



**PHILIPPINE SOCIETY OF PUBLIC HEALTH PHYSICIANS**  
**Recommendations for Research for COVID-19 Response and Implementation of ECQ**

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**Background**

COVID-19, as defined by the World Health Organization, is an infectious disease caused by SARS-CoV-2 spread through “droplets of saliva or discharge from the nose when an infected person coughs or sneezes.” On 30 January, the World Health Organization declared COVID-19 to be a Public Health Emergency of International Concern (PHEIC). COVID-19 is currently a pandemic, affecting at least 177 countries and territories including the Philippines.

The Philippines encountered its first local transmission on 06 March, raising concerns and triggering responses at the national level. When the number of cases rose to 10, the country was placed into a State of Public Health Emergency through Proclamation No. 922, s. 2020, streamlining processes for COVID-19 response. The whole of Luzon was declared under Enhanced Community Quarantine on 16 March after the member-agencies of the Inter-Agency Task Force (IATF) raised Code Red Sub-Level 2. This status restricted any mass transportation systems, hindering economic activities.

The Philippines, through Proclamation No. 929, s. 2020, further entered into a State of Calamity on 17 March, permitting LGUs to tap into appropriate funds for COVID-19 Response. The national government, through the IATF, developed implementation guidelines prompting Local Government Units to innovate and devise strategies to establish social safety nets and strategies to combat COVID-19. A week after this Proclamation, almost all LGUs, i.e. Provinces and Cities, have raised community quarantine measures while ensuring resources and capacities for their hospitals and health facilities, including the private sector.

While public health experts and medical practitioners understand the necessity of these interventions, it is also well understood that evidence gathering, analysis and research should be conducted hand in hand with government and health sector actions. COVID-

19 is a new virus and information in terms of epidemiology, virology, diagnosis, clinical management, public health measures and socio-economic initiatives are still limited. Research is essential to understand many questions, improve diagnostic and clinical protocols, update public health measures in the Philippines. In addition, it is important to contribute to the growing global body of knowledge being generated in many countries.

### **Purpose of the Recommendations for Research**

These recommendations are for national government agencies directly involved in COVID-19 response and research to review and consider for funding. They include PCHRD, IATF, DOST and DOH. Other government agencies (e.g. University of the Philippines and the National Institutes for Health) as well as international agencies (e.g. WHO, USAID, UNICEF, UNDP, etc.) may also review these recommendations for considerations in their programming. Universities, teachers and students may use these recommendations as guidance which topics are relevant at different levels. These are recommendations and are framed as research themes or questions. These are designed to contribute to agenda-setting conducted by different organizations.

### **How the Recommendations were Developed**

PSPHP Technical Group for COVID in collaboration with different experts and agencies convened a rapid scoping of research questions across different themes. Inputs were collected from colleagues and consultants from the Alliance for Improving Health Outcomes (AIHO), 101 Health Research, MetaHealth, UP College of Public Health, Healthcare Practice and Policy Management (HPPM) and Physicians for Peace Philippines (PFPP). The inputs are categorized into several areas ensuring comprehensive scoping of themes in accordance to health system building blocks, health care organizations, clinical management, diagnostics, community health, social determinants for health and health leadership and management.

### **Important Considerations on Health Research in the Philippines**

In 2017, the Philippine Council for Health Research and Development (PCHRD) launched the National Unified Health Research Agenda (NUHRA) 2017-2022 which forms the basic framework for prioritizing annual research activities in succeeding years. The NUHRA 2017-2022 has six Research Priorities namely, a) Responsive health systems,

b) Research to enhance and extend healthy lives, c) Holistic approaches to health and wellness, d) Health resilience, e) Global competitiveness and innovation in health and f) Research in equity and health. Research questions identified align well with Responsive health systems and Health resilience.

The Philippines provides strong support to R&D and the development of health technologies and biomedical devices. These include R&D for medicines, vaccines, test kits, assistive devices, etc. Furthermore, all research activities are geared to progress current knowledge and support national direction towards Universal Health Coverage to ensure health for all Filipinos and responsive health care services

### **Recommendations for Research**

These are synthesized research questions and themes. These are grouped based on research areas as well as similarities to facilitate review, analysis and planning for research.

<b>Research Area</b>	<b>Research Questions and Areas for Research</b>
Community Initiatives and Prevention	<ul style="list-style-type: none"> <li>● What are the best practices/ experiences in the community on COVID19 response in terms of incident command system, detection and screening, community isolation, management of asymptomatic cases and mild symptoms, referral networks, resource mobilization and other relevant areas?</li> <li>● Which of the PITAHC-recognized halamang gamot/ indigenous treatments can be used for symptomatic relief and potential clinical use?</li> <li>● What is the effectiveness and feasibility of scale-up of innovations launched/piloted for this COVID19 response? How can best practices be scaled up for other future infectious or health crises?</li> <li>● What will be the new scenarios in public health, RHUs and primary care services once the ECQ is lifted? How will "new normal" services influence staffing and delivery of care? These include considerations on staff case-mix, working hours, staff availability, activities in the RHU, BHS and communities, etc.</li> <li>● How can other essential services be provided in the new normal to ensure continuity in care? These include</li> </ul>

	<p>other public health programs e.g. immunization, NCDs, chronic diseases, services for persons/ children with disabilities, elderly care, etc.</p>
<p>Risk Communication for General Public</p>	<ul style="list-style-type: none"> <li>● How does the public perceive and understand COVID19 and related interventions to prevent the disease?</li> <li>● How did COVID19 related miscommunication/fake news spread/developed?</li> <li>● What is the effectiveness of COVID19 IEC materials? What is the effectiveness of using various communication channels (e.g. Facebook, Twitter, Viber, Virtual Presser, SMS, etc.) for COVID19 health education and updates? What are related community engagement efforts to ensure success?</li> <li>● What are the lessons/best practices for COVID19 risk communication using the perspective of the government?</li> <li>● How did the media frame the communication coming from the government?</li> </ul>
<p>Diagnostics</p>	<ul style="list-style-type: none"> <li>● What is the validity and reliability of rapid antibody-based test kits for COVID-19?</li> <li>● What is the appropriate/optimal use for serial monitoring of IgG? (i.e., seroconversion of confirmed patients, seroconversion in suspect/probable patients, monitoring of asymptomatic contacts of suspect/probable/confirmed)</li> <li>● What is the seroprevalence of COVID-19 (IgG), and its trend over time, in high-exposure settings, low-exposure settings, and frontliner (healthcare/military) settings in selected pilot LGU sites?</li> <li>● What is the accuracy and precision (e.g. sensitivity/specificity and/or PPV/NPV) of various diagnostics (e.g. risk scoring, symptom screening, temperature monitoring, PCR-based diagnostics, rapid testing kits, drive-thru) for identifying positive cases of COVID19?</li> <li>● What is the feasibility of deploying GeneXpert for rapid PCR testing for COVID19? What is the impact on TB testing as a first line diagnostic test for TB?</li> <li>● Is there any genomic/ antigenic variance of the COVID19 strain in the Philippines vs elsewhere?</li> </ul>

<p>Clinical Management</p>	<ul style="list-style-type: none"> <li>● What are the variations in the clinical management of COVID19 patients in DOH hospitals?</li> <li>● What is the fidelity of centers for COVID19 response to existing guidelines and look for adoption (changes in protocol) to suit local context use?</li> <li>● What is the efficacy of Remdesivir in the management of SARI patients?</li> <li>● What is the efficacy of adjunct steroid therapy in the management of SARI patients?</li> <li>● Development of a unified local community and clinical practice guidelines using the GRADE approach?</li> <li>● Continuity of management within the service delivery network and the communities; interlink of community response to hospital based interventions and post-hospital care of COVID19 patients.</li> </ul>
<p>Biosafety, Infection Prevention, and Control</p>	<ul style="list-style-type: none"> <li>● What is the national capability to counter biological threats? What are existing policies and programs? How are these implemented? How do you measure the level of health security preparedness and health resilience level of the Philippines to respond to health emergencies?</li> <li>● What is the baseline capacity of research and clinical laboratories for biosafety practices? What is the KAP of staff in research and clinical laboratories in the Philippines? Is there a national standards and oversight for biosafety in clinical and lab practices? How available and capable are these laboratories in different areas in Luzon, Visayas and Mindanao? How can public and private laboratories be utilized in times of crisis?</li> <li>● Supply chain assessment for biosafety controls (engineering, substitution, PPEs, etc.).</li> </ul>
<p>Hospital Administration and Management</p>	<p>Supply Chain</p> <ul style="list-style-type: none"> <li>● What are bottlenecks in supplies and medicines procurement?</li> </ul> <p>Surge Capacity</p> <ul style="list-style-type: none"> <li>● Hospital surge capacity of COVID19 high-risk areas</li> <li>● Models for surge capacity of our hospitals (private and public) and look at what are existing policies or gaps in existing policies in making concerted efforts for response.</li> <li>● Experience on the establishment of COVID19 dedicated</li> </ul>

	<p>facilities/units/wards?</p> <ul style="list-style-type: none"> <li>• What is the level of intensive care capacity (e.g. beds, mechanical ventilators, HRH, etc.) in the Philippines?</li> <li>• What is the capacity of private hospitals to provide services for COVID-19? What is their capacity to work with government facilities through networks?</li> </ul> <p>Financing, Costs, Resources</p> <ul style="list-style-type: none"> <li>• How much are essential services and interventions for COVID? (Costing analysis)</li> </ul> <p>Health Workforce</p> <ul style="list-style-type: none"> <li>• Assessing healthcare worker resiliency deployed at the frontlines?</li> <li>• What is the effectiveness of e-Learning/ MOOC/ LMS-based delivery of COVID19 related training for the health workforce? What is the training and development framework for the health workforce in times of crisis/epidemics/emergencies/disasters?</li> <li>• Readiness of health workers to implement IPC for pandemic response</li> <li>• How do we keep an adequate HW staff in our country? What are existing rules or policies on migration of HWs in times of health crises? What are emergency measures for intake of HWs as volunteers or contingent staff in health emergencies.</li> </ul> <p>Clinical Governance</p> <ul style="list-style-type: none"> <li>• What is the quality of care/variations in the quality of care given among COVID19 patients?</li> <li>• Clinical governance: Performance of clinical management audits in a pandemic? Measuring deviations (from protocol), appropriateness of admissions, care and hospital-level response, hospital-acquired infection, and mortalities.</li> <li>• Measuring health related outcomes and/or utility/disutility of COVID19? (Complementary to the costing question)</li> </ul>
<p>Unified Local Health Systems and Local Governance in Pandemic Response</p>	<ul style="list-style-type: none"> <li>• How accessible are services in urban versus rural areas? Functionality and integrity of referral systems and pre-hospital care in high and medium risk areas.</li> <li>• Cost utility analysis of telemedicine (?) (versus no telemedicine)</li> </ul>

	<ul style="list-style-type: none"> <li>● What are the lessons/ best practices/ challenges among LGU COVID19 responses? Efficiency of resource-pooling and mapping of assets in response to pandemics?</li> <li>● How would the roll out of UHC among (advanced) implementation sites be maximized/ jumpstarted in the context of a post-pandemic scenario?</li> <li>● Recalibrating LGU performance accountabilities - lessons learned from pandemic response. These include raising absorptive capacity, activating quick response mechanisms, adaptive leadership roles, etc.</li> </ul>
<p>National Governance and Planning in Pandemic Response</p>	<ul style="list-style-type: none"> <li>● Cost benefit of community-based isolation centers in urban, rural and GIDA (versus hospital isolation and home isolation)</li> <li>● What is the capacity of the health system to respond from epidemics and pandemics? How effective was multi-agency/ multi-sectoral response to biosafety/biosecurity threats? How do you measure the level of health security preparedness and health resilience level of the Philippines to respond to health emergencies? Is there a need to establish a multi-disciplinary center for health security/center for disease control/intelligence agency?</li> <li>● How can we redefine the Philippines' UHC trajectory to ensure better contribution to global health security during COVID-19 and beyond? How did the first two months of public health emergency response to COVID-19 compare to the country's preparedness and response plan? Which aspects of the actual response are consistent with the UHC plans for health systems strengthening? What are the health systems gaps that must be addressed in this pandemic that should be reflected in the UHC plans to improve response outcomes?</li> <li>● Is there a framework for maximizing and situating private sector and community capacities (trisectoral collaboration - public, private, people)?</li> </ul>
<p>Disease Surveillance, Evidence, Modelling and Projections</p>	<ul style="list-style-type: none"> <li>● What are the epidemiological characteristics of COVID19 in the Philippines? What is the incidence of asymptomatic cases of COVID19? What is the reinfection rate of COVID19?</li> <li>● Comparative analysis of existing models in relation to the actual incidence of COVID19 in the Philippines?</li> <li>● Modeling of various policy options (e.g. lockdown, quarantine, isolation, etc.) to respond to the COVID19</li> </ul>

	<p>pandemic</p> <ul style="list-style-type: none"> <li>● Assessing superspreading and the effect of individual variation on the emergence of COVID19</li> <li>● Feasibility of the use of risk index scoring (composite of vulnerability, hazard, and resiliency) to measure and monitor effectiveness of national/local government responses to COVID19</li> <li>● Feasibility and acceptability of using nationwide/LGU-wide COVID19 dashboards and/or GIS mapping as an aid for decision-making</li> <li>● What are the effects of COVID-19 on risk factors for other high-burden diseases and health conditions such as malnutrition, NCDs, TB, NTDs?</li> <li>● How are existing policies and health guidance on infectious disease control implemented at the local government units?</li> <li>● Improving surveillance and isolation measures in communities: are isolation units in barangays really needed?</li> <li>● The current status of data privacy and cyber-security measures to ensure full use of digital information technologies in sentinel visualization, contact tracing and other advantages?</li> </ul>
<p>Zoological and agricultural areas of concern</p>	<ul style="list-style-type: none"> <li>● Is there any evidence of animal transmission of COVID-19?</li> </ul>
<p>Socio-economic Impacts</p>	<ul style="list-style-type: none"> <li>● Economic impact of COVID19 among middle income households</li> <li>● What is the equity distribution (financing incidence analysis or benefit incidence analysis) of the Social Amelioration Program (SAP) and/or PhilHealth COVID19 Benefit Package?</li> <li>● What are the effects of COVID-19 on food security? Social and economic dilemmas of people working in the informal sector during a lockdown: prioritizing health or food?</li> <li>● Environment and Health Impact Assessment of COVID 19 response measures in the Philippines, national economic impact across impact groups</li> <li>● What is social distancing to people living in impoverished areas of Metro Manila?</li> </ul>

These recommendations are prepared by the PSPHP Technical Team for COVID-19 Response. We acknowledge the inputs of colleagues, experts and practitioners from different agencies including public and private universities, research firms and health offices at all levels of health services. These themes and research questions are recommendatory and represent expert opinion. These do not reflect official statements and policy positions of PSPHP. Furthermore, we hope to update these research recommendations as new information and data become available.

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