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

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>iv</td>
</tr>
<tr>
<td>Executive summary</td>
<td>v</td>
</tr>
<tr>
<td>Introduction and national context</td>
<td>1</td>
</tr>
<tr>
<td>General national context</td>
<td>1</td>
</tr>
<tr>
<td>Health sector context</td>
<td>2</td>
</tr>
<tr>
<td>Ghana's public health emergency preparedness and response system</td>
<td>3</td>
</tr>
<tr>
<td>National COVID-19 pandemic response</td>
<td>4</td>
</tr>
<tr>
<td>How primary care and essential public health functions are responding to COVID-19</td>
<td>5</td>
</tr>
<tr>
<td>Surveillance, contact tracing and laboratory services</td>
<td>5</td>
</tr>
<tr>
<td>Case management</td>
<td>6</td>
</tr>
<tr>
<td>Risk communication and community engagement</td>
<td>7</td>
</tr>
<tr>
<td>Continuity of essential health service delivery</td>
<td>7</td>
</tr>
<tr>
<td>COVID-19 vaccinations</td>
<td>7</td>
</tr>
<tr>
<td>How multisectoral policy and action are responding to COVID-19</td>
<td>8</td>
</tr>
<tr>
<td>National multisectoral actions</td>
<td>8</td>
</tr>
<tr>
<td>Subnational multisectoral action</td>
<td>9</td>
</tr>
<tr>
<td>How communities are responding to COVID-19</td>
<td>10</td>
</tr>
<tr>
<td>Conclusion and lessons learned</td>
<td>12</td>
</tr>
<tr>
<td>References</td>
<td>13</td>
</tr>
</tbody>
</table>
Acknowledgements

The Primary Health Care (PHC) case studies were commissioned and overseen by the Alliance for Health Policy and Systems Research, a hosted partnership based at WHO headquarters. This case study was authored by: Erasmus EA Agongo, Delanya Dovlo, and Dominic Anaseba, Faculty of Public Health, Ghana College of Physicians and Surgeons; with Emmanuel Ayire Adongo, Child Cancer Centre, West Africa. A team of independent experts provided critical review and input. Special thanks go to Rene Loewenson and Eugenio Villar for their helpful reviews, and Robert Marten, Jeffrey Knezovich, Sonam Yangchen, Alexandra Edelman, Yasmine Yahoum, Joanna Fottrell and David Lloyd for their support in the development of this publication.
Executive summary

Ghana participated in the primary health care (PHC) and systems (PRIMASYS) case studies published in 2017 (1), and is listed as a PHC trailblazer by the Primary Health Care Performance Initiative (2). The present case study explores PHC in Ghana in the context of the COVID-19 pandemic, drawing on an extensive desk-based review.

Ghana is a lower middle-income country (LMIC) in West Africa with a well-established PHC service based on a District Health System (DHS). Reforms have been introduced in the health sector during the past two decades, and the sector is now facing epidemiological, demographic, economic and health financing transitions. Having developed a new National Health Policy (3), a Roadmap for Attaining Universal Health Coverage (UHC) (4), and a National Action Plan for Health Security (NAPHS) (5), the health sector was in pursuit of universal health coverage (UHC) and the Sustainable Development Goals (SDGs) when the first COVID-19 cases were recorded on 12 March 2020 (6).

A whole-of-government and whole-of-society strategy was mobilized at the start of the pandemic with commitment and buy-in from leaders and stakeholders at all levels. This enabled the country to contain two waves of the pandemic between March 2020 and the time of writing in mid-2021.

The DHS played a key role in all six of the strategic pillars of the COVID-19 response, including: 1) surveillance and contact tracing; 2) laboratory sample collection and transportation to testing centres; 3) management of asymptomatic and mild cases; 4) risk communication and community engagement (RCCE); 5) information generation and reporting; and 6) continuity of essential health service delivery. However, there have been some challenges.

Multisectoral and multidisciplinary committees were used to implement public health interventions, and most sectors bought into the social and economic mitigation measures introduced under the national COVID-19 response strategy. Although levels of multisectoral collaboration were high, the adverse impact of the pandemic on people’s lives, businesses and the economy could have been minimized with even greater collaboration.

Communities were actively involved in the COVID-19 response in 2020 and 2021 and contributed to success stories. However, the actions of some community members also compromised the effectiveness of the response.

Overall from early 2020 through to mid-2021, Ghana’s response to COVID-19 was fairly positive. The case fatality rate (CFR) remained relatively low and the health system showed some resilience. Despite this, lives were lost and livelihoods, businesses and the economy were badly affected. The COVID-19 pandemic has enabled better understanding of the dynamics and complexities of public health emergencies. It has also provided lessons on the capacities, roles, interdependencies and limitations relating to health system preparedness and crisis response.
Introduction and national context

The COVID-19 pandemic has brought about hardships for the health and well-being of individuals, families and communities and has had devastating effects on health systems and economies globally (7, 8). COVID-19 was declared a Public Health Emergency of International Concern (PHEIC) on 30 January 2020 and characterized as a pandemic on 11 March 2020.

Ghana recorded its first confirmed cases of COVID-19 on 12 March 2020, with the first wave of the virus continuing until mid-2020. The country experienced its second wave in early 2021 (6). As of 30 March 2021 the WHO/AFRO Region had recorded more than 3 million confirmed cases, 77 000 deaths and a 2.5% case CFR; and Ghana recorded 90 287 confirmed cases, 740 deaths and a 0.8% CFR (9).

The pandemic has revealed inequities, and governance and leadership challenges, within and between countries; and it is reaffirming the importance of PHC (8, 10).

This case study examines PHC in Ghana in the context of the COVID-19 pandemic, from the perspective of the Astana PHC Framework (11). It uses data from publications, situational reports, consultants’ assessments and completion reports from Ghana’s 16 regions, and deliberations from meetings and conferences.

General national context

Ghana is a lower-middle-income country in West Africa with a population of around 31 million people. In January 2021, life expectancy at birth was 63 years and the total fertility rate was 3.9 children per woman; 79% of the adult population were literate, and the country had 50% internet penetration and over 40 million mobile connections (12,13).

In 2018, Ghana’s regions and districts increased from 10 to 16 and 216 to 260, respectively, following re-demarcation of some regional and district borders. The districts constitute the decentralized local government system that comprises Metropolitan, Municipal and District Assemblies (which are generically referred to as districts in this case study).

Ghana achieved significant economic growth and poverty reduction in the first two decades after its return to constitutional rule in 1993. The country attained LMIC status in 2010 and exceeded the Millennium Development Goal (MDG) target 1 by reducing poverty from 53% of the population in 1991 to 24% by 2012 (although there was stagnation in 2012–2016, and even increases in some regions in this period) (14).
Implementation of the National Social Protection Strategy started in 2007 and includes the following programmes: a capitation grant for basic schools, free senior secondary education, school feeding, supplementary feeding for children under five years, youth employment, the Livelihoods Empowerment Against Poverty (LEAP) programme and the National Health Insurance Scheme (NHIS) \((15,16)\). However, most of these programmes have low coverage due to limited investment and managerial challenges \((17)\).

**Health sector context**

Ghana has a pluralistic health service delivery system comprising public, private, traditional and alternative providers. There are three levels of care: primary (DHS), secondary (regional) and tertiary services. The PHC level also has a three-tier system comprising: a) district-level facilities (district hospital and district health administration); b) subdistrict-level facilities (health centres); and c) community-level facilities or Community-based Health Planning and Services (CHPS) zones.

The CHPS system is used within the national strategy to bring essential health services to communities. Trained nurses are deployed to defined geographical zones to work with community health management committees (CHMCs) and volunteers to provide basic essential health services. Two thirds of health facilities operate within the CHPS system, which represents a key component of PHC for the pursuit of UHC and the SDGs \((4,18)\). This CHPS system has been shown to be more impactful in rural settings \((19)\), with studies underway to adapt it to urban settings \((20)\).

Significant progress has been made over the past four decades in reducing under-five and maternal mortality, though the MDG targets for these indicators were not met. Most health service delivery indicators continue to improve but with persistent regional, rural-urban and wealth-quintile disparities \((21)\). A key challenge is how to achieve the SDG targets of reducing the under-five mortality rate from 52 to 25 deaths per 1000 live births, and the maternal mortality ratio from 310 to 70 deaths per 100 000 live births.

Ghana’s health sector is going through four transitions: epidemiological, demographic, economic and donor financial inflows \((23)\). The double burden of communicable and noncommunicable diseases (NCDs), combined with road traffic accidents and mental illnesses, is a major challenge \((24)\). The country also has an ageing population, increasing numbers of unemployed youth, and is experiencing rapid urbanization and environmental and social challenges \((25)\).

Despite attaining LMIC status, government health spending sits at around 40% of total health expenditure, which is below the Abuja target of 15% of general government expenditure \((26)\). Though out-of-pocket expenditure as a percentage of health spending declined from 52.6% in 2000 to 36.2% in 2019, it is still higher than the WHO recommended upper limit of 20% \((26)\). Recent studies \((27,28)\) indicate that the NHIS \((15,16)\), a social insurance scheme financed mainly from a special tax, has contributed to reducing out-of-pocket payments for the insured, but it is not achieving its pro-poor objective due to challenges around...
Ghana: a primary health care case study in the context of the COVID-19 pandemic

Structural and financial sustainability. With the NHIS having less than 50% coverage, health care costs remain catastrophic for many households, especially rural dwellers and those in the lower wealth quintiles who have been shown to benefit less from the Scheme. Some of the driving factors for this include skewed concentration of health infrastructure and the health workforce in urban settings, and poor roads, transport and internet facilities in rural areas (27,28).

External funding for health has been substantial, but the country is now expected to transition out of health aid by 2025. There are concerns about sustaining the health gains made so far, however, if domestic funding does not improve significantly. PHC expenditure is largely expected to decline as donors often support this area (29).

Although the Ghana PHC Vital Signs Profile for 2018 shows that the Government spends 72% of its health budget on PHC (30), this should be interpreted with caution as PHC encompasses the DHS, which includes first-line referral services. Most of this expenditure is on salaries and projects of less priority to PHC, making service providers heavily reliant on NHIS reimbursements. Meanwhile, most public health functions are not covered by the NHIS (31). Implementing the new National Health Policy (3), the CHPS Policy (18), the UHC Roadmap (4) and the NAPHS (5) will require increased domestic funding of the sector and far-reaching reforms of the NHIS, with spending strategically targeted on PHC.

Ghana’s public health emergency preparedness and response system

Ghana’s public health emergency preparedness and response system comprises laws and regulations, institutions, governance systems and processes at all levels that aim to prevent, prepare and respond to public health emergencies.

The Ghanaian Constitution (32), supported by the Emergency Powers Act (33), empowers the President of the Republic to establish a Contingency Fund, declare a state of emergency and adopt appropriate response policies during disasters and emergencies. The National Disaster Management Organisation (NADMO), by law, leads and coordinates disaster preparedness and response (34,35). The District Assemblies, under the Local Government Acts, are responsible for disaster/emergency preparedness and response under the direction and guidance of NADMO (36), while the Ghana Health Service (GHS) is responsible for primary and secondary health service delivery including disease surveillance, preparedness and response to public health emergencies (37).

The Public Health Act (38) provides for the management of communicable diseases and vaccinations, and the establishment of the Food and Drugs Authority (FDA) that regulates food, medicines, other health products and research involving humans. It also empowers the Minister for Health to issue executive instruments (EIs) to declare epidemics with parliamentary assent. The Act incorporates the International Health Regulations (IHR 2005) (39); however, it does not define a governance structure and secure funding source(s), and it is not supported by a legislative instrument.
Introduction and national context

Ghana has been experiencing major disease outbreaks for decades. This includes seasonal outbreaks of cholera, cerebrospinal meningitis and anthrax; sporadic yellow fever outbreaks; and outbreaks of avian influenza (2005–2006) and pandemic influenza (2009–2010) (5). The country also prepared for the 2014–2015 Ebola virus outbreak in West Africa, hosting the WHO’s Coordination and Support Centre and supporting the health workforce of affected countries. Programmes have been established to control priority diseases including HIV/AIDS, malaria, tuberculosis (TB) and neglected tropical diseases. Ghana has an Expanded Programme of Immunization (EPI) and an Integrated Disease Surveillance and Response (IDSR) system (40). The Joint External Evaluation (JEE) (41) conducted in 2017 informed the development of Ghana’s NAPHS 2019–2023 (5).

National COVID-19 pandemic response

On receipt of the alert from the Surveillance Department of the GHS (the National IHR Focal Point) that the COVID-19 outbreak had been declared a PHEIC, key institutions adapted their public health emergency preparedness and response plans for COVID-19 and instituted surveillance for the virus (42,43). The whole public health emergency response system was activated when the first two confirmed cases of COVID-19 were reported on 12 March 2020.

The President outlined sweeping policy measures and directed funds to be released for the response to: 1) limit and stop importation of the virus; 2) detect and contain the spread of the virus; 3) provide adequate care for those who were sick; and 4) limit the social and economic impact on people’s lives. Later, a fifth objective was introduced to: 5) inspire the expansion of domestic capability and deepen self-reliance (43).

Measures were introduced to close borders; to close schools and universities (until a gradual, phased re-opening from the end of 2020); to implement social mobility restrictions and stay-at-home orders for three weeks in the two epicentres of the outbreak; to prohibit large gatherings (until gradual easing after the first peak in 2020); to institute compulsory wearing of face masks; and to establish social and economic mitigation measures to protect livelihoods, businesses and the economy, and to motivate health workers (44). Laws were passed to support some policies such as the imposition of social mobility restrictions (45), the establishment of the COVID-19 Fund (46) and the compulsory wearing of face masks (47).

Ghana employed a whole-of-government and whole-of-society strategy delivered through multisectoral and multidisciplinary committees across six thematic areas: 1) planning and coordination; 2) surveillance and contact tracing; 3) laboratory support; 4) case management; 5) risk communication; and 6) logistics and finance. The National Public Health Emergency Operations Centre (EOC) became the National IHR Focal Point, where the national Rapid Response Team (RRT) and sub-teams operate under the leadership of the Director-General of the GHS. The EOC was later raised to the level of the Presidency, and an experienced public health expert and former Deputy Director-General of WHO was appointed as the National Coordinator.
How primary care and essential public health functions are responding to COVID-19

Primary care and essential public health functions are accessible, quality and affordable integrated health services that meet the needs of individuals, families and communities at all times throughout the life-course (18, 48, 49). Ghana’s three-tier health system is primarily responsible for: general outpatient services including mental health, eye, dental and laboratory services; maternal and child health/family planning; nutrition and health promotion; disease surveillance, prevention and control; and management of medical and public health emergencies. Overall, Ghana’s primary care services played a key and expanding role in all strategic areas of the national response to COVID-19 during the period under review, while largely ensuring the delivery of essential services, demonstrating the importance of PHC levers in the pandemic response.

To support service delivery, the 260 DHS units receive policy and technical direction, capacity-building support, and material and financial resources from the national level through Ghana’s 16 regions. This model also applied during the COVID-19 response throughout the period under review. On receipt of the outbreak alert in March 2020, the respective DHS units revised their emergency preparedness plans and instituted surveillance in all health facilities and at points of entry (PoEs). Public Health Emergency Management Committees (PHEMCs) were activated across the districts; rapid response teams (RRTs), sub-teams and health facility response teams were constituted; and surveillance was intensified in all public and private health facilities and approved PoEs.

DHS facilities adopted various coping strategies in the absence of clear guidelines, such as the suspension of some services, task-shifting and telehealth/telemedicine approaches. However, some of these measures adversely affected the continuity of essential services. Additionally, the already poor stocks of medical commodities and drugs worsened due to exorbitant price increases and the unavailability of some items in the market. This impeded the pandemic response and created fear and panic. In response, the GHS at a national level developed guidelines and protocols on risk communication, case management, infection prevention and control (IPC), and continuity of essential services, which cascaded down to the GHS units and facilities. The GHS at the national level also conducted training of trainers for regional teams. There was also increased logistics inflows from the national level and from donations. Health facility managers then reorganized their services in compliance with COVID-19 protocols, which subsequently improved the confidence of both health workers and the public in the response effort.

Surveillance, contact tracing and laboratory services

The DHS is the engine of the national integrated disease surveillance response (IDSR). As such, district-level health workers were the primary actors in COVID-19 surveillance and contact tracing during the period under review. They screened all travellers at PoEs, introduced pre-triaging in health facilities and enhanced contact tracing, among other activities (50, 51).
How primary care and essential public health functions are responding to COVID-19

All health service providers were required to isolate suspected COVID-19 cases and notify district teams to investigate and act. Laboratory samples that met the case definition were transported to testing centres, of which there were only two at the beginning of the pandemic. Contacts were listed and followed up, assessed and educated on COVID-19. Laboratory samples were collected from high-risk contacts and sent for testing.

Contact tracing was soon decentralized to the districts as it was more difficult and expensive to manage this centrally. The enhanced surveillance and contact tracing adopted by districts prior to and after the imposition of social mobility restrictions and stay-at-home orders helped to slow down community spread during the peak periods. However, large volumes of samples created a backlog at the two testing centres, which resulted in long delays in the release of test results. This demotivated the district teams and created feelings of mistrust among communities. In time, suspected cases began to refuse to isolate. The number of testing centres increased gradually, although occasional stock-outs of testing kits hampered efforts.

Electronic listing of confirmed cases was soon replaced with the web-based Surveillance Outbreak and Response Management and Analysis System (SORMAS). This provided access to real-time data and information sharing at all levels, including to populate COVID-19 updates on the GHS website.

Case management

Initially, COVID-19 case management was not the responsibility of the districts, as district hospitals lacked the requisite health workforce, infrastructure and equipment. Furthermore, 88 districts had no hospitals. Most health facilities were ill-prepared to handle suspected cases of COVID-19 at the beginning of the pandemic: case holding areas were not ready, and staff were not trained or assigned to manage these. Such deficiencies were remedied over time, however, and some district hospitals were able to manage mild-to-moderate cases.

Even though the National Ambulance Service (NAS) received 300 ambulances just before the outbreak in 2020, many districts had to transport COVID-19 patients to treatment centres using their own means because the NAS could not meet the demand. This was done to minimize long stays in case holding areas, which created anxiety among patients, family members and staff. Isolation centres and locally established treatment centres became important as COVID-19 cases increased, but services were sometimes constrained by limited equipment and/or workforce.

Additional challenges included delays in laboratory results and conspiracy theories published by the media. These eroded public trust in the national response to COVID-19, causing stress and anxiety among some members of the public. Home-based care for asymptomatic and mild cases was introduced subsequently, but this further expanded the role of districts in case management, especially during the peak of the second wave in early 2021. Without the support of the GHS, designated treatment centres would have become overwhelmed by the growing number of confirmed cases.
Risk communication and community engagement

Risk communication, as defined by WHO (54), requires mutual trust for collaboration and cooperation among stakeholders. The GHS is positioned to oversee risk communication efforts as part of managing disease outbreaks and community-based health programmes.

During the COVID-19 response, risk communication was unstructured at the beginning of the pandemic in 2020 but it improved over time with the cascaded training and supply of risk communication materials from the Health Promotion Division of the GHS. District Risk Communication Teams engaged target groups including schools, religious groups, traditional leaders and occupational groupings, tailoring the education provision to the needs of each group. These teams also engaged the general public through traditional media (e.g., radio discussions) and social media platforms, and provided dedicated phone numbers for the public to ask questions and seek clarification about COVID-19. Surveys conducted by the Coalition of NGOs in Health and other stakeholders in 2020 showed high awareness of the virus and the control measures put in place, but poor compliance to safety protocols in many settings. For example, the wearing of face masks and adherence to social distancing guidance were generally low in most public places, as were handwashing with soap and running water and the use of alcohol-based sanitizer.

Continuity of essential health service delivery

A lack of guidelines at the beginning of the pandemic contributed to disruptions to essential health services, which resulted in a decline in many health service performance indicators. The response to an outbreak of cerebrospinal meningitis in one region was also compromised (55–59). Analysis of data from the District Health Information Management System (DHIMS 2) (60) facilitated the early detection of a dip in essential service indicators, however, which led to the development and dissemination of continuity guidelines for essential services during public health emergencies (47).

COVID-19 vaccinations

Ghana’s goal to vaccinate two thirds of the population by the end of 2021 by targeting segments of the population in phases was largely dependent on the existing capacity of the DHS. Over the years, the GHS has routinely delivered 13 immunization programmes to various eligible populations through successful routine and mass vaccination campaigns. This existing capacity was also demonstrated through the vaccination of more than 1 million people against COVID-19 in 2021, at a time when many other African countries were facing challenges in their vaccine deployment.

Some sections of the population were hesitant about the vaccines, driven by many factors including conspiracy theories (61). In response, the COVID-19 vaccine was administered to prominent politicians and traditional and religious leaders on television, and there were continued efforts to educate the public.
How multisectoral policy and action are responding to COVID-19

National multisectoral actions

Multisectoral policy actions were embraced by many stakeholders across different sectors and at all levels. The National Coordinating Committee (NCC), comprising of key sector ministers with the President presiding, and being responsible for providing policy direction during major public emergencies, was activated in 2020 when COVID-19 cases started increasing. The National Technical Coordination Committee (NTCC), comprising of sector ministers and agency heads, development partners and key operators across various sectors, provided technical advice to the NCC, and implemented the policies. The MoH and GHS led surveillance contact tracing, testing, case management and risk communication responses in partnership with the private sector, research and academic institutions, development partners and other sectors through multidisciplinary and multisectoral RRTs and their sub-teams. Support for isolation and testing was also provided from the Greater Accra Regional Coordinating Council, security agencies, the Immigration Service, National Ambulance Service (NAS) and the Frontiers Health Care Services (a private service provider conducting COVID-19 testing at the international airport). Development partners also supported with equipment, supplies, and financial and technical assistance, while the business sector contributed to the COVID-19 Fund, logistics and most notably the 100-bed Infectious Disease Treatment Centre that was constructed by a consortium of business entities for the GHS.

The risk communication pillar led by the Health Promotion Division of the GHS demonstrated strong multisectoral action through a national risk communication team from various sectors and agencies. This team of experts developed risk communication guidelines and training materials, conducted training for subnational teams and coordinated the implementation of risk communication campaigns.

The public welcomed the nationwide briefings from the President on COVID-19 (of which there were 24 at the time of writing); meet-the-media interactions that were held jointly by the Ministry of Information, the MoH and the GHS; and the daily radio and television programmes featuring health professionals, academics, researchers and politicians who offered their various perspectives on the pandemic and the response interventions.

The Ghana Medical Association and the Ghana Public Health Association played major roles in policy discussions and public education. There was buy-in following consultative engagements with key national stakeholder groups including the National House of Chiefs, the leadership of religious groups, development partners and the business community to share the vision and solicit support for the pandemic response.
The Ministry of Finance and its agencies led the resource mobilization effort, as well as fiscal and monetary policy interventions in conjunction with the Bank of Ghana, development partners, the Ministry of Trade and Industries, and the business and industrial sectors. These interventions included the COVID-19 Alleviation Programme (CAP) for the emergency response; the COVID-19 Fund for contributions from individuals and corporate bodies; and the COVID-19 Alleviation and Revitalisation of Enterprises Support (CARES) programme, which replaced the CAP to focus on alleviation of economic and social life, and the revitalisation of businesses and the economy. Development partners supported these initiatives, and in some cases reprogrammed existing initiatives. The private and industrial sectors responded to these programmes, with financial and material donations, and reprogramming of some production lines to produce personal protective equipment (PPE), sanitizer and other logistics. The Food and Drugs Authority and the Ghana Standards Authority expedited their certification processes without compromising on quality. This led to increased production, with saturation of some commodity markets bringing prices down.

The Ministry of Education and the Ghana Education Service (GES) developed a COVID-19 Coordinated Education Response Plan, partnering with the Ghana Broadcasting Corporation and other players in television and radio broadcasting to introduce remote learning by radio, television and online (65). Notably, children and students from communities without these facilities did not benefit from the initiative.

Finally, the disinfection/fumigation of markets, lorry stations and other public places was led by the Local Government Ministry in partnership with private companies.

Subnational multisectoral action

The regional and district PHEMCs, led by the Regional Ministers and District Chief Executives, were instrumental in identifying and preparing facilities for quarantine/isolation, supporting those in isolation and coordinating the subnational response. The Regional and District Health Directors led the RRTs and sub-teams in the technical response. They worked with all public and private health facilities on surveillance through daily reporting, contact tracing, laboratory services and case management; and with Port health staff, the Immigration Service and security agencies at the PoEs to prevent unauthorized travel.

Risk Communication Teams trained and provided materials to communicators. The National Commission on Civic Education and the Information Service Department, in turn, conducted educational activities in communities, markets and lorry stations. Media companies were also involved in risk communication, some of which was funded by nongovernmental organizations (NGOs) and philanthropists. In the education sector, the RRTs supported the GES to ensure the safe reopening of schools by providing training and education materials, assigning personnel to screen staff and students, and handling suspected cases of COVID-19.
How communities are responding to COVID-19

The multisectoral composition of the PHEMCs, RRTs and sub-teams, with the inclusion of religious and traditional representatives, facilitated buy-in and multisectoral action. Some organizations, religious and traditional authorities, business entities and philanthropists supported the response in their communities by donating funds, supporting logistics and offering facilities for isolation. As part of their election campaigns, political parties provided financial and logistical support to health facilities, other institutions and vulnerable groups. These donations were uncoordinated, however, which resulted in some facilities having excesses, and others experiencing stock-outs.

Most social protection programmes were interrupted at the beginning of the pandemic, and gradually resumed with the easing of restrictions. The different ministries and agencies led various social mitigation measures based on their core functions. The Livelihood Empowerment Against Poverty (LEAP) Program faced huge demand but had only low coverage due to limited resources. The electricity and water management agencies, together with the Ministry of Finance, implemented subsidies for different consumer categories. Although beneficiaries appreciated this subsidy, many vulnerable groups including those living in informal dwellings and rural areas did not benefit because of lack of access to these services.

The Ministry of Gender, Children and Social Protection collaborated with District Assemblies, NADMO, religious organizations, NGOs, politicians and philanthropists to provide food rations to those in need during the period when stay-at-home orders were in place, but this was not well-coordinated. Consequently, due to poor targeting, these initiatives did not achieve optimal impact as many of those who were most in need did not benefit. Overall, there were reports of increased food insecurity, poverty and unemployment, and widening inequities in health, education and socioeconomic indicators during the COVID-19 pandemic, which risk limiting or reversing SDG progress (66–71).

How communities are responding to COVID-19

In normal times and during emergencies, communities interact dynamically to meet their health needs (72). The CHPS system provides the appropriate infrastructure for this to happen. The health committees and volunteers of the CHPS system – together with Local Government Assembly members, traditional and religious leaders, religious and civil society organizations (CSOs), diverse economic groups, local NGOs and individuals – contributed positively to the COVID-19 response in 2020 (2). Although in a few instances, their actions had a negative impact (4).

While the health committees and volunteers supported surveillance, contact tracing and home-based care, their potential was not exploited fully in some districts at the beginning of the pandemic response. Some community and Assembly members were active in monitoring and reporting to the health authorities on travellers from the epicentres of the outbreak, and in some extreme cases they prevented travellers from disembarking. Through some of
these actions, clusters of cases were detected early, and the spread of the virus was contained. This community enthusiasm and cooperation was short-lived, however, as trust was eroded by the delays in test results. Many people who needed care stayed away from health facilities for fear of contracting the virus, and health workers, their family members and those who were suspected of having COVID-19 were stigmatized. This compromised the response (74). Some community members who initially agreed for their properties to be used for isolation reneged on their offer, thereby creating crisis situations for case management. Some communities prevented isolation centres from being established.

Members of the PHEMCs, traditional and religious leaders or their representatives helped to disseminate information. They ensured adherence to COVID-19 safety protocols, made donations to support the pandemic response, and in some cases released their properties to be used as isolation centres. Others became advocates and demonstrated leadership by receiving their COVID-19 vaccination on television to help minimize vaccine hesitancy. Traditional leaders also suspended funerals, festivals and other activities that would attract crowds and, together with Assembly members, assisted in conflict resolution. This support from key stakeholders in the communities mirrors the findings of a study on the importance of community leadership and resilient health systems during the 2013–2016 Ebola virus outbreak in West Africa (75).

As well as offering cash and in-kind donations, CSOs and local NGOs also supported the technical response. For instance, some CSOs and NGOs organized risk communication sessions with informal groupings such as transport operators, various artisan groups, traders, market women, hoteliers and restaurant operators. The Coalition of NGOs in Health – an umbrella organization of CSOs and NGOs working in the health sector that provides oversight and representation on national issues – was also active. The findings from surveys conducted by the Coalition were highlighted in the media, and this contributed to the ramping up of activities (76).
Conclusion and lessons learned

There are several indications that Ghana’s response to COVID-19 has been successful (77). At the time of writing, the country had been able to withstand two waves of surging cases, and the CFR remained below 1% – lower than global and African regional averages. The strong commitment from political and technical leaders at all levels, plus the roll-out of disease control interventions during the early phases of the pandemic in 2020 enabled an effective response. Collaboration among multisectoral players and between political and technical leadership supported the response.

A key strength was the rapid domestic and external resource mobilization to support the implementation of response measures during the period under review. Other strengths included the teamwork demonstrated by national, regional, district and hospital health management teams through the RRTs and collaboration between the clinical and public health services. Local industries demonstrated their capacities and capabilities to produce goods and manage the logistics for imported goods. The COVID-19 pandemic also drove wide adoption of ICT solutions to address problems encountered in many spheres of life. The adoption of technologies and use of research to find solutions to problems, as demonstrated in the COVID-19 response, were successful approaches that could be scaled up to address emerging challenges.

In parallel, however, the pandemic has had enormous social and economic impacts. Several reports demonstrate that Ghana experienced rising unemployment and poverty rates, and widening inequities (70, 71, 74, 78, 79), which threaten to reverse progress made towards the UHC goals and the SDGs. In the future, care should be taken not to divert resources from critical areas of health with the purpose of fighting the pandemic, because this will compromise response efforts in the longer term. Overall, despite improvements in PHC infrastructure and workforce pre-COVID-19, the pandemic exposed critical PHC gaps. While the PHC infrastructure and health workforce demonstrated key strengths, persistent geographic and socioeconomic inequities need to be addressed to improve the resilience of the health system for future public health emergencies (80,81).

Communities participated actively in the pandemic response throughout 2020 and 2021. However, while levels of awareness of COVID-19 and the control measures were reported to be high, adherence to the safety protocols (especially social distancing and the wearing of face masks) was low. There was also evidence of vaccination hesitancy. The CHPS system has the potential for effective community engagement and risk communication, and represents a key learning from the pandemic. The study findings also demonstrate the importance of developing a clear risk communication strategy to educate stakeholders and minimize disruptions to PHC services.
COVID-19 has brought to the fore the importance, interdependencies and limitations of the different levels of the health system in responding to health emergencies. The pandemic has demonstrated that multisectoral preparedness and response planning that involves all stakeholders at all levels, with periodic testing and updating of plans through simulations, is essential to build capacity, achieve buy-in and coordinate responses. The DHS, with regional support, implements critical policy action, whereas the national level of the health system provides policy and technical direction, mobilizes and allocates resources equitably, and provides overall stewardship. Deficiencies in any of these functional roles will have an adverse effect on the management of public health emergencies, hence the need for the health system to be strengthened at all levels.
References


2. PHCPI. Ghana/PHCPI - https://improvingphc.org/sub-saharan-africa/ghana


18. Ghana Community Health Planning and Services Policy 2016. Accra: MoH.


References


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


60. Ghana District Health Information Management System (DHIMS) 2 [software]. Adapted from Oslo: University of Oslo; n.d. (https://dhis2.org/).


References


76. General News of Monday, 18 May 2020. Ghanaians disregarding nose masks, social distancing – NGOs in Health findings. (Ghanaians disregarding nose masks, social distancing – NGOs in Health findings (ghanaweb.com).


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.