Coordinating, financing and paying for COVID-19 health services:
A synthesis of lessons and best practices from country experience

Authors: Agnes Gatome-Munyua, Henok Yemane, Allyson English, Nivetha Kannan

September 2020

Acknowledgments

Bangladesh
Fatema Zohara
Shahadt Husain Mahmud
Subrata Paul

China
Peipei Chai

Kenya
Esther Wabuge
Isabel Maina

Nigeria
Francis Ayomoh
James Dominion
Kurfi Abubakr
Nneka Orji
Shamsuddeen Sa'ad

Philippines
Abigail Estrada
Merla Rose Reyes
Reiner Lorenzo Tamayo

Republic of Korea
Hyeki Park
Hyunjin Cho

Technical Facilitation Team
Agnes Gatome-Munyua
Allyson English
Amanda Folsom
Cheryl Cashin
Henok Yemane
Nivetha Kannan

Globally, countries are grappling with unprecedented social and economic challenges posed by COVID-19. Health systems across all geographies are under enormous strain — few have been left unscathed. It has been a steep learning curve for many countries, as new information is released daily on the novel coronavirus. No country has all the answers, and many learn from previous mistakes and lessons. More than six months after COVID-19 was declared a pandemic, the Joint Learning Network for Universal Health Coverage (JLN) Primary Health Care (PHC) Financing and Payment Collaborative, has taken a step back to reflect on countries' COVID-19 experiences. The collaborative has 20 JLN member countries with a common interest to improve PHC financing and payment. This brief consolidates common lessons from six countries — Bangladesh, China, Kenya, Nigeria, the Philippines, and the Republic of Korea — that have shared their best practices and experiences with the collaborative. While experiences are often contextual and unique to each country, the objective remains the same: to better prepare health systems to respond to future epidemics and pandemics.

Strategic purchasing for COVID-19

Health systems across the world aspire to achieve universal health coverage (UHC) — providing access to quality health services and financial protection from the consequences of ill health. Strategic purchasing is a lever to achieve UHC goals, by using limited resources most efficiently to achieve equitable access to quality health services.

When COVID-19 struck, many countries mobilized resources to address the needs for the 3T's — tracing, testing and treatment — the pillars for containing the spread of the virus. To encourage the population to seek care, policymakers in all six countries resolved to remove financial barriers and ensured that COVID-19-related testing and treatment, including medical services and hospitalization, was free for all. While many countries directed resources for these entitlements through inputs and line-item budgets, bypassing institutions and systems set up for "normal" health services, the Philippines and the Republic of Korea shared examples of how existing institutions were leveraged for purchasing health services — transferring funds to health providers.

Generally, members of the Republic of Korea's National Health Insurance Scheme (NHIS) pay a copayment of 20% of health care service fees. For COVID-19-related services, these copayments were waived to guarantee access to health services without financial hardship. The NHIS also reduced their monthly insurance contributions to further ease the financial burden on the most vulnerable members. In the Philippines, all COVID-19-related care was free for patients, and providers were reimbursed through the existing single payer, PhilHealth.

To be effective, incentives for patients to access care need to be coupled with assurances to providers that they will receive the appropriate reimbursement for services. The Philippines leveraged PhilHealth to develop benefit packages for isolation, referral, testing and treatment of potential COVID-19 patients at PhilHealth accredited facilities. These packages were costed to determine provider payment rates. As Filipinos stayed away from health facilities due to the fear of COVID-19, PhilHealth stepped in and provided advance payments to protect accredited providers struggling from reduced patient visits at health facilities. Similarly, the Republic of Korea prepaid and expedited payment to providers — a policy based on learnings during the MERS outbreak as health care facilities faced financial difficulties due to the reduced number of patients.

To incentivize health providers, China provided per-person, per-day payment to providers caring for COVID-19 patients, along with paid rest time to prevent provider burn out. While in Nigeria, hazard allowances payable to health care workers on the frontlines was increased.

As demonstrated in these countries, strategic purchasing remains relevant in times of crisis such as a pandemic. Striking a balance between an increased demand in care and providing supply-side incentives provide a concrete foundation for health system responsiveness.

Leveraging primary health care and community health systems

PHC and community health are the first point of entry into formal health systems in many countries. Although many investments for the pandemic focused on "surging hospital capacity" with more intensive care beds and ventilators, and "flattening the curve," the reality is that many cases remain mild or asymptomatic, and PHC and community health systems remain the backbone to support contact tracing, testing and home-based care. In China, community health workers used a "grid-based" technique to log household health in their communities and provide support to those in isolation. In some instances, this support included delivering essential medicines from pharmacies to households whose members were unable to visit the store themselves. Bangladesh used established community health infrastructure for door-to-door community sensitization, household level testing and contact tracing by community volunteers. Kenya developed a home-based care model — designated community health workers support patients in their homes rather than in a hospital setting — allowing patients with mild symptoms to isolate in their homes. This approach drastically reduced the number of contacts and costs associated with out-of-home isolation. In Nigeria, the National Primary Health Care Development Agency leveraged community volunteers to support surveillance efforts and referrals to ensure that patients showing symptoms received timely care.

Governance and coordination across sectors and between levels of government

In times of crisis, governance arrangements play a critical role in building resilience to the COVID-19 pandemic and future epidemics or pandemics that may occur. The pandemic response goes beyond the health sector — all six countries have pandemic national coordination units that bring together all sectors, such as immigration, security, finance, transport, trade, education, and hospitality — including state and non-state actors — to develop multisectoral strategies that address the multiple facets of community life affected by COVID-19 and enforce their implementation. Effective pandemic responses require seamless coordination across sectors and between central and lower levels of government.

In Bangladesh, private individuals and enterprises supplied inputs to testing centers, and private facilities were mobilized to provide free testing and treatment services that would be later reimbursed by the government. Similarly, in Kenya, the private sector provided in-kind support to supply and distribute essential commodities, such as oxygen supplies and personal protective equipment for essential health workers and high-risk groups in the transport industry.

In Nigeria, where health care service provision is a function of autonomous state governments, the Nigeria Centre for Disease Control, Federal Ministry of Health and other federal agencies require close collaboration with State Ministries of Health and health departments to define testing and treatment protocols and their implementation, and fund flows to the providers under the mandate of the state governments. In the Republic of Korea, within 24 hours of the first confirmed case, an emergency quarantine system was enacted between the central and local governments. Local governments were responsible for establishing hospital sites, while the central government stepped in where the local government faced shortages with supplies or manpower.

Evidence-based strategies

Data is a vital component in helping governments, researchers, and policymakers battle the COVID-19 pandemic. With accurate, timely and complete data, governments can make informed decisions to ensure the safety of the population. In Bangladesh, the Ministry of Health used data to identify clusters for transmission, define criteria to zone parts of the city and target different levels of restrictions and safety precautions depending on new cases, recoveries and deaths. These localized, targeted measures allowed the pandemic response unit to focus resources on areas where the burden was highest, avoiding generalized restrictions for less affected areas. Kenya has prioritized efficiently analyzing incoming data, collected and synthesized, at both the national and county level. This data-driven approach has allowed the Kenyan government to stay abreast of the rapidly evolving situation, monitoring human resource, test kits, drugs and personal protection equipment levels to more effectively direct resources to where they are needed.

Innovation and technology

The unfolding crisis has driven abundant creativity and innovation at the national, institutional, and individual levels. the Republic of Korea pioneered drive-through testing for COVID-19 — an innovation that was adopted by many countries as a safe and effective method of testing. The innovative and rigorous testing measures are credited with reducing case numbers and fatalities. Kenya developed the Jitenge (Swahili for self-isolate) application, that allows patients to self-register or be registered by a health official at the initiation of quarantine, either in home isolation, quarantine, or at a point of entry. Users receive daily reminders and prompts to report on their health status providing an inexpensive way to track new symptoms and identify cases requiring further testing and treatment.

Sheltering populations through the 'infodemic'

The most important agents of change in a country are the people themselves. In the context of the pandemic, the behaviors of the population are crucial to curbing the virus. The COVID-19 pandemic is unique in that the wider population is learning about the coronavirus concurrently with healthcare professionals, researchers, and policymakers. With scientific information circulated and widely spread in a matter of seconds, without being thoroughly vetted by the scientific community, trust in health institutions and programs can be severely undermined. The pandemic has been proof of how information can be powerful, yet dangerous.

Bangladesh, Kenya, Nigeria and the Republic of Korea utilized existing resources to track contacts, and address stigma and fear, due to misinformation. Recognizing that public fear can derail efforts led by health officials and government leaders to contain the virus, Bangladesh and Kenya's television and radio media outlets broadcast health messages that were developed by the Ministry of Health, with key messages being further amplified by the local administration, community leaders and community health infrastructure. Nigeria mobilized community volunteers to share accurate COVID-19 information, including the signs patients should look for and when to seek medical care. the Republic of Korea used credit card transactions, CCTV recordings and GPS data on mobile phones to track and test those who had been in contact with confirmed COVID-19 patients and then alerted the public that they have been exposed to a confirmed case and encouraged them to go for testing.

Investing now for future pandemic preparedness and response systems

China, Nigeria and the Republic of Korea shared an important lesson — as countries grapple with addressing this pandemic, investments being made now — if well-organized, with clear institutional frameworks and organizational arrangements, will benefit countries in the future. In China, Nigeria, and the Republic of Korea, investments for previous epidemics have played a pivotal role in enabling quick responses for COVID-19. They built foundations for their public health disease surveillance and emergency response dating back to when each country faced an epidemic — SARS, Ebola, and MERS, respectively. For example, combating the Ebola epidemic in Nigeria strengthened the capacity to rapidly deploy disease surveillance, including screening at ports of entry and contact tracing. In the Republic of Korea, investments made for MERS were quickly deployed to link immigration records with health providers, track movement and contacts of suspected cases using mobile phone GPS systems, credit card transactions and security surveillance, and initiate research and development to quickly develop and ramp up production of test kits. These previous investments allowed for the setting up of quick response systems to the pandemic.

In summary, the COVID-19 pandemic has been rapidly evolving. We learn something new every day and course correct as needed. Progress can be made by ensuring that lessons and best practices are rapidly transferred across geographies to inform country response strategies and strengthen health systems to be more resilient and better prepared for the next crisis.

First Confirmed Case	Population	Confirmed Cases (as of September 29, 2020)	Recovered Cases (as of September 29, 2020)
March 30, 2020	164.7 Million	362,043	273,698

Authors: Agnes Gatome-Munyua
Contributors: Dr. Shahadt Husain Mahmud, Fatema Zohara, Dr. Subrata Paul, Dr. Kamaliah Noh

Adapting localized solutions to address local problems

Bangladesh, a lower-middle income country in South Asia, has a population of 164.7 million. The capital, Dhaka, has 22 million people and is ranked as the fourth-most densely populated city globally. The COVID-19 pandemic is concentrated in urban areas with the majority of cases in Dhaka. The first case was reported on March 30, 2020, and the COVID-19 cases peaked in June 2020 although the curve of new COVID-19 infections refuses to flatten as quickly after peaking, with more than 2,000 new cases daily on average in August 2020. The Ministry of Health and Family Welfare (MoHFW) is leading a multi-sectoral response to COVID-19, which is overseen by the Prime Minister, through a taskforce led by the Minister of Health and Family Welfare with representation of Public Administration, Public Security, Finance Division, Local government, and other sectors.

COVID-19 has brought new challenges and exposed the vulnerabilities of health systems in all geographies. International guidance changes frequently as new evidence is unearthed. As in all countries, Bangladesh has had to develop strategies to address the pandemic by adapting international guidance into their unique country context.

With the reality of their population density, informal economy, and inter-generational families, general lock down measures, isolation and quarantine, were unlikely to work. Rather, the national coordination unit based in the Ministry of Health and Family Welfare has had to innovate to create localized solutions. This short brief aims to spotlight best practices and lessons from Bangladesh's experience.

Evidence-based design of a contextualized triaged response

Generalized lock down, isolation and quarantine are difficult measures to enforce in low and low-middle income, densely populated countries with large informal economies. Instead, the national coordination unit based in the Ministry of Health and Family Welfare used data to identify clusters for transmission and define criteria to zone parts of the city and target different levels of restrictions and safety precautions depending on new cases, recoveries and deaths. Areas with very high numbers of cases per population are designated as red zones and lockdown measures are instituted, including closing businesses and limiting movement of citizens to 1-2 km from their house. Red zones were declared in urban areas if 60 or more people per 100,000 people were infected in the last 14 days, while in rural areas the threshold was lower at 10 or more infections per 100,000 people. Areas with intermediate case numbers are designated as yellow zones with fewer restrictions on movement, while areas with very low case numbers, or none, are designated as green zones and have no limitations in movement and businesses are open. Urban areas were designated as yellow zones if there were 3 to 59 infections per 100,000 people in the last 14 days. These localized solutions have supported targeted measures, allowing the pandemic response unit to focus resources on areas where the burden is high while reducing restrictions to the general public and allowing for a semblance of normalcy for areas that are less affected.

Setting up a working triage and referral strategy starting at the primary health care level

In urban areas, primary health care (PHC) is provided through the city corporations and municipalities owned by the local governments. In rural areas, PHC is provided through an extensive network of MoH facilities with community clinics at the lowest level linked to the union centers, which are linked to upazila-level (sub-district) hospitals. While there are referral linkages in rural areas, citizens in urban areas often bypass urban PHC clinics and prefer to go to hospitals. As such, Bangladesh did not have a properly working referral strategy when COVID-19 cases began. This made it difficult to triage and manage

suspected cases appropriately and to maintain other essential services.

To mitigate this, the MoHFW developed the COVID -19 case management plan which outlines health care services at different levels of the health system, referral points, drug and treatment protocols, and testing protocols. The MoHFW was quick to ramp up testing with 45 facilities approved for testing, increase access to Personal Protective Equipment (PPE) to protect health workers, and increase capacity of oxygen generating plants to ensure a steady supply. PHC facilities that did not have access to oxygen were supplied with oxygen cylinders. At almost all facilities, particularly at upazila health complexes, fever clinics were set up to triage and filter COVID and non-COVID cases with suspicious cases sent to isolation wards or COVID-19 designated hospitals.

At the community level, the MoHFW worked with local authorities to collect samples at home. In rural areas, upazila health complexes — through a network of volunteers — collected travel history information and traced contacts of suspected and confirmed cases. There was a special hotline dedicated for citizens to call if they had suspicious symptoms or were in need of an ambulance. Furthermore, COVID-19 prevention and control committees were established in district and upazila levels — comprising the head of the local public hospital, local authority, and police and education officers.

Private facilities were contracted to provide free COVID-19 services

The private sector has been invaluable in the COVID-19 response with private individuals and enterprises donating to the response and mobilizing domestic resources to supply inputs for testing centers. In terms of service delivery, private facilities have been mobilized to provide treatment services that are reimbursed by the government. The private facilities received inputs such as PPE, test kits, drugs, and equipment to facilitate service delivery.

As there was no contractual agreement to facilitate private sector contracting, a simple agreement was made between COVID-19 designated private facilities and the MoHFW using fee-for-service as the payment modality. The private facilities bill the Director General of Health Services under MoHFW, with itemized claims for patients managed at their facility. This arrangement requires significant trust from both parties as there are no pre-negotiated rates and treatment protocols for high end care are not set; guidelines also change rapidly. However, the arrangement is working for now but will require evaluation in the future.

Addressing stigma

Fear in accessing services and the stigma related to respiratory symptoms due to COVID-19 has resulted in a drop in facility attendance and suspicious cases hiding in the community. The MoHFW has maintained essential services, by designating COVID and non-COVID facilities in urban areas or COVID-specific units in rural hospitals, where there are shortages of facilities; and has sustained health services in outpatient departments. In addition, Bangladesh has used above-the-line media, such as television, print, mobile phone voice alerts and messages, and a dedicated hotline, to address citizens' concerns. The hotline service has a dedicated tracing application, which is linked to an ambulance service for critically ill cases. In addition, below-the-line channels leverage established community health infrastructure for door-to-door community sensitization, community testing at household levels and contact tracing by community volunteers.

In conclusion

Each country will have to forge the best path based on its unique context to overcome the pandemic. Despite the challenges of initial shortages of PPE and human resources, Bangladesh has recognized that no one size fits all and has identified local solutions to overcome the pandemic.

First Confirmed Case	Population	Confirmed Cases (as of September 29, 2020)	Recovered Cases (as of September 29, 2020)
December 31, 2019	1.39 Billion	90,509	85,415

Authors: Agnes Gatome-Munyua

As COVID-19 began to spread rapidly around the world, Chinese health officials identified two priorities to guide their response: timeliness and access. These measures were largely effective, while many countries have continued to grapple with sustainable containment policies, China has seen community transmission drop. On August 23, 2020, Reuters reported that China had seen eight consecutive days with no local transmission of COVID-19.[1]

A triaged approach for rapid response

The rapid spread of COVID-19 underscored the importance of timeliness in controlling the outbreak. In response to the exponential spread of infection, Chinese officials developed a strategy, dubbed the "Four Early's," that sought to minimize infection by identifying, addressing, and conducting contact tracing for infections as soon as possible. The pillars of this strategy — early detection, early reporting, early isolation and early treatment — were bolstered by a triaged approach for different regions based on the level of risk identified. The strategy allowed policymakers to direct resources more efficiently to where they were most needed.

In low-risk areas — that is, areas without suspected or confirmed cases — a "prevent importation" principle was followed. This emphasized screening, monitoring, detection and reporting, and stipulated that any patients with a fever be referred immediately for further testing. In medium-risk areas, categorized by low incidence with some community spread, the goal was to prevent importation of new cases and stop local transmission. This was achieved by thorough epidemiological investigations, in which community health workers used a "grid-based" technique to log household health in their communities and provide support to those in isolation. In some instances, this support included delivering essential medicines from pharmacies to households whose members were unable to visit the store themselves. These same practices were carried forward in high risk areas, which also included further triaging to address the needs of high-risk patients and implemented strict prevention and control measures.

In addition to rapid response rates — the turnaround time for lab reports was about 12 hours. This approach also emphasized the local context. This was achieved by prioritizing the role of primary health care providers in each stage of detection, testing, and patient management. Moreover, the rapid flow of information from central levels into each province, partially bolstered by a "wartime pandemic control system," helped ensure that information was effectively translated, and standardized practices were followed.

Increasing access to quality care

To successfully curb the spread of COVID-19, officials recognized that access to high quality health services could not be a barrier to any patients. Free treatment policies for all citizens were established, and information that these services were available was widely disseminated. In response to broad reluctance to visit clinics for non-COVID related conditions in the early months of the pandemic, telemedicine options have surged in China. This created an important stop-gap for overburdened clinics and may serve as a harbinger for a permanent change to the way some health services are accessed in China, especially for rural patients.

Sustainably increasing access to care requires that guarantees to patients are matched by similar guarantees to providers. This gives providers confidence that their labor will be appropriately compensated, and removes any disincentives to taking on increased caseloads in order to effectively address need. In China, this support manifested in the form of per-person, per-day premiums for working with COVID-19 patients, along with paid rest time to prevent provider burn out. Aligning demand-side assurances with supply-side incentives helped strengthen system responsiveness and allowed China to more effectively

identify and track emerging cases.

Building on success

In the aftermath of the COVID-19 pandemic, officials have indicated that things won't exactly go "back to normal" for the Chinese health care system. Rather, experts say that this experience may serve as a catalyst, in much the same way the response to SARS in 2003 did, to expedite new reforms.

[1] https://www.reuters.com/article/us-health-coronavirus-china-cases/china-reports-16-new-covid-19-cases-eighth-day-without-local-infections-idUSKBN25K01

First Confirmed Case	Population	Confirmed Cases (as of September 29, 2020)	Recovered Cases (as of September 29, 2020)
March 12, 2020	47.6 Million	38,378	24,740

Authors: Allyson English
Contributors: Agnes Gatome-Munyua

A data-driven approach to timely response

By the time cases of COVID-19 were documented in East Africa, a comprehensive containment strategy in Kenya was already underway. By March, the Ministry of Health was already working in partnership with a range of government agencies, partners and a National Emergency Response Committee was established by executive order. Officials knew that fighting the COVID-19 pandemic would require a multi-pronged approach. In addition to the epidemiological factors involved to curb the spread and ensure that infected individuals receive the timely and high-quality care they need, Kenya also recognized the need to address the social, behavioral and economic elements of prevention and protection.

One of the major priorities in Kenya's response has been the efficient processing of incoming data to ensure timeliness, completeness and accuracy. These data — which are made publicly available through daily national press briefings and on the Ministry of Health website — are collected and synthesized at both the national and county level. Though there is room to improve the flow of information, including increasing the response rate from private sector facilities and achieving even more granularity to compute trends at the sub-national level, this approach has allowed the Kenyan government to stay abreast of the rapidly evolving situation, monitoring human resource, test kits, drugs, and personal protection equipment levels in order to more effectively direct resources to where they are needed.

Combating the 'info-demic'

One of the major challenges that all countries faced in responding to COVID-19 was sharing timely and accurate information, especially as misconception and myths began to spread about the origins of the virus, the modes of transmission, and the preventative measures. In Kenya, the proliferation of misinformation was termed an "info-demic," — the effects of which could be nearly as dangerous as the spread of the virus itself. When the first case in the country was documented on March 12, news stations and digital media outlets had already begun to broadcast messages to the public about how individuals could remain safe. Soon after, radio stations and digital platforms amplified key messages about precautions individuals should take. To harmonize and streamline health messaging across media outlets, broadcast messages were developed by the MoH. These messages were reinforced by sensitization forums, chiefs' baraza, local administration and community sensitization to amplify the message and create awareness. And yet, changing social norms — and helping individuals guard against the fatigue associated with prevention activities — can be challenging.

Ensuring patients receive the care they need

In the early weeks of the pandemic, primary health care utilization rates saw a sharp decline, due in part to restricted mobility imposed by local officials (such as curfews) as well as feelings of fear among patients that visiting a health clinic would increase their risk of contracting COVID-19. Health officials realized that, in addition to spreading accurate information about COVID-19, it was necessary to assure individuals that visiting a health facility to seek care for other needs was not dangerous. The Ministry of Health estimated that as many as 1.2 million health visits for prenatal and antenatal care, antiretroviral therapy for HIV patients, malaria treatment, routine vaccinations, and under-five visits were foregone during the early months of the pandemic. To respond to this fear, counties annexed facilities specifically for COVID-19 patients, and the national government gave guidance to each county to reserve 300 hospital beds for COVID-19 related patients. Non-COVID related care was redirected to other facilities. Additionally, guidelines were issued on continuity of essential care services during COVID-19.

Health workers were a key resource used to combat the spread of misinformation and re-establish patient trust in health facilities. As clinics and providers have adapted their means of service delivery, several important innovations have helped strengthen patient trust in clinics, reduce the chances of excess exposure, and ensure that care can be both comprehensive and continuous. A home-based care model — where designated community health workers support patients in their homes, rather than in a clinic — allows patients with mild symptoms to isolate in their homes, rather than seek care in a hospital or clinic. This approach drastically reduces the transmission of the coronavirus and helps mitigate costs associated with out-of-home isolation. The program focuses on empowering individuals — and those in their household — with basic knowledge, skills and competencies in self-isolating to watch for symptoms and in caring for someone with COVID-19. In the event that symptoms escalate, households are provided with an emergency number to call to notify the designated health worker and transfer the symptomatic individual to a higher level of care.

Leveraging tech solutions

Nairobi — Kenya's Silicon Savannah — has been home to a range of innovative tech solutions to help individuals stay safe and informed while curbing the spread of the virus. The Jitenge system — named for the Swahili word for self-isolate — was developed to support government efforts to control the spread. The system allows patients to either self-register or be registered by a health official at the initiation of quarantine, either in-home isolation, in a quarantine facility, or at a point of entry. Users then receive daily reminders and prompts to report on their health status, such as their symptoms and other relevant information. Thus far, the system has been used effectively to manage home-based care, self-quarantine, post-isolation follow-up, and to monitor the health of long-distance truck drivers.

As Kenya reflects on what the COVID-19 pandemic has demonstrated thus far, the key takeaway is clear: advancing universal health coverage (UHC) is the best means of pandemic prevention to ensure a better response now and in the future. Accordingly, nearly all of the efforts to address COVID-19 in the country have sought to use a systems approach, rather than short-term fixes, with the hope that the Kenyan health system will emerge from this response more resilient than before. Harnessing a strong community response — combined with clear guidance from the national level — has been one of the most effective strategies for helping Kenya achieve this. The impact of COVID-19 on each county has varied greatly and, accordingly, the response required has varied as well.

First Confirmed Case	Population	Confirmed Cases (as of September 29, 2020)	Recovered Cases (as of September 29, 2020)
February 2020	195.9 Million	58,647	49,937

Authors: Allyson English, Dr. Kurfi Abubakr, Dr. Nneka Orji, Dr. Shamsuddeen Sa'ad, James Dominion, Dr. Francis Ayomoh

Triaging a health systems response

When the first case of COVID-19 was diagnosed in Nigeria, the federal government was ready to act. Just one week after the country reported its first case, a Presidential Task Force (PTF) was created to provide leadership and technical recommendations for the COVID-19 response. The first priority was mitigating the spread of infection, but experts were keen to ensure that any response mobilized for COVID-19 did not take place in isolation. The sustainability of the response would only be as strong as the extent to which efforts were both integrated into and aligned with the existing health system, while also leaving room for local contextualization by different states.

As the world has continued to grapple with the pandemic, the wisdom of this approach is even more apparent: a systems-based response not only helped reduce the burden of morbidity and mortality in the immediate term but has also helped prepare Nigeria to better handle a resurgence of COVID-19 — or any other pandemic of similar magnitude. Care was taken to minimize the impact of the pandemic on critical social, economic and health infrastructure systems and to outline how Nigeria's response would translate into post-pandemic recovery and rehabilitation.

Learning by doing

Around the world, the COVID-19 response has been a learn-by-doing effort. Responding to the pandemic has pushed providers, policymakers, and health systems experts to be creative in their approaches and to incorporate what they learn as new evidence becomes available. In Nigeria, no pre-defined benefits package existed for health services during a pandemic, so the government had to establish a case management plan that was feasible, realistic, and efficient. Policymakers decided that COVID-19-related testing and treatment, including medical services and hospitalization, should be free for all patients and exclude any associated fees or out-of-pocket payments. These same guidelines were applied for essential drugs related to the treatment of COVID-19. The goal of these policies was to ensure that financial barriers did not cause patients to forego care and inadvertently spread COVID-19 to their neighbors and communities.

Designing a comprehensive, inclusive, and system-wide health strategy is one thing but funding such a response is a different matter entirely. As the price of crude oil dropped and global lockdowns stifled international trade, one of the major challenges that the PTF confronted was mobilizing funding for COVID-19 efforts. The federal government realized that in order to curb the spread of the virus, the pandemic response must be robust and requisite care must be guaranteed for all citizens. Under federal and state government guidance, private health care providers were harmoniously integrated into the response and the government ensured that providers received appropriate compensation for treating all COVID-19 patients. This was an essential step to ensure continued service delivery amid the pandemic response as guaranteeing free services to COVID-19 patients can only be effective if healthcare providers are confident that they will receive appropriate remuneration for services rendered. A World Bank loan, donations from UN organizations and other domestic and external sources, as well as some strategic reprioritization of funds in the existing government budget helped cover some of these costs, and support the provision of essential medical supplies. At the same time, the private sector mobilized financial and material resources through the Coalition against COVID-19 (CaCOVID) — a private-sector-led group that donated isolation centers, personal protective equipment, medical supplies and funds.

Providers have also had to innovate for non-COVID-related care. Clinic data reviewed in the early weeks of the pandemic showed that health visits for non-COVID-19-related needs dropped significantly at the onset of the COVID-19 pandemic. Patients stayed away from health care facilities for fear of being infected with COVID-19 within clinical settings. Telemedicine and other digital health solutions, especially in the private

sector, helped fill the service delivery gap caused by patients' fears and allowed patients to overcome these fears amid the pandemic. Nigeria's National Health Insurance Scheme also developed an integrated health insurance response to COVID-19 that will ensure continuity of services by both public and private providers to the benefit of health insurance enrollees. This response also leverages the COVID-19 pandemic to advocate for UHC in Nigeria and ensure no Nigerian is left behind when it comes to access to affordable and qualitative health care.

The Federal Ministry of Health provided stewardship for the COVID-19 response in collaboration with the National Centre for Disease Control, providing guidelines for laboratory diagnosis of COVID-19 infection across the country. To further enhance the technical inputs for the pandemic response, the Federal Ministry of Health constituted a Ministerial Expert Advisory Committee on COVID-19. The National Primary Health Care Development Agency (NPHCDA) supported the continued delivery of essential health care services by training the primary health care workforce on COVID-19 service delivery protocols. To further motivate the health workforce at the frontlines, the federal government increased the hazard allowances payable to healthcare workers. The government also made efforts to ensure essential health care workers and those offering services in isolation and treatment centers were duly trained on the protocols for diagnosing, isolating and treating patients with COVID-19 and received personal protective equipment.

Leveraging community health systems

Health care access challenges were further complicated by the large population size and high proportion of the population living in remote areas. To confront the spread of misinformation about the virus and symptoms, community volunteers were mobilized to share accurate COVID-19 information, including the signs patients should look for and when to seek medical care. The community level health response also played a key role in the referral process, to help ensure that patients showing symptoms received timely care. Outreach and awareness-building have been essential to ensure that the population is not only aware of what COVID-19 is, and what the symptoms are, but also the rights patients have in accessing care and where such care can be sought. In addition to playing an important role in sensitization, NPHCDA trained over 200,000 health personnel and community volunteers to support surveillance efforts as well as infection prevention and control.

Of the many lessons emerging from Nigeria during the response, one seems to stand out most clearly: the COVID-19 pandemic is demonstrating how interrelated health is to all social systems and should be used as a template to advocate for a system-wide response for good health.

First Confirmed Case	Population	Confirmed Cases (as of September 29, 2020)	Recovered Cases (as of September 29, 2020)
January 30, 2020	108 Million	309,303	252,930

Authors: Agnes Gatome-Munyua, Mel Santillan, MD
Contributors: Merla Rose Reyes, Abigail Estrada, Reiner Lorenzo Tamayo

Leveraging the existing single payer (PhilHealth) to strategically purchase COVID-19 services

The Philippines, an archipelago in Southeast Asia, is a lower-middle income country with a population of 109.5 million. The first case of COVID-19 was reported on January 30, 2020, and the first case of community transmission was documented on March 4, 2020. COVID-19 cases increased in mid-August 2020 with general lockdown measures being re-instituted in the most populous parts of the country such as Manilla, the capital, where almost all Filipinos have been ordered to stay at home.

In 2014, the Philippine Government established the Inter-Agency Task Force for the Management of Emerging Infectious Diseases to facilitate inter-sectoral collaboration for epidemic preparedness and ensure an efficient government response to assess, monitor, control, and prevent the spread of epidemics. The task force, chaired by the Secretary of Health, was convened in January 2020 to lead an inter-sectoral collaborative response to the COVID-19 pandemic.

The Philippines Health Insurance Corporation (PhilHealth), established in 1995, administers the National Health Insurance Program (NHIP) to provide health insurance coverage and ensure accessible and affordable health care services for all Filipinos. In 2019, the Universal Health Coverage (UHC) law was passed, which expanded access to health care services by automatically enrolling all Filipinos in the NHIP. At the onset of the COVID-19 pandemic, PhilHealth played a pivotal role in financing health care services. This brief documents actions taken by PhilHealth and how it has leveraged existing systems to quickly respond and contribute to the pandemic response.

A strategic purchaser defines what to buy, where to buy and how to buy

In January 2020, PhilHealth developed a benefits package for the isolation and referral of suspected cases at all PhilHealth-accredited facilities — with full reimbursement to health care providers. Meanwhile, PhilHealth continued to collect data to develop new benefit packages, which were launched in April 2020. These explicit benefit packages included health and non-health benefits for COVID-19 testing, community isolation and inpatient case management for mild, moderate, severe and critical case types.

	Community isolation	Testing by RT-PCR	Inpatient case management for COVID-19
Included services	• 14 days admission • Accommodation, food, hygiene kit • Patient education • Monitoring • As needed: medicines, diagnostics, imaging, referral and transport to other facility	• Screening/clinical assessment • Specimen collection • Specimen handling • Conduct of RT-PCR testing • Analysis and reporting	• Accommodation • Management and monitoring of illness • Diagnostics: Laboratory, imaging • Medicines • Supplies and equipment • Professional/readers' fees
Contracted Public and Private Providers	• Accredited and Department of Health (DOH)-certified community isolation units or temporary make-shift isolation centers	• DOH licensed and PhilHealth accredited testing laboratories	• Accredited level 2 or 3 health care provider and Tertiary hospitals for inpatient case management • COVID-19 referral centers for severe and critical cases
Payment modality	Case based payment rates for each benefit package		

The Department of Health (DOH) licenses public and private health facilities, while PhilHealth accredits and contracts health facilities to offer different benefit packages. While guidelines are still evolving and being updated, PhilHealth based their costing for COVID-19 case management on existing guidelines and used the patient's perspective to identify full economic costs. These costing estimates were used to develop payment rates. Rather than use the provider perspective for the analysis — which reflects providers' acquisition costs that are difficult to obtain and capture accurately, and also have wide variances because of differing institutional cost structures — PhilHealth used direct medical costs borne by the patients, which are the costs of services encountered by patients at the point of care. These costs are price signals that reflect provider acquisition costs, that will generate a sufficient margin to support sustainable operations and embodies the health facilities objectives regardless of ownership (public or private).

Reimbursement amounts for the COVID-19 testing benefit package were based on market information on test kits and in consultation with infectious disease experts. Prevailing rates may change in the future as protocols change and with the entry of new test kits. Therefore, PhilHealth is tracking prevailing market conditions and demand for testing services, that will inform subsequent policy reviews.

Buffer payments to protect health providers

When local community transmission began in March 2020, PhilHealth initiated an "interim reimbursement mechanism" (IRM) or advance payment to accredited health care providers. The IRM supported health care providers who were struggling with increasing operational costs coupled with reduced footfall as Filipinos stayed away from health facilities because of stigma and fear of COVID-19. The reimbursement was computed based on historical data of health care provider operations and billing in the previous year.

Monitoring strategic purchasing functions

PhilHealth used their existing monitoring systems to monitor the effectiveness of their purchasing functions. The health care provider assessment system supported the medical audit of submitted claims, which were required to be detailed and itemized with comorbidities listed using ICD coding. This system also tracks utilization of health care services, and is being used to examine quality and appropriateness of treatment. Feedback channels through the regional PhilHealth centers receive patient feedback, such as patients' suggestions, complaints and any cases of informal charges levied by providers. An expert panel is due to review the COVID-19 benefit packages, and their implementation, to inform subsequent revision of the benefit packages.

In conclusion

Despite PhilHealth being designated as the primary channel for resources to health care providers, resources continue to flow directly to providers through other channels beyond input financing — limiting PhilHealth's ability to take advantage of its monopsony power. However, the Philippines presents an interesting example on how a social health insurance program can leverage existing purchasing mechanisms to transfer funds to health care providers rather than use parallel channels to fund the pandemic response as observed in many countries.

First Confirmed Case	Population	Confirmed Cases (as of September 29, 2020)	Recovered Cases (as of September 29, 2020)
January 20, 2020	51.6 Million	23,699	21,470

Authors: Nivetha Kannan, Hyeki Park, Hyunjin Cho

Preparedness for public health emergencies

The Republic of Korea's preemptive and transparent public health response was instrumental to slowing the spread of the virus and flattening the curve of new infections, without as severe restrictions to businesses, travel, and movement, as compared to other countries. In the aftermath of the Middle East Respiratory Syndrome (MERS) outbreak in 2015, the country implemented a series of policy changes to boost pandemic preparedness and response. These policies provided a crucial foundation for the COVID-19 response and became investments that were quickly leveraged, and supported a faster and more effective response. As a result, even prior to the first confirmed case of COVID-19 in the country, the government had already begun preparations to ensure large volumes of diagnostic tests were readily available.

Within 24 hours of the first confirmed case of COVID-19, the government immediately scaled up the national alert level from attention (Blue — Level 1), to caution (Yellow — Level 2) on a 4-level national crisis management system, which swiftly communicated risk to the public. As the system further escalated to alert (Orange — Level 3), the Korea Disease Control and Prevention Agency (KCDA) tirelessly coordinated national efforts with cooperation from the central and local governments. After a month, the level escalated to serious (Red — Level 4) and the Prime Minister initiated the "Central Disaster and Safety Countermeasure Headquarters" for active cooperation between all government ministries. The system proved to be a seamless and coordinated response to COVID-19 that spanned various departments and different levels of government. The six focus areas for the response were holistic and included entry prevention, response to confirmed cases, early patient detection, treatment of COVID-19 patients, treatment of non-COVID-19 patients, and resource-securing and support.

The role of National Health Insurance in providing financial protection against COVID-19 health expenses

The National Health Insurance (NHI), a single-payer system, facilitated free diagnosis and treatment services for the population. In normal circumstances, NHI members pay a copayment of 20% of the costs of health care. In the case of COVID-19, copayments were eliminated to guarantee access to health services without financial hardship. 80% of costs were paid by the NHI scheme, while 20% was covered by the government. Further, to ease the financial burden on the most vulnerable insured members, the NHI scheme reduced their monthly insurance contributions. The reduction rates varied according to their area of residence (as documented in the sidebar). So far, approximately 11.6 million individuals have benefited from these reductions to their insurance contributions amounting to US$ 700 million. Easing the financial burden and providing easy access to testing and treatment enabled the population to seek needed care, and in turn, for the country to effectively control the spread of COVID-19.

To ease the public's financial burden, NHIS reduced monthly insurance contributions as follows:

- *Residents of the special disaster zone - 50% reduction for 3 months for those in the lowest 50% of the income bracket*
- *Residents of other areas - 50% reduction for 3 months for those in the lowest 20% of the income bracket and 30% reduction for 3 months for those in the lowest 20% - 40% income bracket*

The Korean government quickly mobilized providers and resources to sustain health services

The NHI covers nearly 97.2% of the population — around 51.4 million people. The health system is heavily dominated by private providers — 94% of hospitals and 90% of beds are owned by the private sector. While the NHI is publicly funded, both public and private providers are mandatorily enrolled in the scheme.

During the MERS outbreak, health care facilities faced financial difficulties due to the reduced number of patients, ergo for COVID-19, the government was able to promptly identify the importance of protecting public and private providers. The Korean government then implemented prepayment and expedited payment to providers.

With a coordinated and proactive health system, the Korean government was exceptionally prepared to

> *"Honestly, it's very ironic. Before the pandemic of COVID-19, overutilization and oversupply of equipment and health facilities has been a point of criticism about the Korean National Health Insurance scheme. Because of the COVID-19, that oversupply has become an advantage to combatting COVID-19."*
>
> – Hyunjin Cho

quickly mobilize providers and resources to sustain health services during the COVID-19 pandemic. In the aftermath of MERS, the KCDA had designated several beds in mostly public hospitals — called "nationally-designated beds" — that would be allocated to treat infectious disease patients. Initially, these "nationally-designated beds" were the primary resource to treat COVID-19 patients. In tertiary-level private hospitals, there are "beds dedicated to severe infectious disease," which treat patients with complicated illnesses, such as cancer. As the number of COVID-19 patients increased, these private hospitals were mobilized and some of the beds dedicated to severe infectious disease were re-designated to treat only COVID-19 patients. By the end of February, there was a surge of COVID-19 cases in the ROK. With a shortage of beds, the Korean government then mobilized a number of hospitals to exclusively treat COVID-19 patients. The Republic of Korea's prompt reallocation of resources increased their capacity to treat patients quickly. In this way, the Republic of Korea was able to surge the bed capacity based on the daily confirmed cases, mobilizing public and private hospitals as required.

A holistic government response

While governments and bureaucracies have the potential to slow a public health emergency response, the Republic of Korea is a noteworthy example of a government's coordination between departments and governments contributing to a more efficacious response. The spread of COVID-19 has required cooperation between central and local government. For example, within 24 hours of the first confirmed case, an emergency quarantine system was enacted between the central and local governments. The central government established guidelines while local governments were responsible for establishing hospital sites. When the local government's capacity was insufficient, or they faced shortages with supplies or manpower, the central government stepped in to fill the gaps.

Innovating in times of crisis

The government was not only able to dramatically expand their testing capacity, but they were also able to implement innovative and rigorous testing measures that are credited with reducing case numbers and fatalities. The Republic of Korea pioneered drive-through testing for COVID-19 and went on to implement walk-through testing as well. In this case, COVID-19 sample collectors were stationed outside, conserving resources, as there was less of a need to change protective gear with each case. With getting a test as effortless as everyday tasks, those infected with COVID-19 were diagnosed easily and conveniently; and informed quickly, preventing further spread to the community.

Gaining public trust

As evidenced in other countries, fear and misinformation can derail efforts led by health officials and government leaders to contain the virus. After the first confirmed case was recorded, the government stressed transparency and released details to the public quickly to reduce unnecessary fear. Using credit card transactions, CCTV recordings, and GPS data on mobile phones to track and test those who had been in contact with confirmed patients, relevant anonymous information was disclosed to the public to alert them of having crossed paths with confirmed patients. This level of information disclosure not only played a role in reducing fear, but also in strengthening public trust in the government response.