



ACT-A Health Systems Connector

# Health financing for the COVID-19 response

Process guide for national budgetary dialogue





ACT-A Health Systems Connector

# Health financing for the COVID-19 response

---

Process guide for national budgetary dialogue

Health financing for the COVID-19 response: process guide for national budgetary dialogue. ACT-A Health Systems Connector

ISBN 978-92-4-003052-7 (electronic version)

ISBN 978-92-4-003053-4 (print version)

© World Health Organization 2021

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<http://www.wipo.int/amc/en/mediation/rules/>).

**Suggested citation.** Health financing for the COVID-19 response: process guide for national budgetary dialogue. ACT-A Health Systems Connector. Geneva: World Health Organization; 2021. Licence: [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

**Cataloguing-in-Publication (CIP) data.** CIP data are available at <http://apps.who.int/iris>.

**Sales, rights and licensing.** To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**General disclaimers.** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

**Design and layout:** Phoenix Design Aid, Denmark

# CONTENTS

<b>01</b>	<b>Introduction</b>	<b>1</b>
	1.1 Motivation	1
	1.2 Background	1
	1.3 Overview of methods and content of the Process Guide	3
<b>02</b>	<b>What to finance for a national COVID-19 health response and preparedness?</b>	<b>5</b>
	2.1 A comprehensive package of investments, actions, and policies	5
	2.2 Engaging with responsible budgetary units	9
<b>03</b>	<b>How to finance a national COVID-19 health response and preparedness?</b>	<b>15</b>
	3.1 Fiscal instruments and budget prioritization to ensure sustainable funding for preparedness and response	15
	3.2 PFM adjustments to support effective implementation of the COVID-19 response and preparedness	16
	3.3 Resource tracking to monitor resource use, performance, and accountability	22
<b>04</b>	<b>Summary: Preparing the budget process in each country</b>	<b>27</b>
	4.1 Determining what activities to finance and who the budget holders are	27
	4.2 Analysing cost, macro-fiscal, and health spending	29
	4.3 Analysing Public Financial Management (PFM) structures and systems	29
	4.4 Tracking and mapping resources for COVID-19 and related purposes	30
<b>05</b>	<b>References</b>	<b>32</b>
	<b>Annex 1.</b> Methods	36
	<b>Annex 2.</b> Types of Common Goods for Health (CGH)	38

# TABLES

<b>Table 1.</b> What needs to be financed, immediately and over the longer term, for preparedness?	7
<b>Table 2.</b> A hypothetical example of the variety of institutions and activities involved in health security	10
<b>Table 3.</b> Selected budget provisions and required health system improvements for COVID-19 vaccination roll-out	12
<b>Table 4.</b> Examples of inclusion of health security activities in programme budgets in LMICs	18
<b>Table 5.</b> Ghana's programme budget performance plan linking inputs, operations, outputs, and outcomes for immunization	21
<b>Table 6.</b> Examples of how two countries with different budget structures are recording COVID-19 health spending	24

# FIGURES

<b>Figure 1.</b> Inclusion of health security provisions in Gabon's health programme budget (2019)	19
--	----

# BOXES

<b>Box 1.</b> Mobilizing laboratory capacity for the COVID-19 pandemic response	9
<b>Box 2.</b> The "production function" for delivering a COVID-19 vaccine	12
<b>Box 3.</b> Local PFM adjustments in health: Tanzania's Direct Facility Financing (DFF)	23
<b>Box 4.</b> Key questions to guide baseline assessment and mapping	29



# ACKNOWLEDGEMENTS

This Process Guide was produced under the auspices of the ACT-A Health Systems Connector by a team of World Health Organization, World Bank, and Global Financing Facility staff with periodic input from a working group under the auspices of the P4H network. The writing team of the report included Susan Sparkes, H  l  ne Barroy, Peter Cowley, Joseph Kutzin, Owen Smith, Agn  s Soucat, Ke Xu, Netsanet Workie, Sarah Alkenbrack, Marian Cros, Alexandra Earle, Christoph Kurowski, and Ellen Van de Poel.

We gratefully acknowledge reviewer comments and feedback from staff of WHO's Health Emergency Programme and Department of Health Workforce, as well as from other partner agencies of the Sustainable Health Financing Accelerator of the Global Action Plan for Healthy Lives and Well-Being for All. Thanks to Anya Levy Guyer for technical editing support.





# 01

## INTRODUCTION

### 1.1 Motivation

Annual and medium-term budget preparation processes are the platforms through which specific plans are transformed into actual resource allocation decisions. The aim of this Process Guide is to support key stakeholders involved in these processes (such as the Cabinet, Ministries of Finance and Health, the Parliament, citizens, media, and civil society organizations) to reorient budgetary arrangements in order to facilitate the ability of national governments to respond to the COVID-19 pandemic by delivering, therapeutics, diagnostics, and vaccine services to their populations. Reorienting budgetary arrangements positions governments to sustain the capacity to mitigate and respond to COVID-19 while concurrently delivering other essential health services and working towards Universal Health Coverage (UHC). The reorientation process is an opportunity to better align budgetary arrangements to sustain systemic capacity to prevent emerging health threats over the short, medium, and long terms.

In this Process Guide, we discuss 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 to 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 diagnostics, therapeutics, and vaccine services. In addition, we discuss *how to monitor the use of resources* to ensure transparency and accountability. We conclude by laying out concrete steps that can be taken and adapted at country level to assess financing capacities, needs, and processes to deliver COVID-19 therapeutics, diagnostics, and vaccine services, while also reorienting financing arrangements to better meet both health security- and UHC-related objectives in the longer run.

### 1.2 Background

Chronically under-funded public health capacities and fragmented and insufficiently responsive health financing arrangements have constrained the ability for many countries to adequately anticipate, prevent, respond to, or mitigate COVID-19. COVID-19 has triggered both a health and economic crisis, with many countries and populations experiencing increasing poverty rates (1) and economic recession (2).

Economic recession will inflict substantial damage on fiscal balances (3). In 2020, governments responded to COVID-19 by both re-programming and increasing spending on a wide range of support measures for: households, through social assistance; workers, with wage subsidies and other measures; and firms, through credit guarantees (4). As of October 2020, discretionary budget measures worth 3.5% of GDP in emerging markets and developing countries<sup>1</sup> had been implemented. On the revenue side, slumping economies will weaken countries' tax revenues. Higher spending and lower revenues imply wider fiscal imbalances. The International Monetary Fund (IMF) has projected that general government deficits in emerging markets and developing economies will more than double, from -4.8% in 2019 to -10.4% in 2020, and then narrow slightly to -8.8% in 2021. Debt-to-GDP ratios in these same countries will consequently rise by over 10 percentage points, to about 65% of GDP (5).

The fiscal impacts of COVID-19 will impose additional strain on the budgetary space available for health spending. Yet public financing is central to financing health systems for both health security and progress towards UHC (6,7). The impact of COVID-19 on budgetary space for health is deeply concerning 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 to individuals forgoing care for fear of infection (8,9). As patients begin to address delayed concerns, these strains on systems will increase, even as the pressure from COVID-19 declines (10). From a personal services perspective, therefore, the need for expenditures will remain high even as revenues decline substantially (5,11).

COVID-19 has also laid bare glaring blind spots in national and sub-national preparedness<sup>2</sup> and risk management arrangements—these also require strengthening and additional investment. Many of the key capacities that require strengthening or reinforcement are Common Goods for Health (CGH): 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 (12).<sup>3</sup> They include: effective policies and coordination; information collection, analysis, and dissemination; community engagement; regulations and legislation; and critical population services, including from other sectors such as water and sanitation, and animal health. In addition to investing in CGH capacities and functions, governments must take action to ensure that resources actually reach service providers to prepare for universal access to COVID diagnostics, therapeutics, and vaccine services. For low-income countries in particular, this requires redressing gaps created by historical patterns of under-investment in health system foundations, such as investment in the education and employment of health workers, and lack the necessary elements

1 As defined by the IMF, “emerging markets and developing countries” is group of 156 countries, distinct from advanced economies.

2 Preparedness encompasses capacities for ensuring rapid detection, verification, and response to public health risks. For more information on preparedness, please visit: [https://www.who.int/health-topics/international-health-regulations#tab=tab\\_3](https://www.who.int/health-topics/international-health-regulations#tab=tab_3).

3 See Annex 2 of this Progress Guide for examples of CGH. For additional information on CGH, please visit: [https://www.who.int/health-topics/common-goods-for-health#tab=tab\\_1](https://www.who.int/health-topics/common-goods-for-health#tab=tab_1).

in health facilities such as running water, power, and connectivity. In a 2021 survey, 66% of countries reported the most common cause of disruption to essential health services was the shortage of health workers (13). The health sector must coordinate and work together with other sectors to effectively tackle these challenges from both financing and implementation perspectives.

Addressing these capital and operational expenditure demands in any given country requires making targeted and deliberate decisions on the prioritization of public spending and reorientation of financing arrangements in the immediate- and medium-terms. Analytics to support these decisions are further detailed throughout this Process Guide.

### **1.3 Overview of methods and content of the Process Guide**

The content of this Process Guide adapts best practices in health financing reform (14–16) to the specific demands of COVID-19. In this way, the practical steps and analytics are not new but have been reoriented to reflect financing and budgeting dynamics and decisions countries are likely to face in the coming months and years to come. The adaptation process involved robust literature reviews, additional analytical work conducted by the authorship team, and summarizing the experiences learned from the frontline operation by author organizations between March 2020 and March 2021 (see Annex 1 for more details).

Two main topics are covered: 1) how to approach budget dialogue around what investments should be prioritized, and 2) efficient and sustainable ways to organize and channel public resources. Financing for the COVID-19 health response and preparedness is an issue for the health sector, governments, and the global community alike. Therefore, appropriate mechanisms should be put into place to enable coherence, coordination, and efficiency from a system perspective to ensure entire populations are served. Moreover, preparedness for epidemics and other (e.g. environmental and chemical) health threats cannot be fully established in just one year; instead, the time frame for creating true preparedness is sequenced over several years. Hence a multi-year perspective is essential to guide systematic and practical implementation.

This Process Guide focuses on the country-level budget dialogue, but it is important to note that, for many countries, strengthening national systems will also require adequate funding to and from global- or regional-level institutions and agencies. Sections 2 and 3 of the Process Guide address analytical steps and inputs needed in and beyond the health system for budgetary processes to enable the delivery of COVID-19 tools, achieve health security, and enable sustainable progress towards UHC—while ensuring accountability for the use of resources. This budgetary process will involve addressing the following questions:

1. What are the key capacities, functions, and budget provisions that need to be prioritized, and what system foundations are needed to deliver them, in the immediate term?
2. Which budget-holding agencies are responsible for ensuring these functions are delivered?
3. How should the health system and the wider government be organized to deliver on key actions most efficiently so that progress can be sustained?
4. What fiscal instruments are available to finance preparedness, and more broadly, to build capacities to enable health security? Which fiscal instruments 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 key functions in the medium term?
6. How should the key stakeholders account for spending and outputs?

In Sections 2 and 3, we address key elements in each of these questions that can be adapted in specific country settings to facilitate more granular assessments and policy framing. We also identify how issues can manifest in different contexts and list the types of analyses that can be used to prepare a budget process.

The Process Guide also underlines the importance of tracking resource flows from domestic and international sources. The Guide addresses how to adapt existing mechanisms and tools for tracking resource flows and expenditures on preparedness for and response to COVID-19. These mechanisms and tools can be used to assure decision-makers and politicians that allocated resources are reaching their intended destinations for their intended purposes; they can also help to identify any bottlenecks that must be addressed. Section 4 presents a set of analytics steps, mapped to the components of Section 2 and 3, that can be taken and adapted in every country to inform national budgetary dialogue processes.

This Process Guide presents a holistic financing and budgeting approach to enable speedy and effective health systems and wider government responses to the COVID-19 crisis and beyond. This is intended to guide countries to effectively respond to the COVID-19 pandemic by adapting existing mechanisms and tools based on their unique financing system structure and public financial management (PFM) rules. As such, the Process Guide does not intend to provide fixed answers to each country's problem, but rather offers a standard approach to the analytic work needed for each country to address these budgetary issues in a way that fit their specific situation. We provide the steps in the last section of this Process Guide to facilitate and sequence this work.

# 02

## WHAT TO FINANCE FOR a national COVID-19 health response and preparedness?

This section first highlights the investments, actions, and policies that address *what* needs to be financed for an effective national response to COVID-19. It then offers comments on *who* should be involved in making and directing these investments.

### **2.1 A comprehensive package of investments, actions, and policies**

Urgent responses to COVID-19 need to build on and leverage health systems within a strong enabling environment. Ensuring access to COVID-19 tools and essential technologies, including vaccines, diagnostics, and therapeutics, requires multi-layered investments and implementation capacities that enable the immediate actions needed to deliver vital population-based and individual services. The endeavour of a COVID-19 response goes beyond direct clinical service delivery. Rather, a large and targeted push is needed to set a course for establishing effective core population-based functions (i.e. Common Goods for Health), while also strengthening existing health system foundations to support preparedness for health security. Financing is a prerequisite for all these activities.

The critical investments to ensure COVID-19 vaccination, for example, need to be coupled with a comprehensive package of public health interventions and clinical service capacities. The availability of the vaccine itself depends on well-functioning supply chains, procurement systems, and stocks; to effectively deliver vaccinations to individuals requires sufficient health workers, support personnel and facilities; and surveillance systems are necessary to gather accurate and timely information from facility-based actors in order to track and understand population coverage trends.

Table 1 lists the key functions, capacities, inputs, and policies that may require investments in order to deliver COVID-19 tools, including vaccinations, and to lay a foundation for preparedness. This list was derived from WHO guidance on the COVID-19 response and overall preparedness. The timing and content of

budgetary provisions is illustrative and will vary based on need, as well as fiscal and implementation feasibility.

The first set of budget provisions is, called “foundations”, comprise supplies and other inputs that are integral to delivery of services to individuals. The second set of budget provisions are CGH that relate to broader population-based functions, encompassing policies, regulations, surveillance and information, and taxes and subsidies to support health. The table provides an illustrative breakdown between those budget provisions that may need investments in the immediate term (up to 12 months) and those that may require medium- to long-term (1-6 years) investments to become established. The specific time horizon will vary by country based on context. The table also delineates budget provisions that fall under a capital budget (designated in italics) from those that require recurrent funding.

For the most part, these are not one-off investments; rather, they are predominantly sets of activities that must be financed and implemented on a recurrent basis (although in some countries establishing or extending these foundations may require increased capital investments). Not all of the items listed necessarily require budget financing, but they all need to be considered during the overall budgeting and financing dialogue. By including all these components, this Process Guide stresses that an effective response entails a complex consideration of various types of budget provisions, multiple time horizon, and recurrent versus capital budget requirements.

Table 1: What needs to be financed, immediately and over the longer term, for preparedness?

Time horizon	Budget Provision: Foundations (Supplies & Vaccines, Service Delivery)	Budget Provision: Common Goods for Health (Surveillance & Information, Policies & Regulation)
<p><b>Immediate (next 12 months)</b></p> <p><i>Capital investments are shown in italics</i></p>	<p><b>Supplies and Vaccines</b></p> <ul style="list-style-type: none"> <li>• Analysis of effectiveness of national procurement mechanisms and supply chains for health products, including vaccines, oxygen, and medicines</li> <li>• Training and software for improved supply chain management</li> <li>• <i>Procurement of relevant vaccine cold chain equipment<sup>4</sup>, personal protective equipment (PPE), test kits, vaccine, and other supplies</i></li> </ul> <p><b>Service Delivery</b></p> <ul style="list-style-type: none"> <li>• Human resources for health (HRH) <ul style="list-style-type: none"> <li>— HRH resource mapping, including surge capacity and redeployment/emergency staffing measures</li> <li>— Establishment of policies impacting salaries, remuneration, and incentives (e.g. shift allowances, outreach services, overtime compensation)</li> <li>— Additional salary resulting from new employment (full-time equivalents and temporary hires of students or retirees)</li> <li>— Additional in-service education and training for COVID-19 vaccination teams, infection control, and case management protocols etc.</li> <li>— Training to address COVID-19 while preserving the delivery of essential services as part of integrated health service delivery strategy</li> </ul> </li> <li>• Review of service delivery arrangements, including health facility mapping, and development of integrated health service delivery strategy</li> <li>• Assessment of health management information system and establishment of plan to address gaps</li> <li>• <i>Determination of infrastructure gap (e.g. water, electricity, connectivity) in health facilities and funding requirements for emergency investment plan</i></li> <li>• <i>Determination of occupational health and safety measures</i></li> </ul>	<p><b>Surveillance and Information</b></p> <ul style="list-style-type: none"> <li>• Establish or improvement of: <ul style="list-style-type: none"> <li>— Contact tracing programme</li> <li>— Risk communication systems</li> <li>— Citizen- and community-engagement mechanisms</li> <li>— <i>Laboratory networks and testing for priority diseases</i></li> <li>— <i>Specimen transport and referral systems</i></li> </ul> </li> <li>• Surveillance system: COVID-19/other biological threats</li> <li>• <i>Procurement and training to expand and improve epidemiological surveillance laboratory network</i></li> <li>• <i>Digital/IT platforms for real-time surveillance and service delivery</i></li> <li>• Specialized training for health workforce on COVID-related surveillance and contact tracing</li> </ul> <p><b>Policies and Regulation</b></p> <ul style="list-style-type: none"> <li>• Emergency Operations Centre establishment, governance, regulation, and functioning</li> <li>• Point-of-entry screening establishment, strengthening, and coordination</li> <li>• <i>Medical and solid waste management improvement</i></li> <li>• Policies for: <ul style="list-style-type: none"> <li>— Activating, recruiting, and coordinating health and other personnel during a public health emergency</li> <li>— Distribution of PPE and supplies</li> <li>— Vaccination coverage</li> </ul> </li> <li>• Strong legislation and regulation of access to supplies, including vaccines and related health security diagnostics and treatments</li> <li>• Infection prevention and control policies and strategies for healthcare facilities and farms</li> </ul>

<sup>4</sup> The extent of the required upgrade is contingent on the types of vaccines made available in a given country and the results of the analysis of existing cold chain capacity.

Time horizon	Budget Provision: Foundations (Supplies & Vaccines, Service Delivery)	Budget Provision: Common Goods for Health (Surveillance & Information, Policies & Regulation)
<p><b>Longer-term (1-2 year or 3-6 year budget cycles)</b></p> <p><i>Capital investments are shown in italics</i></p>	<p><b>Supplies and Vaccines</b></p> <ul style="list-style-type: none"> <li>• Vaccine, diagnostic, medicine, and PPE supply chain management</li> <li>• Cold chain maintenance management</li> </ul> <p><b>Service Delivery</b></p> <ul style="list-style-type: none"> <li>• Expand pre-service education capacity, including faculty and <i>infrastructure</i></li> <li>• HRH labour market adaptation and expansion, including surge capacity</li> <li>• Enhance health workforce capacity (including community-based health workers), including employment, distribution, and retention of respective health occupations in rural and urban areas</li> <li>• <i>Improvement and hazard proofing of health facility infrastructure (running water, electricity, connectivity)</i></li> <li>• <i>Establishment of diagnostic laboratories with referral capacities</i></li> <li>• <i>Health Management Information System strengthening</i></li> <li>• <i>Efficient and flexible financial management systems (including technology and training)</i></li> </ul>	<p><b>Surveillance and Information</b></p> <ul style="list-style-type: none"> <li>• Development of systems and procedures for managing: <ul style="list-style-type: none"> <li>— Chemical event</li> <li>— Radiological or nuclear event</li> </ul> </li> <li>• Expansion of public health institutes' mandates</li> <li>• Installation of interoperable information systems that integrate disease-specific data, data on facility utilization, HRH capacity, etc.</li> <li>• Routine analysis of surveillance data</li> <li>• <i>Expand surveillance systems to include</i> <ul style="list-style-type: none"> <li>— <i>Zoonoses</i></li> <li>— <i>Anti-microbial resistance</i></li> <li>— <i>Early warning systems</i></li> </ul> </li> <li>• Vaccine adverse event reporting system</li> </ul> <p><b>Policies and Regulation</b></p> <ul style="list-style-type: none"> <li>• Enlarge scope of medicine and health product quality regulation</li> <li>• Integrate COVID-19 and other relevant vaccines into vaccination schedule</li> <li>• Legislation for International Health Regulations (IHR) implementation strengthening</li> <li>• Establishment of antimicrobial resistance policies/taskforce</li> <li>• Establishment of zoonoses policies/coordination mechanisms</li> <li>• Sustainability of Public Health Institute operations</li> <li>• Improvement of food control and licensure</li> <li>• Expansion of integrated biosafety and biosecurity training</li> <li>• Policies for recruitment – health workers and support personnel</li> </ul>

Sources: (17–21)



This budgetary assessment process should consider existing capacities that can be leveraged. For example, Box 1 presents the mobilization of existing laboratories in several countries to support the COVID-19 response is described. These mobilization processes require financing to activate health system foundations, as well as enabling plans, policies, regulations, and legislation.

### Box 1. Mobilizing laboratory capacity for the COVID-19 pandemic response

Many countries leveraged existing laboratory networks to mobilize COVID-19 testing and surveillance. Their efforts involved various strategies, including utilizing private laboratories and repurposing labs involved in other activities, such as veterinary surveillance.

The strategies selected for mobilizing laboratory capacity varied depending on the country context. For example, Germany rapidly commissioned 300 local laboratories to conduct COVID-19 testing. Sweden also used existing laboratories in 19 of its 21 regions. To decrease turnaround time for testing, Ghana mobilized additional laboratory capacity across the country by going outside university-based laboratories to also use laboratories in the veterinary service, teaching hospitals, and the private sector.

Activating laboratory capacity goes beyond simply allocating funding for laboratory services. It also has implications for public financial management, available legal mechanisms to contract with non-state providers, and payment methods.

Source: (22,23)

## 2.2 Engaging with responsible budgetary units

Doing practical budgeting entails identifying “the budget holders” that have responsibility for overseeing, directly implementing, or contracting out the delivery of each function. The exercise should also include identifying institutional gaps as well as areas where realignment is needed. The resulting assessment will be different for each country.

Health system foundations (including supplies, procurement, human resources for health, and service delivery infrastructure) sit largely within the purview of the health sector, health facilities, and the Ministry of Health. Response and preparedness-related interventions and functions, however, involve a wider range of implementing sectors and agencies. These may include the national Public Health Institute(s), the national Centres for Disease Control (CDC), medicines/standards regulatory agency, customs/border control, civil service administration, emergency response authorities, the National Guard and other defence agencies, and other national and sub-national

government structures. Indeed, many health security functions are implemented by sub-national entities, which are frequently the ultimate budget holders. Table 2 provides an illustrative example of the range of government institutions involved in achieving health security- and preparedness-related activities to respond to national health emergencies and risks.

To organize all involved institutions' activities and inputs, an appropriate coordination entity should exist. Coordination is especially critical in epidemic control, given the zoonotic and wildlife origins of many emerging pathogens. "One Health"<sup>5</sup> and environmental health (including deforestation and biodiversity) approaches bring together multiple sectors and levels of government to coordinate plans and budgets to work collaboratively towards a common goal of improved health.

Table 2: A hypothetical example of the variety of institutions and activities involved in health security

<b>Goal: Protection of population health and safety, including preparedness to respond to national health emergencies and risks</b>	
<b>Implementing Entity</b>	<b>Activities</b>
Finance	<ul style="list-style-type: none"> <li>• Budget allocations, including contingencies during major outbreaks and emergencies</li> </ul>
Health	<ul style="list-style-type: none"> <li>• Health protection and emergency response policies</li> <li>• Immunization/vaccination</li> <li>• Environmental health</li> </ul>
Labour	<ul style="list-style-type: none"> <li>• Employment, Occupational Health and Safety, Labour rights and protections</li> </ul>
Agriculture and Water	<ul style="list-style-type: none"> <li>• Biosecurity and customs services</li> <li>• Animal health, zoonosis monitoring</li> <li>• Food security</li> </ul>
Education	<ul style="list-style-type: none"> <li>• Secondary, tertiary and Technical Vocational Education and Training inputs to the pool of qualified labour. Workforce distribution</li> <li>• Distance learning protocols</li> </ul>
Environment and Energy	<ul style="list-style-type: none"> <li>• Management of hazardous wastes, substances and pollutants</li> <li>• Environmental risks: e.g. deforestation and biodiversity</li> </ul>
Defence	<ul style="list-style-type: none"> <li>• Surge capacity for logistical support and response</li> </ul>
Sub-national governments	<ul style="list-style-type: none"> <li>• Service delivery responsibility</li> <li>• Community outreach</li> </ul>

<sup>5</sup> "One Health" is an approach to designing and implementing programmes, policies, legislation and research in which multiple sectors communicate and work together to achieve better public health outcomes. The approach is specifically focused on food safety, zoonoses, and antimicrobial resistance (24,25).

Federal government systems face challenges when identifying the appropriate agencies to lead the implementation of specific functions. For example, due to the inherently cross-border nature of pandemic preparedness and response and the need for strong coordination within and among countries, some key functions may be best located within the central government. In the case of a disease outbreak, these functions could include disease surveillance, creating national stockpiles of key equipment, and doing centralized procurement to ensure that needed supplies are distributed equitably across sub-national divisions. Meanwhile, other functions are better addressed at sub-national or local level, such as contact tracing or tasks requiring public health workers. Central governments should carefully assess how best to ensure in advance that local authorities have the capacity to fulfil these critical functions. Chronic under-investment in these functions might seem to be perceived as relatively inconsequential in the short term, but in cases of widespread outbreaks or emergencies, gaps in one area can quickly affect the entire country and even other countries.

Budget holder identification processes need to ensure that investments are channelled strategically in order to sustain them over the long term; they also need to ensure that investments are aligned with other ongoing health systems strengthening efforts. The respective roles of each budget holder may need to be clarified as part of overall administrative and fiscal decentralization frameworks and agreements. Fragmented financing arrangements can drive fragmentation in the organization of many core functions, and this can undermine efforts to build adaptable, efficient, and well-prepared health systems (26).

Other critical questions arise related to how public funds could be channelled and used to engage, finance, and regulate the private sector's contributions to the development and delivery of COVID-19-related services and therapeutics. The budget holder identification process should therefore also lay the groundwork for private sector engagement through legal and public financial management reform.

To illustrate the importance of understanding both what and who needs to be funded, consider the 'production function' that includes the financing and organizing of an effective rollout of COVID-19 vaccines. The relevant activities are summarized in Box 2.

## Box 2. The “production function” for delivering a COVID-19 vaccine

Implementing a successful Covid-19 vaccination rollout requires having a realistic estimate of available budgetary resources for the forthcoming period. It is also essential for country-level planners to understand, in detail, four elements of the production function:

1. Supply and appropriate logistics for a COVID-19 vaccine;
2. Correct delivery of the vaccine to defined target population groups;
3. Ensuring demand from the public for COVID-19 vaccination; and,
4. Disease surveillance, including reporting on COVID-19 vaccine coverage, any associated adverse events, and containment of new COVID-19 outbreaks.

Table 3 provides a simplified list of the necessary budgetary provisions for each element that need to be considered in the short- (next 12 months) and medium-term (subsequent 12-36 months) timeframes. These timeframes are illustrative. The budget requirements cover potential capital and recurrent resource needs for vaccine delivery as well as the health system improvements essential to ensure that COVID-19 vaccination targets can be met.

**Table 3. Select budget provisions and required health system improvements for COVID-19 vaccination roll-out**

Function	Short term (0-12 months)		Medium term (12-36 months)	
	Budget provision	Required health system improvement	Budget provision	Required health system improvement
Vaccine and cold chain logistics	<ul style="list-style-type: none"> <li>• Vaccine</li> <li>• Syringes</li> </ul>	<ul style="list-style-type: none"> <li>• Supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>• Vaccine</li> </ul>	<ul style="list-style-type: none"> <li>• Supply chain management</li> </ul>
	<ul style="list-style-type: none"> <li>• Refrigerators/ cold chain</li> </ul>	<ul style="list-style-type: none"> <li>• Improved procurement</li> </ul>	<ul style="list-style-type: none"> <li>• Refrigerators</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance management</li> </ul>
Service delivery	<ul style="list-style-type: none"> <li>• Training modules</li> <li>• HRH reallocation</li> <li>• Waste management</li> </ul>	<ul style="list-style-type: none"> <li>• Pre- and in-service training</li> </ul>	<ul style="list-style-type: none"> <li>• Training</li> </ul>	<ul style="list-style-type: none"> <li>• Supervision</li> <li>• Quality assurance</li> <li>• In-service training</li> </ul>
	<ul style="list-style-type: none"> <li>• PPE</li> </ul>	<ul style="list-style-type: none"> <li>• Improved procurement</li> </ul>	<ul style="list-style-type: none"> <li>• PPE</li> </ul>	<ul style="list-style-type: none"> <li>• Supply chain management</li> </ul>
	<ul style="list-style-type: none"> <li>• Health workers</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment</li> <li>• Surge capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Health workers</li> </ul>	<ul style="list-style-type: none"> <li>• Scope of practice reform</li> <li>• Strategies for recruitment</li> </ul>
Demand generation	<ul style="list-style-type: none"> <li>• Community engagement</li> </ul>		<ul style="list-style-type: none"> <li>• Community engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Engagement with civil society</li> </ul>
	<ul style="list-style-type: none"> <li>• Risk communications</li> </ul>		<ul style="list-style-type: none"> <li>• Social media</li> </ul>	

Table 3. Select budget provisions and required health system improvements for COVID-19 vaccination roll-out, cont.

Function	Short term (0-12 months)		Medium term (12-36 months)	
	<i>Budget provision</i>	<i>Required health system improvement</i>	<i>Budget provision</i>	<i>Required health system improvement</i>
Epidemiological surveillance of vaccination coverage and diseases	<ul style="list-style-type: none"> <li>Track and trace</li> </ul>	<ul style="list-style-type: none"> <li>Improvements to contact identification</li> </ul>	<ul style="list-style-type: none"> <li>Vaccine adverse event reporting system</li> </ul>	<ul style="list-style-type: none"> <li>Improvements to HMIS</li> </ul>
	<ul style="list-style-type: none"> <li>Vaccination coverage system</li> </ul>	<ul style="list-style-type: none"> <li>Improvements to HMIS</li> </ul>		
Safety and quality regulation				

Initial reviews of various countries' COVID-19 National Deployment and Vaccination Plans (NDVPs)<sup>6</sup> show variability in the estimates of the proportion of the population that will be vaccinated ("coverage assumptions") depending on the actual/projected availability of vaccine, budgetary space, and the time needed to address logistical and human resource constraints. The basis for the NDVPs is the Vaccine Readiness Assessment Tool/Vaccine Readiness Assessment Framework (VIRAT/VRAF) for situational analysis.<sup>7</sup>

In the short term, many countries will aim to vaccinate the most vulnerable 20% of their populations (including health care workers, the elderly, and people with co-morbidities). Countries are starting with the 20% figure based on the minimum availability of vaccines through the COVAX facility. The next target, where feasible, is to vaccinate a further 20% of the population to reduce transmission (e.g. including people working in sectors where social distancing is difficult, such as service sector workers with high contact rates). At the time of writing this Process Guide, additional availability of vaccine beyond the COVAX facility's 20% coverage rate is unknown; also unknown are the fiscal capacity and willingness of countries to purchase vaccine independently. Some countries will secure enough vaccines and have the health system capacity to provide more than 20% coverage in the short term. However, modelling using the COVID-19 Vaccination Costing Tool (CVIC) (27) indicates that in the foreseeable future in some countries, supply chain and human workforce capacity bottlenecks will pose critical challenges to going beyond 20% coverage.

<sup>6</sup> For more on NDVP development, please see: [https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccine\\_deployment-2020.1](https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccine_deployment-2020.1).

<sup>7</sup> For more on the COVID-19 Vaccine Readiness Assessment guidance, please see: <https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccine-introduction-RA-Tool-2020.1>.

Addressing supply chain and health workforce issues to advance COVID-19 vaccination coverage takes resources and time, both of which are in short supply for many fiscally challenged governments. For demonstration purposes, this example assumes that the balance of the population will be vaccinated over the following 12 to 36 months; in reality, vaccination timelines will differ across countries. However, the 36-month timeframe is a practical time horizon that is aligned to the medium-term budgetary and expenditure planning processes of Finance Ministries.

Country circumstances vary greatly, and just as countries must identify the responsible budgetary units to 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 programmes are heavily dependent on logistics, as they usually require maintenance of a refrigerated cold chain, the acquisition and disposition of single-use syringes, and the timely arrival and use of vaccines and sundry items. COVID-19 vaccines require some degree of refrigeration along the supply chain—consideration should be given to purchasing refrigerators that are cheap to acquire, as well as cheap to run, easy to repair and environmentally sensitive.

As emphasized, assessing each country's individual situation is a vital first stage. In countries where existing logistics systems are not adequate for COVID-19 vaccination requirements, a greater relative share of resources must be allocated to enhancing the system infrastructure as compared to other activities. In other countries, critical areas for attention may instead be other functions, such as human resource management, regulatory preparedness, demand creation, or monitoring of vaccination coverage and reporting of adverse events. Many countries face shortages of human resources and need to redeploy or train new staff to deliver critical COVID-19-related services.

Ongoing assessment is critical as well. For the medium-term planning process, the relative resource needs for the different activities may shift. For example, once logistics have been established, the focus may need to turn to demand generation, coverage monitoring and surveillance, or investing in improving service delivery. Often the marginal cost of delivery increases in the latter stages of a vaccination campaign, given the challenges of vaccinating remote or otherwise hard-to-reach populations. These are among the specific considerations that each country should anticipate accounting for and addressing in its budget processes.

# 03

## HOW TO FINANCE A national COVID-19 health response and preparedness?

This section addresses *fiscal instruments*, the practical public financial management *systems and practices* that are needed, and the *monitoring* of health security-related expenditures. Financing questions follow directly from the organizational questions addressed in the previous section—namely what functions need to be in place and who needs to manage and deliver them—that must be answered first.

### **3.1 Fiscal instruments and budget prioritization 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 to ensure health security, requires 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 (5). First, while it will be difficult to rely heavily on new revenue measures amidst a severe economic downturn, there remain potential areas to explore to mobilize additional resources, including higher tax rates for high-income brackets, capital gains, property, and wealth, along with stronger global coordination on international corporate taxation. In some contexts, pro-health taxes (whether 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 interest rates, supported by international debt relief for the poorest countries—is important. Third, spending measures should be: appropriately targeted (focusing on those households, workers, and firms most in need); 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). Together, these measures can help strengthen sustainable general taxation and protect the fiscal space for health.

Ministries of Finance are likely to press their Ministry of Health counterparts, along with other government agencies, to identify areas within the sector that

may contribute to additional budgetary space for health. Within the health sector, suspending less cost-effective entitlements in benefit packages and shifting from branded to generic medicines in formularies are two potentially viable options to free up 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. Of course, reliance on external support needs to be balanced with the potential for future cuts to these resources.

Ministries of Finance and Health should conduct short-term spending reviews and fiscal scenarios; for a medium- to long-term perspective, public expenditure reviews or health financing assessments can highlight broad areas for improvement. Countries with robust health information systems can better understand the distribution of provider performance at a micro level, and take actions to promote overall efficiency gains. If the approach to budgeting and financing is led by the service delivery strategy, appropriate financing instruments can be identified, such as: creating, changing, or expanding Conditional Grants from central to sub-national levels of government; changing provider payment mechanisms; and extending contracts to private sector service providers and outreach organizations. Sustaining implementation of such measures often requires thoughtful adjustments to public financing management (PFM) systems.

### **3.2 PFM adjustments to support effective implementation of the COVID-19 response and preparedness**

Critical adjustments in national PFM systems are necessary in order to support the delivery of COVID-19 tools and services, prepare for future health emergencies, and sustain progress toward UHC. These 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, to how money is tracked in relation to these goals. This section covers budget formulation and execution issues. Section 3.3 looks at budget monitoring.

Historically, weaknesses and rigidities in budget structures have constrained effective planning and use of public funds in the health sector. When budgets are prepared and disbursed by detailed line items (e.g. for drugs, medical equipment, or staff), they do not allow for flexibility as needs evolve that require reallocations across budget lines; this can create complexities and inefficiencies in budget implementation. Generally, such input-based budget formulations also impede effective matching of resources with results and have prevented fund holders from being held accountable for health outputs (28,29). The COVID-19 crisis has demonstrated that countries with



more flexible budget formulation approaches, such as programme budgets,<sup>8</sup> were able to rapidly reallocate budget to respond to the health emergency. In Mexico, New Zealand, and South Africa, where programme budgeting is standard practice, the approach clearly enabled agile budgetary responses from the start of the crisis (30).

Programme budgets appear to be particularly relevant to support the operations needed for health security.<sup>9</sup> 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. Budgetary reform to 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 response phases of health emergencies, budgetary programmes that integrate health security provisions would be appropriate. It would enable the flexibility needed to support effective engagement by:

- **Increasing efficiency in preparedness** and reducing fragmentation in health security-related activities through cross-cutting, system-wide, non-disease-specific interventions grouped into broader budgetary programmes (such as programmes focusing on the five cross-cutting CGH categories).
- **Offering a framework for multisectoral coordination** for dimensions that require action in other sectors (such as water and sanitation). Instead of having fragmented inputs in various entities' budgets, budgetary programmes would allow different stakeholders involved in health security activities to coordinate, reduce overlaps, and share an agreed performance framework.
- **Facilitating expenditure tracking and accountability** for financial and non-financial performance on defined goals and targets.

Before COVID-19, some countries had already begun to integrate health security aspects into their budgets as part of budget formulation transformation processes. This integration occurred in various ways, as shown in Table 4. Some countries integrate such provisions as stand-alone budgetary programmes, as with a health security budgetary programme in Gabon that was further broken down into specific activities (see Figure 1). In other cases, countries include activities for preparedness as sub-components of other broader budgetary programmes (e.g. as part of a public health programme in Armenia, or in a disease prevention and control programme in Indonesia) to support integration in delivery systems. 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.

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

9 While the use of programme budgeting can support a better response to health emergencies, it can also provide a more supportive financing environment for the health security and UHC agendas. Evidence is converging on three key merits for programme-based health spending: 1) programme budgets support better alignment with health sector policies and strategies; 2) they provide more flexibility in funds management, notably at service provider level; and, 3) they enhance financial and non-financial transparency and accountability towards health outputs (31).

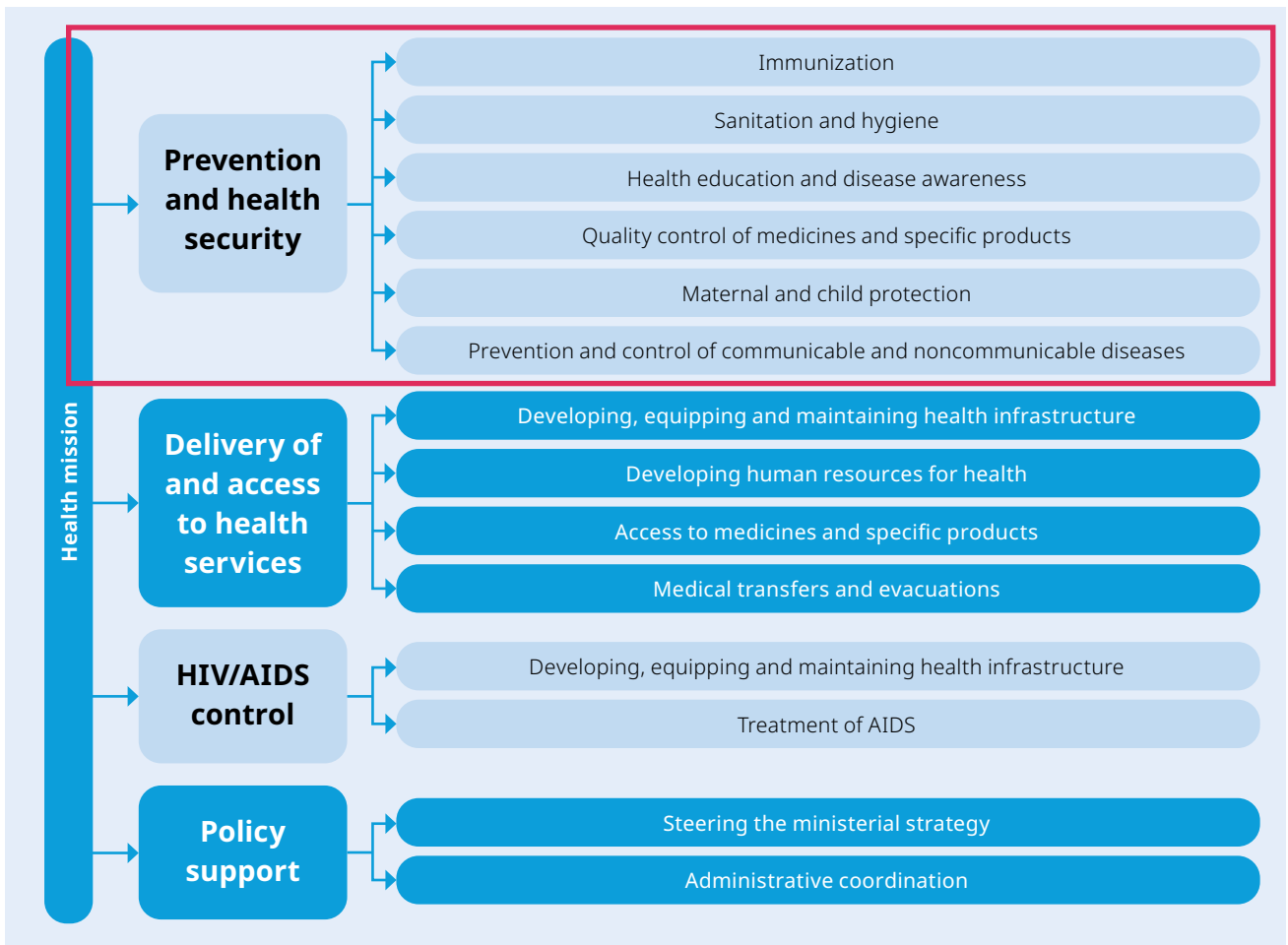
Table 4. Examples of inclusion of health security activities in programme budgets in LMICs

Country	Health Ministry budgetary programme	Sub-programme/activity
<i>Armenia</i>	Public healthcare services	Sanitary and epidemiological safety and public health services
		National immuno-prophylaxis programme
		Blood collection service
		Hygiene and anti-epidemic expert examination service
<i>Burkina Faso</i>	Health service delivery	Crisis preparedness and management
	Support to Ministry of Health	Health information and surveillance
<i>Kenya</i>	Preventive, promotive and Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH)	Health promotion
		Environmental health
	General administration, planning and support services	National quality control laboratories
<i>Kyrgyzstan</i>	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
<i>Indonesia</i>	Pharmaceutical and medical device programme	Medicine and medical supplies
	Disease prevention and control	Surveillance and health quarantine Vector and zoonotic infectious diseases Infectious diseases
<i>Mexico</i>	Epidemiological surveillance	
<i>Morocco</i>	Epidemiological surveillance, sanitary security, prevention and disease control	

Country	Health Ministry budgetary programme	Sub-programme/activity
Peru	Zoonotic and vector-borne diseases	
Philippines	Public health	Public health management Environmental and occupational health National immunization Elimination of infectious diseases Prevention and control of other infectious diseases
	Epidemiology and surveillance	
	Health emergency management	Health emergency preparedness and response
	Health regulatory programme	Health facilities and services regulation Consumer health and welfare Routine quarantine services

Source: (31)

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



Source: (32)

As noted, 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 intended outputs (e.g. better preparedness and responsiveness to health emergencies). Further, the intentions of such reforms typically go beyond a change in budget formulation towards broader shifts in spending procedures (i.e. reducing control of 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 aspect of the budget structure 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 may not be an improvement 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 the performance monitoring frameworks that track financial and non-financial performance of budgets. For example, South Africa's 2019/20-2021/22 performance monitoring framework<sup>10</sup> for the MOH programme budget includes six targets for IHR interventions, which fall under Programme 3 (communicable and noncommunicable diseases) and Programme 4 (primary health care). 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 the programme budget's performance plan to track immunization performance. Table 5 shows how child immunization was included as an output in the "primary and secondary health services" sub-programme (33). Having a well-defined performance framework is of paramount importance to budget structure reforms to ensure effective tracking of resources and achievement of results.

<sup>10</sup> Please see the Annual Performance Plan for the South African Department of Health budget here: [https://static.pmg.org.za/NDOH\\_APP\\_2019\\_2020.pdf](https://static.pmg.org.za/NDOH_APP_2019_2020.pdf)

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

<b>Policy objective</b>	<b>Enhance national capacity for the attainment of the health-related MDGs and sustain the gains</b>
Strategy	Intensify and sustain the Expanded Programme on Immunization (EPI)
Programme	Health services delivery
Sub-programme	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
Operations	Purchasing vaccines and equipment to administer vaccinations Assigning and mobilizing health care professionals to administer the vaccinations
Inputs	Vaccines Syringes and alcohol swabs SMS Service Provider Health care professionals to administer vaccinations

Source: Ghana MoF revised PBB manual, 2018

While modifying budget formulation is a key step to better support preparedness, improving execution procedures and practices is also needed. Poor budget execution has long been recognized as a chronic issue in the health sector (34). This problem often has multiple PFM-related causes that create common shortcomings in all public sector operations (e.g. delays in budget release, diversion of resources to other sectors, or rigid appropriation structure). Health-sector specific issues also exist (e.g. weak budget preparation and poor costs estimates, delays in cash requests, or health-specific procurement challenges) (35). Despite the prevalence of poor budget execution in the health sector, the issue has not to date been prioritized in policy response. Addressing problems with health budget execution processes needs to be prioritized in country policy actions by both health and finance authorities. The COVID-19 pandemic has added urgency to this agenda, as populations expect effective delivery of COVID-19 tools and other essential services.

Further adjustments in spending procedures are often needed to empower providers to receive and use public funds and deliver health services efficiently. Some countries have introduced adjustments in how providers can access and manage expenditures. For example, direct transfers to autonomous facilities is the standard in both OECD and emerging economy countries' health reforms. This practice seeks to address centralized PFM system bottlenecks and provide hospitals and health centres with direct access to funds through a shift to output-based financing. The combination

of fiscal transfers and provider autonomy enables facilities to directly receive funds that were previously managed at higher levels and to define their inputs according to service needs. A budget-neutral payment formula is often developed to shift funds allocation and disbursement from an input-based to an output-based provider payment system.

Over the past two decades several LICs, including sub-Saharan African countries, have introduced performance- mechanisms for facilities, often in exchange for reduction or abolition of user fees. An increasing number of LICs is implementing reforms to move towards this standard. Rwanda (since 2005) and Burundi (since 2012) have been transferring funds directly to autonomous hospitals and health centres on the basis of results-based contracts.

Adjustments to PFM frameworks have been made to provide facilities with more financial flexibility. For example, Burundi, Niger, and Rwanda introduced programme-type budget lines in central budgets. Other systems have established a performance-based disbursement system based on ex-post controls for primary health care facilities. Most recently, the United Republic of Tanzania introduced an intermediate approach that is similar to a transfer mechanism. As described in Box 3, this Direct Facility Financing (DFF) keeps funds under local government control. Tailoring similar approaches to local conditions in other countries will enable providers to quickly adapt and respond as new resources are found to roll out COVID-19 tools. Whether COVID-19 funding flows through standard PFM or special channels, mechanisms that provide more financial flexibility to enable both the health workforce and sub-national managers to directly receive, manage, and account for funds will be critical enablers for effective delivery.

### **3.3 Resource tracking to monitor resource use, performance, and accountability**

Timely mobilization and disbursement of funds has been essential in the response to the COVID-19 pandemic. In this and similar situations, it is especially important to have accountability mechanisms in place. Governments must demonstrate transparency and accountability to sustain the trust of their citizen and resident populations—and trust has proven to be a very important factor for effective control of the COVID-19 pandemic. Tracking budgetary and other channels of available resources and expenditures are powerful tools to enable transparency and accountability, thereby building trust.

A well-functioning Financial Management Information System (FMIS)<sup>11</sup>—including a double-entry expenditures management system—provides a timely and reliable record of government transactions. Financial information systems, including charts of account, have been widely updated since the start of the crisis to include new COVID-19 expenditure codes. These updates should enable real-time tracking of expenditures based on existing budget classifications and available structures. A

<sup>11</sup> Please see this blog post for more on FMIS: <https://blog-pfm.imf.org/pfmblog/2019/05/rethinking-the-design-of-fmis.html>.

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

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

Recognizing that these challenges had a substantial impact on public service provision, especially for poor and underserved segments of the population, the Government of Tanzania decided to move towards greater provider autonomy. In creating the Direct Financing Facility (DFF), the government delegated more decision-making authority for some inputs critical to frontline service delivery to the service provider level in health and other sectors, such as education. This was done by improving resource flows to service providers and improving alignment between available limited resources and priority service outputs.

Prior to the creation of the 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 for health centres. Following the adoption of the DFF, a primary health care (PHC) per capita payment formula was developed; it includes a base rate and three adjustors reflecting three key policy objectives: catchment population (for need), number of visits (for performance), and distance from LGA centre (for equity). This has moved funds allocation and disbursement from an input-based to an output-based provider payment system while maintaining budget neutrality.

Effective implementation of the DFF is anticipated to: increase service providers' visibility, autonomy, and accountability in the processes of planning, budgeting and expenditure prioritization; improve transparency in fund use; improve management of service delivery; and, increase community ownership. These outcomes are expected to improve PHC service delivery, especially for poor and underserved communities, improve health outcomes, and accelerate Tanzania's progress towards UHC.

Source: Mtei G. Abt Associates, Tanzania DFF implementation experience: Preconditions, information flow management, successes and remaining challenges. unpublished observations, May 2021

budget formulated and accounted for by programme and sub-programme, in addition to economic and administrative classifications, allows finance authorities to track COVID-19 coded expenses relatively easily. Input-based budgets, on the other hand, make 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) that bundle inputs. Others use sub-programme or action-type categories if they exist in the budget classification. Table

6 shows two examples of different country budget structures. The WHO COVID-19 Strategic Preparedness and Response Plan (18, 36) provides boundaries for tracking national and international COVID-19 expenditure under nine pillars. This necessary extension to routine tracking of health system expenditures using the System of Health Accounts (SHA2011) framework enables relevant expenditures extend to beyond the scope of the health system. However, the use of different categories and accounting approaches makes comparisons between countries difficult. Greater consistency in national accounting systems would allow for a more reliable and systematic picture of expenditures on COVID-19 response and preparedness. This will be an important consideration in future revisions of the System of Health Accounts framework.

Table 6: Examples of how two countries with different budget structures are recording COVID-19 health spending

Côte d’Ivoire <sup>12</sup>	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)

Sources: (37,38)

Tracking resource flows and expenditures for the purpose of health security is challenging as it involves tracking funds used in multiple sectors. Thus it requires data collection from both health and non-health sectors, extending beyond the boundaries of the standard health accounting framework of the System of Health Accounts (39). However, such tracking is a vital part of the policy response. It can help to answer a number of important questions:

- What proportion of the resources committed and disbursed from the government budget and external aid are for the purposes of the COVID-19 health response and preparedness?
- How much is the country spending from each funding source on the COVID-19 health response and preparedness?
- How are these resources being channelled?

<sup>12</sup> In Côte d’Ivoire, spending on the COVID-19 health response is also accounted for using detailed line items such as air purification, cleaning products, and IT equipment.



- What interventions and functions are public, external, and private funds spent on?
- To what extent are public and external funds for the COVID-19 health response and preparedness channelled through sectors other than health?
- On which providers (e.g. human resources, medicines, public and private hospitals) and inputs (e.g. human resources, medicines, capital, etc.) is the money spent?

Mapping expenditures for the COVID-19 response and preparedness is challenging. In the health sector, many (perhaps even most) joint health system activities 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 sectors) plans; it will be important to identify explicit opportunities in all sectors to facilitate future tracking efforts. Countries that codify their national health plan's priorities (and sub-priorities) using programme-based budgeting or other output-based budget structures may be better positioned to monitor preparedness-related budgets and expenditures. To do this, health security must be a priority (or sub-priority) of the national health (or other sector) strategy, and the coding system must allow expenditures to be mapped to multiple programmes. Countries that have input-based budget lines disconnected from the national health (or other sector) strategy and health security plan are more likely to struggle to monitor preparedness and COVID-19 response expenditures. (This difficulty is already evident in the challenges they face in routinely producing reliable National Health Accounts (NHA).) Because many health system resources serve health security and UHC, mapping and tracking resources should be done in a way that does not require them to be exclusively one function or another.

Countries with NHA reporting systems in place could expand them to include data collection on CGH functions related to health security and COVID-19. Doing so would require more granular data within the SHA2011 framework and expanding "memorandum items" that are beyond the framework's defined boundary for health. This exercise would need to be part of broader resource tracking efforts that also includes mapping budgets and other sources of available funding. As NHAs report audited expenditures, they often reflect a two-year time lag ("t-2"). Given long-term needs, specific Resource Mapping and Expenditure Tracking (RMET) related to COVID-19 across several sectors would be helpful to monitor resource gaps and budget execution in real-time. It would also allow for monitoring whether responses to epidemics jeopardize the provision of essential health services. Finally, COVID-19 RMET would also provide lessons for developing the methodology further to be used over the longer term for tracking expenditures for health security.

There are several RMET data collection and analysis tools available, including REMAP (40) and individual countries' RMET tools that MOHs and other line ministries have tailored to monitor budget and expenditures related to the COVID-19 response and preparedness (see COVID-19 RMET technical guidelines<sup>13</sup> for a comparison of existing

<sup>13</sup> Please see: <https://www.globalfinancingfacility.org/resource-mapping-and-expenditure-tracking-covid-19-response-design-checklist-and-overview-tools>

tools). Such short-term exercises can provide budget, disbursement, reprogramming and initial expenditure data, while feeding into NHA and programme- or output-based budgeting systems that will codify preparedness expenditures and budgets for the mid- to long term.

# 04

## **SUMMARY:** Preparing the budget process in each country

This Process Guide raises a number of budgetary and financing issues that are likely to arise as challenges for the COVID-19 response in many countries. 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 in place to enable resources to flow to those who need them with appropriate accountability mechanisms.

This Guide does not provide all the answers to the question of what each individual country needs. Instead, it specifies the issues that each country should consider internally so its financing systems can effectively support the response to COVID-19. Translating this general guidance into specific actions at country level requires analytics to address the questions of what to finance, whom to finance, and how to finance the critical actions needed in the short, medium, and long terms, operationalized through the annual and medium-term budget dialogue. These questions are described in the remainder of this section.

The starting point for the budgetary dialogue process should be to identify the existing assessments, analyses, and data that can be used as inputs into each of the steps and relevant questions below. After this systematic organization of existing information, the need for additional analysis and data collection can be identified.

### **4.1 Determining what activities to finance and who the budget holders are**

Various types of assessments can be used to determine what activities need to be financed and who the relevant budget holders are (or should be).

- **Baseline assessment:** Conduct rapid assessments of the budget provisions from Table 1 (i.e. based on health system foundations and CGH) to determine if they are adequate to deliver the COVID-19 tools services. Based on the results of the assessment, determine the type of investments and related actions that are needed in the immediate and intermediate (up to three years) terms. The VIRAT/VRAF tools developed by WHO, UNICEF and the World Bank can facilitate this

process (41). Attention should be given to financial flows and budget processes that contribute to undue fragmentation in core functions and work against efficiency and universality. WHO's *system-wide approach to analysing efficiency across health programmes* can be adapted to identify these areas of cross-programmatic inefficiency (42).

- **Mapping:** Map the existing distribution of responsibilities (e.g. Ministry, agency, and department) for implementing the specific activities and functions of interest in order to identify the budgetary units responsible for oversight, implementation, or contracting. Look within and outside the health sector, and include central and sub-national levels of government as relevant. These are the entities that need to receive funding. As part of this mapping, assess whether any changes to existing roles and responsibilities are needed (for example, if responsibility for implementation of a function is fragmented across various institutions, rather than organized on a system- or population-wide basis). Where change is needed, highlight opportunities for potential organizational or institutional reforms.

Certain questions will be more or less relevant in each country, depending on the structures and amount of data already available. Box 4 presents examples of the types of specific questions that should be asked in baseline multisectoral assessments and mapping exercises.

#### Box 4. Key questions to guide baseline assessment and mapping

- Do the identified functions exist within this country?  
*If yes:*
  - Do the capacities need to be created/strengthened?
  - What purpose are they serving? What agency(ies), department(s), institution(s) is/are responsible, and what is the rationale for this structure?
  - Where do these functions sit within the government budget? How much funding is allocated to these functions?
  - Do these functions support preparedness towards the goal of health security? If no, how can they be leveraged or better organized to serve this function?*If no:*
  - 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 to mitigate the risk that key inputs will lie idle during “normal” (non-pandemic) times? How can resources (e.g. lab equipment, etc.) be organized instead to contribute to regular health system activities?
- In the case that these functions sit outside the health sector, what coordination mechanisms are in place? Which mechanisms need to be built?
- What health systems foundations (including procurement systems, supply chains, human resources and infrastructure) need to be strengthened? Can existing financing mechanisms be strengthened to build the health system foundations or are new mechanisms needed?

## 4.2 Analysing cost, macro-fiscal, and health spending

Several types of analyses are critical to understanding the financing issues linked to COVID-19 (as well as their potential synergies with health security, preparedness and UHC efforts).

- **Costing:** Estimate the additional resource needs associated with delivering COVID-19 tools, as well as the incremental recurrent and capital investment requirements for CGH functions and health system foundations that enable effective delivery of these tools (e.g. by using WHO's CVIC costing tool (27)).
- **Fiscal scenarios:** Project the baseline public revenue scenario for the current year and a two- to three-year outlook. This provides the basic data needed to consider several other questions, including:
  - Is there any scope to alter the scenarios through fiscal policy, such as by increasing tax or contribution rates from specific segments of the population?
  - How is overall government debt managed?
  - Is there scope for preparedness 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, and fossil fuels) or at least to reduce subsidies to their production and use?
- **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 de-prioritized with the least harm to overall health and well-being in order to ensure that the resources are available to put urgently-needed COVID-19 tools and services in place. Key questions include:
  - Within the health sector, are there efficiency options that may minimize the severity of trade-offs (e.g. postponing lower-priority capital projects or shifting to generic drugs in a formulary)?
  - Are there particular areas of health spending that can be delayed in light of fiscal pressures?

## 4.3 Analysing Public Financial Management (PFM) structures and systems

Several sets of questions depicted below can be used to identify strengths and weaknesses in PFM structures and systems:

- **Budget formulation:** Does the current budget formulation support cross-cutting functions and population-based activities? If yes, what existing budgetary programmes, or sub-programmes and activities are directly serving CGH (in the MOH and other ministries' budgets)? If no, how could budget formulation be adjusted to support these activities? Options include: grouping certain inputs into budgetary programmes; streamlining prevention activities into existing budgetary programmes; and, updating or 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 and therefore in the budget structure?
- **PFM bottlenecks:** Are budget holders able to effectively receive, manage and account for public resources to serve preparedness functions? If not, where are the major bottlenecks (such as, for example, a complex approval system, delays in disbursements, or funds release by inputs)? Can budget holders contract with private or non-governmental providers for health services, community engagement, or logistical services? If low budget execution is a problem, what are the causes? What means could be used to address these challenges to enable effective implementation, including in decentralized contexts?
- **Central/subnational-alignment:** For activities for which sub-national budget management is appropriate, what mechanisms are used for transferring funds from the centre? Are these mechanisms directive regarding how the funds can be used? If so, can such Conditional Grants be used for COVID-19 tools or related complementary system activities? If they are not being used currently, could they be used, given 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, including for private entities contracted with public funds? If not, how can performance monitoring frameworks be introduced to support effective monitoring of results, including for preparedness?

#### 4.4 Tracking and mapping resources for COVID-19 and related purposes

Finally, there are various components of resource tracking and mapping.

- **Tracking needs assessment:** Define the country's needs for resource mapping and expenditure tracking in the COVID-19 health response and preparedness for health security. This may include: assessing and mitigating impact of COVID-19 on routine essential service delivery and health systems strengthening efforts; mobilizing resources for key funding gaps; improving allocative efficiency with existing resources; or, supporting implementation monitoring, coordination, and accountability.
- **Data tools:** Develop data collection tools that address the objectives of the country's resource tracking/mapping strategy.
- **Plan for rapid assessments:** As part of the COVID-19 resource mapping and expenditure tracking exercise, develop a plan for rapid and or real-time

assessments of capital and recurrent resources and expenditures, both explicitly for COVID-19 and preparedness more generally, including within and outside the health system.

- **Maintain standard tracking:** Ensure that routine mechanisms for tracking public and private health spending—such as National Health Accounts—and health service utilization continue to produce relevant data on health spending and service use patterns.



# 05

## REFERENCES

1. World Bank. World Economic Prospects [Internet]. Washington (DC): World Bank; 2021 Jan [cited 2021 Apr 27]. Available from: <https://www.worldbank.org/en/publication/global-economic-prospects>
2. International Monetary Fund. World Economic Outlook: Managing Divergent Recoveries [Internet]. Washington (DC): International Monetary Fund; 2021 Mar [cited 2021 Apr 27]. Available from: <https://www.imf.org/en/Publications/WEO>
3. International Monetary Fund. Fiscal Monitor: Policies for the Recovery [Internet]. Washington (DC): International Monetary Fund; [cited 2021 Apr 27]. Available from: <https://www.imf.org/en/Publications/FM/Issues/2020/09/30/october-2020-fiscal-monitor>
4. World Health Organization. Global spending on health 2020: weathering the storm [Internet]. Geneva, Switzerland: World Health Organization; 2020 [cited 2021 Jan 29]. Available from: <https://apps.who.int/iris/handle/10665/337859>
5. International Monetary Fund. World Economic Outlook: A Long and Difficult Ascent [Internet]. Washington (DC): International Monetary Fund; 2020 Oct [cited 2021 Apr 27]. Available from: <https://www.imf.org/en/Publications/WEO/Issues/2020/09/30/world-economic-outlook-october-2020>
6. Kutzin J. Anything goes on the path to universal health coverage? No. Bulletin of the World Health Organization. 2012 Nov 1;90(11):867–8.
7. Smith P, Gaudin S, Soucat A, Yazbeck AS. Common Goods for Health: economic rationale and tools for prioritization. Health Systems & Reform. 2019;5(4).
8. Tseng V. The Four Waves of a Pandemic; reprinted with permission [Internet]. 2020. Available from: <https://twitter.com/VectorSting/status/1244671755781898241>
9. Bourgeault IL, Maier CB, Dieleman M, Ball J, MacKenzie A, Nancarrow S, et al. The COVID-19 pandemic presents an opportunity to develop more sustainable health workforces. Human Resources for Health. 2020 Oct 31;18(1):83.
10. World Health Organization. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020. 2020 Aug [cited 2021 Apr 27]; Available from: <https://apps.who.int/iris/handle/10665/334048>
11. World Bank Health, Nutrition and Population. Economic Impact of COVID-19: Implications for Health Financing in Asia and the Pacific. Washington (DC): World Bank; 2020 Sep.
12. World Health Organization. Financing Common Goods for Health. Geneva, Switzerland: World Health Organization; Forthcoming. (Guidance Paper).



13. World Health Organization WH. Second round of the national pulse survey on continuity of essential health services during the COVID-19 pandemic: January-March 2021: interim report. 2021 [cited 2021 May 25]; Available from: <https://apps.who.int/iris/handle/10665/340937>
14. WHO Health Financing Team. Financing for Universal Health Coverage: Dos and Don'ts [Internet]. Geneva, Switzerland: World Health Organization; 2019 [cited 2021 May 17] p. 43. Report No.: Health Financing Guidance Note No 9. Available from: <https://p4h.world/en/news/financing-universal-health-coverage-dos-and-donts>
15. Jowett M, Kutzin J, Kwon S, Hsu J, Sallaku J, Solano JG. Assessing country health financing systems: the health financing progress matrix [Internet]. Geneva, Switzerland: World Health Organization; 2020 [cited 2021 May 18]. Report No.: Health Financing Guidance No 8. Available from: <https://apps.who.int/iris/handle/10665/337938>
16. World Bank Group. High-Performance Health Financing for Universal Health Coverage (Vol. 2) : Driving Sustainable, Inclusive Growth in the 21st Century [Internet]. Washington, D.C.: The World Bank; 2019. Available from: <http://documents1.worldbank.org/curated/en/641451561043585615/pdf/Driving-Sustainable-Inclusive-Growth-in-the-21st-Century.pdf>
17. World Health Organization. State Party self-assessment annual reporting tool [Internet]. Geneva, Switzerland: World Health Organization; 2018 [cited 2021 Apr 27] p. 34. (International Health Regulations (2005)). Available from: <http://www.who.int/ihr/publications/WHO-WHE-CPI-2018.16/en/>
18. World Health Organization. 2019 Novel Coronavirus (2019-nCoV): Strategic Preparedness and Response Plan. Geneva, Switzerland: World Health Organization; 2021 Feb p. 21.
19. World Health Organization. Joint External Evaluation Tool: Second Edition. Geneva, Switzerland: World Health Organization; 2018 p. 114. (International Health Regulations (2005)).
20. Peters DH, Hanssen O, Gutierrez J, Abrahams J, Nyenswah T. Financing Common Goods for Health: Core Government Functions in Health Emergency and Disaster Risk Management. *Health Systems & Reform*. 2019 Oct 2;5(4):307–21.
21. World Health Organization. WHO benchmarks for International Health Regulations (IHR) capacities [Internet]. Geneva, Switzerland: World Health Organization; 2019 [cited 2021 May 17]. Available from: <https://apps.who.int/iris/handle/10665/311158>
22. COVID-19 Health Systems Response Monitor [Internet]. What do countries need to do to implement effective 'find, test, trace, isolate and support' systems? 2020 [cited 2021 Apr 27]. Available from: <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/>
23. Kenu E, Frimpong JA, Koram KA. Responding to the COVID-19 pandemic in Ghana. *Ghana Med J*. 2020 Jun;54(2):72–3.
24. Mackenzie JS, Jeggo M. The One Health Approach—Why Is It So Important? *Trop Med Infect Dis* [Internet]. 2019 May 31 [cited 2021 Jan 29];4(2). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6630404/>

25. World Health Organization. One Health [Internet]. World Health Organization. 2017 [cited 2021 Jan 29]. Available from: <https://www.who.int/news-room/q-a-detail/one-health>
26. Sparkes SP, Kutzin J, Earle AJ. Financing Common Goods for Health: A Country Agenda. *Health Syst Ref.* 2019;5(4).
27. World Health Organization. COVID-19 vaccine introduction and deployment costing tool (CVIC tool) [Internet]. Geneva, Switzerland: World Health Organization; 2021 [cited 2021 Apr 27]. Available from: <https://apps.who.int/iris/handle/10665/339802>
28. Cashin C, Bloom D, Sparkes SP, Barroy H, Kutzin J, O'Dougherty S. Aligning public financial management and health financing [Internet]. Geneva, Switzerland: World Health Organization; 2017 [cited 2019 Jan 14] p. 56. Available from: [http://www.who.int/health\\_financing/documents/aligning-pfm-health-financing/en/](http://www.who.int/health_financing/documents/aligning-pfm-health-financing/en/)
29. Barroy H, Dale E, Sparkes S, Kutzin J. Budget Matters for Health: Key Formulation and Classification Issues. World Health Organization. 2018;
30. Barroy H, Margini F, Ravishankar N, Kutzin J, Piatti-Fünfkirchen M, Gurazada S, et al. If you're not ready, you need to adapt: lessons for managing public finances from the COVID-19 response [Internet]. P4H. 2020. Available from: <https://p4h.world/index.php/en/blog-lessons-for-managing-public-finances-from-COVID-19-response>
31. Barroy H, Bletcher M, Lakin. How to make budget work for health: A practical guide on design, implementation and monitoring of programme budgets in health. Geneva, Switzerland: World Health Organization; Forthcoming.
32. World Health Organization. Health financing and budgeting reforms in Gabon: process and challenges on the road to universal health coverage [Internet]. World Health Organization; 2020 [cited 2021 Apr 27]. Available from: <https://apps.who.int/iris/handle/10665/333604>
33. Osei D, Sparkes S, Addai Frimpong K, Sapatnekar S. Implementing Programme Based Budgeting in Ghana's Health Sector. Geneva, Switzerland: World Health Organization; Forthcoming.
34. Piatti-Fünfkirchen M, Barroy H, Pivodic F. Budget execution: key characteristics and bottlenecks in the health sector. Geneva, Switzerland: World Health Organization; Forthcoming.
35. Barroy H, Kabaniha G, Boudreaux C, Cammack T, Bain N. Leveraging public financial management for better health in Africa: key bottlenecks and opportunities for reform. 2019 [cited 2021 Apr 27]; Available from: <https://apps.who.int/iris/handle/10665/339297>
36. World Health Organization. Operational planning guidance to support country preparedness and response [Internet]. Geneva, Switzerland: World Health Organization; 2020 May [cited 2021 Apr 27]. Available from: <https://www.who.int/publications-detail-redirect/draft-operational-planning-guidance-for-un-country-teams>
37. Ministry of Finance. Indonesia budget allocation and absorption for COVID-19 control. Jakarta: Indonesia: Ministry of Finance; 2020.
38. Ministry of Health. Côte d'Ivoire budget allocation and absorption for COVID-19 control. Yamoussoukro: Côte d'Ivoire: Ministry of Health; 2020.
39. Organisation for Economic Co-operation and Development, Statistical Office of the European Communities, World Health Organization. A system of health

- accounts [Internet]. Paris, France: OECD Publishing; 2011 [cited 2021 Apr 27]. Available from: <https://apps.who.int/iris/handle/10665/44775>
40. World Health Organization. Resource mapping and impact analysis on health security investment (rREMAP): strategic partnership for IHR (r2005) and health security (rSPH): 2019 [cited 2021 Apr 27]; Available from: <https://apps.who.int/iris/handle/10665/329385>
  41. World Health Organization, United Nations Children's Fund (UNICEF). COVID-19 vaccine introduction readiness assessment tool [Internet]. Geneva, Switzerland: World Health Organization; 2020 [cited 2021 May 10]. Available from: <https://apps.who.int/iris/handle/10665/336188>
  42. Sparkes S, Durán A, Kutzin J. A System-Wide Approach to Analysing Efficiency across Health Programmes. Bulletin of the World Health Organization. 2016;94(1).
  43. Chukwuma A, Gurazada S, Gong E, Tsaturyan S, Jain M, Khcheyan M. World Bank Blogs [Internet]. Reforming public financial management for health: A tool for recovery from the COVID-19 pandemic in Armenia. 2021 [cited 2021 May 18]. Available from: <https://blogs.worldbank.org/governance/reforming-public-financial-management-health-tool-recovery-covid-19-pandemic-armenia>
  44. Barroy H, Wang D, Pescetto C, Kutzin J. How to budget for COVID-19 response? [Internet]. Geneva, Switzerland: World Health Organization; 2020 [cited 2021 May 18]. Available from: <https://www.who.int/publications/m/item/how-to-budget-for-covid-19-response>
  45. Kutzin J. Priorities for the Health Financing Response to COVID-19. P4H Social Health Protection Network. 2020.
  46. Rahim F, Allen R, Barroy H, Kutzin J, Gores L. COVID-19 Funds in Response to the Pandemic. [Internet]. International Monetary Fund; 2020 [cited 2021 May 18]. (Fiscal Affairs). Available from: <https://www.imf.org/-/media/Files/Publications/covid19-special-notes/en-special-series-on-covid-19-covid-19-funds-in-response-to-the-pandemic.ashx>

# ANNEX 1

## Methods

This section presents the process of development and related references for each section of this Process Guide.

### **Section 2: What to finance for a national COVID-19 health response and preparedness?**

The contents of Section 2 on what and whom to finance were derived based on a detailed review of key documents specific to preparedness by WHO (specifically Joint External Evaluation (JEE) (19), State-Party Self-Assessment Annual Reporting Tool (SPAR) (17), and the International Health Regulations (IHR) Benchmarks (21)), and were expanded to include COVID-19 specific adaptations and guidance (specifically the Strategic Preparedness and response Plan (SPRP) (18) and the COVID-19 vaccine introduction and deployment costing tool (CVIC) (27)). Expert input and review was also provided by World Bank and WHO, based on direct involvement in supporting the COVID-19 financing response in countries. The illustrative example of budget holders comes from a 2019 review of country budgets (12) specific to CGH.

CVIC was developed to fill in the gap between microplanning (which requires detailed facility-level information) and back-of-the-envelope macro estimates, for a vaccination program which has several important features – (i) the target population is very different from typical infant EPI vaccines; (ii) the scale is very much larger than existing routine vaccinations, putting at risk essential health services, (iii) a fast evolving vaccine supply landscape – with uncertain approvals, specifications, and availability, and (iv) and on-going pandemic which is stressing the health care capacity and fiscal space of many countries which mean that optimizing efficient delivery scenarios is critical.

The development of CVIC was grounded on published guidance and evidence (e.g., interim SAGE guidelines, vaccination specifications, and clinical trial results) contextualized by existing vaccination delivery norms formed from experiences gained in the cost drivers and modalities for routine immunizations, and reviews provided by experienced immunization specialists at the country, regional, and global level. Initial draft releases of the tool were then piloted directly with countries in an iterative manner – unneeded functionality was removed, needed features were added, simplifications and convenience steps adopted – resulting in the first release of CVIC (version 1) in December 2020. Based on expanded usage of version 1 in ~20 countries, a subsequent revision was developed incorporating further enhancements and simplifications and resulting in version 2.0. In parallel, translation of the tool into the UN languages was undertaken to cater for global demand for the tool. Version 2.1 was recently released and includes the multilingual functionality and further enhancements which take into consideration ultra-cold chain strategies, vaccine durability considerations, and further flexibility in defining and setting the priority of target populations, and compatibility with the Partners Platform.

### **Section 3: How to finance a national COVID-19 health response and preparedness?**

Section 3.2 is directly informed by the WHO and World Bank PFM work developed since 2013-2015 to guide policy adjustments to public finance systems. Specifically, the PFM bottlenecks assessment tools developed by WHO and World Bank have guided the definition of policy actions required to make PFM systems more flexible and responsive to health needs in the context of COVID-19 (28,43). The guidance developed by WHO to inform the effective design, implementation and monitoring of programme budgets in health has also helped to delineate key policy actions in budget formulation (31). In addition, additional analytical work was conducted to inform the development of section 3.2 and related recommendations:

- In 2020, WHO conducted an assessment of the PFM modalities used to support the COVID-19 health response in 80 countries (30,45–46);
- WHO conducted deep-dive in targeted countries to identify good PFM practices to support an agile budgetary response to COVID-19 (e.g. in South Africa and Mexico)
- A mapping of programme-based budgets was conducted in later 2020 by WHO to capture the inclusion of health security related provisions in existing budgets.



## ANNEX 2

# Types of Common Goods for Health (CGH)

CGH form a critical foundation for the response to COVID-19 and resilient and responsive systems that can support both health security and UHC. However, there has long been general underinvestment in CGH functions in most countries. CGH can be grouped into five categories: policy and coordination; taxes and subsidies; regulations and legislation; information collection, analysis, and communication; and, population services. Annex Table 1 lists examples of CGH that bolster health security functions.

Table A1: Examples of Common Goods for Health (by category)

Category	CGH for health security
Policy & coordination	<ul style="list-style-type: none"> <li>• Institutional capacities and plans               <ul style="list-style-type: none"> <li>— Public Health Institute, Emergency Operations Centre</li> </ul> </li> <li>• Health and social workforce policy</li> <li>• Laboratory quality systems</li> <li>• Distribution protocols (such as policies for distribution of PPE)</li> <li>• Antimicrobial resistance policies/taskforce</li> <li>• Zoonoses coordination/policies</li> <li>• Disease prevention and control policies and strategies</li> </ul>
Taxes & subsidies	<ul style="list-style-type: none"> <li>• Health taxes</li> <li>• Removal of energy subsidies to reduce respiratory illnesses</li> </ul>
Regulations & legislation	<ul style="list-style-type: none"> <li>• Regulations on medicines, health products, supplies, environmental protection</li> <li>• Legislation for IHR implementation</li> <li>• Food control and licensure</li> <li>• Laboratory quality systems and biosafety/biosecurity standards</li> </ul>
Information collection, analysis, & communication	<ul style="list-style-type: none"> <li>• Surveillance systems               <ul style="list-style-type: none"> <li>— Information systems for COVID-19, other vaccine preventable diseases, communicable diseases</li> <li>— Community-based surveillance for COVID-19</li> <li>— Global coordination and information transfer to WHO</li> <li>— Zoonoses and AMR</li> </ul> </li> <li>• Analysis and monitoring of surveillance data</li> <li>• Information systems for managing:               <ul style="list-style-type: none"> <li>— Chemical event</li> <li>— Radiological or nuclear event</li> </ul> </li> <li>• Risk assessment and communication               <ul style="list-style-type: none"> <li>— Outreach to empower individuals and families to better manage their own health and to strengthen community engagement and trust</li> </ul> </li> <li>• Community engagement mechanisms</li> <li>• Contact tracing</li> <li>• Interoperable information system</li> </ul>
Population services	<ul style="list-style-type: none"> <li>• Water and sanitation in health facilities</li> <li>• Medical and solid waste management</li> <li>• Vector control management</li> <li>• Specimen referral and transport system</li> </ul>

Source: World Health Organization (2021). Financing Common Goods for Health. Geneva, World Health Organization.



9789240030527



9 789240 030527