of the outbreak in their own context, to assess their readiness and to prepare accordingly. The coronavirus systems dynamic model is already open-sourced.

Recommendation 3. Detect the disease closer to the homes, quarantine and isolate within communities and reserve the well-equipped and protected hospitals for severe and critical cases.

The high salience of hospital care in COVID-19 cases reduces the importance of community-level containment processes as the first line of defense in this pandemic. Facilitate the shift of mindset that the disease must be detected as quick as possible, and positive cases isolated and managed properly. This approach will also enable communities to contribute in reducing the burden in health facilities.

	<i>Well population</i>
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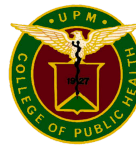
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	<ul style="list-style-type: none"> • Encourage people to stay at home as much as possible. • Encourage household protocol for leaving the house and in returning. • Repeated messages of handwashing, social distance, and proper coughing.
	<p><i>Person Under Monitoring</i></p> <ul style="list-style-type: none"> • Provide a clear guide for monitoring of PUMs who are under home quarantine.
	<p><i>Positive asymptomatics</i></p> <ul style="list-style-type: none"> • Establish a community-level isolation area (e.g., school, gymnasium, or hotel) for positive asymptomatics, with priority accommodation for population groups living in crowded places. • Home isolation of positive asymptomatic cases is strongly discouraged. However if LGUs have not yet set up an adequate space for all the cases, provide a clear guide for monitoring of positive asymptomatics who are able to do home quarantine. Ensure a clear system for clearing those without symptoms after the 7-days of isolation or referring those who develop symptoms and may need medical care
	<p><i>Positive symptomatics with mild to moderate symptoms and Persons Under Investigation</i></p> <ul style="list-style-type: none"> • Establish a dedicated community space for PUIs and positive symptomatics with mild to moderate symptoms (e.g., school or gymnasium close to the hospitals, with oxygen tanks and masks). This should be an extension of a hospital setting, with qualified personnel monitoring the space. • Home isolation of positive cases with mild symptoms is strongly discouraged. However if LGUs have not yet set up an adequate space for all the cases, provide a clear guide for monitoring of PUIs and positive symptomatics with mild to moderate symptoms who are able to do home isolation .
	<p><i>Digital support for monitoring</i></p> <ul style="list-style-type: none"> • Use an appropriate technology to effectively monitor home isolation and quarantine.

The community containment measures should be adequately guided by national technical protocols. These technical protocols must be quickly translated into operational guides. This includes key surveillance, laboratory, medical care and countermeasures, and risk communication interventions.

Surveillance

- Rapidly and progressively expand the population to be tested, in this order:



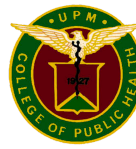
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- All Persons Under Investigation (PUIs) with symptoms
- Frontline healthcare workers
- Patients in the ICU with fever of unknown origin
- Any patient presenting with pneumonia
- Close contact asymptomatics
- Adapt the use of Cepheid’s point-of-care coronavirus diagnostics that utilizes the country’s already installed capacity of GenXpert PCR machines.
- Promote the use of the COVID-19 hotline as an initial screening tool to advise concerned persons whether they should be tested, and if so, the location of the nearest testing facility where they can have samples collected
- Expand the number of testing centers where specimen collection can be safely done, to be equipped with the necessary infrastructure to minimize exposure between the suspected case and the healthcare workers and other patients, such as:
 - Setting-up make-shift facilities outside the hospital proper;
 - Repurposing of primary health care facilities as possible testing centers
- Use SMS for rapid feedback results to the concerned person regarding the results of the test, and immediately advise regarding isolation protocol if positive, if not yet in place. If symptoms are mild to moderate, cases should be managed and isolated at a designated community-based facility to decrease the burden in hospitals
- Use digital solutions to improve population screening, contact tracing, and monitoring of persons under isolation or quarantine.

Laboratory

- Increase the laboratory capacity to the provincial-level:
 - Identify and certify all BSL2 laboratories in the country that have an RT-PCR machine.
 - Identify and certify public, private, and academic research laboratories that have an RT-PCR machine that could process inactivated specimens, including the regional and provincial facilities that currently have GenXpert machines for TB diagnosis
- Establish a mechanism to link testing centers with the certified laboratories.
- Routinely monitor the turnaround time between submission and result reporting. Re-assign testing centers to other certified laboratories as needed.

Medical care and countermeasures



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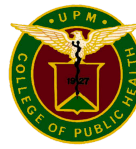
- Safe triage - process suspected cases in a separate area with safety mechanisms; PUIs to follow quarantine mechanism while waiting for results
- PPEs - project the need and update on a regular basis; organize donors; work with DTI for local production
- Testing of frontline workers
- ICU capacity, particularly availability of ventilators and oxygen; work with DTI for local production
- Regular update and communicate testing and treatment protocol
- Plan how to handle other non-COVID-19 cases (designating COVID-19 centers to minimize possible contamination), elective, and OPD; work as a service delivery network in a geographic area; PhilHealth to quickly adjust payment mechanisms to accommodate agreements across public and private facilities, particularly in the case of indigents
- Close coordination with funeral parlors to implement the proper management of the dead. Put measures to discourage abusive behaviors that could further traumatize families.

Risk communication

- Step up risk communication to highlight the importance of community participation; conveying empathy and transparency to gain public trust.
 - Appeal to the bayanihan movement to enlist volunteers when needed
- Identify credible members of the science community to explain the policies being put in place. Provide quick risk communication training to an identified pool of speakers. This must be done in all provinces.

To make this process more efficient, identify appropriate DOH Bureaus that could take charge of each domain. The following CDC-recommended domains need to be addressed in a pandemic: (1) surveillance, epidemiology, and laboratory activities, (2) community mitigation measures, (3) medical countermeasures, (4) healthcare system preparedness and response, (5) communications and public outreach, (6) scientific infrastructure and preparedness, and (7) domestic and international response policy, incident management, and global partnerships and capacity building. These Bureaus should rapidly systematize the guidelines and conduct regular consultation with the CHDs to receive feedback.

The DOH TAG can also be expanded and divided into sub-teams according to the domains to anticipate and respond to information needs. There should be a mechanism for regular dialogue between the DOH Bureaus and the DOH TAG to adjust strategies as needed.



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