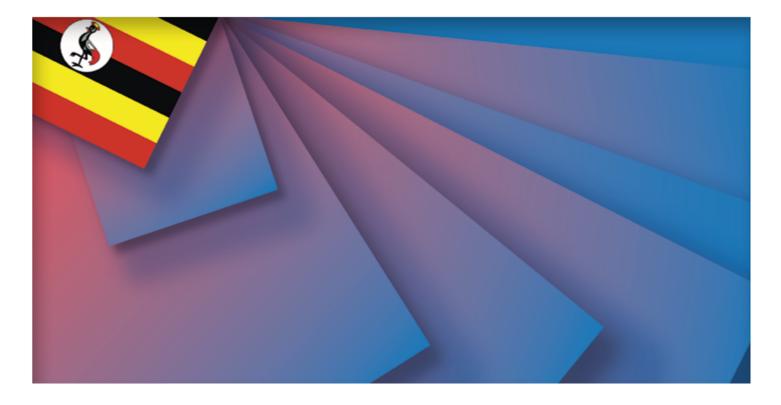


Uganda: a primary health care case study in the context of the COVID-19 pandemic

Rhona Mijumbi-Deve Ismael Kawooya Edward Kayongo













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Executive summary

The experience of the COVID-19 pandemic strengthened Uganda's commitment to primary health care (PHC). The country's previous experience with several epidemics and other political factors helped to shape PHC, which in turn influences its pandemic response. This case study examines PHC in Uganda in the context of the COVID-19 pandemic from early 2020 through to mid-2021.

Although there were strengths in the response, public health interventions introduced to limit virus transmission had a significant impact on vulnerable individuals and livelihoods. There were also reports of stigma around the virus, which in some instances was propagated by the negative language used by authorities.

Scaling up and managing critical emergency services requires efforts to strengthen public-sector governance – involving political leaders' efforts to mobilize multisectoral networks and ensure accountability. Case study findings suggest that these efforts should not overshadow investment in technical expertise, which provides scientific evidence for decision-making. Opportunities can be harnessed to strengthen health information systems and reporting structures to help improve community diagnosis, planning, referrals and monitoring. Moreover, to reduce the health burden in Uganda and establish sufficient capacity during emergencies, public systems may need to involve the private sector to meet the needs of the population. Although Uganda's response to COVID-19 throughout 2020 and 2021 utilized a multisectoral approach, some have noted challenges in engaging with and supporting the Ministry of Health (MoH) during the early phase of the pandemic.

Within the pandemic context, medical teaching universities adapted their curricula to emphasize self-directed learning, learning in small groups, and community-based learning and practice. Looking to the future, tthere are opportunities to explore a hybrid model of in-person and remote learning, and to review the training curricula of health workers to achieve a balance between specialization and general practice training to meet primary care needs.

While community engagement initiatives were limited in initial response efforts, the National Community Engagement Strategy proved invaluable in guiding action and it is expected that this strategy will lead to the institutionalization of integrated people-centred PHC, especially for infectious disease management.

Introduction and national context

Uganda is a landlocked country in East Africa with a population of 45.7 million in 2020, of whom over 20% live below the national poverty line. Life expectancy at birth is 64 years, with a fertility rate of 4.7 births per woman. The under-5 mortality rate stands at 43 deaths per 1000 live births, down from 76 a decade earlier (1). Infectious diseases represent the greatest health burden in Uganda – HIV/AIDS, malaria, lower respiratory infections, tuberculosis (TB) and meningitis are the leading causes of mortality. However, the country also faces a growing burden of noncommunicable diseases (NCDs) (primarily cardiovascular disease and cancer), which are estimated to account for 27% of deaths (2, 3).

This country case study examines PHC in Uganda in the context of the COVID-19 pandemic from early 2020 through to mid-2021. It focuses on: 1) integrated primary care and essential public health functions; 2) multisectoral policy and action; and 3) community engagement.

The case study draws on the views and experiences of key stakeholders within the health sector who were involved in the planning, management and analysis of the COVID-19 response. This includes officials from the MoH and districts at leadership and technical level, as well as development partners, community leaders, citizens and academics. Data were also collected from a comprehensive document review. Information was coded and categorized to identify pertinent gaps.

Commitment to PHC

Primary care is delivered through public and private facilities, based on a National Minimum Health Care Package. In the public sector, PHC is provided via a doctor-led referral system, with rural areas in particular relying on services delivered by clinical officers and Community Health Workers (CHWs). The MoH governs both the public and private health sector, supported by District Directorates of Health Services (DDHS) that manage services and facilities at Health Subdistrict (HSD) level. National and regional referral hospitals operate at central level, while health centres and Village Health Teams (VHTs) operate at HSD level as the principal providers of PHC (3).

A functional PHC system is central to the management of COVID-19. Such a system "addresses the broader determinants of health and focuses on the comprehensive and interrelated aspects of physical, mental and social health and wellbeing" (4) – factors that health managers have highlighted as crucial to managing people, populations and the pandemic in general. As countries responded to COVID-19, they found that the core values of PHC such as social justice, equity, solidarity and participation were invaluable.

Table 1 illustrates the government's commitment to the core strategic levels of the World Health Organization's (WHO) PHC operational framework (5).

Table 1. Examples of Uganda's efforts towards the four strategic levers of the WHO PHC operational framework

Core strategic levers

Example of Uganda's efforts towards strategic lever

Political commitment and leadership that places PHC at the heart of efforts to achieve universal health coverage and recognizes the broad contribution of PHC to the Sustainable Development Goals (SDGs) Uganda has assigned PHC to one of two State (Deputy) Cabinet Ministers in the MoH. This ensures that the PHC agenda is prioritized at a high policy- and decision-making

Governance and policy frameworks and regulations in support of PHC that build partnerships within and across sectors, and that promote community leadership and mutual accountability Restructuring in the MoH has seen the formation of a Department of Health Sector Partners and Multisectoral Coordination. This reflects the importance that the MoH and government places on partnerships and coordination across sectors.

Adequate funding for PHC that is mobilized and allocated to promote equity in access, to provide a platform and environment to enable and incentivize high-quality care and services, and to minimize financial hardship

Health care is financed through government revenue (15%), private funds including out-of-pocket expenditures (38%) and donor grants/loans (47%) (6).

The government has introduced financing reforms that are supportive of PHC. For example, it removed user fees in 2001 in a bid to reduce catastrophic health expenditure for both poor and nonpoor households (7). This resulted in an immediate increase in utilization of both public and private health services, which was most evident in the poorest quintile of the population (8, 9).

Also, since 1997, in an effort to increase access to services, the government has supported the private-not-for-profit (PNFP) sector, through financial and nonfinancial Government Resource Contributions (GRCs) (10). Financial GRCs are primarily PHC grants.

Engagement of community and other stakeholders from all sectors to define problems and solutions and prioritize actions through policy dialogue The government has put in place portals in which community feedback can be sought. For example, the Office of the Prime Minister (OPM) holds *Barazas*, which are community-based information fora. These provide a platform for citizens to participate in the development cycle. Their feedback spans all sectors and programmes. *Barazas* have been found to increase citizen participation when appraising government programmes and projects and help identify priority areas for further intervention (11). They have been found to be more popular in rural areas than urban ones, however.

COVID-19

The daily number of new COVID-19 cases peaked at about 41 new cases per million in December 2020, and rose again to 38 new cases per million in June 2021 (12). At the onset of the pandemic, several contextual factors shaped PHC and therefore also shaped its response to COVID-19. In turn, the PHC structure and response may have shaped the trajectory of the pandemic too. Uganda had experienced several epidemics prior to COVID-19 – most notably Ebola virus in 2000, 2014, 2017 and 2018 (13) – and this was important in driving the PHC response (positively or otherwise). For example, the population easily and quickly adopted Standard Operating Procedures (SOPs) such as frequent hand washing and social distancing because they had experienced these public health measures before.

Uganda's health system is designed and tailored to support a more curative approach, therefore facility-based interventions are common and are prioritized in budgets. In addition, the country has a decentralized health system, although it has faced severe implementation challenges that have sometimes compromised the intended outcomes (14, 15). Often, districts to which authority should have been handed wait for implementation instructions and funds from the central level, and they hesitate in making decisions for service delivery (16). Furthermore, the private sector, although large and used by 37% of those who seek care as a first point of call (17), is often not prioritized and is poorly engaged during decision-making (18). The two systems – public and private – often seem to run in parallel and are not complementary at all levels of the health care system, with both providing suboptimal quality of care.

The service coverage index for universal health care (UHC) – an indication of whether people in need of health services receive them and whether they incur financial hardships in doing so – is at 44 (19). With a high percentage of the population seeking essential services from the private sector and having to pay for them, and with a fifth of the population living below the poverty line, this means that a considerable proportion of those seeking health services are not able to meet the costs.

Perhaps the most significant contextual factor in the country's response to COVID-19 is that, at the height of the pandemic, the country was preparing for a national election, which the government declined to postpone. It advised on strict SOPs instead; however, these were often breached. Furthermore, stakeholders indicated that in some instances COVID-19 was politicized or used as an excuse to carry out (or not) certain activities. During this time, the public agitated for major reforms to the public health system and services (20).

How primary care and essential public health functions are responding to COVID-19

The MoH declared COVID-19 a notifiable disease and an epidemic on 17 March 2020, passing several presidential directives and statutory rules according to the Public Health Act 1935 (21) in response to the virus. Initially surveillance, contact tracing, and quarantine and isolation (which were institutional) were coordinated centrally. Later, contact tracing was delegated to District Health Teams (DHTs) and isolation shifted to self-isolation. The government restricted entry at all border points and instituted health monitoring using temperature checks and a self-reported screening checklist (22) to prevent imported cases. All travellers were also required to present a negative COVID-19 polymerase chain reaction (PCR) test result on entry to the country.

Scaling up and managing critical emergency services

To strengthen public-sector governance for health, political leaders often need to be involved in mobilizing multisectoral networks, in fundraising and in ensuring accountability. For example, the President engaged the public through regular addresses on the pandemic situation. However, while essential for legitimacy and social accountability, it can be problematic when politicians overshadow technical expertise, which provides detailed scientific evidence for decision-making. This concern was raised by actors in the decision-making space (23), who noted that technical persons withdrew from active participation in 2020 when they felt overshadowed by political leaders, who also took technical decisions. Local government officials interviewed for this study also noted that their early efforts to support health workers through training and the forging of referral networks were often ignored by officials at the central level. This was demoralizing and resulted in the duplication of effort and sometimes confusion among health workers and patients.

Perceived inadequacies in information systems and reporting structures contributed to poorly integrated primary care planning in national and subnational governance. Also, community registers supported by nongovernmental organizations (NGOs) often left out information that was vital for planning. The central and local governance and coordination structures were not well aligned, and task forces and pillars activated during COVID-19 were somewhat duplicative as they were not effectively integrated into the health system infrastructure. Moreover, partnerships and networks of actors in remote areas were not effectively engaged by the government to provide comprehensive and relevant information. There may also be an opportunity to strengthen verbal autopsy in Uganda to enhance the reporting of deaths (24).

Many trainings were undertaken for health workers during the initial months of the pandemic, but duplication of effort between partners caused unnecessary confusion and training fatigue. Information and knowledge exchange efforts between the MoH, districts and other stakeholders were also poorly coordinated.

There is thus an opportunity to identify knowledge needs, existing gaps in trainings and target audiences, ensuring that trainings are context-sensitive (e.g., private versus public sectors) and accessible to all. The Uganda Healthcare Federation used social media creatively and successfully to share information and exchange ideas, suggesting a potential avenue for future efforts.

Existing weaknesses in the quality and performance of PHC services affect efforts to rapidly scale up during emergencies. For example, PHC is generally underfunded and there are chronic shortages in human resources, which limit overall performance, especially at the subnational level. All health facilities faced rising costs during the pandemic, not least due to the costs associated with personal protective equipment (PPE) – stakeholders suggested that to dress one health worker to manage a COVID-19 patient cost UGX 300 000 (US\$ 85). In the face of such rising costs, queries arose about how funds were being mobilized and prioritized by the government for the pandemic response: even with a deficit of 38 207 hospital beds, the government chose to procure motor vehicles for surveillance of COVID-19 cases (25).

Aside from financial constraints, Uganda also experienced challenges in health system capacity. The health system became overwhelmed as a result of over-emphasis on facility-based care for quarantine and hospitalization of asymptomatic and mild cases of COVID-19. Similarly, nonfacility-based CHWs were not prioritized as being essential. These health workers were responsible for an initially weak community response at the beginning of the pandemic, although the country later adapted its response to emphasize home-based care instead.

Public health emergencies often call for rapid task-shifting especially in settings, where there is a chronic shortage of health care workers of any cadre. The increased screening and triage tasks were assigned to nontechnical personnel like security guards, while so-called reverse task-shifting was commonplace where senior personnel undertook lower-cadre duties to meet urgent needs. Notably though, many of these personnel were ill-prepared, sometimes not technically but socially and psychologically considering the stigma attached to COVID-19 infection. For example, drivers supporting evacuations were too afraid to be a part of these operations, hence doctors took over their role. This could be addressed through a minimum level of clinical exposure training for such nontechnical personnel.

Continuing essential services

Management of COVID-19 cases involved significant redirection of health care resources including health care workers, facility space and care time. Coupled with restrictions around social distancing, border closures and reported COVID-19 cases among health workers, this meant that essential services were interrupted. Accessibility of routine services like immunization, antenatal care and continuing care for chronic illnesses were affected.

How primary care and essential public health functions are responding to COVID-19

After a period of managing COVID-19 cases in facilities in urban settings, much of the case load was shifted to community-based workers equipped with resources such as information, education and communication (IEC) materials on COVID-19.

These experiences suggest that addressing the inequitable distribution of health workers between urban and rural areas could support continuity of care during health emergencies. This could be achieved through interventions like mandatory service or incentives such as opportunities for further education. Furthermore, performance-based contracts could be used or health workers could be recruited on a contract basis – as was done during COVID-19 in 2020 and 2021 – to supplement the low number of health workers in rural areas. Increasing the capacities of referral hospitals by creating more bed space, setting up more intensive care units (ICUs) and repurposing space as isolation units also proved effective in the pandemic response (26, 27). There is an opportunity to sustain the increased human and institutional capacity established during the COVID-19 health crisis.

The MoH, working with the United Nations Children's Fund (UNICEF), established a Continuity of Essential Health Services pillar (28) and later launched a National Community Engagement Strategy (29, 30), with structures that were envisaged to remain in place beyond the COVID-19 pandemic. At the subnational level, facilities worked with development partners to deliver medicines to patients with chronic illnesses such as HIV, TB, diabetes and hypertension, although such efforts received mixed reactions because of the stigma within communities around these conditions.

To improve access to PHC further, there is an opportunity to develop context-specific knowledge on how persistent gender or cultural norms may act as obstacles to health care access for particular individuals or groups. Respected community leaders can play a role in communicating with communities about these obstacles, while health workers may require further training in these aspects to avoid conscious and unconscious bias in service delivery. VHTs are well placed to identify and prioritize individuals who face barriers to accessing health care as a result of discriminatory gender and cultural norms.

Although building a disease prevention and control-focused health system to tackle future health crises is a MoH priority, this is likely to require budgetary prioritization; improvements to logistics and resource management to ensure adequate medical supplies are available in a timely way; and investments in digital health systems such as teleconsultation platforms to enable health workers to avoid unnecessary referrals and to manage patients more efficiently.

Medical teaching universities adapted their curricula during the pandemic in 2020 and 2021 to emphasize self-directed learning, learning in small groups, and community-based learning and practice. This was done to build leadership, communication, community engagement and interpersonal skills to help support the delivery of essential services, with trainings delivered initially as part of a short induction course for graduates. Furthermore, in-service training – which

is mainly delivered through the Civil Service College, Uganda (CSCU) – has an elaborate curriculum, among which are modules in leadership and management. At the time of writing, there was no specific tailored programme for epidemics and pandemics, yet the aforementioned trainings could help to build the capacity of health managers for future pandemic preparedness.

Finally, the COVID-19 pandemic has highlighted the need to explore a hybrid model of in-person and remote learning and to review the training curricula of health workers to achieve a balance between specialization and general practice training to meet PHC needs in the country.

Managing referral systems to ensure appropriate distribution of service load

To ensure better distribution of workloads, public systems can involve the private sector to free up resources during health emergencies. For example, the Uganda Healthcare Federation engaged actively with the Kampala Capital City Authority to improve the COVID-19 response in the capital. Furthermore, it is important to channel information effectively to manage referrals and patient flows. Without such information during the pandemic in 2020–2021, patients made false assumptions about changes to facilities and services, which affected health care utilization. Limited information exchange at that time between service providers on aspects such as beds and capacity in intensive care units hindered the response.

In addition, patients looked for alternatives to government facilities that could not provide the services that were needed. Such situations worsened when health workers were absent for different reasons, including fear of infection and stringent SOPs, which had an impact on the management of service loads. Furthermore, some departments that were deemed nonessential were closed for long periods, which potentially has long-term health impacts because patients were unable to access care.

Challenges were also experienced as a result of inconsistent approval processes for health centres to manage COVID-19 patients. This interrupted patient flows and resulted in individuals arriving at their usual point of care only to be asked to seek services elsewhere and with unclear guidance given.

Due to a high number of positive cases of COVID-19, the health system eventually became overwhelmed and there was reverse referral of patients: larger, highertier hospitals referred patients to (any) smaller, lower-level hospitals that still had space. This was unusual and caused confusion for both patients and providers who usually link the referral system to the level of care.

To counter this, governance processes that allow central guidance can be integrated into local (facility-level) decision-making processes. This might involve authorities maintaining contact lists for all district heads, use of informal communication channels like WhatsApp groups and MTrac (a text-based

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messaging application), regular quarterly review meetings, and quarterly supervision and mentorship meetings. Importantly, a clear hierarchy for decision-making allows guidance to flow and be integrated into local decision-making during health emergencies. Channels of communication should ideally be clear, simple and regular, and liaison persons can be designated who can be reached quickly by community-based facilities. Additionally, each health facility and/or health worker can be empowered with information about the health crisis and they should feel confident to use this information.

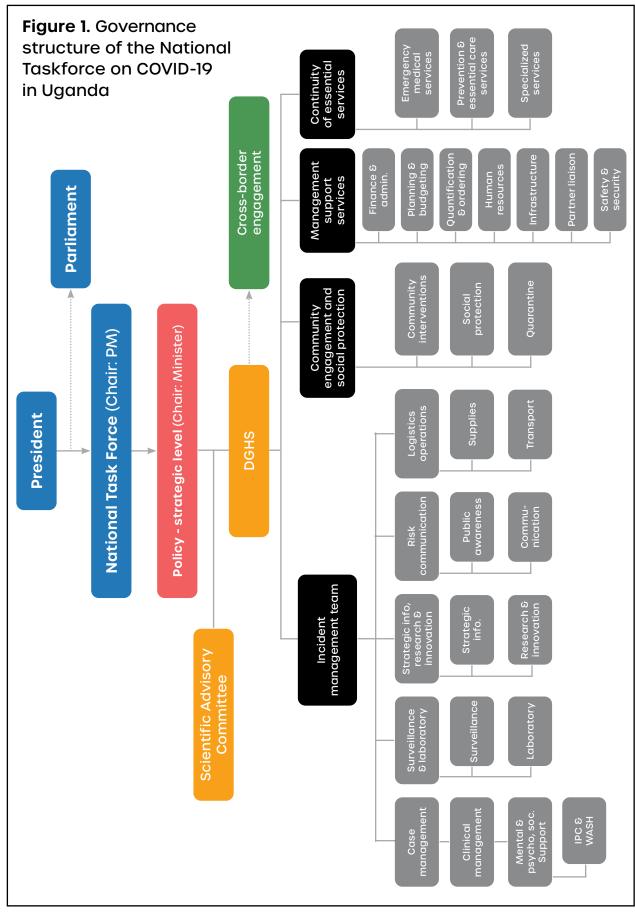
How multisectoral policy and action are supporting COVID-19 responses

Multisectoral action

At the start of any epidemic, the government activates a National Task Force to provide a coordinated multisectoral response. This Task Force spans several pillars, including leadership and governance, case management, risk communication and logistics. Given the large-scale impact of COVID-19, the National Task Force was scaled up at the start of the outbreak in March 2020 to be coordinated by the OPM, with close involvement of the President (see Fig. 1). It applied a whole-of-government and collaborative approach (31), which is understood in the country to be essential to address public health emergencies. However, partners noted challenges in engaging with and supporting the MoH during the early phase of the pandemic. There were no clear guidelines and no transparent mechanisms for identifying and engaging stakeholders, for example (32). Some stakeholders turned to old relationships to engage individual policyand decision-makers, while other stakeholders felt that the whole-of-government and multisectoral approach involved a process that was too laborious.

The institutional structure for multisectoral collaboration at the district level includes the District Executive Committee, the District Social Services Committee and Local Government Officers from different sectors. Other partners can only participate by invitation. However, during the pandemic in 2020–2021, some districts introduced mechanisms to strengthen coordination with partners and stakeholders reported these to be helpful. One stakeholder noted that all ministries, local governments and agencies have mechanisms and structures in place at the district level – for health there are Village Disaster Management Committees, Local Councils and VHTs, which often comprise the same individuals within communities and work in parallel. In light of the newly designed National Community Engagement Strategy (29), these structures might achieve more impact and better use of resources if they were merged or coordinated in a more centralized way, however.

COVID-19 provided an opportunity for a whole-of-government approach to be applied because all sectors were affected – the coordinated pandemic response was led by the OPM and involved several sectors and partners across all governance levels. It is essential that the Technical Inter-Sectoral Committee



Source: MoH, 2020 (33).

How multisectoral policy and action are supporting COVID-19 responses

under the OPM is maintained and strengthened to enhance collaboration and coordination for all sectors and partners beyond the pandemic.

During the early phases of the response, the government set up a mechanism to mobilize resources, establishing several teams to collect donations and grants, which were pooled into a common fund before allocation. Although there was potential for this common fund to improve the coordination and control of resources, stakeholders reported that it led to delays in the response and reduced response reports because of inadequate allocations.

At the start of the pandemic the MoH reviewed its health budget and allocation of funds for the year 2020/2021. It advised DHTs to spend more on prevention activities to strengthen the community response to COVID-19 (34). However, the amounts that the districts were allocated was inadequate. For example, the Non-Wage Recurrent Expenditure to first-level health facilities (HC II) was approximately US\$ 560 per quarter compared to US\$ 28 000 for a government hospital (3) – although these values should be considered in the context of the population and geographical area that they serve.

Impact on broader determinants of health

The government instituted and promoted a broad range of interventions across multiple sectors to reduce the transmission of COVID-19, including the closure of schools, workplaces and places of worship; the suspension of public gatherings; curfews; border closures; and the suspension of public and private transport. However, some of these interventions may have had an impact on broader determinants of health, especially for vulnerable groups.

For example, banning private and public transport during the country-wide closures and stay-at-home orders made it difficult for persons with disabilities and special needs to access medical and other services. There were also reports of individuals being denied re-entry into their communities following hospital discharge or if the individuals were thought to have COVID-19, due to stigma around the disease. Indeed, some of these attitudes were propagated by the negative language used within communication materials disseminated by the authorities (35, 36).

There was also an increase in the rate of unemployment during the period when social restrictions were in place (37) – especially among wage earners and rural farmers. Several people lost their jobs due to workplaces such as schools, bars and borders being closed, which had a significant impact on their livelihoods.

Furthermore, surveys conducted during periods when workplace closures and stay-at-home orders were instituted reported at least a 15% increase in physical or sexual violence. In some areas, nearly one in five individuals knew someone or had themselves experienced physical or sexual violence (38). Violence against children also increased during the time of school and workplace closures, with reports of unplanned pregnancies as a result of sexual abuse (39).

Lastly, the government supported vulnerable persons, especially the urban poor, who were affected by country-wide closures (40, 41). However, corruption and a lack of coordinated activity across sectors meant that few individuals received food or monetary support. The pandemic thus exacerbated inequalities and exclusions for those already marginalized during these efforts, including the urban poor (42). It will be important to examine the effect of these experiences on progress against the SDGs.

How communities are responding to COVID-19

The early phase of the COVID-19 response was characterized by one-way community awareness campaigns (43) and other strategies that were later criticized for failing to secure genuine involvement of the community to understand and incorporate their needs, cultures and practices (44). Initially, community perceptions were shaped by both fear of what was happening elsewhere in the world and by experience of previous responses to epidemics – hence, the acceptance of social distancing measures and other movement restrictions among the public and no deliberate attempt by the authorities to improve long-term compliance (45).

Over time, the population came to feel ill-prepared and also that their needs and community structures were not being considered in decision-making. Furthermore, some felt inconvenienced by the changes to the health system, which resulted in a significant drop in health services utilization during the early days of the pandemic (46).

Limited public trust in government – as a consequence of a breakdown in services, poor access to support and perceived corruption – meant that the relationship between the authorities and the community was strained. Stakeholders also reported that the government lacked a clear communication strategy, which avoided criminalizing COVID-19 and that could be adapted regularly as the pandemic progressed.

Following calls from several stakeholders, the MoH and the Technical Inter-Sectoral Committee developed a National Community Engagement Strategy (29) in September 2020 to ensure that the population was empowered and that they participated actively in the prevention and control of COVID-19. This strategy was expected to lead to the institutionalization of an integrated people-centred PHC approach and was designed to remain relevant beyond the pandemic, especially for infectious disease management. It elaborates a structure that brings together different players to achieve comprehensive community engagement, starting at the village level. By leveraging existing resources, authorities can identify community health needs and carry out community-based case detection, surveillance, contact tracing and health education activities, among other things. This is followed by oversight at the parish level to support Village Task Forces and then by a mandate at the subcounty level for planning, resource mobilization and

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treatment of illnesses. Overall leadership, supervision, enforcement, planning, monitoring and resource mobilization sit with District Task Forces.

Throughout the period under review, the government used existing platforms for community communication (for example community radio stations, community mass media campaigns and print media). There is also a free short messaging service (SMS) designed to identify and address pertinent community issues – the U-report platform. This enables communities to access real-time information, updates and feedback on new initiatives or campaigns. Meanwhile, the mTrac system provides a channel for community members to feedback on health care service delivery at facilities and also enables health workers to transfer health management information system weekly surveillance reports and to provide data to their DHT for timely planning. All of these communication channels are in addition to more common email and social media platforms and newer online platforms such as Zoom, which was used to conduct meetings and training during the pandemic.

To gain and maintain trust in community engagement structures and activities, it is important that a balance is achieved between technical and political action. During the initial outbreak of COVID-19 in Uganda, communities did not always appreciate activities led by political figures who were perceived to have ulterior motives and to be implementing measures that were skewed inequitably towards their support base. Stakeholders reported that there were calls for technical experts to be given more space to participate in or lead community engagement activities as they could command trust from the community. Furthermore, PHC workers were concerned that communities expected too much from them and that their duties were made harder by incomplete or inaccurate information circulated by politicians who overstated the services and support available to the community.

On its own, the government was not able to meet the initial human resource and operational costs of community engagement and health service delivery during the early days of the pandemic. Consequently, the National Task Force was involved in mobilization and fundraising activities to secure support from the community, receiving a good response from the public and other donors. However, the resulting resources were distributed equally across the country, irrespective of disease burden and/or population structure, for example. This led to complaints from the leaders of districts that had contributed the most resources and that coincidentally also had the highest burden of disease.

Mobilization of resources from the public means that, in turn, communities need to be empowered to demand accountability for these resources from the government. This empowerment involves getting the community to recognize that good health starts with them and that it is supported by professional skills, knowledge and technology accessible through medical outreach services, facility-based care, health education, and water, sanitation and hygiene (WASH) programmes. Adequate information should be available

to the community about the services they can expect from different levels of the health system, as well as about mechanisms for feedback and redress. For their part, health care providers need to be motivated to be transparent and respectful towards community members who demand accountability.

Opportunities exist for this through the government's *Baraza* programme, where leaders and health care providers respond to community questions, and through a platform provided by the Centre for Health, Human Rights and Development (CEHURD). The latter is a non-profit research and advocacy organization that works with community-based organizations to develop the capacity of community health advocates who are responsible for demanding accountability from PHC providers.

Conclusions and lessons learned

This case study of the PHC response to COVID-19 in Uganda reveals several lessons for future pandemic preparedness efforts and calls for reflection on several issues.

- Flexible structures and systems can support effective responses to health
 emergencies. Integrating these adapted structures into existing systems and
 designing them in such a way that they are useful beyond a particular crisis
 is also important. For example, adjustments have been made by medical
 training schools to balance the need for specialized services and experts
 with much-needed general practitioners.
- Lessons and experiences from past epidemics are crucial, but these
 need to be contextualized for each new health emergency according
 to the magnitude of an epidemic and the resources available.
- Coordination and planning are key elements of effective efforts to engage private sector and other partners. Without this, there are missed opportunities, wasted resources and fragmentation of response efforts.
- Although politicians brought a face to the COVID-19 pandemic and helped to
 mobilize resources, a balance can be achieved between political leadership
 and technical input and stewardship. Furthermore, given known social
 attitudes towards particular leaders or political groups, effort is required
 to secure and maintain trust in the authorities to illicit a successful response
 from the population.
- Facility-based management alone is not a sufficient pandemic response strategy. Instead, community-led interventions can help to realize gains in pandemic responses at a faster pace and on a greater scale. With this knowledge, resource allocations and management policies can be re-prioritized.
- The nonmedical cost of interventions can be weighed against their medical benefits. Management of a disease such as COVID-19 can bring about great socioeconomic costs to the population, which can cause hardship and affect compliance with preventive measures. When movement restrictions, stayat-home orders and border closures affect people's livelihoods, some might choose not to cooperate with the authorities.
- Authorities can make better use of available structures and integrate
 new ones into existing infrastructure to enable multisectoral collaboration
 and action. This will help to avoid parallel, duplicate and at times
 contradictory systems, and create opportunities to harness long-lasting
 partnerships for the sharing of invaluable resources, knowledge and time.

- Task-shifting has always been on the policy agenda, but it is mostly
 understood to mean more complex duties being reassigned to lower-qualified
 cadres. COVID-19 has shown that there is a need to explore the concept
 of reverse task-shifting to maximize capacity and resources, as well as
 to develop orientation for nonmedical health workers who may be involved
 in emergencies.
- The preparation and coordination of support for vulnerable persons and communities can be strengthened, as these are among the population groups who are most affected by the direct impacts of a health crisis as well as the indirect impacts of the pandemic response. The all-around well-being – not just health – of these persons should be considered.
- Community empowerment is crucial. In the case of the COVID-19 pandemic throughout 2020 and 2021, the health crisis was too big for any one entity including the government to manage alone. Partners and the community must be involved, and they need to be empowered to make valuable contributions through sustained collaboration.

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This case study was developed by the Alliance for Health Policy and Systems Research, an international partnership hosted by the World Health Organization. In 2015, the Alliance commissioned the Primary Health Care Systems (PRIMASYS) case studies in twenty low- and middle-income countries (LMICs) across WHO regions. This case study builds on and expands these previous studies in the context of the COVID-19 pandemic, applying the Astana PHC framework considering integrated health services, multisectoral policy and action and people and communities. This case study aims to advance the science and lay a groundwork for improved policy efforts to advance primary health care in LMICs.

