One Year into the Pandemic: Using Data to Protect and Promote Essential Health Services as Part of COVID-19 Response and Recovery

OVERVIEW

Building on earlier information presented at the Investors Group meeting in October 2020, this paper presents an updated analysis of the current available data related to the impact of COVID-19 on essential health services in GFF partner countries. It provides lessons learned and identifies some important next steps for the GFF to support partner countries to protect and promote essential health services as part of their COVID-19 response and recovery efforts.

SUMMARY OF FINDINGS

- In the early days of the COVID-19 pandemic, the Global Financing Facility for Women, Children, and Adolescents (GFF) warned of the potential for significant disruptions in provisions of essential health services that could trigger a secondary health crisis and jeopardize years, if not decades, of progress in global health.
- Data from ongoing GFF-supported country monitoring has reaffirmed significant service delivery disruptions in low- and lower-middle income countries. On the supply side, new data from surveys of health facilities shows alarming vulnerabilities in infection prevention measures. The pandemic's impact on lowering demand for essential health services may be just as significant in reversing health outcomes.
- There are several looming threats facing GFF partner countries which warrant attention.
- The emerging data points to the need for continuing support from the GFF to partner countries to protect and promote essential health services as part of the COVID-19 response and recovery.

ACTION REQUESTED

This paper is background to the session "One Year into the Pandemic: Protecting and Promoting Essential Health Services as part of COVID-19 Response and Recovery." The Investors Group is asked to take note of the findings provided to inform future programming, funding and advocacy priorities.

EXECUTIVE SUMMARY

In the early days of the COVID-19 pandemic, the Global Financing Facility for Women, Children, and Adolescents (GFF) warned of the potential for significant disruptions in provisions of essential health services that could trigger a secondary health crisis and jeopardize years, if not decades, of progress in global health. The GFF moved quickly to invest in array of efforts to model, monitor and assess the situation and support its partner countries to protect, promote and adapt delivery of essential health services to ensure continued access and affordability. These efforts have included facilitating a real-time country exchange and learning platform, review and analysis of routinely reported administrative data, phone surveys of health facilities and households, and resource mapping and expenditure tracking (RMET).

Data from ongoing GFF-supported country monitoring has reaffirmed significant service delivery disruptions in low- and lower-middle income countries. During the first round of monitoring conducted in spring and early summer of 2020, statistically significant service gaps ranged from seven to as high as 64 percent across the 18 monitored GFF countries. Child vaccinations saw the largest declines, and there were also significant monthly reductions in family planning consultations with disruptions as high as 26 percent reported. While some recovery from these initial shocks was reported as of June 2020, new data from the most recent round of monitoring in the last two quarters of 2020 show that several countries continued to experience persistent disruptions in essential health services, including in outpatient consultations, maternal and reproductive health services. Urban areas were more likely to experience substantial and prolonged service disruptions, implying that national-level estimates may mask underlying inequities in service disruptions within countries.

On the supply side, new data from surveys of health facilities shows alarming vulnerabilities in infection prevention measures. For example, in Nigeria, one in four facilities reported not having any masks on hand in December, and only one in two facilities reported that staff had received training on infection prevention and control or proper use of personal protective equipment. In Liberia, only one in two facilities had enough masks or gloves for clinicians and 97 percent of facilities that saw a decrease in service delivery in November cited supply chain disruptions as a primary reason. These findings point to systematic weaknesses and poor pandemic preparedness in health systems which pose a threat to future continuity of services.

The pandemic's impact on lowering demand for essential health services may be just as significant in reversing health outcomes. Among the health facilities that reported lower than expected service volume during the rapid phone survey conducted in late 2020, the most cited factors were lower service demand due to people avoiding health facilities out of fear of contracting COVID-19, and reduced access to health services due to mobility restrictions. Data from the most recent round of household phone surveys in 16 GFF countries show that in two countries about one quarter of households who reported needing health care could not access it and more than 10 percent of households in seven countries. In the 11 GFF countries where households where asked about the primary reason for not being able to obtain care, affordability was cited as the main reason. Given the global economic downturn and its impact on increasing poverty, COVID-19 has created or exacerbated financial barriers to health care, which is being most acutely felt by the poorest and most vulnerable households.

There are several looming threats facing GFF partner countries which warrant attention. First, the second wave of infections has been significantly higher than the first, and now is being driven by variant strains of SARS-CoV-2, which may be more transmissible, more lethal and potentially less easily controlled by the available vaccines. Second, the efforts to roll out vaccines to prevent COVID-19 are unprecedented in scale and are likely to place severe strain on health systems and health resources, while at the same time current estimates are that the poorest countries will not have widespread access to COVID-19 vaccines until 2023 due to severe global supply constraints. Third, the impacts on health financing are likely to be significant in many of the poorest countries, impacting their ability to deliver essential health services and of vulnerable households to pay for these services for at least the next several years.

The emerging data points to the need for continuing support from the GFF to partner countries to protect and promote essential health services as part of the COVID-19 response and recovery. In-depth analysis from resource mapping in several partner countries shows that funds for essential health services have been reprogrammed toward the COVID-19 response. Taken together with the emerging data on service delivery disruptions, this underscores the importance of both continued monitoring of the secondary health and socio-economic impacts of the pandemic combined with proactive efforts to protect and promote access to essential health services. These efforts are key to the success of the Action for COVID Tools Accelerator (ACT-A), as they will help unlock bottlenecks that could hamper the delivery of the COVID-19 vaccines and tools. In addition, the prominence in the emerging data of financial barriers to foregone care highlights the need for the GFF to broaden and deepen its engagement with countries on increasing financial access and equity by developing and implementing more effective and efficient models of delivering health care that will reduce costs and improve access for the poorest and most vulnerable populations. In sum, the data emerging from these monitoring efforts show that the GFF's support for partner countries is more important than ever, to help ensure continued access to essential health services during the COVID-19 response and to reimagine service delivery to reclaim recent health gains and accelerate progress toward the goal of ensuring that every woman, child and adolescent can access the care they need to survive and thrive.

1. BACKGROUND AND CONTEXT

Outbreaks, epidemics and pandemics can cause major disruptions in essential health services, leading to morbidity and mortality from preventable and treatable conditions that may exceed the direct impacts of the specific disease outbreak. For example, research has shown that deaths from malaria likely exceeded direct mortality from Ebola Virus Disease during the Ebola outbreak in West Africa from 2014 to 2016.

In the early days of the COVID-19 pandemic, reports emerged from many countries of essential services being disrupted. In April 2020, leaders from the GFF partnership collectively warned of the growing risk to widespread disruptions in primary care and the need for action. Researchers and international organizations, including the GFF, produced sobering projections of the impact on service delivery outcomes under different transmission scenarios. This modeling raised the possibility of significant increases in morbidity and mortality and the reversal of positive trends maternal and child health and the hard-won gains in HIV, TB and malaria.

The GFF, collaborating with various international agencies, immediately began supporting partner countries to understand the disruptions in their essential health services and to take steps to mitigate them. Initially, the GFF team conducted monthly pulse surveys in each partner country which provided early corroboration of these fears, finding disruptions in a range of key areas. The team prepared country-specific briefs that outlined the potential impact on key maternal and child health indicators and were used for advocacy purposes at country level. The GFF team also partnered with the Reproductive Health Supplies Coalition and Avenir Health to develop a new tool to support policymakers in understanding the potential impacts on family planning. Using that tool, they estimated that as many as 26 million women could lose access to family planning services because of the pandemic, resulting in nearly 8 million unintended pregnancies.

The GFF moved quickly to create the action-oriented Service Delivery Learning Program as a platform for partner countries to share their experiences and learn about possible adaptations to service delivery in real time to help guide their response efforts. As a result of these conversations, GFF partner countries requested additional support for more rigorous monitoring and assessment of service delivery disruptions to inform their decision-making. Subsequent GFF support for monitoring of essential health services confirmed significant disruptions in service delivery, as revealed by the analysis of 63,000 health facilities in September 2020. These efforts by the GFF highlighted the fact that COVID-19 has impacted essential health services through multiple pathways (see Box 1).

Box 1: Pathways through which COVID-19 is impacting essential health services

There are multiple drivers of disruptions in essential health services during an outbreak, epidemic or pandemic. Disruptions may be associated with supply-side factors that impact the ability of health services to provide care or demand-side factors that influence care-seeking behaviors. During the COVID-19 pandemic, some of the supply-side disruptions have been around supply chains for essential family planning and primary care commodities, strains on health care workers, reduced hours or closure of health facilities, and/or re-allocation of resources toward managing the pandemic response. Demand-side factors have included financial barriers to seeking care due to loss of income and the general recession, lockdown policies that restrict travel, and fears of COVID-19 infection that have led people to avoid health facilities and public transportation.

It also became increasingly clear that the pandemic was having quite different impacts both within and across GFF partner countries. These considerations led the GFF to step up its support to partner countries in continued monitoring of essential health services, including by working with partners to develop a range of more sophisticated tools to better understand both the supply- and demand-side factors.

The next two sections of this paper share the findings of these latest monitoring efforts. They underscore the significant impacts that the pandemic has had on service delivery to date, and they also confirm that the worst-case scenarios from the early days of the pandemic have not yet been borne out. However, this welcome news should not lead to complacency, particularly given several looming threats. First, data from many low- and middle-income countries indicate that the second wave of infections has been significantly higher than the first, and now is being driven by variant strains of SARS-CoV-2, which may be more transmissible, more lethal and potentially less easily controlled by the available vaccines. Second, the efforts to roll out vaccines to prevent COVID-19 are unprecedented in scale and are likely to place severe strain on health systems and health resources, while at the same time current estimates are that the poorest countries will not have widespread access to COVID-19 vaccines until 2023 due to severe global supply constraints. Third, the full economic consequences of the pandemic have not yet been felt, with the impact on health financing likely to be significant in many of the poorest countries, impacting their ability to deliver essential health services as well as the ability of vulnerable households to pay for these services over the next several years (see the accompanying paper "From Double Shock to Double Recovery – Implications and Options for Health Financing in the Time of COVID-19" for more detail on this).

These factors underscore the importance of continuing to invest in monitoring the secondary health and socio-economic impacts of the pandemic, and in proactive efforts by governments and international partners to protect and promote access to essential health services and to use this data to adapt their response and recovery plans in the COVID context to the latest conditions. The final section of the paper looks ahead and presents some of the next steps in this work.

2. SUPPLY-SIDE DISRUPTIONS IN ESSENTIAL HEALTH SERVICES

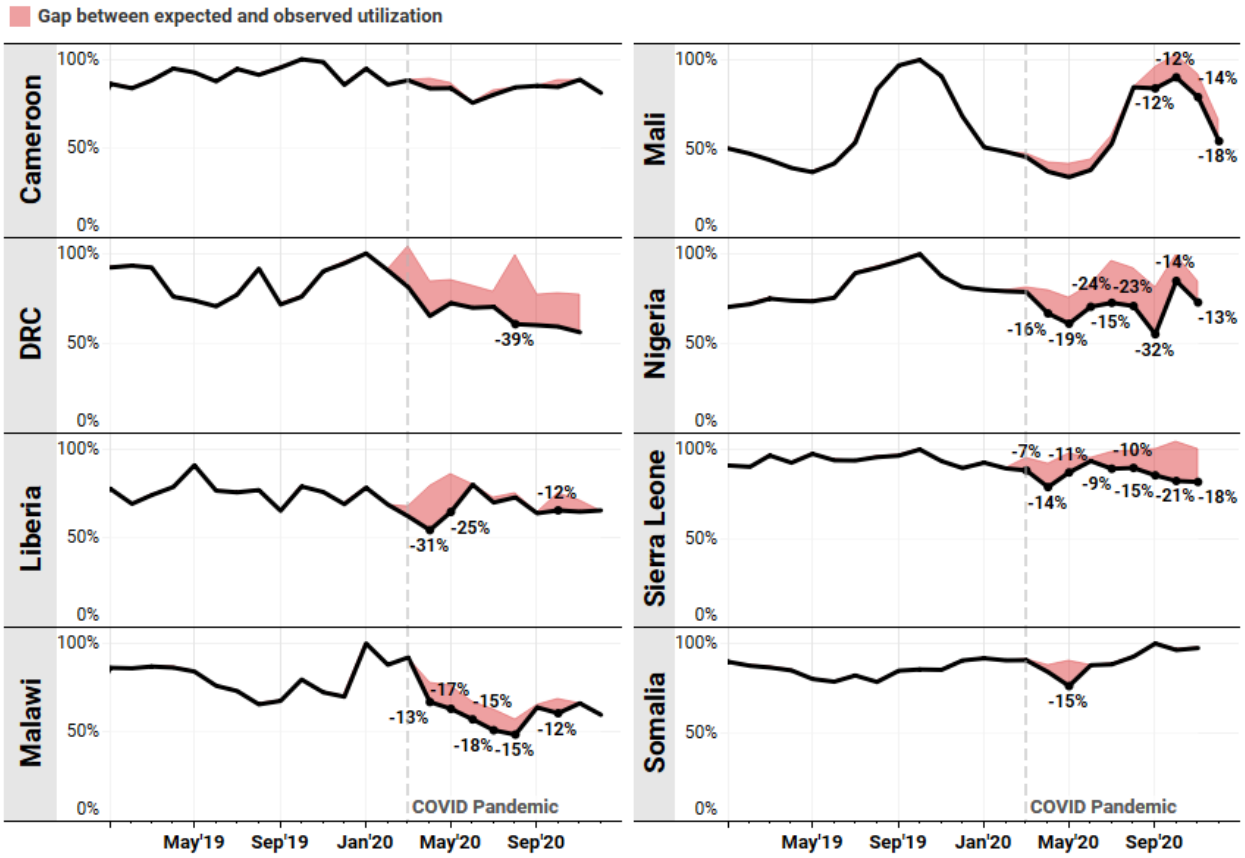
To date, the GFF has supported four complementary efforts to understand how COVID-19 is impacting essential health services and health outcomes for women, children and adolescents in its partner countries.

- The first is to use administrative data (such as from DHIS2) to assess the pandemic's impact on service utilization and how the actual experience has differed from what would have been expected given historical trends.
- The second is a series of phone surveys with health facilities to capture the experiences of frontline workers and to triangulate the DHIS2 findings.
- The third is an assessment of the impact of the pandemic on the financing available to countries to maintain and adapt essential health services.
- Lastly, household surveys to assess the impact on health seeking behavior.

A. Understanding the supply shock through analyzing administrative data

The GFF is supporting monitoring of routinely reported administrative data for disruptions in the volume of key services in 18 GFF countries (see further details on methodology in Annex 1). Results from analysis of the data from March to December 2020 show that service disruptions were largest in the first few months of the pandemic, starting in March in some settings, with widespread and severe disruptions in April and May 2020. The volume of outpatient consultations, used as an indicator for general health service utilization, was lower than expected in nearly all monitored countries during these months. Statistically significant service gaps ranged from seven percent to 64 percent during the March to May period across the 18 monitored GFF countries. The patterns of disruption differed between countries, with some countries experiencing large but acute disruptions, whereas, in other contexts, these disruptions were persistent. For example, among the eight countries with publicly available results (Figure 1 below), *overall* service disruptions in outpatient consultations were largest in Nigeria, which reported 16 percent fewer consultations than expected between March and July 2020. Disruptions to outpatient services in Nigeria continued through the end of the year. In contrast, analyses in Somalia suggest there was an acute decrease of OPD service volume of 15 percent lower than expected in May, but the service levels have since recovered. However, these recoveries may mask subnational disruptions – in Somalia, nearly half of districts reported lower service volumes of 5 percent or more in November 2020

Figure 1. Percent difference between reported outpatient consultation volume and expected volume based on pre-pandemic data

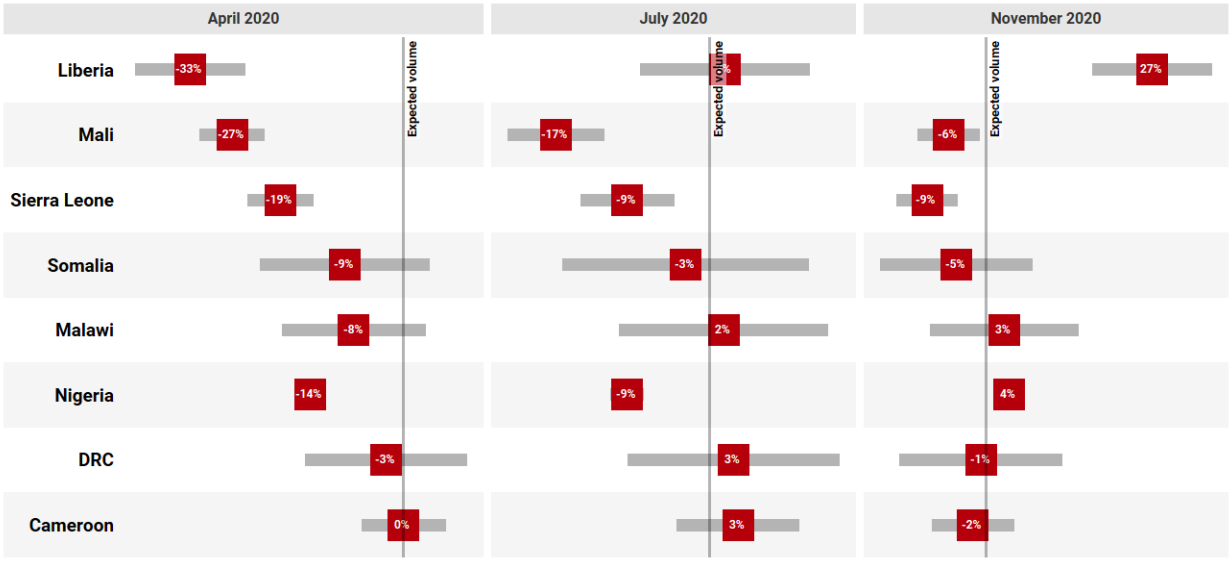


Child vaccinations had the largest decline in several countries. The number of children who received the third dose of the pentavalent vaccine was lower than expected for at least one month in 11 of 14 countries with available results. For the countries with publicly shared disruptions, the cumulative reduction in the March-July period ranged from 3 percent in Cameroon to 17 percent in Mali. The largest disruptions were seen in April and May 2020. In Mali, Nigeria, and Sierra Leone, some disruptions also continued in June and July. In Cameroon, Liberia, and Somalia, however, in June 2020 the numbers of vaccinated children were not significantly different from the pre-COVID-19 levels.

Disruptions across reproductive and maternal health services are more context-dependent than vaccination or outpatient services. Significant monthly reductions in family planning consultations in at least one month were estimated in 10 out of 12 countries. Among countries with publicly shared data, Mali experienced the largest and most persistent disruptions, with as high as a 26 percent disruption each month between March and July 2020, and a cumulative reduction of 17 percent over the five-month period. Eleven out of 12 countries reported lower volumes of women initiating antenatal care, and 10 in 14 countries reported decreases in retention of women in antenatal care (attendance of the fourth visit or total visits). Institutional deliveries were significantly lower than expected in 6 out of 10 countries. The number of deliveries reduced by 2 percent in DRC in March and 5 percent in Liberia in April. Nigeria and Mali experienced more persistent reductions in the range of 7-11 percent. Statistically significantly lower than expected volume in the number of postnatal care visits (total or first postnatal visit) were detected in eight out of 13 countries.

Findings also point to a variation in the patterns of health service disruptions following the initial system shocks in the spring and early summer of 2020. Disruptions to child vaccination programs have eased in most settings, and some countries have recouped the shortfalls from the start of the pandemic (Figure 2). However, several countries continue to experience persistent disruptions in essential health services. Mali and Sierra Leone, for example, still experienced disruptions to outpatient consultations in November, the most recent available month for the HMIS analysis. Many countries experienced a brief return of maternal and reproductive services in the third quarter of 2020, but disruptions returned in some countries during the last three months of the year. Urban areas are more likely to be experiencing substantial and prolonged service disruptions, which also implies that the lower national-level estimates may mask underlying inequities in service disruptions within countries.

Figure 2. Percent difference between reported number of third pentavalent doses given and expected volume based on pre-pandemic data



B. Understanding the frontline experience through phone surveys

To complement the analysis of the administrative data, phone surveys were conducted to a nationally representative sample of health facilities (100-450 facilities) during monthly phone calls from September 2020 to March 2021 in Guatemala, Liberia and Nigeria. The survey questionnaire uses the global Continuity of Essential Health Services: Facility Assessment Tool, which was published by WHO and for which the World Bank and GFF were contributors through their partnership in the ACT-A Health System Connector Data group: Integrated Data for Health Systems Preparedness and Performance Monitoring.

Among the health facilities that reported lower than expected service volume during the rapid phone surveys, the most cited factors were lower service demand due to people avoiding health facilities out of fear of contracting COVID-19 and reduced access to health services due to mobility restrictions. For example, in Nigeria, where there is evidence of ongoing disruptions nationally, one in three facilities reported that service volumes continued to be impacted by mobility restrictions and fear of COVID-19 as of December 2020. There are unique drivers of disruption across countries as well. In Liberia, almost all facilities with lower volumes in December 2020 indicated that the lack of essential medical supplies was a primary constraint.

Subnational differences in the magnitude and drivers of disruption point to potential inequities in the pandemic's impact. A staggering 90 percent of Liberia's urban facilities reported fear of COVID-19 as a major factor for clients in their avoidance of health facilities, compared to 50 percent of rural facilities. Urban facilities were also less agile in making modifications to service delivery to adapt to the COVID-19 context. For example, 25 percent of urban facilities provided home-based care for some patients compared to 50 percent of rural facilities.

The surveys also found alarming vulnerabilities in infection prevention measures. In Nigeria, one in four facilities reported not having any masks on hand in December. Only one in two facilities reported that

staff had received training on infection prevention and control or proper use of personal protective equipment. In Liberia, only one in two facilities had enough masks or gloves for clinicians and 97 percent of facilities that saw a decrease in service delivery in November cited supply chain disruptions as a primary reason. These findings point to systematic weaknesses and poor pandemic preparedness in health systems which pose a threat to future continuity of services. This is further reinforced by onsite assessments[1] carried out by the Global Fund in 38 countries with the following findings: 32 percent of facilities reported staff absenteeism in more than 10 percent of their workforce. Absence was most frequently due to vacation or sick leave while lockdown and lack of PPEs were among the major reasons for absenteeism. Among adaptive measures on management of health workers, 69% of facilities have re-assigned staff to different units and 35 percent has provided a temporary secondment to different facilities. Results also showed a 44 percent overall decline in outpatient consultations relative to 2019 and similar decline in both ANC first visit and sick child consultations (reports for 349 facilities providing ANC services across 31 countries). Seventy-two percent of facilities developed alternative delivery strategies for non-COVID essential services, the predominant solutions being extended drugs prescriptions for long-term use such as NCDs drugs; priority given to encounters with high-risk patients; provision of all care in a single visit for multiple morbidities.

C. Understanding the impact of COVID-19 on resources for health

As the COVID-19 pandemic moved from an acute to a prolonged crisis, emergency preparedness budgets in routine health planning were exhausted, and countries have had to stretch out budgets while seeking additional external funding. As the pandemic is far from over, this has the potential to significantly hamper the ability of countries to deliver essential health services over the long-term and can serve as a leading indicator of where health access and health outcomes are likely to be at greater risk in the future. To this end, the GFF has expanded its work on resource mapping to assess the impact of COVID-19 (for further information see Annex 1).

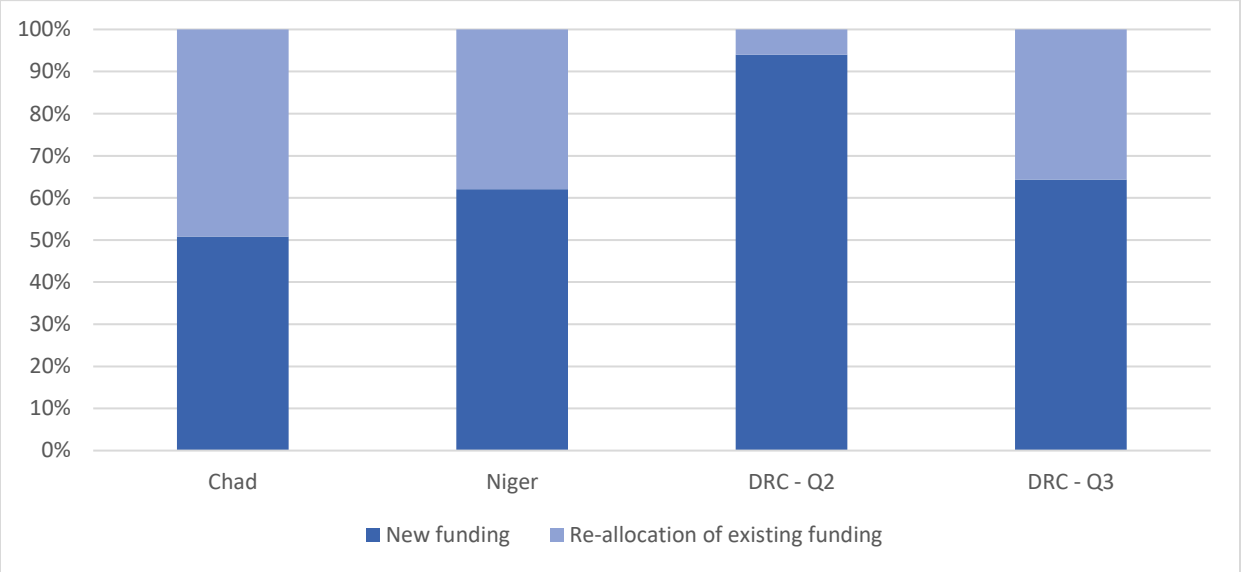
An analysis of resource mapping and expenditure tracking (RMET) exercises for 2020 from seven GFF countries shows a variety in the size, scope, and funding of COVID-19 response plans. Budget commitments for COVID-19 programs in 2020 varied from US$17.4 million in Malawi to US$289 million in Afghanistan, even before the procurement and distribution of vaccines was included. In GFF partner countries that had mapped both donor and government commitments, approximately 90 percent of funding for COVID-19 response came from international donors. The budget allocations for COVID-19 were significant in several countries when compared to the overall annual budget for their Investment Cases (IC) for women's, children's and adolescent health or their National Health Plans. For example, in Afghanistan, the COVID-19 response plan represented a 50 percent increase over the budget for the national health plan; in Ghana, the COVID-19 response plan was a 30 percent increase on top of the overall budget. On the lower range, in Pakistan and Malawi, the budget for COVID-19 response represented 3 percent of additional budget over the existing IC or health plan. Given that several countries already had an existing funding gap for their IC or health plan prior to the onset of the pandemic, the financial resource needs are even greater.

In depth analysis from resource mapping data in Chad, Niger and DRC shows that funds for essential health services were reprogrammed towards the COVID-19 response (see Figure 3 below). In Chad, where the

[1] The Global Fund carries out assessments through spot checks visiting a sample of 15 health facilities in each country.

COVID-19 response plan is primarily funded by donors, about 50 percent of the $27 million plan was reprogrammed from existing projects. In Niger, about 40 percent of the $30 million COVID-19 response plan funding was reprogrammed from existing funding, including the entire $3 million contribution from the government and almost $9 million of donor funding. In DRC, most of the funding was new, but re-programming from existing programs to COVID-19 increased from 6 percent of the COVID-19 plan in April 2020 to 35% in July 2020. The source of these reprogrammed funds was mainly from the part of DRC's IC that is related to delivery of an essential package of health services.

Figure 3: New and reprogrammed funding for COVID-19



Using detailed resource mapping and funding gap analysis, Malawi and Niger have been able to create a platform to advocate for additional funding to meet their needs. In both countries, the resource mapping exercise has also shed light on the specific activities most in need of resources. In Niger, significant funding gaps exist for infection control, building service delivery capacity, and building and equipping isolation sites. Niger shows a slight funding surplus in two program components; these funds can be redirected towards another area. In Malawi, supplies and equipment comprise the largest cost of the COVID-19 response plan; this component also has the largest funding gap.

Assessing demand-side constraints to service utilization

The global community has focused heavily on addressing supply-side challenges created by COVID-19, yet the pandemic's impact on demand for health services may be just as significant in reversing health outcomes. The GFF has been supporting two approaches to understanding this: household surveys to directly ask about health-seeking behaviors and modeling to estimate the impacts of the economic shock on infant mortality.

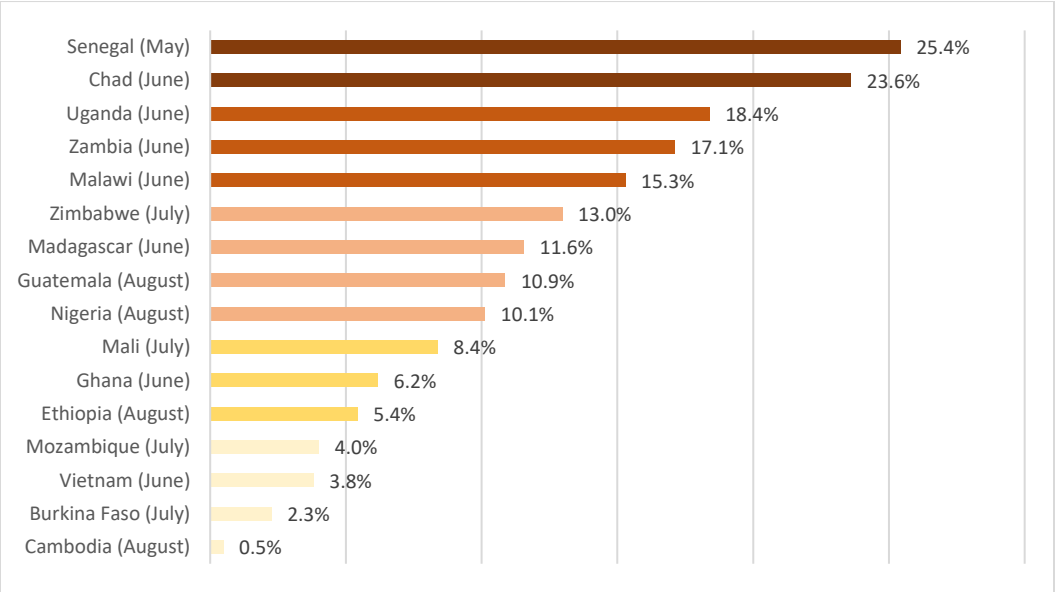
A. Understanding how COVID-19 is influencing health-seeking behavior

Household surveys enable monitoring of the extent to which people report needing health care and whether or not they are to access it during the pandemic. These surveys also provide valuable information

about the reasons for foregone care. In collaboration with the World Bank's Poverty and Equity Global Practice, the GFF has been supporting periodic (monthly or bi-monthly) phone-based household surveys to better understand the barriers to accessing health care households in GFF countries have faced during the pandemic (for more info see annex 1).

The data from the most recently available round of the survey in 16 GFF countries show that about a quarter of the households who reported needing health care could not access it in two countries while in seven other countries, more than 10 percent of the households reported that they could not access health care when needed, as detailed in Figure 4.

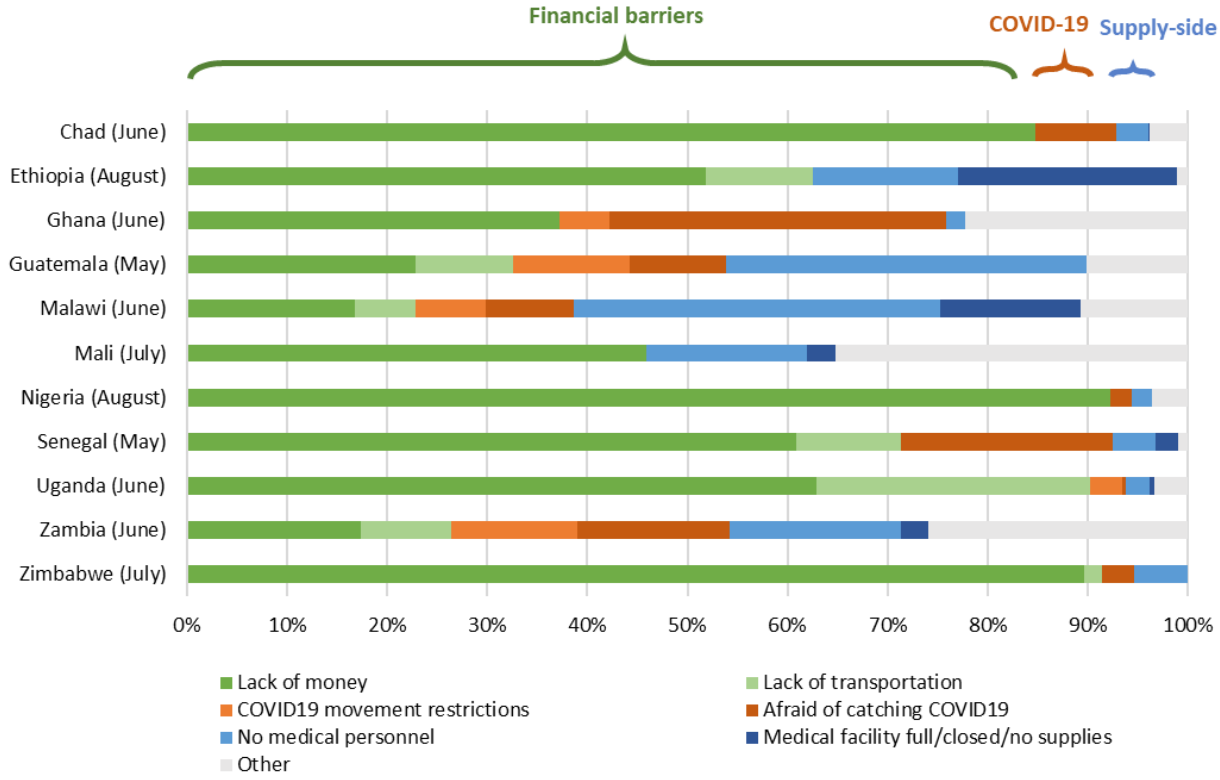
Figure 4: Households reporting not being able to obtain health services they needed, as percentage of households reporting needing health services



Source: World Bank COVID-19 High-frequency survey, most recent wave for 16 GFF countries

In a subset of 11 GFF countries the surveys also asked households about the primary reason for not being able to obtain needed health care. The most significant reason for foregone care across these countries was financial barriers. In seven countries, in the most recent survey wave, financial barriers were the most frequently reported reason for not accessing needed health care. Only in two countries (Ghana and Zambia) reasons directly related to COVID-19 were reported more frequently than any other reasons why households could not access the services they needed. While in Malawi and Guatemala supply side challenges (no medical personal, supplies, etc.) were cited most frequently (Figure 5).

Figure 5: Reported reasons behind not being able to obtain health care, as percentage of households reporting not being to obtain health care, in the most recent survey wave in 11 GFF countries.



Source: World Bank COVID-19 High-frequency Monitoring Dashboard, February 15, 2021 version.

These surveys were implemented during/after the first wave of the COVID-19 pandemic so estimates cannot be compared against a baseline and are likely to suffer from reporting bias. One should therefore be careful to interpret these findings as representing a COVID-19 impact. Rather, they represent a baseline analyses for an ongoing effort to more frequently monitor financial access to essential health services as the economic impact of the pandemic will affect countries' health spending.

B. Quantifying the impact of the economic consequences of COVID-19

Given the global economic downturn and reductions in GDP growth rates, it is likely that COVID-19 has created or exacerbated financial barriers to health care. Such secondary impact is most likely most acutely felt by the poorest households, further exacerbating the inequity in the access to care between the well-to-do and the poor.

The global economy contracted by about 4% in 2020 and economic growth projections for the next few years remain below pre-pandemic trends.[2] In its most recent estimates, the World Bank projects that as

[2] World Bank. 2021. Global Economic Prospects, January 2021. Washington, DC

many as 163 million may fall into extreme poverty by the end of the 2021. Reports from various countries already document increased food insecurity and lowered affordability of key goods and services among vulnerable households brought on by the pandemic and ensuing economic crises[3].

The relationship between short-term fluctuation in aggregate income and infant survival in low- and middle-income countries has been extensively documented.[4] The loss of income at the household level will lead to worsened nutrition and care practices for infants and reduced ability to pay for health services, while the economic crisis may also affect the availability and quality of critical health and nutrition services. That means that the economic downturn caused by the pandemic is expected to increase all-cause infant mortality for the residents of low- and middle-income countries.

This impact can be modeled, using the approach developed in Baird et al. [5] and Friedman and Schady [6], which estimates the relationship between changes in GDP per capita and infant mortality using a flexible regression model that draws on data from Demographic and Health Surveys conducted in 83 low- and middle-income countries between 1985 and 2018.

The average projected economic shortfall for 35 GFF countries in 2020 is 6.4 percent.[7] This translates into a forecast of 98,656 excess infant deaths in this group of countries (90% confidence interval 49,928-147,385), corresponding to an increase of 5.5% in overall infant mortality. This projection may only be a lower bound of the actual excess mortality if the economic downturn is accompanied by more severe health service disruptions than those that accompanied past economic slowdowns.

The IMF also projects that the size of economic output in the coming years will be smaller than it would have been in the absence of the pandemic, implying that low- and middle-income countries are likely to continue to experience "excess" infant mortality in the near future even if COVID-19 transmission recedes—the economic consequences will be long-lived. While efforts towards prevention and treatment of COVID-19 remain paramount, the global community should also strengthen social safety nets and assure continuity of essential health services to forestall the detrimental impacts estimated here.

[3] Dennis Egger, E. M.-P. (2021). Falling living standards during the COVID-19 crisis: Quantitative evidence from nine developing countries. *Science Advances.*

[4] As identified in: Pritchett, Lant, and Lawrence H. Summers. "Wealthier is Healthier." *Journal of Human Resources* (1996): 841-868; Bhalotra, S. (2010). Fatal fluctuations? Cyclicality in infant mortality in India. *Journal of Development Economics*, 7-19.; Baird, Sarah, Jed Friedman, and Norbert Schady. "Aggregate income shocks and infant mortality in the developing world." *Review of Economics and statistics* 93, no. 3 (2011): 847-856.; Cruces, Guillermo, Pablo Glüzmann, and Luis Felipe López Calva. "Economic crises, maternal and infant mortality, low birth weight and enrollment rates: evidence from Argentina's downturns." *World Development* 40, no. 2 (2012): 303-314.; Friedman, Jed, and Norbert Schady. "How many infants likely died in Africa as a result of the 2008–2009 global financial crisis?." *Health Economics* 22, no. 5 (2013): 611-622.; and Maruthappu, Mahiben, Robert A. Watson, Johnathan Watkins, Thomas Zeltner, Rosalind Raine, and Rifat Atun. *Effects of economic downturns on child mortality: a global economic analysis, 1981–2010.* 2017, BMJ global health.

[5] Baird et al. 2011.

[6] Friedman and Schady 2013.

[7] The IMF World Economic Outlook does not include projections for Somalia.

2. LESSONS LEARNED AND NEXT STEPS FOR THE GFF

The GFF's experience to date in supporting countries around the monitoring of essential health services has highlighted several key lessons. Most striking are the differences between countries and within individual countries over time and between different parts of each country. These patterns were not predictable in advance and would be difficult to detect without the kinds of rapid data collection and analysis described above. The fast-moving nature of the pandemic means that it has been important to be able to look at multiple data sources and triangulate between them to develop more nuanced understandings of the situation in each country.

The recent publication by WHO of its interim guidance on "Analysing and using routine data to monitor the effects of COVID-19 on essential health services: practical guide for national and subnational decision-makers" is an important development in this regard. As part of the GFF's broader contributions to the ACT-Accelerator's Health Systems Connector (see Box 2 for more on the GFF's engagement with ACT-A), the GFF is committed to helping countries operationalize this guidance, and so will continue to provide support for monitoring and analysis of health information system data. More GFF countries will be supported with both health facility and household surveys, as well as analysis of budget and expenditure data. Analysis will focus on within-country changes over time and identify country-specific patterns, including at subnational level, to better understand drops in service utilization and effects on vulnerable populations.

Box 2: The GFF and ACT-A's Health System Connector

The GFF is a partner in the ACT-A's Health System Connector (HSC), co-led by the Global Fund and the World Bank and WHO. The HSC is supporting countries to prepare for a rapid, equitable and safe delivery of vaccines and tools at scale while also ensuring continuity of essential health services by addressing country-specific bottlenecks. This is key for achieving the ACT-A objective to accelerate equitable access to COVID-19 tests, treatments, and vaccines, as well as the GFF's objective to protect, essential reproductive, maternal, neonatal, child, adolescent health and nutrition services. The cold chain, supply chain and other health system improvements that must be made to enable COVID-19 vaccine delivery to the last mile are also the same systemic changes will help strengthen delivery of childhood vaccines and other essential health services. In addition, PPE supplies and oxygen are not only vital for COVID-19 response, but also for providing other lifesaving services for women, children and adolescents. With countries in the lead, there is a huge need, and opportunity right now, to strengthen health systems and protect essential services against further disruptions, such as by taking a system-wide approach and avoiding building "vertical" systems for the delivery for COVID-19 tools.

The GFF has been contributing to the HSC by supporting the vaccines and systems readiness assessments and collaborating with other HSC partners around the development of key tools and guidance on financing and data collection. As countries are deploying and implementing National Deployment and Vaccination Plan, the GFF will co-finance critical systems strengthening interventions for effective deployment of COVID-19 tools while ensuring countries' systems have the capacity to continue saving lives beyond the acute needs related to COVID-19.

Going forward, and as part of its new strategy, the GFF will extend and expand its monitoring work and use of data to inform decision-making. This information is critical for country platforms to enable timely adjustments to their service delivery in response to the challenges raised by the survey and assessment data, such as stockouts of medicines and IPC tools. The available data will help countries prioritize where

to put scarce resources, ensure better alignment of external financing and enhance accountability for results.

The RMET data elucidate the emerging financing challenges facing GFF partner countries. Insufficient resources for either the COVID-19 response (including vaccine rollouts) and/or the delivery of essential services means that difficult tradeoffs will need to be made. Prioritization is at the heart of the GFF-supported IC process, so GFF country platforms are well-positioned to play a key role in this process. RMET will continue to provide vital inputs that enable both governments and external financiers to allocate their resources in ways that complement each other and will improve program implementation and budget execution and is thus a critical accountability tool for countries. Through its partnership in the ACT-A HSC, the GFF has a unique role to play to support governments to ensure that their COVID-19 response and vaccine rollout efforts are leveraged to reinforce and build smarter health systems rather than lead to further disruptions in routine care.

As an incentive, and as part of its new strategy, the GFF is launching a special round of grants to support partner countries in taking actions that will protect and maintain the delivery of essential reproductive, maternal, neonatal, child and adolescent health and nutrition services while preparing for rapid, equitable and safe delivery of COVID-19 vaccines and other tools. These "essential health services" grants will focus on investments in primary care and community services and system strengthening activities that are critical for maintaining essential health services and will help countries unlock bottlenecks that will hamper the delivery of the COVID-19 vaccines and tools. The grants will be linked to the World Bank's considerable financing for the COVID-19 response. Activities will be tailored to country needs and may include infection prevention and control, innovations in front line service delivery and health system redesign; private sector and community engagement; supply chain management and optimization of the health workforce to manage vaccine rollout; and strengthening disease surveillance and other information systems. The GFF will also support reinforcing capacity for good governance, management, and accountability.

Finally, the prominence of financial barriers in the data around foregone care highlights the need for the GFF to broaden its engagement on issues related to financial access, particularly around synergies with social safety nets programs to develop and implement effective models of reducing financial barriers to care, especially for the poor. The GFF is strategically well placed to do so, being embedded within the World Bank providing opportunities for collaboration with the Social Protection Global Practice and the Governance Global Practice. A recent example of such collaboration is described in box 3. An expansion of this collaboration is part of the GFF's new strategy.

Box 3: GFF support to Rwanda to strengthen health and social protection

GFF Trust Fund financing supported local government in the design and implementation of remote delivery and monitoring mechanisms to ensure continuity of social protection services while minimizing risk of COVID-19 exposure. The grant helped advance the connectivity and interoperability of social protection and health information systems for an automated enrolment of beneficiaries to receive the Nutrition Sensitive Direct Support (NSDS) co-responsibility cash transfers targeted to the poor families with pregnant and lactating mothers as well as children below 2 years. This new system, coupled with revision in the eligibility criteria to enhance the coverage of poor families, helped significantly increase the enrollment from 30,000 beneficiaries in March 2020 to 104,357 beneficiaries by the end of January 2021.

will also identify household-level factors associated with the reported lack of access the health services as well as with specific reasons reported by the households.

This analysis will not only allow to support countries in monitoring changes in access to essential services due to the COVID-19 impact, but will also allow for a more real-time monitoring of the impact of reforms aimed at improving financial protection and equity. While household survey data with extensive consumption modules will remain the gold standard for monitoring financial protection, phone-based surveys provide a good complement to obtain more real time monitoring in between large survey efforts and the GFF will support both data collection and methodological innovations in this field.

In sum, this data collection effort will not only allow for support to countries in frequent monitoring access to essential services but will also allow for real-time monitoring of the impact of reforms aimed at improving financial protection and equity. While household survey data with extensive consumption modules will remain the gold standard for monitoring financial protection, phone-based surveys provide a good alternative for more timely monitoring in-between larger survey efforts, so the GFF will support both data collection and methodological innovations in this field.

The COVID-19 crisis represents both a challenge and opportunity for the GFF in its mission to save lives and improve the health of the most vulnerable women, children and adolescents. The emerging data from these monitoring efforts show that the GFF's support for partner countries is more important than ever, to help countries prioritize and adapt essential health service delivery during the COVID-19 response so that they can continue to deliver lifesaving care and get back on track to reclaim recent health gains as soon as possible. At the same time, the GFF partnership, through its multi-stakeholder country platforms, can leverage its catalytic financing, analytical and technical assistance capabilities to inform critical decisions by governments that will both drive more efficient use of scarce resources and reimagine service delivery to build back better.

ANNEX 1: FURTHER INFORMATION ON DATA SOURCES AND METHODOLOGY SUPPORTED BY GFF

To determine which health services have been affected by the pandemic and quantify the magnitude of disruption, in collaboration with the World Bank Development Research Group, the GFF supports countries in **monitoring routine administrative data** from each country's Health Management Information System (HMIS). Specific indicators are selected, representing the continuum of maternal, reproductive, childcare services, and other locally prioritized services. Facility-level service volume data are processed and audited to correct for data completeness and to remove outlier values. As the data predate the pandemic, we can use regression analysis to use two years of historical data to build an expected volume of services for each health service had the pandemic not occurred. This expected volume accounts for pre-pandemic trends and seasonality and considers differences between regions and types of health facilities within each country. The observed and expected volumes are compared to estimate the percentage change in utilization each month.

To understand the drivers of identified service disruptions, assess weaknesses in the health system, and capture information from health providers which may not report to the national administrative systems, the GFF also supports **rapid phone-based facility surveys.** Surveys are administered to a nationally representative sample of health facilities (100-450 facilities) during monthly phone calls. The survey questionnaire is a contextualized version of the global Continuity of Essential Health Services: Facility Assessment Tool published by WHO, to which the World Bank and Global Financing Facility were contributors. The questionnaire collects quantitative and qualitative information on service volume changes in the facility and contextual information for the reason in volume changes and modification to service delivery each month. General information on service availability and readiness covering the health workforce, supply availability, infrastructure, and pandemic preparedness are also collected in a three-month rotation. The questionnaire is adapted between rounds to respond to the local context.

The GFF collaborates with the World Bank's Poverty and Equity Global Practice which supports **high-frequency COVID-19 household surveys** in 24 GFF countries to monitor the socio-economic impact of the COVID-19 pandemic and understand demand-side drivers of service disruption. These short (30 minutes) phone-based household panel surveys[8] cover topics such as employment dynamics, household income and livelihoods, utilization of health care and education services, knowledge of COVID, and mitigation measures. Utilization of health services is measured through a sequence of questions: a.) "Did you or any member of your household need medical care during [recall period]?" and b.) "Were you or the member of your household able to access the medical service?" In most countries, the sequence also includes the reasons why services needed could not be accessed. In some countries, services are disaggregated by specific service types (e.g., immunization, maternal health, etc.).

To assess and mitigate the impact of COVID19 on routine service delivery and health system strengthening but also to improve allocative efficiency of available resources and to mobilize resources for key funding gaps, the GFF also supports **resource mapping and expenditure tracking (RMET)**. Using Excel-based data collection templates, such as the GFF RMET tool, which captures the budget commitments of donors and government sources, including breakdowns by year, priority area (as specified in the Investment Case or

[8] Data collected from the same households periodically (every month, two months, or three months, depending on the country).

National Health Plan), and geographic region. GFF is working with WHO, country governments, and partners to conduct effective RMET for COVID-19 and developed a **technical brief** in partnership with WHO, OECD, GF, GAVI and the World Bank due to the growing demand of support for GFF countries on C-19 RMET. Certain countries have conducted the covid-19 RM exercise as a part of the routine resource mapping; in other countries, a separate exercise was conducted using a GFF tool developed for covid-19. The RMET findings are presented in country reports. RM enables coordination of resources, like in Ghana, where the MoH has used RM data to assess alignment to the Covid-19 response plan at National Technical Coordination Committee (NTCC) meetings. Development partners with new funding check the areas covered by other donors and follow up with bilateral discussions with the government and with the DP(s) covering those areas. These exercises will serve as a baseline for comparison as GFF countries conduct subsequent rounds of Covid-19 RM in 2021.