# Spending for Health in Malawi:

Current Trends and Strategies to Improve Efficiency and Equity in Health Financing



Malawi has made remarkable progress in improving maternal and child health outcomes, but the COVID-19 pandemic could reverse these gains due to its direct and indirect effects on health, and its impact on economic growth and resource mobilization efforts.

In the short term, the government and donors should ensure that existing financial resources in the health sector are not reduced, while at the same time monitoring how the COVID-19 pandemic is affecting the supply of, and demand for, services in order to mount an effective response.

There is an urgent need to make public finance management work better at district level in order to improve the quality and effectiveness of health service delivery in the country.

The Malawian government could strengthen the efficiency and equity of its human capital investments given the constrained fiscal space by developing a health financing strategy to guide resource mobilization, pooling, allocation, and purchasing of health care goods and services.



ver the past two decades, Malawi has made remarkable progress in improving maternal and child health, as well as nutrition outcomes. Under-5 and maternal mortality have been reduced by more than half, surpassing the averages for regional and peer countries. This is due in large part to government expansion of key health and nutritional services across the country. In fact, Malawi performs better than most low-income countries in sub-Saharan Africa in terms of service coverage, and government spending on health is relatively higher than other low-income countries. However, Malawi still lags behind on certain health and nutrition indicators particularly stunting, which contributes to the country's low Human Capital Index score of 0.41. This means that children born in Malawi today will only be 40 percent as productive as they could have been had they enjoyed full health and complete education.

The COVID-19 pandemic could reverse the gains in the health sector in Malawi. As of April 7, 2021, there were 33,673 confirmed cases of COVID-19 in Malawi with 1,124 deaths<sup>[1]</sup>. There has also been a reduction in the use of some key reproductive, maternal, and child health services. This is mainly due to disruptions in the procurement and distribution of medicines and other medical commodities; and greater emphasis on COVID-19 as compared to other essential

health services. Patients' fears of contracting COVID-19 if they go to health facilities has also been contributing to this trend. Even though a COVID-19 vaccination campaign was launched in the country on March 11, 2021, the direct and indirect effects of the pandemic are nonetheless likely to persist for some time.

Financing of health services in Malawi is also likely to be affected by the COVID-19 pandemic. Additional investments in the health system are needed to prevent the further spread of the virus and maintain the provision of other essential health services. This will require additional domestic and external funding. However, given the negative impact of the pandemic on economic growth and resource mobilization worldwide, expenditure on health and other

social sectors could shrink rather than increase.

In the face of the COVID-19 pandemic, Malawi needs to improve the efficiency of its current spending in the health sector while at the same time strengthening key institutions so that service delivery improves. Structuring spending to support the most vulnerable and improve human capital outcomes more broadly is also important. To support these efforts, the World Bank recently completed a Public Expenditure Review that seeks to identify bottlenecks and solutions in order to improve expenditure on human capital[2]. This policy brief draws on the health module of this review highlighting key gaps, and outlining the measures required to improve financing and health service delivery in Malawi.

# Trends in the Volume and Composition of Health Expenditure

Malawi's total spending on health in per capita terms and as a share of GDP is higher than other low-income countries.

Nonetheless, total health spending per capita, estimated at US\$39 per year, is insufficient to provide essential health care as outlined in the country's health benefit package – the Essential Health Package (EHP). This has contributed to gaps in service delivery. Moreover, due to high inflation, public expenditure on health has been decreasing in real terms over the years despite the country's growing population

and high disease burden.

The fact that most key health system delivery inputs - such as medicines, equipment, and ambulances - are purchased outside the country, and paid in foreign currencies from international suppliers compounds this problem.

Donor funding remains the largest source of funding to the health sector, but its growth has been low in recent years with households picking up this slack (Figure 1). High dependency on donors to finance the health sector

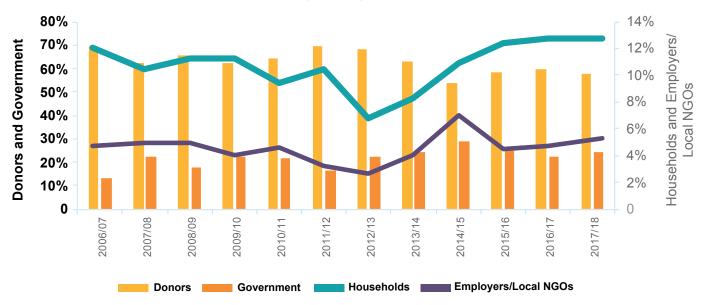
in Malawi poses a potential risk of making health financing unsustainable, which could cause disruptions in health service delivery. Since the 'Cashgate' scandal in 2013, where misappropriation of donor funds amounting to around US\$32 million

was uncovered; donor support to the health sector has mainly been through vertical programs and projects. For the FY2017/18, about 74 percent of donor funding to the health sector was off-budget. This negates the five principles on aid effectiveness\* and is a missed opportunity to improve the public financial management (PFM) system in the country. On the other hand, households have significantly increased their spending on health as compared to growth in donor and government spending (see Figure 1).

Figure 1:

Composition of Total Current Health Expenditure, FY2006/07 – FY2017/18





## Resource Allocation and Predictability of Funding

All three main financiers of health care in Malawi (donors, government, and households) focus their spending on the main causes of disability-adjusted life years (DALYs), but priorities differ. Government and household funding are more aligned to the order of priority of the disease burden than donor funding. This suggests that although health spending in Malawi is broadly linked to the disease burden, the order of prioritization is aligned to the preferences or interests of the financiers. Adapting to the changing nature of the

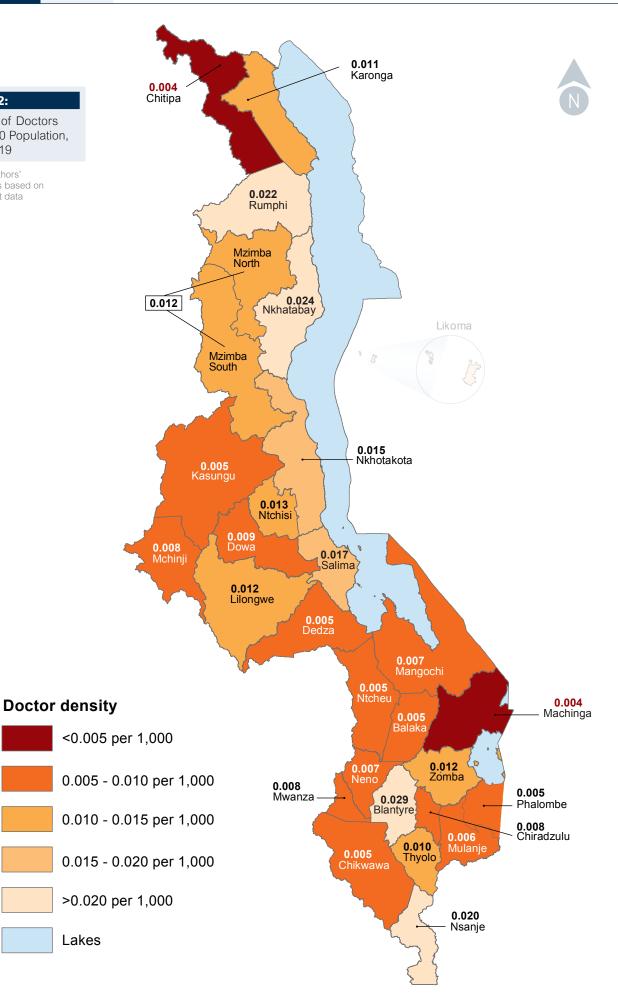
disease burden in the country – for example, the growing prevalence of non-communicable diseases – and aligning funding to the top causes of DALYs is an important strategy for reducing the overall burden of disease in the country.

In line with the national health policy, which prioritizes primary health care, the bulk of financial resources are spent at district level, but there are issues with the way spending is distributed. More than half of total public funds in the health sector are spent on

personnel emoluments, leading to low expenditure on drugs and medical supplies, and other recurrent transactions (ORT). At 16 percent, Malawi's share of public spending on drugs is lower compared to the share spent by other African countries. Consequently, the current level of funding only caters for about a six-month supply of drugs. Results from the Harmonised Health Facility Assessment (HHFA) shows that, on average, health facilities countrywide had only 38 percent of the essential medicines

#### Figure 2: Number of Doctors per 1,000 Population, FY2018/19

Source: Authors' calculations based on government data



they should have, and no health facility had all 24 essential medicines at the time of the survey<sup>[4]</sup>.

Despite the relatively high expenditure on personnel emoluments in the health sector in Malawi, there is still a critical shortage of clinical health workers while the existing infrastructure is dilapidated.

The World Health Organization recommends one doctor per 1,000 people, a ratio that none of the country's 28 districts currently come close to (see Figure 2). Moreover, the distribution of doctors varies by district, with most doctors in the country working in Blantyre, which has 0.029 doctors per 1,000 people, compared to Machinga and Chitipa districts, which have just 0.004 doctors per 1,000 people. The quality of health care is also poor, with only 75 percent of health workers able to diagnose and treat common conditions such as pneumonia, while only

25 percent are able to diagnose and treat co-morbidities like malaria with anaemia, and diarrhoea with severe dehydration<sup>[4]</sup>. Finally, while the share of public spending on infrastructure development in the health sector increased from a low of 5 percent in FY2014/15 to a high of 16 percent in FY2015/16, only half of required infrastructure is available. In addition, general service readiness is estimated at 60 percent<sup>[4]</sup>.

Malawi has developed four needs-based formulas for distributing financial resources from the center to the districts, which aim to achieve efficiency and equity objectives. Its latest formula, developed in 2019, includes data on population size, disease burden and coverage rates, unit costs of treatment, and cost variations across districts<sup>[5]</sup>. It is also aligned to the country's health benefit package, the EHP, which aims to advance the principles of health maximization,

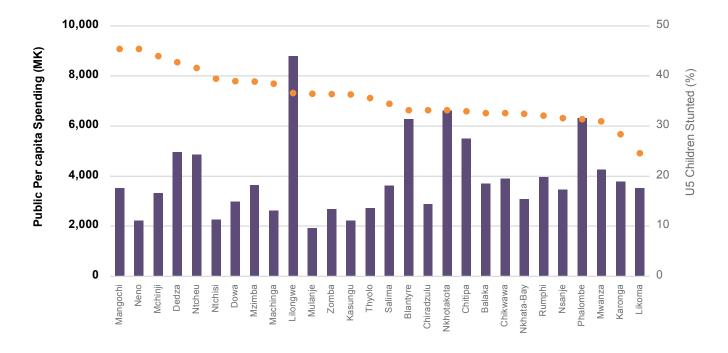
cost-effectiveness, and equity.
However, this formula is not being used, and distribution of public funds to districts is based on historical precedence.
Specifically, the amount allocated

to each district annually is based on the previous year's allocation, which increases (or decreases) in line with the available budget. This approach perpetuates inequities and explains the wide variations across districts between per capita public health spending and health outcomes (see Figures 3 and 4). Moreover, the formula only focuses on the allocation of government funds, and financial resources for drugs and ORT. These constitute a very small portion of the overall resource envelope in the health sector.

#### Figure 3:

Public Per Capita Expenditure by District vs Stunting Among Children Under 5 (U5)

Per Capita Spending - FY2018/19
Stunting

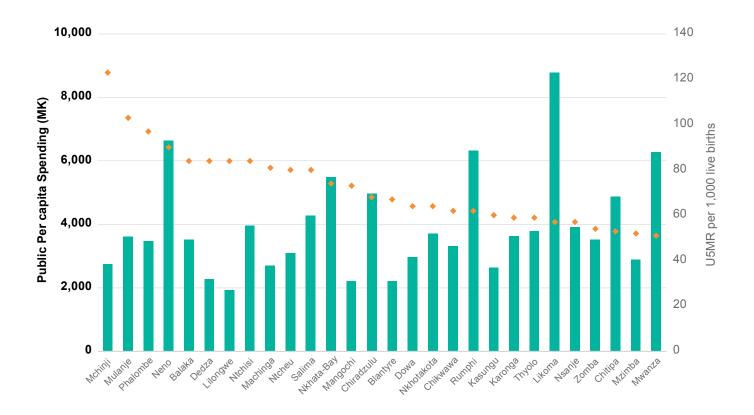


#### Figure 4:

#### Public Per Capita Expenditure by District vs Under 5 Mortality Rate (U5MR)

Per Capita Spending - FY2018/19

Source for Figures 3 and 4: Authors' calculations from government data and Malawi Demographic and Health Survey, 2015-2016. U5MR=Under-5 mortality rate.



Spending is also not aligned to the budget. This could be due to weaknesses in domestic resource mobilization at the national level, and gaps in health services planning. Regular expenditure below and above the budget raises questions about its credibility, as well as its usefulness as a planning and resource allocation tool in the health sector.

There is room to improve the predictability of donor funding.

Identifying and resolving inefficiencies in the allocation and use of donor funds is critically important because donor funding is the largest source of financing for the health sector in Malawi.

Donor funds are often released late, and their absorption is low

due to numerous reporting requirements.

## Efficiency and Value for Money

There are various points in the health system where resources could be lost or wasted. Figure 5 illustrates these pathways including: i) inefficiencies during the allocation of funds and/or purchasing of key health system inputs such as recurrent transfers, human resources, drugs, and physical infrastructure; ii) technical inefficiencies in transforming available inputs into quality health services and outputs; and iii) issues translating

available health services and outputs into better health outcomes. This section analyzes each of these in turn.

Pathway 1:
Purchasing of Key
Health System Inputs

A major cause of inefficiencies in the health sector relates to Malawi's weak PFM system, which has made it difficult to deliver health services at government

#### **Financing**

» Total current health expenditure per capita



#### **Inputs**

- » Recurrent transfers
- » Human resources
- » Drugs and medical supplies
- » Medical equipment and physical infrastructure

Services and Outputs

» Service packages for maternal, child health, and nutrition

**Production of** 

- » Outpatient and inpatient admissions
- » Universal Health Coverage index
- » Health Access and Quality index

3

## Improved Health Outcomes

- » Health status
- » Patient satisfaction
- » Risk protection

#### Figure 5:

Pathways for Potential Inefficiencies in the Health Sector.

Source: Adapted from Hafez (2020)[6]

#### hospitals and health centers.

Effective management of public expenditures on health is essential to increasing coverage and achieving better health outcomes in Africa[7]. In Malawi, PFM is characterized by inadequate compliance with guidelines, especially at government health facilities. For example, while health expenditures at the district level are in excess of budgeted amounts, there are persistent delays in the transfer of funds, and inter-sectoral borrowing of earmarked funds also occurs. Delays in funding means that the money is not remitted as planned, which results in monthly disbursements being unpredictable. In addition,

budgetary releases to districts are not usually communicated to health providers leading to poor accountability.

Planning and budgeting processes are in place at district level, but they do not effectively support prioritization of activities.

Service providers at district hospitals and health centers are usually not informed about the amount of available funding or 'in-kind' support for the following year. In addition, participation of service providers in planning and budgeting processes is marginal, which weakens the prioritization process. Further, by using vertical programs, donors also contribute

to fragmentation of planning and budgeting, delivery, and monitoring and evaluation systems in the health sector. For instance, in addition to the government system, there are multiple financial management and monitoring and evaluation systems that are managed by donors.

Execution protocols emphasize control over flexibility. Budget execution protocols at district-level government health facilities require input-based controls of the line-item budget with limited opportunity for virement. As a result, district health management teams sometimes avoid using the electronic system, which weakens

accountability, and contributes to the accumulation of arrears. Non-government facilities managed by the Christian Health Association of Malawi (CHAM), on the other hand, receive a global budget and have greater flexibility with regards to how they

spend money. In fact, and as highlighted in Table 1, budget formulation, execution, and evaluation at CHAM facilities is relatively better than at government facilities. Lessons could be learned from PFM at these facilities.

#### Table 1:

Budget Formulation, Execution and Evaluation by Facility Type and Ownership

Source: Authors' construction.

#### E1 = Efficiency | E2 = Equity | Q = Quality | A = Accountability

Health Centers					
Budget Phase	Service Delivery Measures				
		E1	E2	Q	A
Formulation	Government	D	D	D+	D+
	СНАМ	D	D	С	D+
Execution	Government	D+	D	D	D+
	СНАМ	D+	С	С	D+
Evaluation	Government	D	D	D	D+
	СНАМ	С	С	D	С

Hospitals					
Budget Phase	Service Delivery Measures				
		E1	E2	Q	A
Formulation	Government	D+	D	С	D
	СНАМ	B+	С	В	В
Execution	Government	C+	D	D+	C+
	СНАМ	В	В	A	A
Evaluation	Government	D	D	D	С
	СНАМ	Α	Α	Α	A

There are no comprehensive financial reports covering all levels of government. Financial reporting at district level is done using Navision accounting software, while at central level the financial management information system (FMIS) uses a different application, called Epicor. These two systems are not integrated, making it difficult to generate comprehensive financial reports across all levels of government. Moreover, donor financing is generally not captured in the FMIS, which leads to partial financial reporting. Given that about 60 percent of total health expenditure in Malawi is provided by donors, this means that a large part of health expenditure is not routinely reported. Consequently, evaluating the effectiveness of spending in the health sector is challenging.

# Pathway 2: Technical Efficiency

There is a direct relationship between public health expenditure per capita and availability of clinical staff. This means that the distribution of health workers is a key factor in how financial resources are distributed in the public health sector in Malawi. Nonetheless, results show an inverse relationship between the availability of health workers and total outpatient visits. Districts with lower staffing levels see more outpatients than those with higher staffing levels. This suggests that some health workers are being underutilized. The other possible explanation is that the quality of outpatient services is poor in districts with high staffing levels,

hence the low usage. As revealed in previous sections, high expenditure on personnel emoluments, but low spending on medicines and other medical supplies, contributes to limited access to quality and efficacious medicines in the country. To address this problem, resource allocation should be improved so that there is optimal distribution of financial resources across all key health systems inputs.

## Pathway 3: Value for Money

Although Malawi performs better than most low-income countries in sub-Saharan African in transforming the available health services into better child health outcomes, it is not as effective when it comes to maternal health outcomes. This could be attributed to low quality maternal health care, as documented in the 2015-16 Demographic and Health Survey. The survey shows that while the percentage of births occurring at a health facility or attended by a skilled provider are high in Malawi, at 91 percent and 90 percent respectively, the quality of antenatal and maternal delivery services is poor<sup>[8]</sup>. Further, critical shortages of key health systems inputs (human resources, medicines and medical supplies, infrastructure), and poor governance and accountability. also contribute to the provision of low quality maternal health care in the country[4].

For service coverage to translate into improved health outcomes, greater focus on quality is

**needed.** Having a better mix of service inputs and reconfiguring the financing mechanism from an input-based to a performance-based financing system is critical.

### **Equity**

Ensuring equitable access to quality health care services is a key priority for the Government of Malawi. This is reflected in the country's national health policy and strategic plan, which affirms the country's commitment to achieving the health-related Sustainable Development Goal targets, and universal health coverage†. Aligned to these frameworks is the EHP, where Malawi has defined a list of priority interventions and services through which resources are allocated. The government provides free EHP services at all government health facilities, and where there is no government facility, CHAM health facilities are contracted to provide a package of selected health services for free.

Though out-of-pocket expenditure on health as a share of total health expenditure has been increasing consistently since FY2012/13, poor households have not been affected. In fact. there has been a decline in total household spending on health as a share of total household expenditure among the poorest households. The increasing burden of out-of-pocket spending has been borne by wealthy households. However, when faced with illnesses requiring medicines, the burden on poorer households has increased,

while remaining steady for the wealthiest households. Increasing household spending on medicines could be attributed to inadequate public spending on medicines as highlighted in earlier sections. Persistent shortages of medicines at government health facilities prompts households to buy them from private drug stores and pharmacies, which has a greater impact on poor households.

Over the years, equity of access to health care services for the poor has improved. This could be due to the increased use of free health services by poor households at government and CHAM health facilities. Nonetheless, catastrophic health expenditures are still prevalent in certain areas even though there has been some improvement in financing and access to health services for the poor. The proportion of households in the lowest (poorest) quintile incurring catastrophic health payments has increased in rural areas, for example. Thus, despite having a free health care policy and the existence of service level agreements with CHAM facilities, catastrophic health expenditures are still prevalent in parts of Malawi. Therefore, the chances of rural poor households being exposed to financial hardships when accessing health care, and being pushed into poverty, are very likely. Furthermore, poor households continue to consume more health services at government health facilities (where quality of health care is low) as compared to CHAM and private health facilities.

# **Policy Recommendations**

To address the challenges outlined above, several key recommendations could be implemented in the short, medium, and long term. These interventions are provided in Table 2 below.

Table 2: Policy Recommendations				
Intervention	High Priorities: Short Term (1–3 Years)	Medium to Long Term Priorities (3–5 Years)		
Improve domestic and external resource mobilization	Raise additional financial and material resources to prevent the further spread of COVID-19, and maintain provision of other essential health services. At a minimum, the government needs to ring-fence funding for health care by ensuring that the existing level of funding to the health sector is not reduced.			
Improve allocation and use of available resources	<ul> <li>Reprioritize government and donor spending in the health sector. If need arises, spending on infrastructure could be suspended until there are sufficient funds.</li> <li>Fully apply the revised district-level resources allocation formula to both government and donor resources across all districts. Furthermore, considering that this formula only focuses on the allocation of financial resources for drugs and operational grants in the public sector, the Ministry of Health and Population (MOHP) could also look closely at the funding and distribution of human resources, infrastructure, and equipment. Focusing on the resources allocation formula alone will not lead to the desired improvements in allocative and technical efficiency.</li> <li>Develop a financial sustainability plan that could sustain the available government and donor funding for an additional three to five years.</li> </ul>	Develop and implement a health financing strategy to guide resource mobilization, pooling, allocation, and purchasing of health care goods and services. The strategy needs to encompass key aspects of the financial sustainability plan, and contain viable strategies for promoting financial sustainability and resilience.		
Improve predictability of donor funding	Donors should align their funding to government systems at both central and district levels to increase its effectiveness. Aligning donor funding in this way is critical to improving the overall allocation of funds, as well as governance and accountability in the health sector. Immediate actions include:  i) Developing a system for routine mapping and tracking of external funds at both central and district levels;  ii) Aligning donor funding to the order of priority of the disease burden; and  iii) Increasing the predictability of donor funding through the use of joint budgeting, disbursement, financial management, procurement, and reporting systems.			
		table continued next page		

Table 2: Policy Recommendations				
Intervention	High Priorities: Short Term (1–3 Years)	Medium to Long Term Priorities (3–5 Years)		
Improve public finance management and efficiency	<ul> <li>Enforce use of the existing public finance management guidelines at district level. Integrating accounting systems at the district and central government levels should also be prioritized in order to improve financial reporting in the health sector.</li> <li>There is a need for greater flexibility on budget execution at government health facilities. Health budgets at district level also need to be ring-fenced to avoid intergovernmental transfers when funds are disbursed to the district councils.</li> <li>Provide regular training and mentorship on health services planning and budgeting to authorities and service providers at district level. This could help to improve the allocation and use of resources.</li> <li>There is a need for consistent advocacy on evidence-based planning and application of the district-level resource allocation formula among policymakers and planners.</li> </ul>			
Improve value for money and equity	<ul> <li>The government should improve the quality of health care services at government health facilities as this is where most poor people access health services. This is also the primary route towards achieving universal health coverage.</li> <li>Catastrophic health expenditures are still prevalent in rural areas even though there has been some improvement in financing and access to health services by the poor. Therefore, there is a need to further increase access for poor households to CHAM and private health facilities, especially in areas where there are no government health facilities. This could be achieved through the introduction of vouchers in addition to the existing service level agreements between the government and CHAM.</li> </ul>			
Effective management of human resources	<ul> <li>The MOHP needs to improve distribution of the available health workforce across all districts and health facilities.</li> <li>Increasing the productivity of existing health workers by introducing performance-based financing (PBF) schemes. By using PBF, financing to health facilities would be distributed on the basis of outputs rather than inputs. These sorts of schemes are currently being used in Rwanda, Tanzania, Uganda, Zambia, and Zimbabwe.</li> </ul>			
Improve planning for the procurement of drugs, vaccines and other medical supplies	Regularly monitor how the COVID-19 pandemic is affecting supply and demand for health services, and undertake timely procurement and distribution of vaccines, medicines, and other essential medical commodities.			

#### **Endnotes**

- \* In line with the Paris Declaration on Aid Effectiveness, the five principles that make aid more effective are: ownership, accountability, alignment, harmonization, managing for results, and mutual accountability. Several donors that operate in Malawi are signatories to the Paris Declaration. For more information see https://www.oecd.org/dac/effectiveness/34428351.pdf.
- † SDG 3, target 3.8 requires all countries to "achieve universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all."

#### References

- World Health Organization. Health Emergency Dashboard [Malawi]. Available from: https://covid19. who.int/region/afro/country/mw.
- 2. World Bank. Malawi Public Expenditure Review 2020. Washington DC; 2020.
- Ministry of Health and Population [Malawi]. Malawi National Heath Accounts Report for Fiscal Years 2015/16–2017/18. Lilongwe: 2020.
- Ministry of Health and Population [Malawi]. Harmonised Health Facility Assessment 2018-19. Lilongwe; 2019.
- 5. **Twea P, Manthalu G, Mohan S.** Allocating Resources to Support Universal Health Coverage: Policy Processes and Implementation in Malawi. BMJ Global Health. 2020;5:e002766.
- **6. Hafez, R.,** ed. Measuring Health System Efficiency in Low- and Middle-Income Countries: A Resource Guide. Joint Learning Network for Universal Health Coverage; 2020.
- 7. Kutzin J. Why Does Public Finance Matter for UHC? World Health Organization. Africa Health Economics Association Conference. Rabat; 2016.
- National Statistical Office [Malawi] and ICF International. 2015–16 Malawi Demographic and Health Survey. Zomba/Rockville; 2017.

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This policy brief was produced by the World Bank's Health, Nutrition and Population Team for Malawi with financial support from the Global Financing Facility. The team was led by Collins Chansa and Katelyn Jison Yoo. The core team included Toni Lee Kuguru, Mariam Ally, Moritz Piatti-Fünfkirchen, Collins Owen Francisco Zamawe, Patrick Hettinger, and John Borrazzo. Technical support was also provided by Carolina Kern.







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