ACT-A Health Systems Connector

Health Financing for the COVID-19 Response

Guidance Note for National Budgetary Dialogue¹

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1. Introduction

1.1 Motivation and overall aim of the Note

The broad aim of this Guidance Note is to support countries to reorient budgetary arrangements to facilitate the ability of national governments to deliver vaccines, therapeutics and diagnostics to their populations to respond to the COVID-19 pandemic. In doing so, governments will be better positioned to sustain the capacity to prevent, mitigate and respond to health threats in the short, medium and longer term, while concurrently delivering other essential health services.

This Note recognizes that the annual and medium-term budget preparation processes are the platforms through which specific plans are transformed into actual resource allocation decisions. Therefore, this Note provides key stakeholders involved in the budgeting process (e.g. Cabinet, Finance, Health, Parliament, citizens, and civil society organizations) with clear, operational guidance on the analytics needed to take informed decisions for translating the actions needed to respond to the immediate challenge posed by the COVID-19 pandemic into budget processes, while also orienting health and related systems to be sustainably prepared to protect against and respond to future threats.

After this introduction and background, we lay out the critical issue of identifying what needs to be financed both in the immediate- and medium-terms to respond to the COVID-19 crisis and lay the critical foundations for health and related systems that can be better prepared for and adaptive to emerging threats. We then consider how countries can use fiscal instruments to enable sustainable financing and budgets to support effective implementation of COVID-19 tools. In addition, we discuss how to monitor the use and performance of funds to ensure transparency and accountability. Based on this "global analysis", we conclude by laying out the concrete steps to be taken at the country-level to assess financing capacities, needs, and processes to deliver COVID-19 vaccines, therapeutics, and diagnostics, while reorienting financing arrangements to better meet both health security- and UHC-related objectives in the longer run.

1.2 Background

The COVID-19 pandemic has shown that the health systems of many countries are not adequately equipped to anticipate, prevent or mitigate health threats, ultimately failing to fully protect the health of their populations. Under-funded public health functions and fragmented and insufficiently responsive health financing arrangements contributed to these problems, leading to delays and inefficiencies in the health response to COVID-19. These weaknesses must be addressed to enable health and related systems to better respond to the challenge posed by COVID-19 and to be better prepared to address future threats to health security.

Investing in health systems through the COVID-19 response is not only critical for the health of populations but also for the health of the economy. The economic impact of the COVID-19 crisis is severe. As of October 2020, the IMF forecasts that the global economy will

contract by 4.4 percent in 2020, with Latin America, emerging Europe, and South Asia suffering the steepest declines.² An estimated 143 to 163 million people may fall below the \$1.90/day extreme poverty line due to the pandemic in 2021,³ while human capital accumulation is expected to suffer a severe setback especially due to widespread school closures.

The recession will inflict significant damage on fiscal balances.⁴ In 2020, governments responded by re-programming and increasing spending with a wide range of measures to support households through social assistance, support workers with wage subsidies and other measures, and support firms through credit guarantees.⁵ Discretionary budget measures worth 3.5% of GDP in emerging markets and developing countries have been implemented thus far. On the revenue side, slumping economies will weaken tax collection. Higher spending and lower revenues imply wider fiscal imbalances. The IMF projects that general government deficits in *emerging markets* and *developing economies*⁶ will more than double from -4.8% in 2019 to -10.4% in 2020 and narrow slightly to -8.8% in 2021. Debt/GDP ratios in these same countries will consequently rise by over 10 percentage points to about 65% of GDP.⁷

This fiscal impact of COVID-19 will impose additional strain on the budgetary space that will be available for additional health spending. Yet public financing is central to financing health systems for both health security and progress towards UHC.8,9 This is of great concern because the need to sustain high public expenditures will not decline proportionally to the decline in COVID-19 incidence. In particular, many non-urgent health services have been deferred due both to prioritizing COVID-19 care (e.g. postponing elective surgeries) and individuals foregoing care for fear of infection; this will increase strains on systems even as the pressure of COVID-19 cases declines.¹⁰ Thus, purely from a personal services perspective, the need for expenditures will remain high even as revenues decline

² International Monetary Fund, World Economic Outlook: a long and difficult ascent. October 2020, International Monetary Fund: Washington, DC.

³ https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-looking-back-2020-and-outlook-2021.

⁴ International Monetary Fund. Fiscal Monitor: policies for recovery. October 2020. Washington, DC: International Monetary Fund. https://www.imf.org/en/Publications/FM/Issues/2020/09/30/october-2020-fiscal-monitor#Full%20Report%20and%20Executive%20Summary

⁵ World Health Organization. Global spending on health 2020: weathering the storm. Geneva: World Health Organization; 2020. https://www.who.int/publications/i/item/9789240017788

⁶ A group of 156 countries, distinct from *advanced economies*, as defined by the IMF.

⁷ International Monetary Fund, World Economic Outlook: a long and difficult ascent. October 2020, International Monetary Fund: Washington, DC.

⁸ Kutzin, J., Anything goes on the path to universal health coverage? No. Bulletin of the World Health Organization, 2012. 90(11): p. 867-868.

⁹ Gaudin, S., et al., *Common Goods for Health: Economic Rationale and Tools for Prioritization*. Health Systems & Reform, 2019. **5**(4).

¹⁰ World Health Organization, Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020. 2020, World Health Organization.

substantially. Further, modelling the fiscal impact of COVID-19 in Asia indicates that per capita health spending will, in the best case scenario, still remain positive (yet at a lesser growth rate as compared to pre COVID-19 trend lines); however, in some countries it will decrease without active re-allocation of government expenditures towards health.¹¹

Hence, and despite the constrained fiscal outlook, the IMF's <u>World Economic Outlook</u> (October 2020) notes the importance of protecting health budgets in its Executive Summary (p.xvii):

"With the pandemic continuing to spread, all countries—including those where infections appear to have peaked—need to ensure that their health care systems can cope with elevated demand. This means securing adequate resources and prioritizing health care spending as needed, including on testing; contact tracing; personal protective equipment; life-saving equipment, such as ventilators; and facilities, such as emergency rooms, intensive care units, and isolation wards."

COVID-19 has also laid bare glaring blind spots in country preparedness and risk management arrangements that require strengthening and additional investments. Indeed, the critical necessity of public finance is even stronger for the functions and foundations that support health security. Many of the key capacities that have to be strengthened or reinforced are population-based functions and interventions that require public financing (supplemented by donor sources where relevant) because they are public goods or have large social externalities, and thus will not arise through market forces (referred to as Common Goods for Health). These foundational functions provide the critical enabling environment for health protection and service delivery through effective policies and coordination; information collection, analysis and dissemination; community engagement; regulations and legislation; and critical population services including water and sanitation. Importantly, these functions are essential for the COVID-19 response, as well as to protect against emerging and concurrent threats stemming from environmental degradation and chronic co-morbidities. In this way they also serve as "step zero" to UHC as they form the foundation for both health security and UHC-related objectives.

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In addition to investing in these population-based functions and capacities, actions are needed to ensure that resources reach front-line service providers to prepare the ground

¹¹ World Bank Health, Nutrition and Population Discussion Paper, "Economic Impact of COVID-19: Implications for Health Financing in Asia and the Pacific." 2020 https://openknowledge.worldbank.org/handle/10986/34572

¹² These can be characterized as "common goods for health." Please see the following website for more information: https://www.who.int/health-topics/common-goods-for-health#tab=tab_1.

¹³ Yazbeck, A.S. and A. Soucat, When Both Markets and Governments Fail Health. Health Systems & Reform, 2019. 5(4).

¹⁴ Most countries have endorsed UHC as a policy goal. Concretely, countries that pursue UHC seek to reduce the gap between the need for and use of services of good quality while reducing financial hardship that may arise due to payments made for care. Health security is a goal that is distinct from but closely linked to UHC, as it means that both individuals and societies are protected from health risks that may be national or international in scope. Health security precedes UHC in the sense that the elements of the health system, and wider public system, that need to be in place for health security are an on the path towards UHC.

for universal access to COVID diagnostics, therapeutics, and a vaccine. For low-income countries in particular this requires redressing the historical pattern of under-investment in health system foundations, such as adequate supplies of health workers and health facilities with necessary elements such as running water, power, and connectivity. The health sector will need to coordinate and work together with other sectors to effectively tackle these challenges both from a financing and implementation perspective.

Addressing these demands in each country will require targeted and deliberate decisions on the prioritization of public spending, both in the immediate and the medium-term. In addition to these allocation decisions, new approaches should be considered to financing and organizing services, especially in contexts that have historically relied on overly-fragmented approaches. These approaches are further detailed in the sections described below.

1.3 Content overview

This Note offers guidance on: (1) what investments should be prioritized and (2) more efficient and sustainable ways to organize and channel public resources. Financing for health security is both a health sector, government-wide, and global issue. Therefore, appropriate mechanisms should be put into place that enable coherence, coordination, and efficiency from a system perspective to ensure entire populations are served. In most countries, moreover, preparedness for epidemics and other health threats (e.g. environmental and chemical) is not something that can be fully established within one year. Instead, the time frame is several years, and hence a multi-year perspective is essential to guide systematic implementation. Ensuring that preparedness is an explicit part of national health strategies is a starting point for this. Furthermore, preparedness requires global level coordination and functions, as pathogens do not adhere to borders. This Note focuses on the country-level budget dialog, but it is important to note that for many countries, strengthening national systems will also involve adequate funding to and from global- or regional-level institutions or agencies.

More specifically, Sections 2 and 3 of the Note address the actions needed in the health system, and beyond the health system, to enable delivery of the COVID-19 tools, achieve health security and enable sustainable progress towards UHC, while ensuring accountability for the use of resources. This involves addressing the following questions:

- 1. What are the key functions and budget inputs that need to be prioritized and the system foundations needed to deliver them in the immediate term?
- 2. What are the budget-holding agencies that are responsible for ensuring these functions are delivered?
- 3. How should the health system, and wider government, organize itself to deliver on the key functions most efficiently so that progress can be sustained?
- 4. What are fiscal instruments available to finance preparedness and more broadly capacities to enable health security? Which are feasible and what are their implications?
- 5. What changes in budget formulation and execution processes may be needed to enable the efficient delivery of the key functions in the medium term?
- 6. How to account for spending and outputs?

In the next two sections, we address each of these "what", "who", and "how" questions in a way that is necessarily generic but adaptable to country context, facilitating a more granular assessment and framing of the issues at country level. Within each section, we identify how the issues manifest themselves in different contexts and list the types of analyses needed to prepare the budget process in a country. We make the guidance more tangible by drawing on a set of countries that have been part of the process of developing the Note. The third section of the Note also addresses the mechanisms and tools for tracking resource flows from domestic and international sources to ensure that decision-makers and politicians can be confident that the resources allocated are reaching their intended destination for the intended purpose, and that any bottlenecks are identified rapidly so that they can be addressed. The concluding section identifies a set of specific questions that any country would need to address to inform national budget dialog.

This Note is intended to provide guidance to strengthen country budget dialog for the purpose of ensuring that the health system and wider government response to the COVID crisis is both speedy and effective, and that countries are better prepared to respond to future health crises. As such, the Note is only a starting point; the "real work" will be follow-on country-by-country engagement in budget dialog, bringing the specifics of each country to develop tailored approaches, using the analytic agenda identified in the last section of this Note as a guide.

2. What to finance?

2.1 Investments, actions, and policies

Access to COVID-19 tools and other essential technologies, including vaccination, diagnostics and therapeutics, requires multi-layered investments and implementation capacities. Immediate action is needed to ensure access to and delivery of the necessary population-based and individual services. To enable this, financing is needed beyond that which directly connects with clinical service delivery. Rather, a large push is needed to set the course for establishing core population-based functions effectively, while also strengthening existing health system foundations to support preparedness for health security.

In today's world, ensuring COVID-19 immunization represents the one area for most critical investment, along with a comprehensive package of public health interventions and clinical service capacities. This will require both the availability of the vaccine itself through well-functioning supply chains, procurement systems and stocks, but also sufficient health workers and facilities to effectively deliver the vaccination to individuals. Similarly, surveillance systems to understand population trends rely on accurate and timely information that is often inputted through facility-based actors. This Note stresses that the immediate response to COVID-19 needs to build on and leverage health systems within a strong enabling environment.

¹⁵ This "Consultation Draft" of the Note is to provide the basis for the engagement and feedback from countries, after which the Note will be finalized.

Table 1 lists the key functions, capacities, inputs and policies that need to be invested in as part of efforts to establish systems for health security and UHC. In this table, they are presented based on two classifications:

- Time horizon:
 - \circ those items that need to be budgeted for in the immediate term (6 12 months) and
 - \circ those that realistically require longer-term (1 6 year) investments in those countries where they are not already established.
- Type of budgeting input
 - Enabling conditions¹⁶
 - Recurrent budget
 - Capital budget

While putting in place or extending the foundations may require increased capital investment in some countries, for the most part, these functions and foundations are not one-off investments, but rather sets of activities that must be financed and implemented on a recurrent basis. And although not all of the items listed necessarily require financing from a budgetary perspective, they will need to be considered as part of the overall budgeting and financing dialogue for the purpose of ensuring health security. This combination of the policy and analytical enabling conditions, capital investments and recurrent funding is presented in Table 1 based on the components needed to effectively deliver COVID-19 tools, including (i) supplies and vaccines; (ii) surveillance and information; (iii) public health capacities; and (iv) service delivery. In doing so, this Note stresses that an effective response requires the combination of the three budgeting inputs.

Table 1: What needs to be financed for preparedness for health security?

Table 1: What needs to be financed for preparedness for health security?				
Time horizon	Budget input			
Immediate	Supplies and vaccines			
(next year),	Analysis of effectiveness of national procurement mechanisms and supply			
with <i>capital</i>	chains for health products including vaccines and medicines and remedial			
investment in	investments			
italics and	Policies for distribution of PPE and supplies			
<u>recurrent</u>	Improved legislation and regulations for supplies including vaccines and			
<u>expenditure</u>	related health security diagnostics and treatments			
underlined	Procurement of relevant vaccine cold chain equipment			
	 Procurement of personal protective equipment, test kits, vaccine and other supplies 			
	Training and software for improved supply chain management			
	Surveillance and Information			
	Policies for mapping health facilities to manage COVID-19 across health system			
	Establishment/expansion of contact tracing program			
	Expansion and improvement of citizens and community engagement mechanisms			

¹⁶ Many of these functions and capacities fall under the common goods for health categorization. See https://www.who.int/health-topics/common-goods-for-health#tab=tab 1 for more details.

Time horizon	Budget input	
THIC HOUZON	Procurement and training to expand and improve quality of epidemiological	
	surveillance laboratory network	
	 Digital/information platforms for real-time surveillance and service delivery 	
	,	
	Establishing/ improving laboratory networks	
	Improved specimen transport and referral system	
	Specialized Training for frontline health workforce, including COVID-related	
	surveillance and contact tracing	
	Inclusion of COVID-19 and other biological threats thru expansion and	
	improved quality of surveillance system	
	Public health	
	Governance and regulations for EOC functioning	
	Emergency Operating Center functioning	
	Establishment/strengthening of point of entry screening	
	Improved Medical and solid waste management	
	Service delivery	
	HRH resources mapping and establishment of redeployment and emergency	
	preservice 6 months- 1-year training plan as necessary	
	Establishment of policies and plans for hardship allowances, overtime	
	compensation and other incentives for health workers	
	Review of frontline service delivery arrangements and development of	
	integrated health service delivery strategy	
	Assessment of frontline health information system and establishment of plan	
	to address gaps	
	 Determination of infrastructure gap (water, electricity, connectivity) in health 	
	facilities and establishment and funding for emergency investment plan.	
	 Specialized Training for frontline health workforce in COVID-19 vaccination, infection control and case management protocols 	
	Training and possible expansion of human resources to address COVID-19 while presenting the delivery of expanding any idea as a part of integrated health.	
	while preserving the delivery of essential services as part of integrated health	
Langer town	service delivery strategy	
Longer-term	Supplies and vaccines	
(1-2 year or 3-6 year	Enlarge scope of medicines and health products quality regulation Supersize of receiptable school to be included COVID-10 receiptable and appropriate	
3-6 year budget	Expansion of vaccination schedule to include COVID-19 vaccination and any athor relevant vaccinations.	
	other relevant vaccines	
cycles), with	Information and constillance	
capital Information and surveillance		
investment in • Develop Systems and procedures for managing:		
italics and	Chemical event	
recurrent	Radiological or nuclear event	
expenditure	Expansion of Public Health Institute mandates	
underlined	Move towards interoperable information systems that not only integrate	
	disease specific data, but also data on facility utilization, HRH capacity, etc.	
	Expand Surveillance systems to include	
	o Zoonoses	
	○ AMR	
	 Early-warning systems 	

Time horizon	Budget input			
	Public health			
	Strengthened legislation for IHR implementation			
	Establishment of antimicrobial resistant policies/taskforce			
	Development or strengthening of zoonoses coordination/policies			
	Operations of the Public Health Institute			
	Food control and licensure			
	Integrated biosafety and biosecurity training			
	Service delivery			
	Health labour market policies			
	Enhance health workforce capacity (including community health workers)			
	 Improvement of health facility infrastructure, including running water, 			
	electricity, connectivity, hazard proofing			
	Establishment of diagnostic laboratories with adequate referral capacities			
	Further strengthening of Health Management Information System			
	Efficient and flexible financial management systems (IT, training)			

Sources: 17,18,19,20

As demonstrated in Box 1 below, many countries have mobilized existing capacities to respond to COVID-19. This mobilization process requires aligning financing to activate health system foundations, along with issuing enabling plans, policies and legislation.

Box 1. Examples of surge laboratory capacity during COVID-1921

Many countries have leveraged existing laboratory networks to mobilize COVID-19 testing and surveillance activities. This includes accessing private laboratories, as well as repurposing others, such as those involved in veterinary surveillance in universities. As reported by the COVID-19 Health Systems Response Monitor for the WHO European region, Croatia, Cyprus, France, Estonia, Germany, Lithuania and Norway have all taken this approach. For example, Germany rapidly commissioned testing in 300 local laboratories and Sweden also used existing laboratories in all but two of its 21 regions. Similarly, to increase the turnaround time for testing, Ghana mobilized laboratory capacity from across the country, going outside of the university-based laboratories to use the veterinary service department, teaching hospitals, private sector laboratories, among others. Activating this laboratory capacity goes beyond funding allocations, and has implications for public financial management, legal mechanisms to contract with non-state providers, and payment methods.

¹⁷ https://extranet.who.int/sph/news/ihr-self-assessment-annual-reporting-tool-spar-2018

¹⁸ https://apps.who.int/iris/bitstream/handle/10665/259961/9789241550222-eng.pdf?sequence=1

¹⁹ https://www.tandfonline.com/doi/full/10.1080/23288604.2019.1660104

²⁰ https://www.who.int/docs/default-source/coronaviruse/covid-19-sprp-unct-guidelines.pdf

²¹ Sources: https://analysis.covid19healthsystem.org/index.php/2020/07/15/what-do-countries-need-to-do-to-implement-effective-find-test-trace-isolate-and-support-systems/ and Kenu, Ernest, Joseph Frimpong, and Kwadwo Koram. "Responding to the COVID-19 pandemic in Ghana." *Ghana Medical Journal* 54.2 (2020): 72-73.

2.2 Responsible budgetary units

For a practical budgeting exercise, each country must identify the entities or budget holders that have assigned responsibility for overseeing, directly implementing, or contracting out for the delivery of each function. This exercise should also include identifying institutional gaps and areas for realignment as needed.

While the health system foundations sit largely within the purview of the Ministry of Health, health security-related interventions and functions involve a wider range of implementing sectors and agencies. Typical examples are the Ministry of Health, the National Public Health Institute(s), the national Centers for Disease Control (CDC), emergency response authorities, National Guard/defense, health facilities, and sub-national government agencies. Many of these functions will also have to be directly implemented by sub-national entities, which will be the ultimate budget holders in many countries. Table 2 provides an illustrative example of the range of institutions involved in achieving health, safety and preparedness related activities to respond to national health emergencies and risks.

An appropriate coordination entity should exist that considers the "One Health" approach across the different entities and activities. This approach entails multiple sectors and levels of government coming together to coordinate plans and budgets towards the common goal of improved health that is critical in epidemic control given e.g. the zoonotic origin of many pathogens.

Table 2: Example of institutions/agencies involved in health security

Goal: Protection of the health and safety and preparedness to respond to national health emergencies and risks			
Implementing Ministry/Entity	Activity		
Ministry of Finance	Budget allocations including contingencies during major		
	outbreaks and other emergencies		
Ministry of Health	Health Protection and Emergency Response		
	Immunization		
Ministry of Agriculture and Water	Biosecurity and Export Services		
Resource	Coordination on zoonoses		
Ministry of Education and Training	Workforce training and distribution		
Ministry of Environment and	Management of Hazardous Wastes, Substances and		
Energy	Pollutant		
Ministry of Defence	Surge capacity for response		
Sub-national governments	Service delivery responsibility		
	Community outreach		

In federal systems, there are additional challenges to identify the appropriate responsible agencies to lead the implementation of specific functions. For example, due to the inherently cross-border nature of pandemic preparedness and response (externalities) and the need for strong coordination, key functions may be best located within central governments. Disease surveillance structures, national stockpiles of key equipment, and centralized procurement to ensure sub-national governments do not bid against each other in the event of an outbreak are some examples. However, other functions are necessarily

local, such as contact tracing or other roles requiring frontline public health workers. Central governments should carefully assess how best to ensure that local authorities fulfil these critical functions without under-investment that could affect the entire country.

This budget holder identification process will need to ensure investments are channelled smartly if they are to be sustained over the long-term, ensuring they are aligned with other health systems strengthening efforts. The respective role of each budget holder may need to be clarified as part of the overall administrative and fiscal decentralization framework and agreements. Presently, undue fragmentation in the organization of many of these core functions, which is often exacerbated by financing arrangements, works against building adaptable, efficient and well-prepared health systems.²² These resources, which are also at the core of the day-to-day business of the health system, also need to be cross-cutting so they can be activated and called up in times of crisis. While the focus of this Note is on public funds, there are critical questions related to how those funds can be channelled and used to engage the private sector in the development and delivery of COVID-19 related services and therapeutics. This process should lay the groundwork for private sector engagement well into the future through legal and public financial management reform.

The work needed to ensure effective rollout of a COVID-19 vaccine illustrates the importance of understanding both the content of **what** needs to be funded and **who** the entities are that will receive and manage the resources needed to ensure these are delivered. This is summarized in Box 2.

Box 2. The "production function" for delivering a COVID-19 vaccine

In order to implement a successful Covid-19 vaccination program, and in addition to the need to have a realistic scenarios of available budgetary resources for the forthcoming period, it is essential for country planners to understand, in detail, the following four elements of the *production function*: (a) supply and appropriate logistics for a COVID-19 vaccine; (b) correct delivery of the vaccine to the defined target groups; (c) ensuring demand from the public for COVID-19 vaccination; and (d) disease surveillance including reporting on COVID-19 vaccine coverage, any associated adverse events, and containment of new COVID-19 outbreaks. For each element, there are relevant budgetary inputs that need to be considered in the short- (next 12 months) and medium-term (next 12 – 36 months).

Initial reviews of country COVID-19 National Deployment and Vaccination Plans (NVDPs) show some variability in the estimates of the percent of the national population that will be vaccinated ("coverage assumptions") depending on actual/projected availability of vaccine, budgetary space and time needed to overcome logistical and human resource constraints. Vaccination (including available COVID-19 vaccines) requires some degree of refrigeration/cooling along its supply chain, and consideration must be given to not only purchasing the cheapest refrigerators, but also ones that ultimately turn out to be cheaper to run, easier to repair and more environmentally sensitive.

a. The basis for these NVDPs are detailed in the Vaccine Readiness Assessment Tool/Vaccine Readiness Assessment Framework (VIRAT/VRAF) for situational analysis. We may assume that in the short-term many countries will aim to vaccinate the most vulnerable 20% of the population (health care workers, elderly, those with co-morbidities, etc.) and if feasible a further 20% to

²² Sparkes, S.P., J. Kutzin, and A.J. Earle, *Financing Common Goods for Health: A Country Agenda*. Health Systems & Reform, 2019: 5(4).

reduce transmission (e.g. those in sectors where social distancing is difficult, such as service sector workers with high contact rates) in order to reduce morbidity and mortality in the general population. The 20% figure is based on the minimum availability of vaccine by country thru the COVAX facility. At the time of writing this Note, additional availability of vaccine over and above the COVAX facility 20% coverage rate is unknown, as is the fiscal capacity/willingness of many countries to purchase vaccine outside the COVAX facility. While some countries will have secured enough vaccine and have the health systems capacity to provide beyond 20% coverage in the short term, modelling using the existing COVID-19 Vaccination Costing Tool (CVIC)²³ indicates that supply chain and human workforce capacity "bottlenecks" will pose critical challenges for some countries to go beyond 20% coverage in the foreseeable future. . Addressing some of these supply chain and human workforce issues takes resources and time, both in short supply for many fiscally challenged governments in the lesser developed world who are racing to advance COVID-19 vaccination coverage rates. For demonstration purposes, we assume that the balance of the population will be vaccinated over the following 12 to 36 months in Table 3, below, with the recognition that vaccination timelines will differ across countries. This is a practical time horizon that is aligned to the medium-term budgetary and expenditure planning processes of Finance Ministries.

Table 3 provides a simplified list of necessary budgetary inputs for these short- and medium-term time frames, relating to potential capital and recurrent resource needs for vaccine-specific and complementary health system improvements that are essential to ensure that the COVID-19 vaccination targets can be met.

Table 3 identifies the activities that need to be funded but budgeting also requires identifying the agencies that will receive and manage the funds. As noted above in **Error! Reference source not found.**, this can be multiple ministries as well as various levels of government. Thus, budgetary readiness to enable implementation of the planned activities that are essential to the success of a COVID-19 vaccination plan will require a mapping of the existing distribution of responsibilities for implementing of these specific functions in order to identify the responsible budgetary units to be funded and, where necessary, create new ones.

Table 3. Selected budget inputs and required health system improvements

	Short (0 – 12 r		Medium-term (12 – 36 months)	
Function	Budget input	Required health system improvement	Budget input	Required health system improvement
Vaccine and cold chain logistics	Vaccine Syringes	√ Supply chain management	Vaccine	V Supply chain management
	Refrigerators/cold chain	√ Improved procurement	Refrigerators	√ Maintenance management
Service delivery	Training modules HRH re-allocation/ Waste management/ disposal	√ Pre- and in- service training	Training	V Supervision and quality assurance, in-service training
	PPE	√ Improved procurement	PPE	√ Supply chain management
	Health workers	√ Deployment	Health workers	V Scope of practice reform

²³ See https://www.who.int/publications/i/item/10665337553 for more details.

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Demand	Community	Х	Community	√ Engagement
generation	engagement		engagement	with civil society
	Risk	X	Social media	X
	communications			
Safety surveillance	Track and trace	√ Improvements to	Vaccine adverse	√ Improvements to
		contact	event reporting	HMIS
		identification	system	
	Vaccination	√ Improvements to		
	coverage system	HMIS		

Country circumstances vary greatly, and just as countries must identify the responsible budgetary units that will manage the resources, the relative resource requirements for the different activities will also vary in relation to the starting position of each country. For example, immunization programs are heavily dependent on logistics as they usually require maintenance of a refrigerated "cold chain" as well as the acquisition and disposition of single use syringes, the timely arrival and use of vaccines and sundry items. In countries where these logistical systems are not adequate in relation to what is needed for COVID-19 vaccination, a greater relative share of resources is likely to be needed for this as compared to other activities. In other countries, the critical areas for attention may be human resource management, or regulatory preparedness, demand creation or monitoring of vaccination coverage and reporting of any adverse events. Many countries also face shortages of human resources and need to redeploy staff to deliver critical COVID-19 related services For the medium-term planning process in particular, it is important to recognize that the relative resource needs for the different activities may shift, e.g. from logistics to demand generation and coverage monitoring/surveillance issues, or to greater needs for investing in service delivery as it is often the case that the marginal cost of delivery increases in the latter stages given the challenges of vaccinating remote or otherwise hard-to-reach populations. These are among the specific questions that each country must address in the preparation of its budget processes.

3. How to finance?

This section addresses fiscal instruments, the practical public financial management systems and practices that are needed, and the monitoring of health security-related expenditures. The financing questions follow directly from the organizational questions of what functions need to be in place and who needs to manage/delivery them, which therefore must be addressed first.

3.1 Fiscal instruments and budget prioritization: How to ensure sustainable funding for preparedness and response?

Ensuring adequate resources are available to finance the inputs and activities of the health system and beyond needed to ensure health security will require a range of measures both in the context of overall fiscal policies and specifically within the health sector. With regard to overall fiscal management, the IMF's World Economic Outlook (October 2020) highlights three areas of concern. First, while it will be difficult to rely heavily on new revenue measures amidst a severe economic downturn, there remain potential areas to explore, including higher tax rates for high-income brackets, capital gains, property, and wealth,

along with stronger global coordination on international corporate taxation. Pro-health taxes (earmarked or not) on tobacco, alcohol, and sugar-sweetened beverages can also boost revenues. Second, prudent debt management by extending maturities and locking in lower rates, supported by international debt relief for the poorest countries, will be important. Third, spending measures should be well targeted (focused on households, workers and firms most in need) and productive (e.g., high-return infrastructure) and combined with expenditure cuts where appropriate (e.g., untargeted or unproductive subsidies such as fossil fuel subsidies, low-return public investment projects). Taken together, these measures can help strengthen sustainable general taxation and fiscal space for health. Within the health sector, suspending less cost-effective entitlements in a benefit package, or shifting from branded to generic drugs in formularies are potentially viable options to free resources for reallocation. Moreover, especially for low- and lower-middle income countries, recent international commitments to expand external support for pandemic preparedness and response may provide additional needed resources.

Ministries of Finance can press their MoH counterparts to identify areas within the health sector that may contribute to additional budgetary space for health. At a macro level, public expenditure reviews or health financing assessments can highlight broad areas for improvement. At a micro level, countries with robust health information systems can better understand the distribution of provider performance and take action to promote overall efficiency gains. While the approach must be led by the service delivery strategy, financing instruments can be identified to support these, such as creating/changing/expanding Conditional Grants from central to sub-national levels of government, changing provider payment mechanisms, and/or extending contracts to private sector service providers and outreach organizations. Sustaining implementation of such measures often requires adjustments to PFM systems.

3.2 PFM adjustments: How should budgets be formulated and spent to support effective implementation of COVID-19 tools?

To be responsive to the delivery of COVID-19 tools, prepare for future health emergencies and further sustain progress toward UHC, critical adjustments in national PFM systems are necessary. Adjustments are needed throughout the budget cycle, from how budgets are formulated and integrate health security provisions, to how public funds flow to related health services and activities, and to how money is tracked effectively in relation to these goals. This section covers budget formulation and execution issues, while section 3.3 looks at budget monitoring.

Historically, weaknesses and rigidities in budget structures have constrained the effective planning and use of public funds in the health sector. When budgets are presented and disbursed by detailed line-items (e.g. for drugs, medical equipment, or staff), they do not allow flexibility in terms of re-allocations across budget lines as needs may evolve and can create complexities and inefficiencies in budget implementation. Generally, input-based budget formulations have also impeded the effective matching of resources with results and prevented fund holders from being held to account for health outputs (Cashin et 2017; Barroy et al 2018). The COVID-19 crisis has demonstrated that countries with more flexible

budget formulation approaches, such as with programme budgets,²⁴ were able to rapidly reallocate budgeted expenditures to respond to the health emergency. In Mexico, New Zealand and South Africa, where programme budgeting has long been standard practice, this approach clearly enabled an agile budgetary response from the start of the crisis.²⁵

Programme budgets appear to be, indeed, particularly relevant to support the operations needed for health security. Budgetary response to health emergencies requires flexibility in the programming, reprogramming and deployment of resources, given the uncertainties and changing circumstances that arise in an outbreak. A budgetary reform that would group inputs around policy objectives or outputs defined as budgetary programmes can foster efficiency and accountability within a common performance framework. During the preparedness and the response phases of health emergencies, budgetary programmes that integrate health security provisions would be a good fit, enabling the flexibility needed to support effective engagement, for example, to:

- Increase efficiency in preparedness and reduce fragmentation in health securityrelated activities, through cross-cutting and system-wide, non-disease specific interventions that would be grouped into broader budgetary programmes;
- Offer a framework for multisectoral coordination for dimensions that require action in other sectors (e.g. water and sanitation). Instead of having fragmented inputs in various entities' budgets, budgetary programs would allow different stakeholders involved in health security activities to coordinate, reduce overlaps, within an agreed performance framework;
- Facilitate expenditure tracking and accountability of financial and non-financial performance around pre-defined goals/targets for health security

Before COVID-19, some countries had begun to integrate health security aspects into their budgets as part of their budget formulation transformation processes. This integration has occurred in various ways. Countries integrate such provisions either as stand-alone

²⁴ In the public finance taxonomy, budget structure refers to the organization of a government budget and is based on standard budgetary classifications. Historically, countries have predominantly used the economic classification to organize their budgets, which provides a framework for controlling the use of inputs. Gradually, most countries have moved to alternative forms of budgets to better link resources to results. Multiple terms, such as programme-based budget, performance-based budget, output-based budget, or policy-based budget, have emerged in the public finance literature to describe budgets that emphasize outputs and give fund holders discretionary spending power within budgetary programme envelopes while holding them accountable for outputs. In this Note, programme budget is used, as a generic term, to refer to these approaches. Programme budget structure typically include a programme goal, sub-programmes and activities to serve the pre-defined output.

²⁵ Barroy H, Margini F, Kutzin J, Ravishankar N, Piatti-Fünfkirchen M, Gurazada S, James C (2020). If you're not ready, you need to adapt: lessons for managing public finances from the COVID-19 response, https://p4h.world/index.php/en/blog-lessons-for-managing-public-finances-from-COVID-19-response

²⁶ While the reform can support a better response to health emergencies, it can also provide a more supporting financing environment for the broader health security and UHC agendas in the longer run. Evidence converge on three key merits for health spending: i) Programme budgets support better alignment with health sector policies and strategies, ii) they can provide more flexibility in funds management, notably at service provider level, and iii) they enhance financial and non-financial transparency and accountability towards health outputs (Barroy, Blecher & Lakin, forthcoming).

budgetary programmes (e.g. a health security budgetary programme in Gabon further broken down into specific activities) (Figure 1), or include activities for health security as sub-components of other, broader budgetary programmes (e.g. as part of a public health programme in Armenia or a disease prevention and control programme in Indonesia) to support integration in delivery systems (Table 4). This type of reform needs to be scaled-up in countries to allow budgets to include provisions to support health security in a more systematic manner.

Table 4. Inclusion of health security activities in programme budgets (LMICs)

Country	MOH Budgetary Program	Sub-program/activity
Armenia	Public healthcare services	Population's sanitary and epidemiological safety
		and public health services
		National immunoprophylaxis programme
		Blood collection service
		Hygiene and anti-epidemic expert examination
		service
Burkina Faso	Health service delivery	Crisis preparedness and management
	Support to MoH	Health information and surveillance
Kenya	Preventive, Promotive and	Health Promotion
	RMNCAH	Environmental Health
	General administration, planning and support services	National quality control laboratories
Kyrgystan	Public health	Measures to ensure safety standards for human
		health (food safety, indoor air, water, radiation
		levels)
		Immunization policies
		Population awareness and education on health
		promotion
		Measures for epidemiologic surveillance and
		prevention of vector-borne diseases (plague)
		Ensuring quality control of laboratory services for
		diagnosis of infectious diseases including HIV,
		brucellosis, hepatitis, syphilis
Indonesia	Pharmaceutical program and medical device	Medicine and medical supplies
	Disease Prevention and Control	Prevention and control surveillance and health
		quarantine
		Prevention and control vector and zoonotic
		infectious diseases
Marrian	Fridamialarial Comunillaria	Prevention and control infectious diseases directly
Mexico	Epidemiological Surveillance (Federal program)	
Morocco	Epidemiologic surveillance, sanitary	
IVIOIOCCO	security, prevention and disease	
	control	
Peru	Zoonotic and vector-borne diseases	
Philippines	Public Health	Public Health Management
rr		Environmental and Occupational Health (?)
		National Immunization
		Elimination of Infectious diseases
		Prevention and Control of Other Infectious Diseases
	Epidemiology and surveillance	Epidemiology and surveillance
	Health emergency management	Health Emergency Preparedness and Response
	Health regulatory program	Health facilities and services regulation
	,, ,	Consumer health and welfare
		Routine guarantine services

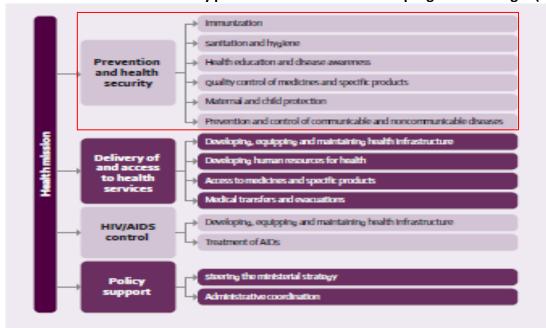


Figure 1. Inclusion of health security provisions in Gabon's health programme budget (2019)

Source: Aboubacar et al, 2020

As noted above, a change in budget structure represents an opportunity to shift from line-item based classification with no explicit links to potential outputs, to a programmatic classification that groups inputs according to outputs (e.g. better preparedness and response to health emergencies). However, the intentions of such reforms typically go beyond just a change in budget formulation and towards a broader shift in spending procedures (i.e. reducing controls by inputs and delegating these controls to lower levels including service providers) and in performance monitoring (i.e. introducing a performance framework with output targets). This part of the reform process has often been overlooked in country transformation strategies and needs to be tackled as an integrated part of budget structure change. Even a well-designed programme budget would not help if funds continue to flow to budget holders by inputs.

Most countries that have introduced health security provisions in their programme budgets include health security-related indicators or targets in performance monitoring frameworks that track financial and non-financial performance of budgets. For example, South Africa's 2019/20 – 2021/22 performance monitoring framework for the MoH programme budget includes six targets for IHR interventions under *Programme 3* (communicable and noncommunicable diseases) and *Programme 4* (primary health care)²⁷. Indicators include surveillance of the Expanded Programme on Immunization (EPI), the implementation of IHR recommendations and the introduction of environmental health norms. In Ghana, a clear result chain was established in their programme budget's performance plan to track immunization performance. Child immunization is included as an output in the subprogramme "primary and secondary health services" (see Table 5) (Osei et al 2020).

²⁷ See performance monitoring framework for MOH budget (2019-2020): https://static.pmg.org.za/NDOH_APP_2019_2020.pdf

Having a well-defined performance framework is paramount to budget structure reforms to ensure effective tracking of resources and achievement of results.

Table 5: Ghana's programme budget performance plan linking inputs, operations outputs and outcomes for immunization

Policy objective	Enhance national capacity for the attainment of the health related MDGs and sustain the gains
Strategy	Intensify and sustain Expanded Programme on Immunization (EPI)
Program	Health services delivery
Sub-program	Primary and secondary health services
Outcome	Reduction in child death due to vaccine preventable diseases
Output	Increase in the number of children vaccinated against measles
Performance indicator for output	5,000 children vaccinated against measles
Operation	Purchasing vaccines and equipment to administer vaccinations vaccinations Assigning and mobilizing health care professionals to administer the vaccinations
Input	Vaccines Syringes and alcohol swabs SMS Service Provider Health care professionals to administer vaccinations

Source: MoF revised PBB manual, 2018

Modifying budget formulation is one key step to better support the health security agenda, but improving execution procedures and practices is also needed in most countries. Poor budget execution has long been recognized as a chronic issue in the health sector.²⁸ This problem often has multiple PFM-related causes that include shortcomings across all public sector operations (e.g. delays in budget release, diversion of resources to other sectors, rigid appropriation structure) and health-sector specific issues (e.g. weak budget preparation and poor costs estimates, delays in cash requests, health-specific procurement challenges).²⁹ Despite the prevalence of poor budget execution in the health sector, to date, the issue has not been prioritized in policy response. Addressing issues in health budget execution processes need to be re-prioritized in country policy actions, involving both health and finance authorities. The COVID-19 adds urgency to the agenda, as populations expect effective delivery of COVID-19 tools and broader responses to ensure delivery of other essential services.

Often, further adjustments in spending procedures are needed to empower providers to receive and use public funds and deliver health services efficiently. In this respect, some countries have introduced adjustments in how providers can access and manage

²⁸ Piatti M, Barroy H, Pivodic F: Budget execution: key characteristics and bottlenecks in the health sector. World Bank, forthcoming

²⁹ Barroy H, Kabaniha G et al (2019): Leveraging PFM for better health in Africa: key bottlenecks and opportunities for reform. World Health Organization: https://www.who.int/health_financing/documents/workingpaper14/en/

expenditures. For example, the United Republic of Tanzania introduced a mechanism called Direct Facility Financing (DFF) to address persistent PFM bottlenecks and to provide health centres with direct access to funds through a shift to output-based financing (see Box 4). This combination of fiscal transfers and provider autonomy enabled facilities to directly receive funds (that were previously managed by higher levels) and to define their inputs according to service needs. A budget neutral payment formula was developed which moved funds allocation and disbursement from an input-based to an output-based provider payment system.

Several other sub-Saharan African countries removed user fees and supported this by introducing performance-based transfer mechanisms from the MoF to facilities. Adjustments to the PFM framework were made to provide facilities with more financial flexibility, from the introduction of programme-type budget lines in central budgets, as was the case in Burundi and Niger, to the establishment of a performance-based disbursement system based on *ex post* controls for primary health care facilities. Tailoring similar approaches in other countries will enable providers to quickly adapt and respond as new resources come to roll out the COVID-19 tools. Even if much of the funding for these flows through special channels or otherwise outside PFM systems, mechanisms providing more financial flexibility to enable both front-line service providers and sub-national managers to directly receive, manage and account for funds will be critical enablers for effective delivery.

Box 3. Local PFM adjustments in heath: Tanzania's Direct Facility Financing (DFF)

Historically, in Tanzania, the Local Government Authority (LGA) management team was responsible to develop plans and budgets for health facilities and manage expenditures by procuring inputs for service providers (dispensaries, health centres and district hospitals). Revenues collected at service provider level were supposed to be deposited at the LGA health sector bank accounts (Council Comprehensive Health Plan (CCHP) guideline 2011). Facilities were supposed to identify their input needs and submit to LGA management through the District Medical Officer's (DMOs) department, which was responsible to procure the inputs. The challenges with this approach included delays in procurement of inputs, a less than optimal mix of inputs for individual facilities and their patients, and sometimes imbalances in the distribution of inputs across service providers.

Recognizing these challenges and their substantial impact on public service provision especially for the poor and underserved, the Government of Tanzania deemed it necessary to further delegate decision-making processes and management to service provider level in health and other sectors such as education for some inputs critical to front line service delivery to beneficiaries. This is done by improving resource flows to service providers in order to make them visible and to improve alignment between available limited resources and priority service outputs. Prior to DFF, funds were disbursed by the Ministry of Finance and Planning to Local Government health sector bank accounts on a line-item basis, with an earmarked block allocation proportion for health centres. Following adoption of DFF, a PHC per capita payment formula was developed which included a base rate and three adjustors reflecting three key policy objectives: catchment population for need, number of visits for performance, and distance from LGA center for equity. This moved funds allocation and disbursement from an input-based to an outputbased provider payment system while maintaining budget neutrality. Effective implementation of DFF is anticipated to increase service providers' visibility, autonomy and accountability in planning, budgeting and expenditure prioritization, improve transparency in fund use, improve management of service delivery, and increase community ownership, all of which are anticipated to improve PHC health care service delivery especially for the poor and underserved, improve health outcomes and accelerate progress towards UHC.

Source: Mtei (2021 forthcoming). Tanzania DFF implementation experience: Preconditions, information flow management, successes and remaining challenges.

3.3 Resource tracking: how to monitor resource use, performance and be accountable?

Timely mobilization and disbursement of funds has been essential in the response to the COVID-19 pandemic. In this situation, it is even more important to have accountability mechanisms in place. Demonstrating transparency and accountability is essential for governments to sustain the trust of their citizens and resident population, something which has proven to be a very important factor for effective control of the COVID pandemic. Tracking budgetary and other channels of available resources and the expenditures arising from these are powerful tools to enable transparency and accountability.

A well-functioning <u>Financial Management Information System (FMIS)</u> provides a timely and reliable record of government transactions. Financial information systems have generally been updated since the start of the crisis to include new COVID-19 expenditure codes. The update should enable real time tracking of expenditures based on existing budget

classifications and structures available. A budget formulated and accounted for by programme and sub-programme, in addition to economic and administrative classifications, can allow finance authorities to track COVID-19 coded expenses relatively easily. Input-based budgets, on the other hand, make the consolidation efforts more difficult.

Some countries have started tracking COVID-19 health spending by using data on detailed line items such as staff training, or larger spending categories such as epidemiological surveillance and contact tracing - which bundle inputs. Others use subprogramme / action type categories when they exist in the budget classification (see Table 6). The WHO COVID-19 Strategic Preparedness and Response Plan³⁰ provide the boundaries for tracking national and international COVID-19 expenditure under 9 pillars. This is a necessary extension to routine tracking of health system expenditures using the System of Health Accounts (SHA2011) framework, because relevant expenditures extend beyond the scope of the health system. The use of different categories and accounting approaches makes comparisons between countries difficult, and greater consistency between national accounting systems would help provide a more reliable and systematic picture of expenditure on COVID-19 response and preparedness.

Table 6: Examples of recording COVID-19 health spending with different budget structures

Côte d'Ivoire ³¹	Indonesia
Epidemiological Surveillance	Spending for COVID-19 Control
Contact Tracing	Incentives for Medical Workers
COVID-19 cases treatment	Death Compensation
Rapid riposte	Subsidy for SHI Premium
Preventive activities	COVID-19 Task Force
Communication	Tax Incentives for Health Sector
Operational research	Other budget (including vaccine)

More broadly, tracking resource flows and expenditures made for the purpose of health security is challenging as it involves multiple sectors, and thus requires data collection from both health and non-health sectors, extending beyond the boundaries of the standard health accounting framework under the System of Health Accounts.³² Such tracking is a vital part of the policy response and helps to answer important questions.

- How much of the resources committed and disbursed from the government budget and external aid are attributable to the purpose of health security?
- How are these resources channelled?
- How much did the country spend for the purpose of health security, from each funding source?
- What interventions and functions are the public, external and private funds spent on?

³⁰ Operational Planning Guidelines to Support Country Preparedness and Response.

³¹ In Côte d'Ivoire spending on the COVID-19 health response is also accounted for by detailed line items such as air purification, cleaning products, and IT equipment.

³² https://apps.who.int/nha/database/DocumentationCentre/GetFile/55060821/en

- To what extent are public and external funds for health security channelled through sectors other than health?
- On which providers (e.g. public and private hospitals) and input factors (human resources, medicines, capital, etc.) is the money spent?

Mapping expenditures on preparedness for health security is challenging, particularly within the health sector, because there are many (perhaps most) joint health system activities that contribute both to health security and to progress towards UHC. Following the COVID-19 experience, more countries are likely to incorporate preparedness for health security considerations in their national health (and related sector) plans, and it will be important to identify explicit opportunities, in all sectors, to facilitate future tracking efforts. Countries that have program-based budgeting or other sort of output-based budget reforms codifying their national health plan's priorities and sub-priorities in their budget structure may be better positioned to monitor preparedness related budget and expenditures, if health security is one priority or sub-priority of the national health (or other sector) strategy, and if the coding system allows expenditures to be mapped to multiple programs. Countries that have input-based budget lines without connection to their national health (or other sector) strategy and health security plan will struggle more in monitoring preparedness /COVID-19 expenditures, as they do in producing reliable National Health Accounts (NHA) on a routine basis. Because many health system resources serve the purpose of health security and also of UHC, the mapping and tracking needs to be done in a way that does not require them to be mutually exclusive.

Countries with an NHA reporting system in place could expand data collection to include CGH functions related to health security and COVID-19 through more granular data within the SHA2011 framework and expanding the "memorandum items" that are beyond the defined boundary for health within the framework. This exercise needs to be part of the broader resource tracking effort which also includes mapping budget and other source of available funding. As the NHA reports audited expenditure, it often reflects a 2-year time lag ("t-2"). Given the long-term plan, specific resource mapping and expenditure tracking (RMET) related to COVID-19 across several sectors can be helpful to monitor in real time resource gaps and budget execution, and monitor whether responses to epidemics are jeopardizing the provision of essential health services. It will also provide lessons for developing the methodology to be used in the longer run for the tracking of expenditures made for the purpose of health security.

There are several RMET data collection and analysis tools available, including REMAP³³ or own country RMET tools that the MOH and other line ministries have tailored to monitor budget and expenditures related to health security and COVID-19 lately (see COVID-19 RMET technical guidelines for a comparison of existing tools). Those short-term exercises can provide budget, disbursement, reprogramming and initial expenditure data, while feeding into NHA and program-/output-based budgeting systems which will be codifying health security expenditures and budgets respectively for the mid- to long term.

³³ World Health Organization. (2019). Resource mapping and impact analysis on health security investment (REMAP): strategic partnership for IHR (2005) and health security (SPH). World Health Organization. https://apps.who.int/iris/handle/10665/329385

4. Summary of actions needed to prepare the budget process in each country

This Guidance Note raises a number of budgetary and financial issues that are likely to arise as challenges for the COVID-19 response in many countries. However, each country has a unique "starting point" in terms of its existing health system, its technical and system readiness to deliver old and new technological tools, and the budgetary and PFM mechanisms it has to enable resources to flow to those who need it with appropriate accountability mechanisms in place. This Note does not provide all answers to what each country needs but attempts to specify the issues that each country must address to ensure its financial systems are ready to enable delivery of effective programs and tools. Translating this guidance into action at country level requires addressing the questions of what to finance, whom to finance, and how to finance the critical actions needed in the short and medium-term, operationalized through the annual and medium-term budget dialogue. These are described in the remainder of this section.

4.1 What activities must be financed and who are the budget holders?

- Baseline assessment: Rapid assessment of the extent to which the five categories of Common Goods for Health functions are operational and funded in a sustainable manner, and whether the health system foundations are in place and capacities (e.g. supply chains, workforce, infrastructure, information systems) are adequate to deliver the COVID-19 Tools. Based on this, determine the type of investments and related actions that are needed in the immediate and intermediate (2-3 year) term. The VIRAT/VRAF tools developed by WHO, UNICEF and the World Bank can facilitate this process.
- Mapping: Map the existing distribution of responsibilities (e.g. Ministry, agency, department) for implementing the specific activities and functions in order to identify the budgetary units responsible for their oversight, implementation, or contracting, and which therefore need to be funded (within and outside the health sector, and including both central and sub-national levels of government as relevant). As part of this, assess whether any changes to the existing roles and responsibilities are needed, for example where responsibility for implementation of some functions is fragmented across various institutions rather than organized on a system-wide, population basis. Where change is needed, highlight for potential organizational/institutional reform.
- Cross-programmatic assessment: Use applied health systems analysis³⁴ to unpack the
 functional responsibilities for cross-cutting CGH functions as well as common health
 systems foundations constraints within health programs, and the overall government
 (i.e. multi-sectoral assessment) and identify any inefficient duplications that need to be
 addressed. As part of this, assess extent to which existing budget structure and financial
 flows contribute to fragmentation in core functions, and develop options to reinforce
 the reform strategy.

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³⁴ https://www.who.int/health_financing/documents/system-wide-approach/en/

Box 4. More detailed questions to guide baseline assessment and mapping

- Do the identified functions exist within my country? Do the capacities need to be strengthened?
- If yes, what purpose are they serving? What agency(ies), department(s), institution(s) is/are responsible, and what was the rationale for this? Where do these functions sit within the government budget? How much funding is allocated to these functions?
- Do these functions support preparedness? If no, how can they be leveraged or better organized to serve this function?
- In the case that the functions do not exist, where should they functionally sit? Who should manage them? What capacities need to be built? How can financing be aligned to those functions?
- How can resources be organized in a way that mitigates the risk that key inputs will lie idle during 'normal' (non-pandemic) times, and can instead contribute to regular health system activities? (e.g., lab equipment etc.)
- In the case these functions sit outside the health sector, what coordination mechanisms are place or need to be built?
- What health systems foundations need to be strengthened? Can existing financing mechanisms be strengthened to build health system foundations, or are new mechanisms needed?

4.2 Cost, macro-fiscal and health spending analyses

- Costing: Estimate the additional resource needs associated with delivering the COVID-19 tools, as well as the incremental recurrent and capital investment requirements for the enabling CGH functions and health system foundations to ensure effective delivery of these tools.
- De-prioritization for re-prioritization: Where relevant and as an integral part of the budget preparation process, identify existing areas of the budget that could be deprioritized with the least harm to overall health and well-being in order to ensure that the resources are available to put the tools in place. Within the health sector, explore efficiency options that may minimize the severity of the trade-offs, e.g. lower-priority capital projects that can be postponed or shifting to generic drugs in a formulary. Are there particular areas of health spending that can be delayed in light of fiscal pressures?
- **Fiscal scenarios:** What is the baseline public revenue scenario for the current year and a 2-3 year outlook? Is there scope to alter this through fiscal policy, e.g. to increase tax or contribution rates from specific segments of the population? How is overall government debt managed? Is there scope for health security considerations to be incorporated into debt restructuring or relief measures? What is the scope to increase taxes on the consumption of items harmful to health (e.g. tobacco, sugar-sweetened beverages, alcohol, fossil fuels) or at least to reduce subsidies to their production and use?

4.3 Public Financial Management analyses

- Budget formulation assessment: Does the current budget formulation support crosscutting functions and population-based activities? If so, what are the existing budgetary programs, or sub-programs and activities directly serving CGH (in MOH and other ministries' budgets)? If not, how can budget formulation be adjusted to support these activities (e.g. grouping certain inputs into budgetary programmes; streamlining prevention activities into existing budgetary programmes; updating/re-categorizing existing activities into preparedness)?
- Budget structure policy alignment: Is there a link between planning and budgeting in the health sector? Are the national health strategy's priorities codified in the budget structure? If yes, is preparedness included in the national health strategy, hence, included in the budget structure?
- PFM bottleneck assessment: Are fund holders able to effectively receive, manage and account for public resources to serve preparedness functions? If not, at which levels are the major bottlenecks (e.g. complex approval system, delays in disbursements, funds release by inputs)? Can budget-holders contract with private or otherwise nongovernmental providers of health services, community engagement, or logistical services? If low budget execution is a problem, what are the causes? Identify the means to address these challenges to enable effective implementation, including in decentralized contexts?
- Central/subnational-alignment: For those activities for which sub-national budget management is appropriate, what are the mechanisms for transferring funds from the center? Do any such mechanisms come with specific directives on the purpose to which the funds can be used? If so, can such Conditional Grants be appropriate for use in relation to the COVID-19 tools or related complementary system activities? If they are not used currently, could they be usefully considered within the framework of the government's existing PFM practices?
- Accountability and reporting for outputs: Is the Ministry of Finance implementing an
 output-oriented budgeting process, including in the health sector? Are accountability
 mechanisms output-oriented, both for public and private entities that might be
 contracted with public funds? If not, how can performance monitoring frameworks be
 introduced to support effective monitoring of results, including for preparedness?

4.4 Resource tracking and mapping

 Tracking needs assessment: Define the country needs for preparedness for health security resource mapping and expenditure tracking (e.g. assess and mitigate impact of COVID-19 on routine/essential service delivery and HSS; mobilize resources for key funding gaps; improve allocative efficiency of existing/committed resources; support implementation monitoring, coordination, and accountability)

- **Data tools:** Develop data collection tools which address the objectives of the country's resource tracking/mapping strategy.
- Plan for rapid assessment: As part of the COVID-19 resource mapping and expenditure tracking exercise, develop plan for rapid and or real-time assessment of capital and recurrent resources and expenditures explicitly for COVID and health security more generally, including within and outside the health system.
- Maintain standard tracking: Ensure that routine mechanisms Health Accounts for tracking public and private health spending, as well as health service utilization, continue to produce relevant data on health spending and service use patterns.

Annex 1. Types of Common Goods for Health

While there is a need to strengthen health system foundations to enable health security, there has been a general under-investment in CGH functions. These form a critical foundation for the response to COVID-19 and resilient and responsive systems that can support both health security and UHC. CGH can be grouped into five categories (policy and coordination; taxes and subsidies; regulations & legislation; information collection, analysis, and communication; and population services).

Annex Table 1: Examples of Common Goods for Health (by category)

Annex Table 1: Examples of Common Goods for Health (by category)	
Category	CGH for health security
Policy &	Institutional capacities
coordination	 Public Health Institute, Emergency Operation Centre
	Health workforce policy (e.g. task shifting)
	Laboratory quality systems
	Distribution protocols (such as policies for distribution of PPE)
	Antimicrobial resistant policies/taskforce
	Zoonoses coordination/policies
	Disease prevention and control policies and strategies
Taxes &	Health taxes
subsidies	Removal of energy subsidies to reduce respiratory illness
Regulations &	Regulation: medicines, health products, supplies, environmental protection
legislation	Legislation for IHR implementation
	Food control and licensure
Information	Surveillance systems
collection,	 Information systems for COVID-19, other vaccine preventable
analysis, &	diseases, communicable diseases
communication	 Community-based surveillance for COVID-19
	 Global coordination and information transfer to WHO
	o Zoonoses and AMR
	Analysis and monitoring of surveillance data
(Systems for managing:
	Chemical event
	Radiological or nuclear event
	Risk assessment and communication
	 Outreach to empower individuals and families to better manage their
	own health and to strengthen community engagement and trust
	Community engagement mechanisms
	Contact tracing
	Interoperable information system
Population	Infrastructure for:
services	 Point of Entry screening
	 Public health institutions
	 Emergency operations centre
	Water and sanitation in health facilities
	Medical and solid waste management
	Vector control management
	Specimen referral and transport system