Geneva Switzerland

Value for Money Technical Brief

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The Global Fund

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1. Executive Summary

Value for Money (VfM) is a concept that defines how to maximize and sustain equitable and quality health outputs, outcomes and impact for a given level of resources. Substantial funding gaps exist in global plans for HIV/AIDS, TB and malaria to end the epidemics by 2030. VfM is therefore imperative for maximizing available limited resources to support the achievement of Universal Health Coverage (UHC) and the health-related Sustainable Development Goal 3 (SDG3).

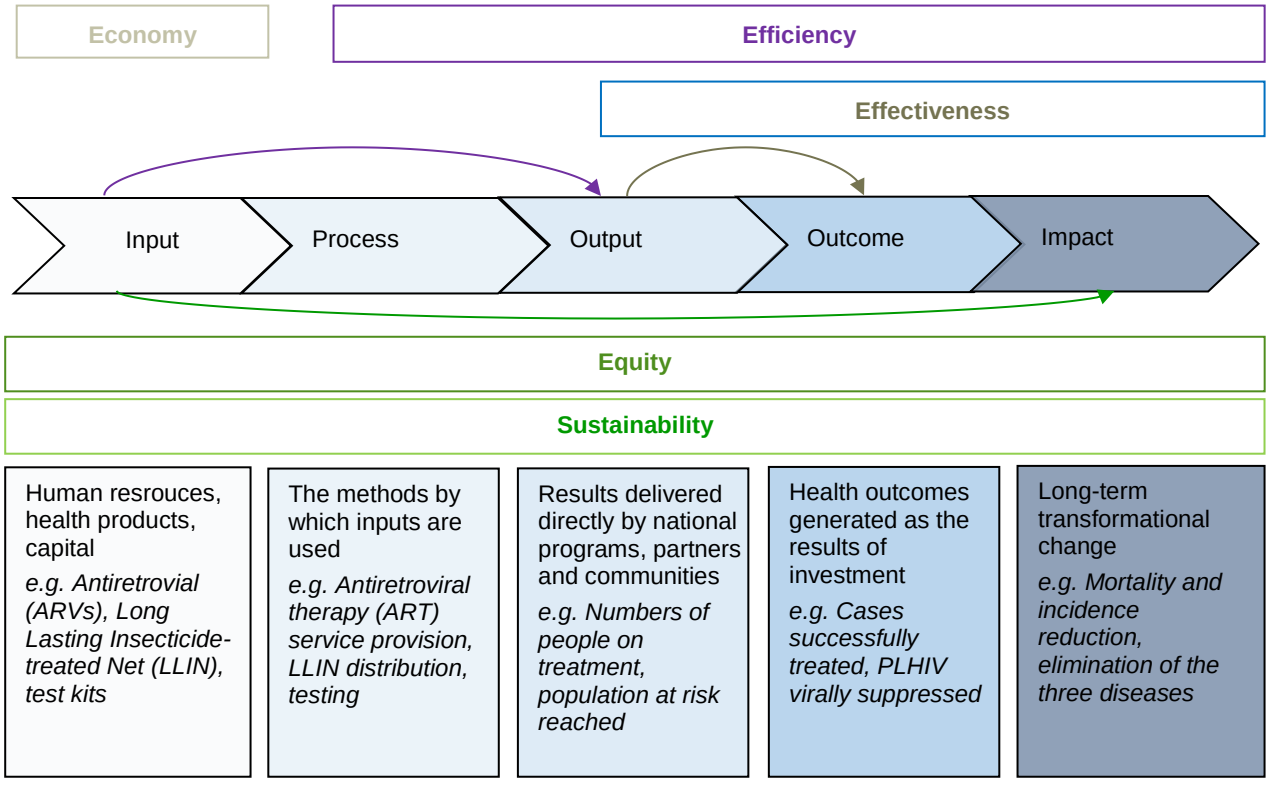
VfM is a key principle that guides the Global Fund's investments throughout the Global Fund grant life cycle.

Figure 1[1] shows how VfM can be achieved across the health production chain, maximizing health impact by reducing morbidity and mortality, within the envelope of available financial, political and human resources. In addition to ending the epidemics, "value" also lies in the achievement of equity and sustainability in the process.

The key dimensions of VfM[2] applicable to Global Fund funding requests (**Box 1**) are *economy, effectiveness, and efficiency,* with *equity* and *sustainability* being critical cross-cutting dimensions.

VfM is about the totality of all five dimensions and cannot be assessed through only one of them in isolation.

Figure 1: Health Production Chain and VfM



[1] Adapted from Department for International Development of the United Kingdom (DFID)'s Approach to Value for Money (2017).
[2] The VfM framework presented in this technical brief draws on the DFID's Approach to Value for Money (2017) and its earlier guidance on VfM, which represent a comprehensive approach to VfM. Core dimensions of DFID's VfM framework include common elements and terminologies on VfM that other donors and technical agencies (e.g. World Health Organization (WHO)) apply.

This technical brief articulates key VfM elements for applicants to consider when developing funding requests during the Global Fund's 2020-2022 funding cycle. It is also intended to support implementing partners when developing disease specific and health sector National Strategic Plans (NSPs).

VfM is an important aspect assessed by the Global Fund's Technical Review Panel (TRP)[4] when making a funding recommendation. The TRP considers whether sufficient considerations of VfM have been incorporated in the funding request and the feasibility that the various dimensions of VfM will be carried through to grant implementation. Applicants are encouraged to make concerted efforts to achieve VfM throughout the Global Fund grant life cycle, from funding request to grant closure.

Box 1: Defining VfM dimensions

Economy: to obtain the lowest costs for quality inputs required to produce quality preventive or curative health services.

Effectiveness: to invest in the most impactful interventions that generate intended effects.

Efficiency: to maximize outputs, outcomes and impact for a given level of resources.

Equity: to ensure everyone has a fair opportunity to attain the full potential for health and wellbeing, with no person disadvantaged due to social, economic, demographic or geographic differences.

Sustainability[3]: to enable a health program or country to maintain and scale up coverage to a level that will provide for continued control of a public health problem.

Developed by the Global Fund Secretariat in consultation with the TRP and Global Fund partners, this technical brief provides an overview of the VfM framework with **a focus on Economy, Efficiency and Equity aspects**. These constitute the main dimensions of the VfM framework which applicants are requested to address when responding the VfM question in their funding requests[5]. Effectiveness and Sustainability dimensions of VfM are primarily covered by other questions in the funding request application forms. Specific guidance on responding to those questions can be found in the Core Information Notes and Technical Briefs.

When providing description of their overall approach on VfM with highlighting ongoing and future VfM improvement efforts on economy, efficiency and equity, applicants can consider the VfM dimensions described below:

Economy. Applicants can explain how the funding request proposes to achieve the lowest costs for quality inputs required to provide services. They can demonstrate the efforts to minimize the costs of inputs by showing that: (i) quality assured health products are budgeted at the lowest sustainable costs[6]; (ii) feasibility and sustainability analysis of new technologies has been conducted to justify the investment; and iii) human resources are appropriately deployed and compensated in line with national human resources procedures and salary scales in support of sustainability.

[3] Global Fund Sustainability, Transition and Co-financing Policy.
[4] The Technical Review Panel consists of independent group of experts who are tasked to evaluate the technical merit and strategic focus of funding requests and make recommendations for funding.
5 In the funding requests for the Global Fund 2020-2022 funding cycle, VfM question is included as the following: Tailored for Focused Portfolios - Section 1.1 (g); Tailored for National Strategic Plans - Section 2.2 question (e); Tailored for Transition - Section 1.1 question (g); and Full Review - Section 2.2 question (e).
[6] In the context of Global Fund grant budgeting, the **lowest sustainable cost** is considered the lowest cost expected to be reliably available throughout the grant implementation period; this is contrasted with a very low spot price that may not be available over time and/or may result in a compromise on the quality of service or supply (e.g., unreliable delivery). Budgets should be established based on the lowest sustainable cost estimate to enable the ability to deliver on grant targets within the defined budget. For example, for health products, Pooled Procurement Mechanism (PPM) reference prices are recommended for budgeting purposes as they are based on the lowest sustainable price expected over time (in contrast to the lowest price available at any single point in time or for a limited period of time).

The economy dimension of VfM can be strengthened by considering improvements in various areas such as program planning, procurement, financial management, and health services delivery.

Applicants are encouraged to give a strong justification when input prices have not been minimized. However, paying lower prices at the expense of inferior quality or lower results is discouraged.

Effectiveness. To demonstrate effectiveness, a funding request needs to be strategically focused, technically sound, sufficiently ambitious and yet operationally feasible.

The proposed interventions and their implementation should be based on a demonstrated understanding of the epidemiological context, considering disease burden and its distribution across geographical areas and population groups, key drivers of the epidemic, patterns of transmission, barriers to accessing health services, and projections of future disease burden.

Financial resource constraints are important considerations in attaining VfM and require countries to carefully prioritize and make choices amongst available effective interventions. Applicants can highlight the rationale behind their prioritization decisions such as why particular interventions will prove most effective, what alternatives were considered and what potential trade-offs were made.

Efficiency. Applicants can explain how their funding requests maximize quality health outputs, outcomes and impact for a given level of resources. The efficiency of each funding request should be viewed in the context of a country's disease-specific and overall health strategies, considering domestic and other donor investments in country in addition to the Global Fund support.

Applicants are encouraged to consider two types of efficiencies at the disease program and system levels in the funding requests. These include:

- *Allocative efficiency.* At the **disease program level**, allocative efficiency refers to optimally allocate resource across interventions, geographies and population groups to maximize impact. For example, this might be achieved by identifying an optimal mix of HIV interventions that minimizes disease burden. At the **system level**, it implies allocating the total resources available, with due consideration of what proportion of resources should support strengthening the health system more broadly to overcome common bottlenecks across programs.
- *Technical efficiency.* At the **disease program level**, technical efficiency refers to minimizing the costs of service delivery along the care continuum while achieving the desired health outcomes. For example, this might be achieved by changing to less expensive service delivery modalities that still produce the same results. At the **system level**, it means to achieve the lowest costs in delivering quality services to meet different health needs so the total health benefit to the entire population is maximized. This can be achieved through removing duplications, improving alignment, and enhancing integration across health system building blocks and delivery platforms, such as supply chains, health information systems and human resources; as well as strengthening governance and financing, to produce an optimally functioning health system.

Efficiency can be measured by unit cost per quality output, outcome or impact. Unit cost of a given intervention can vary significantly across countries. It can also vary within a country depending on geographies (urban or rural; region), health facilities (regional hospital, district health center, or village post), and service delivery models (facility-based or community-based; integrated or vertical delivery). Applicants are encouraged to appropriately benchmark their unit costs within country and also with countries whose economic, epidemiological, and health system settings are comparable,

to identify potential opportunities for efficiency improvement[7]. Efficiency does not necessarily mean continuous reduction in unit costs over time. Countries progress from disease control to elimination or expand services to the underserved populations can have higher costs for certain interventions. For example, it can be more costly to find isolated disease cases, to break down human rights and gender-related barriers, and to treat hard to reach populations. Efficiency is about delivering services in the most efficient way possible in a given context, enhancing scalability.

Whilst an increasing number of disease programs are taking advantage of allocative efficiency tools to optimally allocate resources, major opportunities for efficiency improvement remain in further improving the technical efficiency of disease programs and in improving allocative and technical efficiencies at the system level that can benefit multiple disease programs.

Equity. Applicants can highlight efforts made to improve the understanding of financial, human rights and gender-related barriers to service access, uptake and retention as well as to direct sufficient investment to address those barriers. They can also describe efforts made to meet the needs of key and vulnerable population groups[8] and strengthen community systems. Applicants can also identify and describe investment opportunities that enhance both efficiency and equity and explain the rationale for choices made in settings where resource allocation for efficiency and equity may conflict.

Addressing inequalities in health outcomes should be a programmatic priority, even when the costs of these interventions are higher. The equity objective requires assuring coverage of key and vulnerable populations as they frequently face hardship, stigma and discrimination, have limited access to services, and have disproportionally higher risks and burden. Failing to reach these populations should be considered as poor VfM.

Sustainability. Applicants can highlight efforts taken to ensure continuity of the programs and services supported by Global Fund investments, thus sustaining the short and long-term impacts they produce. Financial and programmatic sustainability should be considered in all investment decisions.

Instructions to respond to the VfM question in the funding request

Investment decisions in the funding request should be appropriate given the country context, consider epidemiological trends and political environment, and recognize the reality of budget and health system capacity constraints. It is important for funding requests to demonstrate that all VfM dimensions have been considered and an appropriate balance among them has been achieved so that the programs proposed in the funding request truly maximize the impacts of the Global Fund investment in an equitable and sustainable manner.

Applicants shall provide a short description or narrative statement of their overarching approach to VfM and then present more information on the following three dimensions of VfM: **economy, efficiency** and **equity**.

[7] Applicants can access unit costs estimates available of different countries through the Unit Cost Study Repository of the Global Health Costing Consortium as one source of information.

[8] Key and vulnerable population groups are those who experience both increased impact from HIV, TB or malaria, decreased access to services and human rights violations, systematic disenfranchisement, marginalization and criminalization. In HIV, key populations include sex workers, men who have sex with men, transgender, people who inject drugs, and people in prisons and other closed settings. For TB, key populations may include migrants and refugees, indigenous populations, people living with HIV, among others. Those who are at heightened risk but may not meet the criteria above are considered vulnerable populations. This, for instance, may include pregnant women, children under 5, refugees, migrants, and internally displaced people in malaria-endemic zones.

Applicants can describe what they consider as the most important ongoing and future VfM improvement efforts and explain how the funding requests present improved VfM in comparison to the activities within the current grant, through examples, figures, and other available evidence to justify their proposals for the Global Fund investment. Applicants are also encouraged to identify challenges faced in approaching VfM as relevant.

Applicants can follow these guiding questions when preparing their response:

Table 1: Guiding Questions for VfM

<table>
<tr><td colspan="2">Overarching questions</td><td><u>Does the overall funding request represent VfM?</u>
Does the funding request integrate Global Fund supported services into the national health systems, provide synergies with investments from domestic governments and other development partners, and fill resource gaps critical to ending HIV, TB and malaria epidemics?
Does the funding request balance the use of Global Fund investments to advance disease control and meet global targets while also building the capacity of national disease programs and health systems to sustain achievements in the future?</td></tr>
<tr><td rowspan="3">Questions by VfM dimensions</td><td>Economy</td><td><u>Does the funding request reflect efforts to ensure that the lowest cost are obtained for quality health products and other key inputs necessary to provide services?</u>
Is the selection of health products fully aligned with current WHO guidelines?
Are procurement plans and supply chain capacity consistent with the programmatic targets set?
Are key quality health products procured, transported, distributed and managed efficiently, reducing stock-outs and wastage?
Are salaries paid in line with national human resources procedures and salary scales?
Are decisions to invest in advanced technology (e.g. GeneXpert) or new drugs based on a sound feasibility and sustainability analysis?
Are programs delivered in ways that reflect good use of existing infrastructure and health system capacity?</td></tr>
<tr><td>Effectiveness</td><td><u>Does the funding request demonstrate prioritized response to maximize impact?</u>
Are affordable health products chosen to maximize acceptability and adherence?
Are the interventions chosen following the existing guidance from technical partners?
Are the interventions prioritized to maximize impact?
Are programs integrated into health systems in ways that enhance effectiveness?</td></tr>
<tr><td>Efficiency</td><td><u>Does the funding request demonstrate allocative efficiency?</u></td></tr>
</table>

		• Are available resources strategically allocated across interventions, geographies and population groups to maximize impact of respective disease programs? • Are adequate resources allocated to strengthen the health and community systems to address shared bottlenecks for the delivery of health services, including those for all three diseases? *Does the funding request demonstrate technical efficiency?* • Is service delivery optimized through choice of appropriate strategies to provide quality services? For example, by optimizing input mix through task-shifting, reducing unnecessary hospitalization, and providing integrated service delivery through primary health care (PHC) facilities, community health workers, as well as community-led and based organizations? • Are there ongoing or planned efforts to improve the efficiency of the health system by integrating parallel and duplicative disease specific management systems (e.g. health information systems, human resources, laboratory systems, and supply chains)? • Are implementation arrangements sound and designed to minimize program management costs and respond to programmatic risks and bottlenecks?
	Equity	*Is the funding request based on a sound analysis of (1) populations at the highest risk and/or bearing the greatest disease burden; (2) inequities in vulnerability to disease, and in service access, uptake and retention?* • Does the funding request present an analysis on populations with the highest disease burden and areas where most new infections occur? • Does the funding request analyze existing financial, human rights and gender-related barriers in service access, uptake and retention? *Does the funding request include programmatic efforts to address inequities in vulnerability to diseases, and in service access, uptake and retention?* • Are Global Fund resources invested in services for the most at-risk populations and in programs to remove human rights and gender-related barriers they face? • Are adequate resources allocated to build and sustain community responses to promote service access, update and retention?
	Sustainability	*Is the funding request aimed at strengthening both short and long-term impact?* • Does the funding request appropriately balance longer-term sustainability against near-term efficiency and effectiveness? • Does the funding request vision a pathway to ensure that service delivery will be affordable and programmatically feasible for national governments to take over in the future?

2. The Concept of Value for Money

2.1 What is VfM

VfM is a concept that defines how to maximize and sustain equitable and quality outputs, outcomes or impact for a given level of resources. VfM must be contextualized to assess its feasibility considering health gaps, needs and opportunities. VfM requires to invest selectively for greater results. It entails understanding the cost-effectiveness[9] of different investment options, as well as associated equity and sustainability implications to make sound investment decisions.

Applicants should make the best possible use of resources and maximize the VfM of Global Fund investments to accelerate the end of the HIV, tuberculosis and malaria as epidemics.

2.2 What VfM is not[10]

The examples listed below explain some concepts which do not represent VfM.

VfM is not always about paying the lowest price for products or services. VfM translates into efforts being made to better understand costs within a country's context to deliver the maximum impact for each dollar spent. It focuses on the relationship between costs and outputs/outcomes/impact, and not just cost alone. The aim is not to produce savings at the expense of quality, impact or equity.

VfM is not about minimizing near-term disease burden. VfM is multi-dimensional. An investment should be considered poor VfM if it: (i) focuses only on the most cost-effective interventions without considering potential inequitable consequences; (ii) prioritizes actions which lead to health gains in the short run but not necessarily in the longer term; and (iii) supports interventions which are financially and programmatically unsustainable in the long term.

VfM does not mean prioritizing interventions which are easy to measure. Programs shall make steady efforts to improve their ability to measure the impact of all interventions. When evaluations and results are robust, based on solid evidence and meaningful beneficiary feedback, programs can more confidently prioritize and scale-up those high impact interventions, increasing overall impact on the three diseases and the health system overall.

VfM does not imply low risk. To maximize overall impact, it is important to find a balance between investing in interventions with known impact and new interventions with potentially higher impact where evidence is not yet available. For example, piloting an innovative method to reach key populations which is costlier but potentially more effective should not be discouraged because of the unknown impact of the new intervention. Program decisions should be made based on full understanding of the potential risks and benefits. These potential benefits should then be measured and reassessed to determine if an innovative intervention should be scaled up.

[9] Cost-effectiveness is an important concept for intervention prioritization. Effectiveness of a given health intervention is often measured by metrics of intervention impact against disease burden, such as Disability Adjusted Life Year (DALY) averted or Quality Adjusted Life Year (QALY) gained. An intervention of lower cost per DALY averted or QALY gained is regarded more cost-effective and to be prioritized to maximize impact within a resource envelope. Cost Effectiveness Analysis (CEA) can be carried out for an intervention or intervention package to compare different resource allocation alternatives. CEA is different from Cost Benefit Analysis (CBA), which monetarizes the impact of intervention(s). Both can be considered to inform resource allocation decisions. In settings when monetarizing impact is not straightforward, CEA can be more appropriate. In addition to CEA or CBA, programs may want to consider budget impact analysis to understand the budget implications when making resource allocation decisions, taking affordability into account.

[10] Adapted from DFID's Approach to Value for Money (2017)

VfM is not just a consideration at the beginning of the program. Whereas improving the use of costing tools and cost-effectiveness analysis to make program decisions is important, operating within the environment of public health programs is complex, as programs are built on long-standing practices and existing institutions. Achieving greater VfM requires regular updating of the understanding of the cost and benefit, considering program costs within the complex program operational environments along the process.

2.3 Who is responsible for VfM and priority actions

Due to scarce resources for health, everyone engaged in designing, financing, delivering, monitoring and regulating programs, such as national disease program managers, funders, service providers, communities, regulatory entities, and beneficiaries, is responsible for securing VfM.

Country Coordinating Mechanisms (CCMs) are highly encouraged to work with key stakeholders to build in VfM considerations throughout all aspects of the development of the funding request and its implementation. For example:

- Targeting programs based on disease epidemiology and existing human rights and gender-related barriers, selecting the most effective health interventions for the given context, measuring results, and using data to improve outcomes.
- Planning procurements efficiently and effectively, obtaining good quality and the right mix of health products at or near international pooled procurement prices, with minimal stock outs of key health products, even in remote areas.
- Using, investing in, developing and strengthening country systems to deliver Global Fund supported services as the expected default position. This is critical for sustainability. Exceptions should be clearly justified. Countries are strongly recommended to shift from established parallel to country-owned systems and improve their efficiency, which will take time. Processes and investments related to this needs to be clearly laid out.
- Strengthening national health-financing leadership, governance and organizational capacity to accelerate the achievement of UHC and SDG3. Mobilizing sufficient resources to achieve intervention coverages high enough to change disease trajectories, improving resource tracking, and avoiding duplication of donor funding.
- Enhancing financial management and service provision systems in settings where absorptive capacity remains a key challenge, to increase the country's capacity to use funds effectively and efficiently.
- Investing in institutional development to promote policy formulation that underpins VfM. For example, to facilitate health care system reform as a means to remove duplications of parallel systems and promote integration; to adopt new laws to remove legal barriers for key and vulnerable populations to access services, as well as to strengthen the enabling environment to address harmful gender norms and social inequity.

The Global Fund Secretariat and technical partners can play a role in supporting CCM in facilitating VfM discussions[11].

[11]Applicants are encouraged to consider needed analysis and country dialogue in advance to strengthen VfM aspect of their funding requests. Technical and funding agencies may have resources available to provide the support needed. The Global Fund, through its Strategic Initiatives for instance, provides technical assistance to countries to improve VfM of their programs and systems. Some of such assistance is dedicated to support the strengthening of NSP and funding request development.

3. Key Dimensions of VfM

3.0 Overview

Across the health production chain illustrated in **Figure 1**, the key dimensions of VfM applicable to Global Fund funding requests are *economy, effectiveness and efficiency,* with *equity* and *sustainability* being cross-cutting.

Each of the five demensions is an integral part of VfM and should be achieved simultaneously to the best extent possible.

The VfM of each funding request will be viewed according to each country's disease-specific context and its overall health strategies, considering domestic and other donor investments. Global Fund investments should be aligned with those of national governments and other partners and funders such as the World Bank, Gavi, and Global Financing Facility (GFF), President's Emergency Plan for AIDS Relief (PEPFAR), President's Malaria Initiative (PMI), to name a few, as applicable. Global Fund investments should be used to leverage equitable responses and maximum efficiency. Countries are highly encouraged to discuss donor coordination for health system building blocks which require larger investments than a single partner can provide.

3.1 Economy: obtaining quality inputs at lowest cost

Economy implies to obtain the lowest costs for quality inputs that are required to produce preventive or curative health services. For health services delivery, health products and human resources are among the key cost drivers. Attention to VfM in these areas can have large impacts on program achievement. Examples of areas of attention are provided below:

(a) **Health Products**. Procurement of health products[12] should particularly focus on VfM. The Global Fund does not finance health products purchased at a higher price than the reference price, where one exists. Such reference price is set based on globally negotiated price lists for specific health and non-health products either through the Global Fund's Pooled Procurement Mechanism (PPM) (e.g.wambo.org), negotiation led by partners or partner platforms such as the Stop TB Partnership's Global Drug Facility (GDF). Following good pharmaceutical procurement practices, each applicant and implementing partner shall use transparent and competitive procedures for the purchase of quality assured health products to achieve VfM.

Funding requests can describe efforts made to achieve the lowest sustainable costs for quality assured health products and ensure other elements of high quality Health Products Management (HPM). Applicants shall refer to the standards that regulate procurement and management of the health products highlighted in the Guide to the Global Fund Policies on Procurement and Supply Management on Health Products, HPM section of the Building RSSH through Global Fund Investments Information Note as well as HPM Annex to the Global Funds' Sustainability, Transition, and Co-Financing (STC) Guidance Note for details

[12] Key health products includes: (i) pharmaceutical products; (ii) durable and non-durable in-vitro diagnostic products, microscopes and imaging equipment; (iii) vector control products; and (iv) consumable/single-use health products (including condoms, insecticides, therapeutic nutritional support, general laboratory items and injection syringes), which are financed out of the Global Fund grant funds.

on HPM. For health products supported by the Global Fund but not procured through its PPM, applicants are highly encouraged to explore and benchmark international and regional prices, including reviewing Global Fund's PPM reference prices (see **Annex 5**).

Applicants are highly encouraged to fully align with current WHO guidelines when selecting and procuring health products regardless of the procurement channel (e.g., whether through PPM , GDF or any other channel). Procurement decisions should be made based on cost-effectiveness analysis, taking into account not only clinical efficacy and cost but also acceptability and adherence into consideration. For example, when procuring antimalarial medicine for children (i.e. artemether-lumefantrine), although the dispersible tablets might be slightly more expensive, its higher acceptability and therefore adherence for children compared to the non-dispersible tablets should be recognized to inform product selection. Applicants are highly encouraged to make a rational choice among different alternatives to ensure VfM, following the similar approach of Health Technology Assessment (HTA)[13] in order to make smart decisions to maximize the return to investment. These decisions can be informed by carefully reviewing various alternatives and comparing the full cost and effectiveness or benefit of them, taking affordability and feasibility into account.

If funding is requested to purchase advanced new technologies, applicants are encouraged to provide evidence-base to justify the request. Global evidence should be complemented by local evidence when available. In addition, feasibility and sustainability including implementation and financial implications should be considered. For example, changing diagnostic technologies for laboratory services (such as expanding GeneXpert to lower level health facilities) requires sound decisions on appropriate geographic location for the machines. It should however also trigger additional considerations, including changes to infrastructure for the transportation of specimens, maintenance and repair of machinery, training and oversight, and other elements of successful new technology introduction.

When analyzing funding requests, the Global Fund looks for evidence that above aspects have been taken into account and that new technologies are chosen or expanded rationally, given the country context and health system's capacities. These investment decisions should be rationalized through the lens of VfM, with trade-offs or alternatives well considered during the decision making.

(b) **Human Resources**. The costs of human resources vary widely across countries, largely reflecting differences in underlying economies, and variations in salaries and payment arrangements for health care providers, including community-based service providers, such as Community Health Workers (CHWs), volunteers, and peer to peer activists. There are cases where volunteers are not remunerated, and others receive stipends and salaries. The Global Fund supports the guidance stating that CHWs should have "a financial package commensurate with the job demands, complexity, number of hours worked, training and roles they undertake".[14]

Funding requests should describe on how the national program is supporting the most efficient way of mobilizing or utilizing human resources for service delivery. This could include avoiding duplication of donor support through good coordination of donor funding, recruiting

[13] HTA is an approach used to inform policy and decision-making in health care, especially on how best to allocate limited funds to health interventions and technologies. The assessment is conducted by interdisciplinary groups using explicit analytical frameworks, drawing on clinical, epidemiological, health economic and other information and methodologies.
[14] Resolution on Community Health Workers

personnel when necessary, assigning appropriate roles for healthcare personnel including community-based service providers, and paying salaries in line with national human resources procedures and salary scales. Applicants are suggested to refer to Building RSSH Through Global Fund Investments Information Note and Human Resources for Health (HRH) Technical Brief for more information.

(c) **Others**. In addition to health products and human resources, the CCM are highly encouraged to scrutinize all proposed investments in the funding request to ensure that they are necessary for efficient and quality service delivery, including program management costs, capital investment and other investment aimed to strengthen health and community systems. Funding requests are suggested to provide a rationale for the investment and the effort made to secure the most economical input prices without compromising quality where there is a major capital or health system investment, such as labs, vehicles or information system.

Applicants are highly encouraged to ensure the internal consistency between the procurement plans and budgets of key inputs (e.g. health products, health human resources, other investment) and programmatic targets set in the funding requests.

3.2 Effectiveness: achieving the intended effects

Effectiveness is assessed by the extent to which the proposed interventions and activities will achieve the outcome and impact targets outlined in health sector plans or disease NSPs. The proposed interventions and their prioritization should be based on a demonstrated understanding of the epidemiological context, considering disease burden and its distribution across geographical areas and population groups, key drivers of the epidemic, patterns of transmission, barriers to accessing health services, and projections of future disease burden.

Funding requests should provide clear evidence to justify that the selected key interventions including health products are technically the most appropriate and in line with normative technical guidance and current best practices to achieve the stated outcomes, given the evidence base and country context including lessons learned[15]. While it is important that the outlined interventions in the funding request demonstrate sufficient ambition to reach NSP targets and goals, they should also be operationally feasible, and can be realized with available funding, and contribute to results achieved with other sources of funding (e.g. domestic and other external resources).

To demonstrate effectiveness, a funding request should be strategically focused, technically sound, sufficiently ambitious and yet operationally feasible. A funding request much be tailored to country's epidemiological context, community and health systems environment, human rights and gender barriers, affordability, and other relevant country-specific circumstances.

Resource constraints are important considerations of VfM. A limited funding envelope requires countries to carefully prioritize and make choices among effective interventions.

To address the VfM question, applicants are highly recommended to make a reference to the funding application related on the *effectiveness* dimension of VfM and highlight the rational of the prioritization among effective interventions, alternatives considered, and potential balances made among polarized options.

[15] See Information Notes on HIV, TB and Malaria

3.3 Efficiency: maxmizing outputs, outcomes and impact

Efficiency is defined as achieving maximum outputs, outcomes or impact for a given level of resources.

Key sources of inefficiency, as identified by the World Health Report 2010, range from inappropriate and ineffective use of medicines to costly staff mix, and from low use of infrastructure to suboptimal quality of care[16]. These findings remain valid today with many opportunities yet to be realized to enhance the efficiency of investments. Applicants are encouraged to review **Annex 1** to identify key sources of inefficiencies in their own settings and highlight efforts to address them when preparing the funding requests.

Efficiency can be approached at two levels: disease program level and system level. At each level, there are two types of efficiency: allocative and technical efficiency[17].

Disease program level efficiency

(a) **Allocative efficiency** refers to the optimal allocation of resources of a given disease program across interventions, geographies and population groups to maximize impact. This should include how data is used to guide interventions to target the people in need at the right time.

A key criterion for resource allocation to achieve allocative efficiency is cost-effectiveness. Understanding the costs of interventions is a critical first step to approach efficiency. For example, it is important to understand the direct costs like drugs but also the cost of service delivery including shared costs of health facilities and human resources that cover multiple diseases and health needs, as well as costs related to addressing human rights and gender-related barriers to services. Countries should analyze the underlying cost structure of a country's health system to support understanding of costs for disease specific interventions. This effort supports countries to robustly cost, budget and prioritize interventions to inform the development of health sector or disease specific NSPs. Applicants can make a dedicated effort, for example through surveys, to better understand their own unit costs. There are different costing tools, approaches or methodologies applicants could use to build and strengthen their unit costs or cost database to support better planning. The effectiveness of an intervention or intervention mix measured by life saved, infection averted or DALY averted, can be projected by epidemiological impact models. Costing tools and epidemiological models if applied together can support allocative efficiency analysis to assess the cost-effectiveness of different options of intervention mix, informing resource allocation decisions.

More information including resources and tools available to support allocative efficiency analysis can be found in **Annex 2**. Applicants are also encouraged to refer to guidelines of NSP development and resources on costing in **Annex 5.**

Funding requests can explain how priorities of a given disease program have been determined, and how resources are being allocated to maximize impact, considering all health funds available in the country.

- Prioritization of interventions may have been informed by allocative efficiency analysis via a country-led process. Funding requests are highly recommended to provide information on the underlying cost estimates used to inform intervention prioritization,

[16] WHO (2010): The world health report: health systems financing: the path to universal coverage, Chapter 4 More health for the money
[17] Technical efficiency is often referred also as implementation efficiency.

including the data source and methodology used. Evidence of robust analytical work to make the link between funding and expected results should be provided.

- In settings where country capacity is limited and/or quality data is scarce, including those defined as Challenging Operating Environments (COEs), allocative efficiency analysis and proper interpretation of the results may not be feasible. If this is the case, applicants are encouraged to provide the rational for how chosen interventions are prioritized to maximize impact, using available information.

Applicants are highly encouraged to cross-reference the rationale for intervention prioritization if it is already provided in other parts of the application.

(b) **Technical efficiency** refers to minimize the costs of service delivery along the care continuum while still achieving the desired health outcomes. This can be achieved through the identification of the right mix of inputs and optimal delivery modalities. For example, achieving successful TB treatment with significantly lower unit cost as a result of switching from hospitalization to ambulatory care. Another example is the designing of a service delivery method to address barriers to HIV testing services in order to maximize access at the lowest cost for both the provider and the client.

Applicants are strongly encouraged to highlight the ongoing and future efforts to minimize the cost of service delivery along the care continuum to achieve the desirable health outcomes. Those efforts are aimed to:

(1) Optimally mix inputs such as quality health products and human resources. For example, some systems are overly reliant on using doctors in settings where less costly resources such as nurses and CHWs could be safely substituted through task shifting. This not only saves financial resources but can also improve outcomes, as CHWs have an important role in promoting treatment adherence.

(2) Remove financial, physical, human rights and gender-related barriers to and inequities in health services for those in need. For example, cost-effective demand-creation activities to address the issue of low service utilization.

(3) Deliver quality services through efficient service delivery protocols, modalities, and channels or platforms. Examples include:

- Adopting more efficient drug refill or patient visit schedules;
- Scaling up community and key population-led services, and other integrated patient-centered delivery models along the care continuum;
- Improving targeting strategies for testing to improve yield;
- Optimizing laboratory testing algorithms to ensure cost-effectiveness;
- Harnessing the power of digital health technologies to improve access to services, linkage to care, adherence, as well as data sharing and utilization to improve the quality, effectiveness and efficiency of care;
- Introducing good hospital management practices to improve hospital's productivity.

(4) Improving the use of data by geography, location and time, and of patient monitoring systems to reduce loss to follow up on services

Technical efficiency can also be achieved through the improvement of the implementation arrangements to minimize program management costs and respond to programmatic risks and bottlenecks, including lowering the operational or management cost of Global Fund grant recipients to ensure efficiency and sustainability.

System level efficiency

Key opportunities for major efficiency gains lie at the system level. Achieving system level efficiency, also known as cross-programmatic efficiency, is the corner stone of obtaining program level efficiencies.

(a) **Allocative efficiency** refers to allocating the total resources available, with due consideration of what proportion of resources should support strengthening the health systems more broadly as to overcome common bottlenecks across programs. System-level resource allocation discussions should be well coordinated among key stakeholders and viewed in the broader context of achieving UHC and SDG3. For example, it can be informed by dialogues among national and sub-national governments, development partners such as the World Bank, other development banks, GFF, Gavi, the Global Fund, technical agencies such as WHO, donors, and affected populations.

Funding requests can articulate how total available resources will be allocated to maximize impact. For example, applicants can explain how resources will be allocated for building RSSH to support the fight against HIV, TB and malaria. This may include investments in supply chain, health information systems, policy, governance and management, human resources, and community organization and network building, for example, to address critical system bottlenecks and support efficient service delivery. Investment for building RSSH needs to be prioritized appropriately across core RSSH components given resource constraints, addressing the most critical bottlenecks and balancing short-term solutions and long-term impact. Applicants are encouraged to review the Building RSSH for Health through Global Fund Investment Information Note for further guidance.

(b) **Technical efficiency** means to achieve the lowest costs in delivering quality services to meet different health needs so total health benefit to the entire population is maximized. It can be achieved through removing duplications, improving alignment and enhancing integration across health system building blocks and delivery platforms, such as supply chains, health information systems and human resources. Strengthening other key functions of the health system including financing and governance is equally important to produce an optimally functioning health system.

Funding requests can highlight efforts to improve alignment, integration and functionality of a given health system building block or the health system overall. Examples of those efforts include:

(1) Concrete actions to remove parallel systems in procurement, supply chain, laboratory, and information across diseases if they currently exist.
(2) The integration of service delivery through PHC platforms to achieve both economies of scope and economies of scale[18], applying a people-centered approach[19]. Moving services from hospital-based delivery to out-patient services and PHC facilities should

[18] Economies of scope: describe situations when producing two or more goods or services together results in a lower cost than producing them separately. This is possible when the services (e.g. testing for HIV, testing for TB, providing treatments) have complementary production processes and share inputs (e.g. nurse's time, lab equipment) to production. Economies of scope differ from economies of scale, which describe situations when producing larger quantity of the same good (e.g. testing, treatment) lead to the reduction of the average cost of the production. While economies of scope are characterized by efficiencies formed by increased variety of services, economies of scale are characterized by increased volume of the same service. Both are important ways to approach efficiency.
[19] People-centered health services is an approach to care that consciously adopts the perspectives of individuals, families and communities, and sees them as participants as well as beneficiaries of trusted health systems that respond to their needs and preferences in humane and holistic ways.

be considered, where appropriate and with quality training, supervision and health products. This shift lowers the cost of service provision and improve accessibility.

(3) Integrating and optimizing laboratory service delivery through systems integration of technologies, improving instrument placement strategies, and optimizing referral networks. Optimal use of multi-disease testing laboratory equipment can be promoted through automation and consolidation to address the under-utilization of laboratory equipment as a major source of inefficiency.

(4) Consolidating laboratory testing coupled with specimen transportation improvement can enhance quality and achieve lower costs. These actions should be balanced with access and timeliness of result for clinical use. More information on how to improve the efficiency of laboratory systems can be found in Laboratory Systems Strengthening Technical Brief.

(5) Adopting a systems approach to address common bottlenecks in service delivery across the three diseases, such as stock-outs or health worker shortages, through effective planning and implementation management.

(6) Promoting private sector engagement in service provision, improving both the accessibility and quality of health services through strategic private sector engagement.

3.4 Equity: pursuing fair and socially just allocation

Equity[20] refers to the fair opportunity for everyone to attain the full potential for health and wellbeing, with no person disadvantaged due to social, economic, demographic or geographic differences.

Equity lies at the heart of the Global Fund and its vision of 'a world free of the burden of AIDS, tuberculosis and malaria with better health for all'. The Global Fund strategy includes the objective of promoting and protecting human rights and gender equality, which are critical and necessary to achieve equity more broadly. Applicants are encouraged to review Global Fund related technical briefs on human rights and gender equity.

As a core component of VfM, equity requires dedicated commitment to reach, among those most affected and left behind first, even if costs are higher. Key and vulnerable populations, particularly if criminalized or facing other human rights-related barriers, may not be able to access health-facility based services. Community-led responses or key populations-led responses, while potentially requiring higher costs for inputs, are more effective in reaching the hardest to reach populations.

Equity underpins effectiveness of investments and their impact for the longer term, given that epidemic control and disease elimination efforts can only be successful if no one is left behind. Ignoring pockets of disease in underserved populations leads to resurgence of epidemics and higher costs. Equity considerations are therefore key in assessing the effectiveness of funding requests. Adequate emphasis and investment in interventions should be dedicated to removing human rights-related barriers and promoting gender equality, while protecting and improving the health of key and vulnerable populations. Enhanced equity in accessing services and equality of outcomes might require additional resources in the short-term to achieve the long-term impact. This is fully aligned with the VfM framework and the SDGs premise of leaving no one behind.

[20] Equity and Health Inequalities

Gender inequity, discrimination on a multitude of grounds, and other human rights-related barriers keep people away from available services[21], reducing the utilization therefore efficiency of those available services. For example, in settings where harm reduction is only available in health facilities and require registration with the narcologist, people who inject drugs (PWID) may not access services because doing so may expose them to risks of losing jobs, driving licenses and even child custody. It is important to ensure that multiple systems and sectors including health and criminal justice, government, and civil society work together to deliver available, accessible, acceptable and quality services in an equitable manner, in order to produce the desirable health outcomes, maximizing impact.

Equity and Efficiency goals therefore are or can be well-aligned in most settings. Improving equity helps to achieve efficiency, and vice versa.

- To achieve national targets and maximize impact of investments, countries should focus on effective interventions to key and vulnerable populations who are most affected by the diseases. Doing so drives up impact, leveraging efficiency.
- Achieving efficiency is possible while reaching equity goals. Service delivery cost might be higher for reaching key and vulnerable populations or underserved populations in remote areas. In this context, efficiency means finding the most cost-effective way of achieving the objective of reaching such populations. For example, online legal counselling has been used in Russia to reach people who use drugs and refer them to existing though limited community-led harm reduction services. Such innovative and cost-effective approaches of service delivery are not only more effective but efficient, removing barriers to services and improving equity.

In situations where efficiency and equity may appear to be in direct conflict and point investment in different directions, a balance needs to be found. An example might be determining the balance of investment between relatively better-off population residing in easy-to-reach areas and marginalized populations living in difficult-to-reach localities. From an efficiency perspective, much higher impact might be achieved through investments directed to the better-off population, given relatively easy access at much lower cost. However, a key consideration is the need to rebalance the proposed investment towards remote populations who may be at greater risk of poverty and disease burden but with the same rights of access to care, consistent with the SDG 2030 agenda of *Leaving-No-One-Behind*.

Intervention prioritization could be done in a way that balances efficiency and equity goals. For example, a country may score each health intervention according to explicit equity and efficiency criteria, using cost-effectiveness as an efficiency criterion and the reduction of diseases burden or catastrophic health expenditures among key and vulnerable populations as equity criteria. Different weights may then be applied to each criterion, so policy makers can fully recognize the alternatives in order to better balance efficiency and equity. The resource allocation needs to be done through a transparent and inclusive process with full engagement of key stakeholders including key, vulnerable and other underserved populations.

Applicants may wish to highlight the effort and investment made to achieve equity. For instance:

[21] UNAIDS (2019) Global AIDS Update, Communities at the Centre; Declaration of the rights of people affected by TB (2019); RBM and Global Fund (2019) The Malaria Matchbox Tool: An equity assessment tool to improve the effectiveness of malaria programs.

- Enacting laws and regulations or introducing other institutional changes to remove human rights-related barriers for key and vulnerable populations to access health services;
- Considering the health and community systems' context and meaningfully engaging communities in the funding request development process and VfM decision-making[22];
- Identifying relevant equity barriers, including financial, human rights and gender-related barriers to access to services and directing sufficient investment to address those barriers, meeting needs of key and vulnerable and other underserved population groups, as well as strengthening community health systems;
- Building capacity of community-based organizations in budget advocacy and community-based monitoring of service availability, accessibility, acceptability and quality, including preempting and reporting stockouts and human rights and gender-related barriers;
- Ensuring that health information systems can collect and use disaggregated data to understand inequities in health risk and outcomes, and responding appropriately (see example in **Annex 4**);
- Identifying investment opportunities that enhance both efficiency and equity;
- Explaining resource allocation criteria and the rationale for balances made in settings where resource allocation for efficiency and equity may have a conflict.

3.5 Sustainability: strengthening short- and long-term impact

Sustainability as defined by the Global Fund in its STC Policy refers to "the ability of a health program or country to both maintain and scale up coverage to a level, in line with epidemiological context, that will provide for continuing control of a public health problem".[23] The Global Fund encourages all applicants, regardless of where they are on the development continuum or when they may transition fully from Global Fund financing, to strengthen the long-term sustainability of health systems and national disease responses and enhance country-led and inclusive sustainability planning.

With an overall focus on improving health outcomes and achieving disease program goals, countries are encouraged to ensure that funding requests consider both immediate and long-term impact of investments. As such, a review of the VfM aspects of a funding request should take into account longer-term sustainability and near-team efficiency and effectiveness considerations.

Illustrative examples of the types of consideration which may promote the overall sustainability of disease programs and health systems include (but are not limited to):

- Making epidemiological and financial justification for the introduction of new technologies in the context of both near and long term programmatic goals, especially in circumstances where such introduction will incur higher up-front costs or have long-term financial implications;
- Considerations for future challenges in Global Fund financing and early planning for domestic uptake of Global Fund financed interventions, particularly in the case of reduced funding or upcoming transition. This includes gradual uptake of program costs financed by external donors, exploring service models that are domestically affordable, and integration of key services into national health insurance schemes;

[22] See information note on *Building RSSH through Global Fund Investments*.
[23] Global Fund Sustainability, Transition and Co-financing Policy.

- Frontloading efforts to remove human rights and gender-related barriers to enhance access, uptake and retention in services for key and vulnerable populations;
- Promoting the access to affordable and quality health products through domestic systems and with domestic financing. To support countries, the Global Fund has been working to increase their access to PPM (via wambo.org), including if procuring with domestic financing. Other similar entities (e.g. GDF) already offer pooled procurement options for TB drugs.

The Global Fund's STC Guidance Note provides more information on the Global Fund's overall approach to this critical area, and is helpful resource for applicants to refer as they work to strengthen sustainability and improve overall VfM.

4. Finding the Right Balances to Maximize VfM

The multi-dimensional nature of VfM requires policy makers to make investment decisions based on careful consideration of the complex country context, while balancing short- and long-term national policy goals.

Some examples of these are listed below, for applicants to considering in their funding requests:

Prevention and treatment. When available resources are insufficient to fully cover all interventions required for a comprehensive disease response, applicants need to identify an appropriate mix of interventions that maximizes impact; i.e., to reduce morbidity and mortality, while putting the country on the path to a sustainable response that will end the three diseases. For instance, in HIV, the design of an evidence-based, cost-effective mix of interventions should include the following key steps: i) include prioritized, technically sound interventions, ii) assess the prevailing epidemic situation, iii) determine the costs involved in delivering services, and iv) consider sustainability and equity, such as accessibility of services for key populations, with attention on addressing human rights- and gender-related barriers (for more information please refer to the HIV Information Note). This must be coupled with efforts to advocate for expanded national resources and capacity so that responses can be expanded to cover all those in need and sustained into the future.

Similar considerations in choosing appropriately prioritized responses are also needed for TB and malaria given resource constraints. Disease impact model models (see **Annex 2**) can assist countries by presenting the benefits of alternative program combinations to decision-makers to help them make the most effective use of the resources available and understand the need to mobilize additional resources to end the diseases.

Disease control and elimination. Disease burden or epidemiological status can differ significantly sub-nationally for a given country, thus there might be a need for policy makers to balance the goals of controlling the disease in some regions while achieving elimination in other regions. In this case, a funding request would need to explain the investment decision(s) and VfM, in epidemiological terms, supported by a thorough analysis of the most effective interventions to achieve the control and elimination goals, and the anticipated impacts of these interventions together with their linkages and inter-dependencies.

High up-front costs and sustainability. The funding landscape and fiscal reality in the countries that the Global Fund supports are important factors for intervention prioritization. Any short-term investment plan needs to consider its long-term financial implications key for sustainability. An investment plan to adopt new technologies or treatment protocols should present both epidemiological and financial justifications, particularly where such decisions will incur high up-front costs or have long-term financial implications around running cost for example. A technically sound funding request should reflect a careful balance between reaching the coverage levels of critical interventions needed to achieve impact and ensuring the financial sustainability of maintaining or scaling up those interventions over time.

Investing for short and long-term results. Investment in disease specific interventions is critical to achieve epidemiological impact. However, the impact of such investment cannot be maximized without strong health systems. The investment required for building RSSH needs to be considered during resource allocation decisions, which may be pressured to demonstrate near-term results. This means advocating for a shift from focusing on short-term, input-focused or disease-specific

support (such as vehicles, travel, training costs, equipment, and others) towards more strategic investments (such as strengthening management, improving accountability mechanisms, empowering service providers, and others) that build capacity and lead to sustainable results. This should be phased and differentiated based on the epidemiological profile and maturity of the health system in each country. While the impact of some RSSH investments may not be captured within the three-year Global Fund funding cycle, the focus should be on identifying a balance between interventions that demonstrate quick results, and those that take longer to influence health outcomes and improve the performance of the health system[24].

Efficiency and equity. Within a given funding envelope, investing in more cost-effective interventions is likely to lead to higher impact (e.g. life saved, DALY averted) than investing in less cost-effective interventions. This helps achieve the efficiency goal. However, such efficiency gains should not worsen equity and violate people's right to health[25]. Policy makers would have to undertake a careful analysis of social and ethical implications of those interventions which present different cost-effectiveness levels. Policy makers should mobilize as much resources as possible to finance comprehensive disease responses and find the most effective, efficient and equitable ways to deliver services. For example, prioritizing drug-susceptible TB (DS-TB) treatment over multi-drug resistant (MDR) TB treatment may lead to higher DALYs averted due to the fact that the first one is more cost-effectiveness. However, cost and consequences of not treating MDR-TB now or deprioritizing it could be catastrophic and would have an undesired impact in the population. National policy makers should find ways to meet the needs of all those affected by TB, regardless of the cost of the different treatments required.

In situations where efficiency and equity conflict and point investment in different directions, it is important to strike a balance, analyzing alternatives and making decisions through a transparent and inclusive process. Priorities should be given to the efforts to reach key and vulnerable population groups who are most affected.

Sample Questions to Address the above Considerations

1. Does the funding request present a balanced investment to reduce both short and longer-term morbidity and mortality?
2. Does the funding request present a rationale for its investment plan to focus on either disease control, elimination or both?
3. How does the funding request justify its need for large up-front investment and address potential near-term funding shortfalls and longer-term funding requirements given the up-front investment? What is the implication of the investment in terms of program sustainability?
4. Under a setting for which efficiency and equity may point investment in different directions, how has the funding request considered and balanced its investment in order to both maximize impact but also improve equity, including human rights and gender equity?
5. How does the funding request address the need to use funds to scale up key services and increase impact, as compared to support proper transition planning, build stronger RSSH, and invest in other areas that are critical to ensure long-term program success without the Global Fund support?

[24] See more information in *Building RSSH through Global Fund Investments*.

[25] See the Global Fund human rights complaints procedure and the 5 minimum human rights standards that are part of the Global Fund grant agreements

5. Instructions on Using this Technical Brief to Address the VfM Question in the Funding Request

Important considerations of VfM are summarized as guiding questions on all five VfM dimensions in the **Table 1** of the Executive Summary.

When addressing VfM question, applicants are recommended to first provide a short description or narrative statement of the overarching VfM approach. For example, applicants can explain how their funding requests will deliver VfM as they will:

- Build inclusion (i.e. leaving no one behind) by focusing on ensuring that x million key and vulnerable population in y localities are included in the national program;
- Support an ongoing national strategy to roll-out capacity building at sub-national level to manage multiple diseases through integration;
- Drive down overall program costs while investing in increased HRH skills and retention thus improving quality and sustainability;
- Add resources needed to scale up DHIS2 to cover the entire country, in addition to x US dollars currently funded by national resources and y US dollars by donor z. It will also help strengthen health information system to all districts not just GF supported districts.

Applicants can then highlight their most important ongoing and future VfM improvement efforts in the three dimensions of VfM (economy, efficiency and equity), with examples, figures and recent data if available. Illustrative examples include but not limited to:

- Feasibility and sustainability analysis of new technology or product;
- Significant additional savings of x US dollars resulted from the expansion of the health products procured through PPM;
- Use of key populations implementation tools for effective integrated key-populations-led prevention services[26];
- Allocative efficiency analysis to inform resource allocation decisions;
- The scaling up of differentiated care models such as shifting of the ARV refill from every 3 to 6 months among stable patients;
- Effort to integrate disease specific responses (e.g. prevention of mother-to-child transmission (PMTCT), TB screening in pregnancy women, and Malaria in Pregnancy (MiP) interventions) into broader PHC platform such as antenatal care;
- Lab network optimization analysis;
- ARV cost per person per year reduced from x US dollars in year s to y US dollars in year t due to improved service delivery;
- Test yield increased from m% to n% resulting from better targeting strategies;
- Enhanced retention in treatment following improved community-led case management;
- Plans that help demonstrate the effort to improve VfM of the investment.

While applicants may face challenges when responding to the VfM question due to lack of available information in the country for instance, they may wish to use the VfM framework described in this technical brief to define how they plan to approach VfM moving forward.

[26] Separate implementation tools are available for sex workers, men who have sex with Men, transgender people and people who Inject drugs

Applicants are encouraged to be transparent about the challenges faced in approaching VfM. When lack of data limits applicants' ability to understand its own VfM, applicants are highly encouraged to consider investing in this area to gain further knowledge on the key information underpins VfM, such as local cost and local effectiveness of key interventions. For example, the data on the unit costs of Adolescent Girls and Young Women (AGYW) interventions may be very limited, or there might be too little information on which type of differentiated ARV delivery modality or TB active case-finding effort is more efficient under what settings, or there is uncertainty on how to best set prices to pay CSOs to provide key and vulnerable population prevention services in order to ensure sustainability. Applicants can request investments to build evidence to overcome those critical information barriers for future strategic resource allocation decisions.

When there is limited capacity at national or subnational level in data analysis to support strategic resource allocation and utilization decisions, investment might be needed to build capacity in this area. Applicants are encouraged to consider the use of resources, including those from the Global Fund, to enhance data systems, especially financial data system and public financial management to strengthen countries' capacity in better tracking and therefore using resources moving forward.

Applicants are highly encouraged to make efforts to achieve VfM throughout the Global Fund grant life cycle, from funding request to grant closure. **Annex 3** provides a stepwise view of the priority areas aimed to leverage efficiency through partnership among the Global Fund, national governments, partners and the global health community. The diagram highlights key focus areas of action in each of the key stages of the Global Fund grant life cycle.

Applicants can refer to Global Fund Guidelines for Grant Budgeting and Financial Management Handbook for Grant Implementers to ensure the robustness of grant budget and financial management as well as grant performance to secure VfM.

Applicants can also consult **Annex 4** for illustrative country examples of VfM effort and **Annex 5** for additional information on VfM.

6. Glossary

ACT	Artemisinin-based Combination Therapy
ART	Antiretroviral Therapy
ARV	Antiretroviral
CBA	Cost Benefit Analysis
CCM	Country Coordinating Mechanism
CEA	Cost Effectiveness Analysis
CHWs	Community Health Workers
CSO	Civil Society Organization
DALY	Disability Adjusted Life Year
DFID	Department for International Development of the United Kingdom
DSD	Differentiated Service Delivery
Gavi	Global Alliance for Vaccine Initiative
GDF	Global Drug Facility
GFF	Global Financing Facility
HPM	Health Products Management
HRH	Human Resources for Health
HTA	Health Technology Assessment
LLIN	Long Lasting Insecticide-treated Net
MDR	Multi-drug Resistance
NSP	National Strategic Plan
PEPFAR	President’s Emergency Plan for AIDS Relief
PHC	Primary Health Care
PPM	Pooled Procurement Mechanism
PWID	People Who Inject Drugs
RSSH	Resilient and Sustainable Systems for Health
SDG	Sustainable Development Goal
STC	Sustainability, Transition, and Co-financing
TB	Tuberculosis
TRP	Technical Review Panel
UHC	Universal Health Coverage
UNAIDS	Joint United Nations Programme on HIV/AIDS
VfM	Value for Money
WHO	Word Health Organization

Annex 1: Leading Sources of Health System Inefficiency[27]

Table 4.1. **Ten leading sources of inefficiency**

Source of inefficiency	Common reasons for inefficiency	Ways to address inefficiency
1. Medicines: underuse of generics and higher than necessary prices for medicines	Inadequate controls on supply-chain agents, prescribers and dispensers; lower perceived efficacy/safety of generic medicines; historical prescribing patterns and inefficient procurement/distribution systems; taxes and duties on medicines; excessive mark-ups.	Improve prescribing guidance, information, training and practice. Require, permit or offer incentives for generic substitution. Develop active purchasing based on assessment of costs and benefits of alternatives. Ensure transparency in purchasing and tenders. Remove taxes and duties. Control excessive mark-ups. Monitor and publicize medicine prices.
2. Medicines: use of substandard and counterfeit medicines	Inadequate pharmaceutical regulatory structures/mechanisms; weak procurement systems.	Strengthen enforcement of quality standards in the manufacture of medicines; carry out product testing; enhance procurement systems with pre-qualification of suppliers.
3. Medicines: inappropriate and ineffective use	Inappropriate prescriber incentives and unethical promotion practices; consumer demand/expectations; limited knowledge about therapeutic effects; inadequate regulatory frameworks.	Separate prescribing and dispensing functions; regulate promotional activities; improve prescribing guidance, information, training and practice; disseminate public information.
4. Health-care products and services: overuse or supply of equipment, investigations and procedures	Supplier-induced demand; fee-for-service payment mechanisms; fear of litigation (defensive medicine).	Reform incentive and payment structures (e.g. capitation or diagnosis-related group); develop and implement clinical guidelines.
5. Health workers: inappropriate or costly staff mix, unmotivated workers	Conformity with pre-determined human resource policies and procedures; resistance by medical profession; fixed/inflexible contracts; inadequate salaries; recruitment based on favouritism.	Undertake needs-based assessment and training; revise remuneration policies; introduce flexible contracts and/or performance-related pay; implement task-shifting and other ways of matching skills to needs.
6. Health-care services: inappropriate hospital admissions and length of stay	Lack of alternative care arrangements; insufficient incentives to discharge; limited knowledge of best practice.	Provide alternative care (e.g. day care); alter incentives to hospital providers; raise knowledge about efficient admission practice.
7. Health-care services: inappropriate hospital size (low use of infrastructure)	Inappropriate level of managerial resources for coordination and control; too many hospitals and inpatient beds in some areas, not enough in others. Often this reflects a lack of planning for health service infrastructure development.	Incorporate inputs and output estimation into hospital planning; match managerial capacity to size; reduce excess capacity to raise occupancy rate to 80–90% (while controlling length of stay).
8. Health-care services: medical errors and suboptimal quality of care	Insufficient knowledge or application of clinical-care standards and protocols; lack of guidelines; inadequate supervision.	Improve hygiene standards in hospitals; provide more continuity of care; undertake more clinical audits; monitor hospital performance.
9. Health system leakages: waste, corruption and fraud	Unclear resource allocation guidance; lack of transparency; poor accountability and governance mechanisms; low salaries.	Improve regulation/governance, including strong sanction mechanisms; assess transparency/ vulnerability to corruption; undertake public spending tracking surveys; promote codes of conduct.
10. Health interventions: inefficient mix/ inappropriate level of strategies	Funding high-cost, low-effect interventions when low-cost, high-impact options are unfunded. Inappropriate balance between levels of care, and/or between prevention, promotion and treatment.	Regular evaluation and incorporation into policy of evidence on the costs and impact of interventions, technologies, medicines, and policy options.

Source (*6*).

[27] WHO (2010): The world health report: health systems financing: the path to universal coverage, Chapter 4 More health for the money

Annex 2: Allocative Efficiency Analysis and Tools Available

Allocative efficiency analysis is an approach to inform how the allocation of resources may be done in such a way as to achieve the greatest impact (according to a particular definition) with the resources that are available. Allocative efficiency tools do this by examining and comparing the costs and expected impact on the epidemics of many different ways in which resource could be allocated. The analysis requires data, such as cost estimates, epidemiological trends, and program operations and results. It should be conducted through a country-led process. A variety of tools have been developed to support allocative efficiency analysis for specific disease programs and for the overall health system. See the list of selected available tools in **Table 2** below. Those tools are mostly epidemiological impact models that are often applied in conjunction with the costing modules embedded in the tool itself.

There are different utilities of allocative efficiency tools:

- The most common use is to inform central level planning, including the development of disease specific or health sector NSPs. There is a growing trend to use these tools to support subnational planning, however. This require using local costing and epidemiological data which are increasingly available. Subnational applications would be benefited from the increased country capacity and availability of skills in data use.
- Another application is to provide analytical insights to make the case for investment and assist advocacy and resource mobilization efforts to fill funding gaps needed for disease control and elimination. This would enable countries to scale up coverages and focus on new directions addressing existing challenges and capitalizing on new opportunities.
- Last but not least, some of the tools can help shed light on program implementation design and support the development of operational plans of NSPs. For instance, to support the estimation of subnational disease burden, provide insights on different service delivery modalities along the care cascade, and share insights on optimal placement of new technologies.

To take full advantage of allocative efficiency tools and maximize the value of the use, program planners need to recognize the following:

- The valuable use of the tools requires insightful reviews by technical experts who understand local program context and can help to properly interpret and translate analysis results into policy making or program implementation. The tools may have important deficiencies due to limited evidence to inform model parametrization and/or lack of quality data to meet the data requirements. These limitations may affect the reliability of the analysis results and have implications on how to properly interpret and use those results.
- Country cost estimates as key inputs to the tools remain weak given the limited availability and uncertain quality of the cost estimates countries can provide. Greater effort on improving costing estimates is critical and should be prioritized.
- Due to the lack of quantitative evidence of the effectiveness of social enablers on disease transmission, not all-important interventions aimed at addressing gender equity and human rights barriers to key services are adequately captured by the allocative efficiency tools. Policy makers should consider this limitation when applying allocative efficiency tools to inform resource allocation decisions and give much-deserved attention to the investment in social enablers which are key to the success of disease responses.

- The choice of what is to "maximize' is important. Often this is taken to be maximizing the reduction in deaths or infections due to a disease in a certain period. However, other issues may need to be considered or incorporated too, such as equity or financial risk protection. Policy makers are highly recommended to factor equity or financial risk protection implications as appropriate into account when making investment decisions.
- As allocative efficiency tools are unable to model the impact of health system level investment (e.g. human resources, supply chain, health information systems, policy and governance and management), it is suggested that countries consider and estimate the resources needed for system investment to address critical system bottlenecks for efficiency service delivery, improving system level investment efficiency.

The Global Fund has been providing support for countries to conduct allocative efficiency analysis since 2014. In collaboration with partners (e.g. UNAIDS, WHO, the World Bank, Bill & Melinda Gates Foundation (BMGF), and Stop TB Partnership) and local stakeholders, this support is aimed to assist countries in developing well costed and prioritized disease-specific or health sector NSPs, as well as Global Fund funding requests.

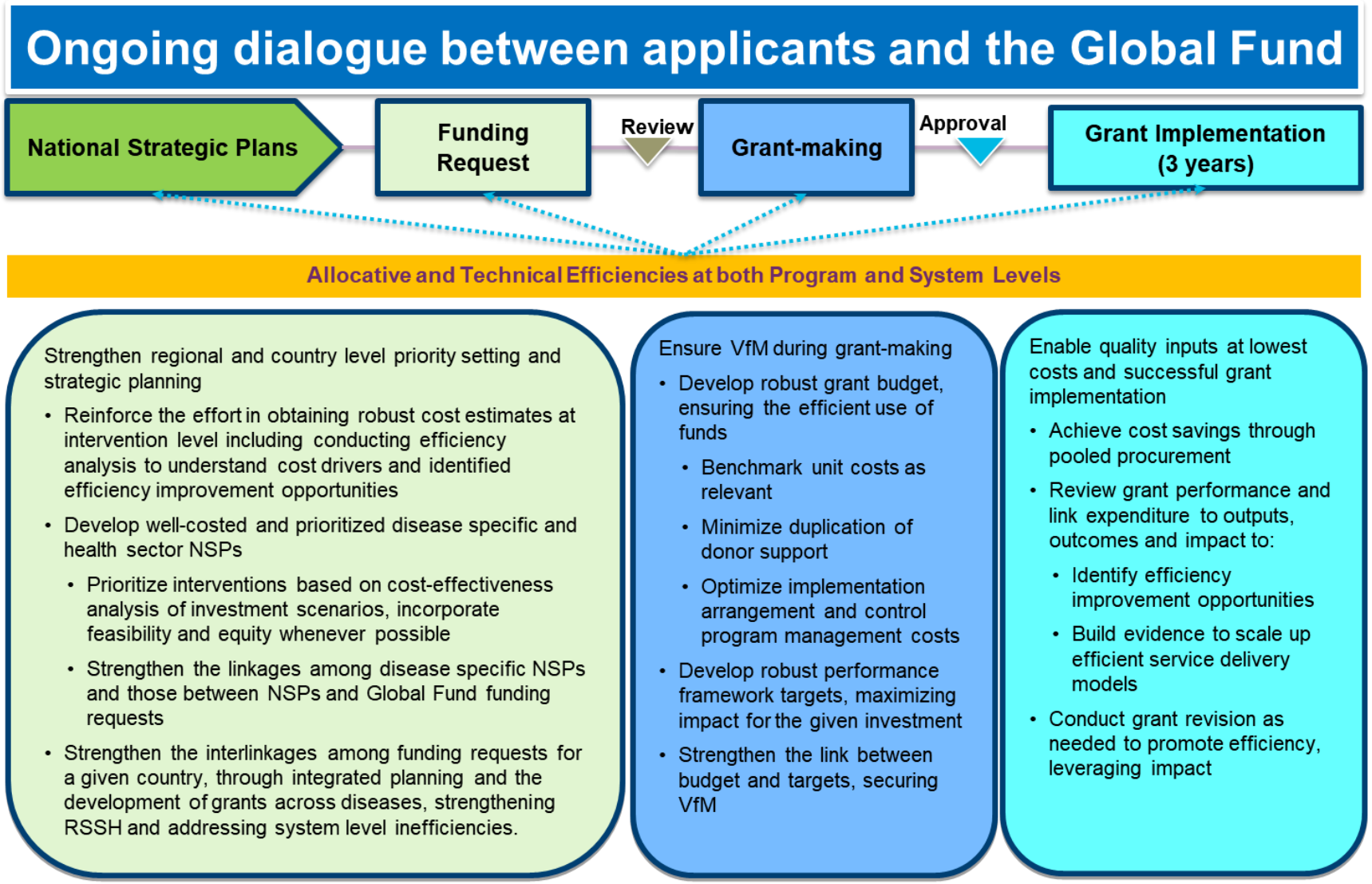
Countries under the Global Fund support can access support on efficiency analysis both at program and system levels through the Global Fund's Strategic Initiative: Sustainability, Transition and Efficiency (2017-2019). Interested countries can contact their Fund Portfolio Managers for more information on how to access the support.

Table 2. Major Allocative Efficiency Tools (by Alphabetical Order)

Disease program/System		Tool	Tool developer[28]
Disease program	HIV	AIM/Goals model	Avenir Health
		AIDs Epidemic Model (AEM)	East-West Center
		Optima HIV	Burnet Institute
	TB	Australian Tuberculosis Modelling Network (AuTnMN)	James Cook University
		Imperial TB model	Imperial College London
		Optima TB	Burnet Institute
		TB Impact and Modelling Estimates (TIME)	London School of Hygiene and Tropical Medicine
	Malaria	Elimination Scenario Planning	Imperial College London
		Epidemiological MODeling (EMOD) malaria modelling	Institute of Disease Modelling
		Malaria Elimination Transmission and Costing (MEMTC) (in the Asia Pacific)	Mahidol Oxford Tropical Medicine Research Unit
		OpenMalaria	Swiss TPH
		Optima Malaria	Burnet Institute
		Spectrum Malaria	Avenir Health
Health Systems		Health Intervention Prioritization (HIP) Tool	University College London
		OneHealth	WHO and others
		Socio-Technical Allocation of Resources (STAR)	London School of Economics
		WHO-CHOICE	WHO

[28] Co-developers or collaborators of some of the tools can be found on the website of the tools.

Annex 3: Leveraging Efficiency throughout the Global Fund Grant Life Cycle: Priority Actions



Annex 4: Efforts to Improve VfM: Illustrative Country Examples

Economy

Example 1: Reforming procurement and contract management in Ethiopia to leverage the power of market shaping

Ethiopia is the world's fifth largest buyer of antiretroviral drugs (ARV). In 2017, the country started major reforms of its Central Medical Stores (Ethiopia Pharmaceutical Supply Agency) supported by key partners. As part of these efforts, the Global Fund's Sourcing Team and Country Team engaged with Ethiopia on a knowledge sharing initiative of procurement and contract management. Following this knowledge exchange, Ethiopia adopted procurement practices to establish long-term framework agreements, which included:

- Performance measures to achieve lowest sustainable prices without compromising reliable delivery;
- Incentives for manufacturers to over-perform, a measure deemed critical for ensuring alignment with the Global Fund's market shaping efforts.

Following the exchange visits between Geneva and Addis Ababa which took place between 2017 and 2019, Ethiopia has now established three-year framework agreements for ARVs, HIV testing kits, Anti-Malarial drugs and many other categories in their Revolving Drug Fund. This initiative to move beyond serial spot tenders has ensured commodity security for the country and has resulted in significant savings from unit cost reductions made possible through higher volumes and better demand predictability for suppliers.

Example 2: Backing up strong response to HIV through an effective and efficient supply chain in Malawi

In Malawi, nearly one million people living with HIV/AIDS (PLWHA) are on treatment. The volumes of supplies required for the Prevention, Diagnosis and Treatment therefore could easily turn into a "logistics nightmare" if not properly coordinated, planned and executed.

With the support of the partnership, Malawi overcame this challenge by optimizing procurement planning, shipment scheduling and using the most cost-efficient freight options (i.e. sea freight) to deliver thousands of Tons of health products across continents to the country. The in-country supply chain arrangement has been adjudged to be cost efficient and patient-centered. The country consolidated the storage and distribution services and engaged the Private Sector Operators to deliver products to over 800 sites on bi-monthly basis at the most efficient rates comparable to private sector.

The Malawi HIV/AIDS program is reputed to be a pioneer on many fronts including the Option B+ and unmatched in the use of real time quality information that enables patient-centered planning and programming. All these put together along with the collaboration with the GF PPM/Wambo.org, Malawi national HIV program has been able to save over 80 million US dollars between 2016 and 2018.

Example 3: Reforming human resources management in Tanzania

The Tanzania, Country Coordinating Committee conducted an HR reform exercise which included a review of the management and coordination structure as well as an assessment of salary scales and performance management matrix related to employees funded under the Global Fund grant.

While the objective of achieving economy was not the primary intent of the review, it yield savings ranging from 3% to 25% for different staff positions which concluded with a total HR budget of USD 16 million. The positions funded by the Global Fund were consolidated across all grants and included Program Management Units, central level staff within the disease programs as well as health workers at subnational level and aligned to the government salary scale with a post adjustment to reflect the fact that posts were non-pensionable as contract employees. This impacted over 1000 staff posts and was approved by the Global Fund in July 2018.

Example 4: Achieving savings through improved health product procurement in Zimbabwe

The HIV grant in Zimbabwe has a budget of USD 426.4 million and is managed by United Nations Development Programme (UNDP) with the Ministry of Health and Child Care as a key sub-recipient.

During the 2018 to 2020 implementation period, savings of over USD 30 million or 7% of total grant budget were achieved during the procurement of health products (medicines) based on a pro-active update of the procurement prices following the conclusion of long-term agreements with suppliers and global ARV price reductions.

The savings achieved from the reduction in prices compared with the original references prices used during grant making were re-invested into addressing ART gaps, prevention and RSSH interventions based on a prioritized unfunded quality demand approved by the CCM.

Efficiency

Disease program level efficiency example 1: Evidence-based national malaria strategic plan in Tanzania

To address challenges in Tanzania's limited progression towards the achievement of malaria elimination by 2030, Ministry of Health, in collaboration with WHO, conducted a Midterm Review (MTR) in 2017 for systematic assessment of impact and program performance. The MTR was followed by a consultative expert meeting in February 2018 of global and national malaria experts, which identified appropriate strategic approaches to achieve country targets and realize greater impact and reduce malaria to very low levels.

The NMCP identified two strategic questions for future planning: 1) Should the country continue charting in the same way towards malaria elimination with the current interventions? 2) Is the current situation conducive for deploying suitable and ambitious intervention packages for defined areas/populations?

Building on the WHO Framework to implement the Global Technical Strategy for Malaria 2016 – 2030, mathematical modelling (OpenMalaria) analysis was conducted to evaluate the feasibility of Tanzania achieving its National Malaria Strategic Plan (NMSP) targets. This led to a model-based evaluation of future scenarios, which confirmed the need for NMSP update with assignment of council areas into five strata, differing epidemiologically and a more targeted approach in the supplementary malaria midterm strategic plan. These simulations provided a rationale for the design of intervention packages and informed a more targeted approach in the supplementary Malaria Midterm Strategic Plan (2018).

Disease program level efficiency example 2: Using evidence in a new way to support the development of Kenya TB NSP

In developing its TB NSP 2019-2023, Kenya applied the WHO's People-Centered Framework to facilitate a systematic approach to country-led, data-driven and people-centered planning, prioritization and decision-making.

Between 2014-2018, the country built an evidence-base in support of this refined approach to better understand the experience(s) of people living with TB and their barriers to accessing high-quality care. This body of evidence, ranging from a recent national prevalence survey to facility-level data across the country, highlighted where people with TB may be missed by the health system. During NSP development, in-country TB stakeholders systematically used these pieces of evidence to identify problems and conducted a 'Root Cause Analysis' along the patient continuum of care. This enabled improved understanding of the patient pathway including accessibility of care and causes of missed diagnosis as well as issues related to linkage to care and treatment adherence. Respective intervention strategies were then formulated and costed.

A TB model collaboratively developed by Kenya National TB Program and the Imperial College London was applied to assess the cost-effectiveness of different interventions and prioritize the most impactful interventions under different resource envelopes. The analysis supported the formulation of the prioritized investment framework for the new NSP and created strong foundation for the subsequent development of subnational operational plans.

Disease program level efficiency example 3: Return on TB investment analysis to information TB response in Thailand

Thailand was classified by WHO as a triple 'high burden' country for TB, MDR-TB and TB/HIV in 2015. Thailand is among WHO member states endorsed 'End of TB' strategy initiated by WHO in 2012 to reduce the number of TB patients to fewer than 10 in every 100,000 by 2035.

To understand the return on Thailand's End TB Strategy and identify priority actions to maximize return to investment, a research study was conducted by Health Intervention and Technology Assessment Program (HiTAP) of the Ministry of Public Health, to estimate the cost-benefit of a 5-year strategic plan (2017-2021) from a societal perspective across different scenarios.

The study concluded that:

- Thailand incurs an economic burden from TB of up to 2,150 million USD per year, the TB burden and productivity loss due to TB will keep worsening if there is no change from the TB strategy in 2016.
- Thailand TB strategic plan (2017-2021) would require more investment but it will significantly reduce the disease burden and productivity loss due to TB with a rate of return on invest being 19.6.

The study provides a solid cost-benefit analysis to back up the urgent need for higher TB investment and highlight programmatic focus for Thailand.

Disease program level efficiency example 4: Optima HIV analysis to support Sudan HIV program investment decisions

National HIV Program of Sudan experienced a 40% funding reduction in 2013. An Optima HIV analysis was carried out subsequently in 2014 to help identify ways to maximize impact given the limited funding available. The analysis recommended the shift of the limited HIV resources from general population prevention to scale up treatment and more importantly prevention programs among FSW, MSM and their clients or partners who accounted for nearly 80% of HIV transmission. In parallel, Sudan's Ministry of Health made a concerted effort to integrate its HIV, TB and Malaria services, which led to increased system-level efficiency and reduced program management costs.

Informed by allocative efficiency analysis and thanks to program management cost savings, the National HIV program tripled coverage levels of FSW and MSM prevention programs and double the treatment coverage over the Global Fund 2015-2017 grant cycle. This strategic shift is projected to avert 11,000 more infections and 2000 more deaths between 2015-2020, as compared to a scenario had the national program kept the way how the resources were allocated and utilized in the past.

Disease program level efficiency example 5: **Differentiated HIV service delivery in Uganda and Malawi**

Uganda and Malawi are among the growing number of countries scaling up differentiated delivery (DSD) of HIV services. DSD is a client-centered approach to provide tailored services by population, clinical characteristics and context. Elements of DSD include differentiated models of care, better utilization of data for decision making, and effective management of the facility with a patient-centered focus in implementation. Evidence indicates that implementing differentiated care for ART yields considerable efficiencies as compared to when all HIV patients are treated the same regardless of their stability.

The community-based ART delivery model carried out by The Aids Support Organization (TASO) in Uganda leads to better CD4 evolution and higher retention, with 20% lower of unit cost per patient per year, as compared with facility-based ART delivery model. 'Community ART Groups' (CAGs) in Malawi obtains higher retention rate among CAG members, as compared to non-CAG patients who were also stable patients. The introduction of CAGs leads to 10% reduction in annual unit cost of service provision and lowers the burden of CAGs members by reducing the number of ART refill visits per person year by over 60%.

Disease program level efficiency example 6: **Using quality improvement approaches to increase TB case detection in Tanzania**

In 2012, the first national TB prevalence survey of Tanzanian, one of the high TB burden countries globally, revealed a much higher TB burden and missing people with TB than previous estimates. The 'Quality Improvement (QI) in TB Case Detection' initiative was subsequently introduced in 2016 with the aim of overcoming health system challenges to deliver high-quality services by scaling-up universal provider-initiated TB screening at each entry point of the health facility and improving TB case notification. The positive results from the pilot provided evidence for a national scale up of this initiative afterward.

After 18 months of implementation (July 2016 to December 2017), additional gains were made from the initiative, including a 12.4 percent increase in national TB case notification (from 62,180 cases in 2015 to 69,818 cases in 2017); increased suspicion of TB among health workers; the incorporation of active TB case finding in facility, district, regional, and national forums; and, increased notification of childhood TB cases.

Given the minimal additional resource which was invested in this initiative compared to the significant improvement in the health outcome achieved, the initiative presents a good case of VfM.

System level efficiency example 1: **Cross-programmatic inefficiency diagnosis to promote integration and financial management in Ghana**

Recent and future funding declines from development partners (e.g. Gavi, Global Fund, DFID, EU, Denmark, and PEPFAR), due to Ghana's transition towards becoming a middle-income economy, triggered concerns about the possibility of continuing to promote and sustain recent health gains in Ghana. This decline impacted negatively upon Ghana's disease programs, whose health products and operations are funded largely through external support.

In this context, WHO conducted its cross-programmatic efficiency assessment to identify duplication or misalignment across the HIV, TB, Malaria, immunization and maternal and child health programs. Amongst other findings, the analysis identified a lack of financial management coordination across governance structures and fund flows as key constraints to an efficient use of funds. This work support consensus-building among the Ministry of Health, Ghana Health Service, the National Health Insurance Agency and development partners to prioritize detailed work in relation to public financial management systems.

Further support is being provided to help identify solutions for Ghana to better implement its program-based budgeting to take advantage of areas for integration and coordination across functions. It has also spurred action across priority disease programs to consolidate/integrate specific activities through the budgeting and planning process. Lastly, it has reignited the urgency in rolling out the Ghana Integrated Financial Management Information System in the health sector.

This effort has helped partners to address disease program issues which can only be addressed as part of an overall health financing and sector related reform discussions.

System level efficiency example 2: **Lab optimization in Lesotho**

In 2018, PEPFAR and Global Fund laboratory assessments identified risks to program implementation regarding the provision of laboratory services and associated supply chain to scale-up responses to HIV/TB in Lesotho. Under the leadership of Ministry of Health, Global Fund, PEPFAR (USAID, CDC) and partners (USAID Global Health Supply Chain Program), embarked on a plan to optimize the country's laboratory network with a relatively small investment. The diagnostic network optimization aimed to increase access to laboratory services, maximize impact, and generate efficiencies through defining the optimal instruments mix, identifying the most appropriate locations where instruments should be placed, and designing integrated specimen referral network linkages across a revised network using Geographic Information System (GIS)-based optimization tools. Following the diagnostic network optimization, coverage for viral-load has increased from 40% to 72%.

It is expected that this optimization will lead to:

- Increased access to laboratory services
- Improved utilization of GeneXpert platforms to implement HIV/TB integrated testing;
- Improved specimen transportation systems and reduced results return time for clinical decision making
- Decrease in total cost/test as instrument utilization increases.

This effort presents very good VfM, given the investment needed to implement the project was small while the impact and efficiency gains has been significant.

Equity

Example 1: **Economics analysis support policy shift in ART provision to immigrants in Botswana**

Until recently, non-nationals living with HIV had no access to free ART in Botswana. The human rights baseline assessment, carried out in 2018, identified non-nationals as a vulnerable population who had to pay for ARVs unlike nationals who can get free access to ARVs. This policy was a key barrier for access to treatment among the non-nationals and the realization of 90-90-90, resulting in nearly 22,000 PLHIV left without access.

Modelling analysis supported by UNAIDS and PEPFAR made a compelling public health and economic case. Costs of inaction were estimated at 23,000 new infections, additional 116 million USD in HIV and TB treatment, and 30 million USD economic loss due to productivity loss.

In the development of a plan for a comprehensive response to human rights-related barriers to HIV and TB services, the multi-stakeholder working group led by National AIDS and Health Promotion Agency (NAHPA) has considered the above analysis alongside the equity considerations and the obligations to protect, promote and fulfil human rights what Botswana has undertaken through international conventions.

The draft plan made clear provisions for removing such equity barriers to enhance access.

The outcome of all these collective efforts, led by PEPFAR and UNAIDS, resulted in the recent policy shift for Botswana to provide ARV free of charge to non-nationals.

Example 2: **Using data to inform investment decisions promoting equity in Zambia, Nigeria and Niger**

The use of disaggregated quantitative data or to inform investment and program prioritization as well as program design and implementation is a critical aspect of reaching equity in health outcomes.

- Zambia used sex and age disaggregated data to hone their Global Fund funding request to focus on specific sub-populations with investments and program design. This resulted in a more focused funding application including reducing new HIV infections amongst young women age 20-24, and an HIV treatment adherence programs focused on men.
- Nigeria TB/HIV funding request used data showing a differential in TB smear-positive case notification rates (7.25 for men and 4.63 for women) to focus on improving men's access to TB diagnostic and screening services.

Qualitative data can help countries to understand risk and barriers to services that drive differentials in health outcomes.

- Niger used a gender analysis to show that economic dependence on male family members curtailed women's ability to attend malaria services, and proposed interventions to address this barrier including radio messaging targeting men's engagement, and an increased number of female CHWs.

Sustainability

Example 1: **Inclusion of HIV treatment in social health insurance in the Dominican Republic**

A critical aspect of sustainability is to ensure increased domestic financing for key services that have been heavily relying on external resources. More countries are developing national health insurance schemes to increase affordable coverage of key interventions meeting basic health needs, including some HIV, TB and malaria services.

One such country is the Dominican Republic, who is working on the inclusion of HIV treatment in its social health insurance package. As part of this initiative, the Global Fund has coordinated support with key partners to advocate and provide technical assistance and guidance.

Since 2015, the government has approved a national budget to purchase enough ARV drugs for people living with HIV. Aiming to guarantee sustainable financing for ART, the government committed in the 2015–2018 National Strategic Plan to cover ART within its Family Health Insurance (SFS) scheme. This would ensure that regular social insurance contributions by employees, employers and the government can be used to finance affordable treatment for the enrolled population as long as needed. The inclusion of ART in the SFS represents a positive commitment on the part of the Dominican Republic to ensure the sustained availability of ART, and with it, improve livelihoods of people living with HIV.

Example 2: Significant health product price reduction strengthens sustainability of Kazakhstan TB program

To secure the accessibility to lower prices for quality assured health products is an important way to ensure economy and sustainability of VfM. This often requires a country's dedicated effort to change procurement regulations, procedures and practices. Kazakhstan TB program is among the examples of how this was made possible.

Kazakhstan TB program was purchasing GeneXpert cartridges with domestic funding at about 71 USD per cartridge in 2017 through national suppliers. With CCM support, MoH initiated discussion on the use of preferential prices, available under some conditions. After exploring several options, the program decided to conduct procurement through GDF. By 2019, the program completed necessary adjustments in the procurement procedures to allow direct procurement from GDF, which lowered the price to about 10.6 USD per cartridge. This price reduction ensures expanding of the use of GeneXpert technology and allows covering 100% of the country needs with domestic funding.

Example 3: Developing mechanisms for public funding for CSO service delivery in Eastern Europe and Central Asia

The sustainability of HIV prevention services - including adherence and support services among key and vulnerable populations, commonly delivered by CSOs - has been a major risk in countries facing transition from Global Fund support.

The discussions around government funding for health services currently provided by CSOs in Eastern Europe and Central Asia, a region with young civil society and high dependency on donor funding for such services, has been challenging under multiple dimensions. Despite these challenges, several countries in the region have made progress towards setting-up and development of mechanisms to bring CSOs into the provision of health services by providing them with funding and delivery responsibility (often referred to as "social contracting"), as well as commitment of domestic resources towards these mechanisms.

Examples illustrating the wide array of efforts in the region include:

- Ukraine is financing CSOs for the delivery of HIV prevention, care and support services through both regional and central government budgets. Though still in incipient stage, it is hoped that these mechanisms will allow CSOs to receive funding through different sources and provide a wider range of services, thus making possible to decrease the dependency on donor funding for such services and allowing not only successful transition but creating sustainable mechanisms for domestic financing of other related services.
- Moldova is financing several projects implemented by CSOs through a separate stream of prevention funding of the National Insurance institution (CNAM). In parallel, the cost of service package (basic and extended) were calculated and will serve as basis for the future contracting with CSOs.
- Serbia and Montenegro are financing CSOs for the delivery of HIV prevention services combining Global Fund grant funds with increasing domestic commitments, a unique grant design integrated with national processes and resources.
- Kazakhstan is running a model of health sites hiring outreach workers to support prevention activities, integrated into the national system.
- Kyrgyzstan is piloting the recently designed mechanism for financing CSOs for HIV preventive services based on the defined standard service packages and cost calculations.

Full Dimensions of VfM

Myanmar – Increasing VfM over time

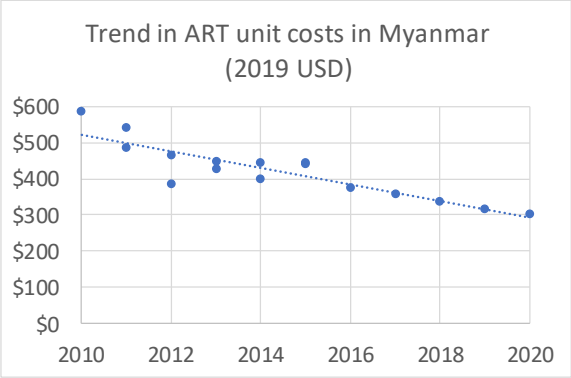
Myanmar's HIV national programs and Global Fund grants illustrate the important dimensions of VfM. Through the mid-2000s, challenges in Myanmar's political environment restricted the country's ability to access international funding streams. With the establishment of the 3 Diseases Fund (3DF) in 2003, resources began to increase for HIV/AIDS. By 2009, in comparison to earlier years, Myanmar had increased coverage among key populations and the prevalence of HIV/AIDS amongst FSW, PWID and MSM begin to decline. However, access to ART was an issue as Myanmar and its partners could only provide antiretroviral treatment to 21,000 people. This marked the beginning of a rapid scale-up of ART to 162,000 people by the end of 2018 as a result of Myanmar's strong commitment for HIV response.

Myanmar has paid close attention to improving **allocative efficiency**: the country was an early adopter of the AIDS Epidemic Model (AEM), using the proportion of incidence among key populations to guide the development of targets for its NSP (2011-2015). Myanmar was one of the first countries to apply AEM's optimization approaches to determine which resource allocations would maximize their impacts – an important input to the country's NSP 2016-2020 and Global Fund funding request. The NSP and Global Fund grant focus on key populations and ART in a geographically prioritized way which maximizes the **effectiveness** of the programs. The current national program promotes **equity** with close attention given to the needs of key populations and the expansion of ART and TB services to underserved areas. For example, coverage among sex workers and MSM has been maintained and further increased since 2009. Coverage levels are expected to increase over the current Global Fund grant cycle, while coverage of needle-syringe and methadone maintenance therapy programs among PWID has been steadily expanding over the last decade.

At the same time, Myanmar has achieved gains in **technical efficiency**. The country established a robust program tracking system to allow the assessment of programs' progress and coverage. Even as available HIV resources have been declining since 2016, high prevention program coverage is being sustained or slowly increasing, whilst ART coverage continues its rapid expansion. The decline in unit costs for ART delivery, shown in Figure 1 below, illustrates how they have continued to make technical efficiency gains over time.

To achieve **economy** in the ART program (which will soon be more than half of overall HIV expenditures), quality assured antiretrovirals are procured at competitive prices in line with global benchmarks. Global Fund grant-financed ARVs are procured through the Global Fund's PPM and through the competitive tendering process managed by co-principle recipient UNOPS. The recent closing of the Médecins Sans Frontières(MSF) Insein Clinic in Yangon, which at the peak served 17,000 people, shows that the current strategy of transitioning PLHIV on ART to government clinics is proceeding apace. This is an essential step in moving toward **sustainability**.

Figure 1: Trend in ART unit costs in Myanmar



Source: Country progress reports, estimates from expenditures and number treated, and unit costs used in NSPs

Annex 5: Additional Information and References

This annex provides some key references on VfM framework, guidance to develop national health and disease program strategic plans and Global Fund funding requests, as well as information on resources and tools to support the development of NSPs and Global Fund funding requests.

1. VfM frameworks
    - DFID's Approach to Value for Money
    - Better Value, Better Health Strategy and Implementation Plan for Value for Money in WHO

2. Guidance to develop NSPs
    - Strategizing National Health in the 21st Century: A Handbook
    - Planning Guide for the Health Sector Response to HIV/AIDS
    - Toolkit to Develop a National Strategic Plan for TB prevention, Care and Control
    - Manual for Developing a National Malaria Strategic Plan

3. Global Fund strategy, policies, information notes, technical briefs and guidance to inform the development of funding requests that are closely related to VfM
    - Global Fund Strategy 2017-2022
    - HIV Information Note
    - TB Information Note
    - Malaria Information Note
    - Building RSSH through Global Fund Investments Information Note
    - Guidance note on Sustainability, Transition and Co-financing of programs supported by the Global Fund
    - Addressing Gender Inequalities and Strengthening Responses for Women and Girls Information Note
    - HIV, Human Rights and Gender Equality Technical Brief
    - Malaria, Gender and Human Rights Technical Brief
    - Tuberculosis, Gender and Human Rights Technical Brief
    - Laboratory Systems Strengthening Technical Brief
    - Digital Health Technical Brief
    - Human Resources for Health (HRH) Technical Brief
    - Guidelines for Grant Budgeting
    - Financial Management Handbook for Grant Implementers

4. Efficiency and sources of inefficiency
    - WHO, Chapter 4: More Health for the Money, World Health Report 2010, Health Systems Financing the Path to Universal Coverage, 2010
    - Tacking Wasteful Spending on Health
    - Improving Technical Efficiency in Health Spending in Africa
    - A system-wide approach to analyzing efficiency across health programs

5. Health Technology Assessment and priority setting
    - HTA and its application as a tool to inform decision makers in support of UHC
    - Health Technology Assessment Toolkit

6. HIV and TB costing data repository and refence case in costing
    - Global Health Costing Consortium
        - Unit Cost Study Repository (UCSR)
        - Reference Case for Estimating the Costs of Global Health Services and Interventions

7. Global Fund Pooled Procurement Mechanism (PPM) reference prices (also available here)
    - Antimalarial Medicines
    - Antiretroviral Medicines
    - HIV Rapid Diagnostic Tests (HRDTs)
    - HIV Viral Load and Early Infant Diagnosis Selection and Procurement Information Tool
    - Long-Lasting Insecticidal Nets (LLINs)
    - Malaria Rapid Diagnostic Test (MRDTs)
    - Strategic Medicines used in HIV Programs