

# Annex 6: Guidance for C19RM Reinvestment Planning

## July 2022 Update

**Date Published:** 20 July 2022

**Date Updated:** This document will go through further updates.

## Introduction

Due to the changing nature of the COVID-19 pandemic and evolving national responses, the Global Fund strongly encourages implementing countries to urgently reinvest COVID-19 Response Mechanism (C19RM) funds to scale-up impactful interventions within the scope of C19RM. This guidance describes key priority areas to be considered for immediate reinvestment and Portfolio Optimization later in 2022.

Principal Recipients are requested to reinvest where the initial C19RM investments no longer respond to current and projected national needs. Reinvestment planning can also identify ‘unfunded demand’, a list of additional interventions that will be considered for financing from September 2022 through the additional US\$800 million available to countries for C19RM Portfolio Optimization.

To support in-country partners to better align C19RM funding with their country’s context, national priorities, implementation experience, global goals and the [2023-2028 Global Fund Strategy](#), this document will cover:

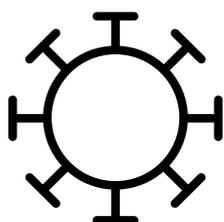
- Areas of reinvestment that countries should consider prioritizing based on country and partner feedback and best practices.
- Additional details on lead times, costs and procurement considerations to inform reinvestments decision-making.
- The objectives and imperative for demand creation for both C19RM reinvesting and additional C19RM funds through the process of Portfolio Optimization.

For further information implementing countries can consult the following documents:

- [C19RM Technical Information Note](#), which sets out in more detail C19RM eligible investments.
- [C19RM Guidelines](#) for a structural overview of the reinvestment process for C19RM funding.

## Key Priority Areas

When the COVID-19 Response Mechanism was created in 2020, the Global Fund Board set three areas of investments for eligible funding: (1) COVID-19 response; (2) COVID-19-related adaptation of programs to fight HIV, TB and malaria; and (3) strengthening health and community systems. Within these three C19RM areas of investment, high value reinvestment opportunities have been identified based on country feedback and emerging best practices:



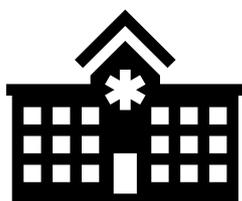
### 1. Adapt COVID-19 responses and interventions to current context

- Re-quantify COVID-19 Dx and PPE
- More attention to Infection Prevention & Control beyond PPE
- Scale-up Medical O2 and respiratory care
- Introduce Novel Tx; Test & Teat



### 2. Enable HIV, TB and malaria program integration and mitigation

- Cover additional PSM costs
- Bi-directional screening and testing for TB/COVID-19 integration
- Note: HIV, TB and malaria commodities remain outside C19RM scope (except TB testing as part of the integrated response)



### 3. Enhance systems & infrastructure to boost responses

- Pandemic Preparedness
  - Laboratory systems and Diagnostic networks
  - Surveillance, Data Systems & Response
  - Community health systems and responses, including community health workers
  - Supply Chain & Waste Management Systems
  - Bring forward RSSH plans
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# Priority Areas of Investment to Maximize Impact

## 1. Adapt COVID-19 responses and interventions

Priority Areas	Considerations for Reinvestments	Additional Comments
<b>Right-size COVID-19 Diagnostics (Dx)</b>	<ul style="list-style-type: none"> <li>• <b>Determine stock levels of Dx tests to cover next surge</b> and clinical management of high-risk patients.</li> <li>• Countries can consider maintaining a minimum of 3 months of testing stock. The estimated minimum stock levels should be adapted to country context- based on average use over the last 12 months and other considerations like warehousing capacity. It could also be calculated as a weighted average of low and peaks months.</li> <li>• Both Ag RDT and PCR tests are appropriate for testing strategies.</li> <li>• Reasonable level of expiries of the safety stock can be accepted.</li> </ul>	<ul style="list-style-type: none"> <li>• Establish supply levels on a per country basis (consult Country Teams as needed).</li> <li>• Consider national testing strategies; use a mix of PCR and Ag RDTs, lead times (see <a href="#">Global Fund Procurement Advice for 2023</a>), current stock levels and expiry dates, in-country supply chain need for decentralized testing.</li> <li>• TA support available through Project Stellar and workplans developed through Stellar to support testing strategy/ algorithm development /revision, quantification od Dx products should be considered.</li> <li>• Link testing to routine surveillance and data systems.</li> </ul>
<b>Re-quantify PPE</b>	<ul style="list-style-type: none"> <li>• <b>Calculate the amount</b> of PPE and other IPC health products (alcohol-based hand rub, soap, disinfectants), including a <b>quantity sufficient to cover a new surge of COVID-19</b>, that will be needed from present moment through December 2023.</li> <li>• Ensure a <b>four-to-six-month in-country supply</b> of PPE/IPC health products.</li> </ul>	<ul style="list-style-type: none"> <li>• Check with Country Teams for help in quantifying PPE/IPC health product needs.</li> <li>• Develop capacity in the countries to store and distribute, a four-to-six-month supply of PPE/IPC HP.</li> </ul>
<b>IPC</b>	<ul style="list-style-type: none"> <li>• Continue supporting a <b>holistic approach of PPE</b> procurement, by investing to ensure sufficient stock of quality-assured IPC health products, adequate storage and distribution and proper discarding practices.</li> <li>• <b>Start investing in IPC programs and the supporting infrastructure</b> to promote correct</li> </ul>	<ul style="list-style-type: none"> <li>• To strengthen IPC programs, look at two levels: national program and at health-facility level. Simplified and standard assessment tools exist for both. Also look at existing prior assessment and unfunded gaps.</li> <li>• Look for quick wins which would help building the national, or local</li> </ul>

Priority Areas	Considerations for Reinvestments	Additional Comments
	<p>use of health products and optimal implementation of IPC measures.</p>	<p>IPC program (hire a national focal point for IPC, support the development national guidance) or facility-based improvements such as installing a water point, recertify/service BSCs or develop better ventilation at healthcare facilities.</p> <ul style="list-style-type: none"> <li>The core tool to guide the IPC program strengthening is the WHO <a href="#">IPCAF tool</a> and the WHO <a href="#">minimum requirements for IPC programs</a>.</li> </ul>
<p><b>Medical oxygen support</b></p>	<ul style="list-style-type: none"> <li>Target <b>gaps in oxygen</b> supply, distribution and delivery-related health products identified by in-country assessments, strategic and operational plans (includes liquid O2 and other bulk O2 production equipment).</li> <li><b>Scale-up PSA plants</b> and as per the need identified in country assessments and plans, include all supporting investments for successful operation and sustainability (electrical, HRH, multi-year warranty and maintenance).</li> <li><b>Oxygen procurement channels</b> due to the technical complexity and long lead time we encourage PSA plants to be procured through the Global Fund procurement channel, with purchase requisitions to be <b>initiated by end-September 2022</b>.</li> <li><b>Scale up oxygen distribution and storage health products</b> to ensure quality delivery to sites of high demand as identified in country operational plans, specific needs assessments and quantification.</li> <li><b>Scale up oxygen delivery and respiratory care health products</b> to fill gaps identified in country</li> </ul>	<ul style="list-style-type: none"> <li>Updated needs identified through country-assessments, TWG's, TA from country partners e.g. (CHAI/PATH/WHO) and the Global Fund central TA via Project BOXER.</li> <li>Long lead times further reinforce the urgency to implement within 2023 deadline.</li> <li>Consider filling gaps in HRH needs (biomedical engineers, technicians).</li> </ul>

Priority Areas	Considerations for Reinvestments	Additional Comments
	operational plans, needs assessments and quantifications.	
<b>Test &amp; Treat</b>	<ul style="list-style-type: none"> <li>• Assess country readiness, financing gaps and enthusiasm/demand for Test &amp; Treat and novel therapeutics (Tx).</li> <li>• Scale-up and decentralize integrated testing to invest in human resource surge capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• New treatments must be tied to vulnerable population support and ensure early diagnosis of COVID-19 for treatments' effectiveness.</li> <li>• Include C19 self-testing in existing diagnostic strategy and enhance linkages to reporting structures Liaise with Country Teams to see how to use manufacturer network to facilitate access to products.</li> <li>• <b>For community and decentralized testing:</b> Consider underlying system strengthening needs (e.g., data systems, HR, referral agreements) to effectively scale up such approaches and invest appropriately.</li> <li>• Test &amp; Treat Centrally-Managed Limited Investment (CMLI) will provide a source of TA for countries introducing novel Tx. Consultant Country Teams as needed.</li> </ul>

## 2. Enable HIV/TB/malaria program integration and mitigation

Priority areas	Considerations for Reinvestments	Additional Comments
<p><b>Additional PSM costs for HIV, TB and malaria health products</b></p>	<ul style="list-style-type: none"> <li>HIV, TB and malaria grants will cover any increase in the unit price costs of HIV, TB and malaria health products. <b>For increases to HTM PSM costs</b> (including freight, warehousing and distribution costs), <b>C19RM funds can be used for the incremental that cannot be covered by the HIV, TB and malaria grants.</b></li> <li>Where net increases in PSM costs exceed available HIV, TB and malaria and C19RM savings, funds can be requested through C19RM Portfolio Optimization.</li> </ul>	
<p><b>TB/COVID-19 integration</b></p>	<ul style="list-style-type: none"> <li><b>Bi-directional screening and testing:</b> increase diagnostic capacity to finding missing people with TB and COVID-19.</li> <li>Procure of digital chest X-ray (CXR) with CAD.</li> <li>Diversify molecular test multi-pathogen platforms through investing in alternates which can also enable decentralise testing at lower levels and in community settings.</li> <li>TB diagnostics can be procured as part of the integrated TB and COVID-19 response</li> <li>Consider mobile diagnostic unit/package with CXR with CAD, rapid molecular diagnostics and mobile vans/vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>Check with Country Teams for help in quantifying PPE/IPC health product needs.</li> <li>Develop capacity in the countries to store and distribute, a four–six-month supply of PPE/IPC health products.</li> </ul>

### 3. Enhance systems & infrastructure

Priority areas	Considerations for Reinvestments	Additional Comments
<p><b>Pandemic preparedness</b></p>	<ul style="list-style-type: none"> <li>Identify investment opportunities, consistent with C19RM scope, identified in national action plans for health security and/or PP assessments such as joint external evaluations (JEE).</li> </ul>	
<p><b>Lab surveillance, strengthening &amp; integration</b></p>	<ul style="list-style-type: none"> <li>Strengthen integrated laboratory systems and Dx networks. <b>Laboratory capacity strengthening</b> activities should not be disease specific but across pillars.</li> <li><b>Integrate COVID-19 testing into routine testing cascade for HIV, TB, malaria, febrile, respiratory illness and lab-based disease surveillance, routine environmental surveillance (Wastewater based surveillance)</b></li> </ul>	<ul style="list-style-type: none"> <li>Focus should be on sustaining capacities developed through the pandemic.</li> <li>Enhance sample referral networks, LIS, HR capacity, equipment service and maintenance, Participation in External quality Assessment schemes for HTM, C19 and others</li> <li>Use <a href="#">CMLI Project STELLAR</a>, where useful (consult Country Teams as needed).</li> </ul>
<p><b>Surveillance &amp; Response, Routine HMIS</b></p>	<ul style="list-style-type: none"> <li>Facilitate country-appropriate shifts from COVID-19 case-based surveillance to integrated, sustainable respiratory disease surveillance, setting the stage for pandemic preparedness.</li> <li>Ensure laboratory linkages to surveillance.</li> <li>Strengthen data systems, digitalization and data use to detect COVID-19 surge and emerging SARS-CoV-2 variants.</li> <li>Capabilities and capacities to respond appropriately to contain the surge</li> </ul>	<p>Focus should be:</p> <ul style="list-style-type: none"> <li>Investments that can be implemented by 2023.</li> <li>Transition and stabilizing COVID-19/pandemic surveillance.</li> <li>Build upon existing investment plan for routine HMIS.</li> </ul>

Priority areas	Considerations for Reinvestments	Additional Comments
	<ul style="list-style-type: none"> <li>Continue strengthening the routine HMIS including those for HIV, TB and malaria.</li> </ul>	
<b>Community health systems and responses, including community health workers</b>	<ul style="list-style-type: none"> <li>Invest systematically <b>across eligible health policy and systems components</b>, aligning with WHO normative guidance and supporting <b>systems' readiness to scale</b>.</li> <li>Undertake an analysis of funding gaps across <b>eligible health policy and systems components</b> to determine what is already covered by other funding sources, what gaps remain and what to include in C19RM reprogramming requests.</li> <li>Use the <b>CHW Programmatic Gap Table</b> to undertake the funding gap analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure systematic investments across health policy and systems supports for CHWs of all types (including peers and other community cadres supported by CLOs and CBOs) filling gaps within existing funding envelopes before expanding / scaling to new geographic areas.</li> <li>Prioritize investment in high value/high volume investments.</li> <li>Consider feasibility of execution of activities within the C19RM implementation period.</li> <li>Consider investments that would enable countries to use C19RM to start CHW investments that would normally have to wait until the 2024-2026 investment cycle. C19RM funding can initiate investments that can be continued and expanded further in the next cycle.</li> <li>Ensure investments will be continued in the future through Global Fund funding in the 2024-2026 investment cycle or through other funding sources.</li> </ul>
<b>Supply Chain Strengthening</b>	<ul style="list-style-type: none"> <li>Invest in effective supply chain <b>governance</b> including the creation, review and renewal of national strategic plans;</li> </ul>	<ul style="list-style-type: none"> <li>Leverage C19RM funds can serve as a catalytic investment into long standing supply chain</li> </ul>

Priority areas	Considerations for Reinvestments	Additional Comments
	<p>governance structures (e.g., logistics unit); <b>leadership</b> development (such as <a href="#">STEP 2.0</a>) and <b>continuous improvement</b> approaches.</p> <ul style="list-style-type: none"> <li>• Build capability for <b>surge capacity</b> and pandemic preparedness: in storage and distribution; <b>Optimization</b> of distribution, warehousing and inventory related processes and operations.</li> <li>• Improve <b>data management and use</b>: WMS, LMIS, systems integration and interoperability; data analytics and visualization; accelerate data use culture.</li> </ul>	<p>priorities that need addressing today and into the 2023-2025 funding cycle.</p> <ul style="list-style-type: none"> <li>• Prioritize investments into key areas that will generate maximum impact over the next 12 months to mitigate key supply chain risks and accelerate maturity of supply chains.</li> </ul>
<p><b>Pre-year for new Strategy: RSSH &amp; pandemic preparedness</b></p>	<p>Other areas of possible investments include but not limited to the following:</p> <ul style="list-style-type: none"> <li>• Health product waste management.</li> <li>• Community-led monitoring.</li> <li>• Human resources for health (HRH).</li> <li>• Community engagement &amp; leadership, social mobilisation.</li> <li>• Community systems strengthening (including research &amp; advocacy).</li> <li>• Private sector engagement.</li> </ul>	<ul style="list-style-type: none"> <li>• Effective use of C19RM funds rests on aligning C19RM re-investments with the priorities of the 2023-2025 funding cycle.</li> <li>• Leveraging the partnership model, countries should focus on key interventions and bring forward the start date of future planned strategic priorities through reinvestment of C19RM funds.</li> </ul>

# Addressing Increased HIV, TB and Malaria PSM Costs due to COVID-19

HIV, TB and malaria grants continue to experience increases in the cost of health products and related procurement and supply chain management (PSM) costs due to the COVID-19 pandemic. At the aggregate global level, the additional PSM costs will be covered across HIV, TB and malaria funds and C19RM funds.

## Background and eligibility

- PSM costs for HIV, TB and malaria products have significantly increased because of multiple contributing factors, including the economic impact of COVID-19, disruption of supply chains and increase in underlying costs.
- The cost of health products has also increased. Most visible are the expected increases in costs of malaria bed nets (petrochemical-based products).
- Costs are not static and the nature of the cost increase (including attribution to the various causes mentioned above) is dynamic.
- This puts pressure on the HIV, TB and malaria grants, particularly on malaria grants. Due to increases to initially budgeted freight and other PSM costs, the HIV, TB and malaria grants may not be able to absorb the additional costs without negatively impacting program objectives and/or scale-up.
- Additional delivery and procurement costs for HIV, TB and malaria programs where related to addressing COVID-19 disruption are **eligible** under C19RM funding ([GF/B44/ER12](#)).

## Approach

- Overarching principle: HIV, TB and malaria grants will cover the increase in cost of health products. Where HIV, TB and malaria grants cannot cover increases to HIV, TB and malaria PSM costs (including freight costs), C19RM funds can be used for the net increases versus the originally approved PSM costs.
- Operationalization:
  - **Where increased PSM costs are identified for orders already placed:** the actual net increase in PSM costs versus approved budget will be reclassified centrally by Finance teams to the C19RM budget following a stress test on HIV, TB and malaria absorption (planned to be carried out in December 2022, mid-2023 and November 2023).
  - **For planned orders where net increases exceed available HIV, TB and malaria and C19RM savings:** funds can be requested through Portfolio Optimization in September 2022 to cover increased PSM costs.

- **For C19RM and HIV, TB and malaria grants with affected PSM costs that are managed by different PRs:** both actual and planned increases to PSM costs will be covered through Portfolio Optimization.

## **Updated Health Product Lead time, Pricing and Cost Guidance**

Since 15 July 2022, updated materials are available regarding:

- Lead times to plan compliant delivery in [English](#) and [French](#), as well as the [procurement and delivery planning guide](#) from the Stop TB Partnership's Global Drug Facility (STBP/GDF). Note that deliveries should be planned to arrive by 30 September 2022 (to avoid slippage beyond 31 December 2023).
- COVID-19 health product cost reference prices: [Diagnostics](#), [PPE](#), [oxygen](#), [health equipment](#) (including sequencers, X-ray, incinerators and other hospital & lab equipment), [treatment](#) and [non-health products](#) (vehicles, computers).
- Freight cost guidance for COVID-19 and HIV, TB & malaria products: [English](#) version and guidance from Stop TB Partnership's [GDF](#).
- [More information](#) on procurement advice is available on the Global Fund website.

## **Detailed Guidance by Priority Area**

### **Right-sizing COVID-19 diagnostics investments**

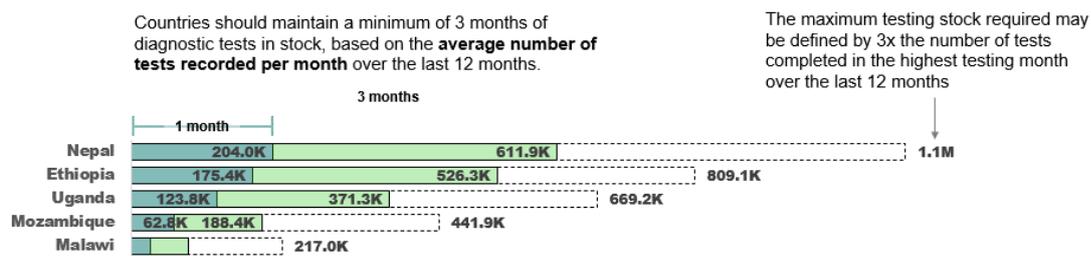
#### Current situation

- The World Health Organization (WHO) has not issued revised guidance on testing strategies. However, the WHO encourages countries to ensure access to testing (for possible next wave, integration into routine testing and surveillance activities, such as looking for “hot spots”, variants, etc.).
- The draft guidance from the Africa Centres for Disease Control and Prevention (AU CDC) on COVID-19 testing strategies does not mandate minimum test stock levels. These are governed by countries procurement policies.
- Insufficient practical guidance is available to benchmark testing needs based on individual country situations.
- Of 34 countries responding to a recent survey, five reported that national inventory of COVID-19 diagnostics is insufficient to meet immediate demand. Twelve were uncertain that stock was sufficient to meet demand.

#### Current operational priorities

- Establish sufficient supply of testing (PCR and Ag RDTs) to meet patient care and public health needs on a *per country* basis.
- Ensure testing supplies account for the possible next wave of cases that could surge because of a new variant.
- Remain vigilant of variant emergence by continuing to scale support to genomic surveillance.
- Countries should plan to hold sufficient diagnostic tests in stock to respond to potential future peaks of testing demand. Historical testing demand from previous waves can inform maintaining reasonable stock quantities.

**Figure 1.**



To support countries on their decisions to maintain stock levels, consider the following factors:

- **National testing strategies:** Test types procured should align with national testing strategies and algorithms.
- **Use of PCR and/or Ag RDTs:** Align proportion of PCR versus Ag RDT with the availability of trained support staff to deploy each type of testing.
- **Lead time for orders of diagnostic supplies:** Current lead time guidance (July 2022) for Ag RDT and PCR is 82-105 days by air and 112-135 days by sea.<sup>1</sup>
- **Levels and expiry dates of current stock:**
  - Some levels of test expiry is considered acceptable to maintain testing levels in case of surges in demand.
  - Countries should track batch expiries to prioritize use of oldest tests first.
  - Where risk of expiry has been reported with existing stock, refer to [Package 1 of reinvesting opportunities](#) for activities to support integrating diagnostic testing into the existing health delivery cascade.
  - For Ag RDTs and/or PCRs at risk of expiry (within three-six months of the listed expiry date), consider re-assigning available tests for surveillance activities.
- **In-country supply chain needs for decentralized testing:** Consider the National essential diagnosis list (EDL) and tiered lab network infrastructure required to make tests available.

<sup>1</sup> <https://www.theglobalfund.org/en/covid-19/health-product-supply/>

## Right-sizing PPE stocks

### Quantifications

Country Teams (CTs) and Principal Recipients (PRs) should estimate the total amount of PPE and IPC health products (HP) that is needed from now until December 2023 to ensure an adequate provision of safe medical care for both the current COVID-19 baseline situation. In case of a surge, CTs and PRs should:

- **Estimate the total amount needed** based on past consumption, expert opinion or a PPE/HP calculator or a combination of sources. See additional notes below for details.
- **Consider the following variables** when making the estimates: number of healthcare workers in the country, number of facilities taking care of COVID-19 patients, local epidemiology of COVID-19, local PPE and HP recommendations including extended use and local recommendations for use of PPE by patients (mainly masks).
- **Review current stock of IPC HP**, including any **orders** that have already been placed but not yet delivered, and any other PPE provided by **other donors** or supplied by in-country resources and subtract that from the total needed as calculated above.
- **Maintain a four-six-month supply of PPE and IPC HP**, depending on storage capacity. Expiry dates should be tracked to ensure rational and safe use of supplies.
- **Ensure the stock should include enough quantities to face a new surge**. The estimation can be made using the consumption during the largest surge experienced by the country, nuanced as relevant by the country epidemiological context (for instance, vaccination coverage, testing capacity, etc.) This can be included in the four-six-month supply or designed as a "put aside emergency stock", as relevant.

### Additional notes on quantification of PPE/IPC supplies

CTs and PRs can use a variety of methods to quantify PPE/IPC HP needs over the next 18 months. Examples are listed below and can be tailored to the country. Contact the Global Fund Country Team for advice on the calculators, methods of estimation and the variables to be used to calculate future PPE/IPC HP needs:

- CTs and PRs can **use data from past consumption of PPE/IPC HP** in their countries and use that to estimate what will be needed until December 2023. One method is to calculate a **weighted average** of PPE and IPC HP used during January 2021 to June 2022 (weighted at 30%) and average consumption from January 2022 to June 2022 (weighted at 70%) to calculate the baseline of what will be needed in the future.
- **Additionally, PPE quantification tools can be used** and include [WHO COVID-19 Essential Supplies Forecasting Tool](#); [CDC PPE Burn Rate calculator](#); [Village Reach calculator](#) (based partially on a CDC Ebola PPE calculator) and others. All the

calculators have pros and cons, have slightly different assumptions and require different inputs. It is not mandatory to use a calculator.

If **additional supplies are needed** to be ordered (more than what is currently in stock or in transit/having been ordered) CTs and PRs should consider ordering **PPE kits/bundles specific for COVID-19**, if available to ease distribution of PPE, improve stock management and reduce purchasing of non-essential PPE (such as booties or Tyvek suits).

PPE and IPC HPs protect patients and HCW against COVID-19 and other key diseases such as HIV and TB. As such, if there is a surplus of PPE or other IPC HPs **countries should develop plans** to use the supplies to support the safe delivery of HIV and TB healthcare, especially using supplies nearing their expiry date.

### **C19RM reinvesting in IPC/PPE**

IPC reinvestment requires a focus on two key areas:

**(a) Start investing in IPC programs** and the supporting infrastructure to promote correct use of health products and optimal implementation of IPC measures.

**(b) Continue supporting a holistic approach of PPE procurement**, by investing to ensure sufficient stock of quality-assured IPC health products, adequate storage and distribution and proper discarding practices.

#### **(a) Start investing in IPC programs**

Expand IPC investments to include IPC program strengthening:

- **Comprehensive IPC programs are more impactful.** PPE that has been inadequately used and inappropriate IPC measures in patient isolation units are of little benefit. Investing in the system has a greater value for money and more sustainable impact than simple provision of products. Spot check health facility surveys and other sources provide a record of inadequate access and inefficient use of PPE potentially resulting in transmission of COVID-19 to healthcare workers and wasted resources.
- **Investing in IPC programs benefits healthcare workers and patients.** Only 4% of countries have complete IPC programs<sup>2</sup> including personnel, policy and education development, surveillance and monitoring. Effective IPC programs can reduce healthcare associated infections, including COVID-19 and TB, by 70%. IPC programs support the correct estimation, distribution, use, monitoring and disposal of PPE and other IPC health products. Strengthening IPC programs has greater value for money and is more sustainable than simple provision of products.

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<sup>2</sup> WHO. [Global report on infection prevention and control \(who.int\)](https://www.who.int/publications/m/item/global-report-on-infection-prevention-and-control), 2022

- **Strengthening IPC programs for COVID-19 will protect against other infectious diseases seen in healthcare settings.** Improving infrastructure (ventilation, laboratory biosafety and biosecurity, triage/isolation rooms, WASH) in healthcare facilities to reduce the spread of COVID-19 also may reduce the spread of other pathogens (TB, pandemic flu, measles, antibiotic-resistant microbes). Improving administrative controls such as enforcing triage and isolation, improving staffing, ensuring that HCW can take time off when ill and training them on correct use of PPE will also reduce the spread of COVID-19 and other common healthcare pathogens.

#### Expand investments in IPC programs and the supporting infrastructure

- **Investment in national programs.** Examples include hiring trained personnel to support national IPC program to develop and validate country-specific evidence-based IPC guidelines, national IPC education curriculum and a national IPC monitoring and evaluation system.
- **Investment in facility level programs.** Examples include hiring facility level IPC focal points to make infrastructure adjustments (ventilation, WASH, laboratory biosafety and biosecurity, triage and isolation); monitor compliance with IPC policies and guidelines; and use quality improvement principles to address gaps.
- **Tools and support already exist to help guide investments in this area.** The starting point for identifying investment opportunities can be an assessment of national and facility level IPC programs using validated tools (e.g., WHO [IPCAT-2](#) and [IPCAF](#), WHO biosafety manual) to identify gaps and prioritize unfunded urgent activities or quick wins. Some countries may also use assessments or JEE (joint external evaluations) available reports, to build on or pre-identified unfunded gaps. CTs and PRs can use the WHO template to develop IPC programs: WHO minimum requirements for IPC programs. Technical expertise and assistance from available resources in countries or within the Global Fund. Detailed list of activities can be found in the [C19RM Technical Information Note](#) (Annex 5 and Annex 6) and the [C19RM 2021 Modular Framework](#).

#### **(b) Continue investing to ensure sufficient stock of health products, storage, distribution and waste management<sup>3</sup>**

- **Prepare for the next surge of COVID-19 by assessing needs:**
  - Quantify future needs based on current stock, expected deliveries, past consumption, other suppliers and expected risk and scale of significant surge, as detailed above.
  - Develop a strategy to deploy stock within short delays in case of surge.

<sup>3</sup> [C19RM Technical information note and Modular Framework](#)

- **Strengthen quality assurance:**
  - Strengthen national regulatory agencies (NRAs) for faster registration and authorization of health products.
  - Strengthen post market surveillance.
  - Build capacity for licensing, supervision and enforcing of good manufacturing practice (GMP) of local manufacturers.
  - Monitor to track and enforce good storage and distribution practices of health products.
  
- **Support clean, safe disposal of HPs:**
  - Support waste segregation at facility level; training on best practices; ensure compliance to standards and norms.
  - Support WM system strengthening by assessing healthcare WM systems, development of integrated and operational plans and alternative green procurement.

## **1. Oxygen reinvestment opportunities**

### **Oxygen & Respiratory care re-investment guidance**

#### General principles:

- Right size oxygen and respiratory care investments to bridge current or anticipated gaps.
- Confirm appropriate consultation with national COVID-19 response coordinating authorities, ideally including Case Management Pillar Working Group or similar and/or any other technical bodies who support O2/RC governance.
- Link to any on-going PR and CCM consultations on C19RM implementation and re-investment priorities; successfully engage negotiations.
- Confirm that needs are considered in scope of C19RM priority investments (bulk oxygen supply, distribution and storage, supportive investments, respiratory care investments) check in with O2 WG members (GMD/HPM, QA, Risk, SO, TAP as relevant).
- Ensure inclusion of key elements that are necessary for long term programmatic impact, functionality and sustainability of the investments. (e.g., supportive infrastructure, biomedical or technical HRH capacity, maintenance, warranties, training for responsible staff, operating expenses).
- Involve technical assistance from country technical WG or request central technical assistance for procurement or specification development as needed.

**Table 1. Oxygen & Respiratory Care re-investment guidance**

Key investments	Description
<b>Bulk oxygen supply</b>	<ul style="list-style-type: none"> <li>• Pressure swing adsorption (PSA) plants and Liquid Oxygen storage equipment and supply.</li> <li>• Supportive and infrastructure investments to ensure site readiness to install, run and maintain bulk oxygen equipment, commissioning and functioning (e.g., housing, concrete slabs, electric power generators, solar power); oxygen concentrators and warranty, service and maintenance, as appropriate, to ensure continuity and sustainability of oxygen generation and supply according to WHO standards and guidance.</li> </ul>
<b>Oxygen distribution and storage</b>	<ul style="list-style-type: none"> <li>• Quality, safe and cost-effective distribution and supply of medical oxygen cylinders, cannister, and external distribution systems to hospital sites where there are identified gaps in supply and demand; piped O2 distribution systems within health facilities and vaporizers (for liquid O2).</li> </ul>
<b>Oxygen delivery and respiratory care</b>	<ul style="list-style-type: none"> <li>• Activities ensuring availability of and access to quality, safe and cost-effective pharmaceuticals, medical devices, oxygen and other health technologies considered essential for the treatment management of respiratory disease in health facilities according to level of care and context, including:               <ul style="list-style-type: none"> <li>○ Disposable, single-use, oxygen-delivering interfaces (e.g., nasal cannula, venturi mask and mask with reservoir bag).</li> <li>○ Infusion pumps and IV sets.</li> <li>○ Invasive and non-invasive ventilators.</li> <li>○ Intensive care beds.</li> <li>○ Physiological parameters monitors.</li> <li>○ Pulse oximeters and imaging equipment (e.g., ultrasound, chest X ray (including digital); and</li> <li>○ CT scans.</li> </ul> </li> </ul>

## **2. COVID-19 Test & Treat**

### **Background**

- Although current WHO guidelines recommend multiple novel therapeutics, current emphasis of test and treat is on the oral antivirals such as molnupiravir and nirmatrelvir/ritonavir (Paxlovid).
- Over the past few months, WHO has issued country surveys of demand for both products, and work is on-going to define specific quantities and available funding in many countries. WHO and other partners have developed country readiness tools, while integrated operational guidance remains under development by WHO/WHE and Africa CDC.
- Relative prioritization of test and treat will depend on country context, including the epidemiologic situation and dynamic response needs, including consideration of minimum preparedness for future surge needs based on co-variants, etc.

### **Key recommendations**

- Consider engaging the diagnostics, case management/clinical services and/or other relevant unit(s) from the national COVID-19 response coordinating body.
  - In settings where this group is no longer functional, engage the pandemic preparedness body over-seeing the national action plan for health security or similar.
- Determine the relative prioritization of demand for and gaps in financing for test and treat services based on the above, including preparedness for future surge.
  - If gaps in financing are identified based on established demand, consider a proposal related to C19RM re-investment, if/where appropriate, including CCM engagement strategy.
- Assess country readiness, including landscape assessment of related activities.
- Develop integrated service delivery model addressing tiered diagnostic, referral, clinical assessment and triage; and define immediate minimum and surge implementation needs.
- Determine appropriate health product procurement mechanism.
- Seek partner technical assistance, whether in-country or external, as needed.

## **3. Bi-directional screening and testing for TB/COVID-19**

### **Introduction**

- TB has been disproportionately impacted by COVID-19 and there is urgent need to catch-up.
- Bi-directional/simultaneous screening and testing is an established approach for the detection of multiple infections and is recommended by WHO. The Global Fund supports this approach for HIV and TB and for TB and COVID-19.

- **C19RM Reprogramming** is a great opportunity to support bi-directional screening and testing for TB and COVID-19.
- The proposal is aimed at increasing capacity to screen and test for TB and COVID-19 through procurement of **digital chest X-ray machines** and molecular multi-pathogens tests.
- **TrueNat molecular test is one of the platforms which can be considered, it has an advantage** to bring screening/testing closer to under-served communities and support finding missing people with TB/DR-TB. This investment will support decentralization of multi-pathogen testing platforms at lower levels and to the community.
- TB cartridges can be procured as part of the integrated TB and COVID-19 response

### Availability and delivery of X-ray machines

- Countries are encouraged to procure the most appropriate digital chest x-rays (CXR) according to their context and proposed use case, which may include a range of digital CXR machines.
- Options for Digital CXR procurement include Portable, Ultra-portable (handheld), Compact Digital X-ray Machines (can be installed in mobile vans) and stationary.
- Procurement as part of a mobile screening/diagnostic package can be considered (i.e., incorporated into a van/vehicle possibly with molecular diagnostic platforms). This is in line with [C19RM Technical Information Note](#) and [TB Catch up plan](#).
- The procurement and use of Computer Aided Diagnosis (CAD) software for CXR readings is recommended.

### Availability and delivery of TrueNat

- TrueNat is a WHO recommended rapid molecular diagnostic test.
- Testing can be decentralized allowing for coupling with CXRs as part of decentralized screening and diagnostic campaign.
- TrueNat operates with the additional advantage of being used with batteries
- The TrueNat machines and chips are cheaper than GeneXpert equipment and cartridges.
- TrueNat molecular testing assay is not widely used outside India.

TrueNat machines should be introduced considering optimized usage within existing National diagnostics network. There is need to generate more evidence including on the wider use of this technology as alternative tests and help with market shaping. Approach

- PRs in the priority countries should receive an all-inclusive offer, covering hardware, CAD software, maintenance and warranty, implementation costs as determined by the Global Fund and agreed with the manufacturer/suppliers.
- Procurement of mobile diagnostic unit/package with CXR with CAD, molecular test platform and mobile vans/vehicles should be considered.

- Consider procurement contractual modalities that are inclusive of reagents and service and maintenance beyond the 12- month warranty period
- This will also be a long-term investment and improves on the countries' health system as CXR and molecular tests could be used for screening and testing for other diseases.
- PRs would also need to commit to bearing the cost of treating patients diagnosed with TB/DR-TB or assure that other stakeholders would do so.

#### **4. Pandemic preparedness**

Most Global Fund eligible countries implemented assessments of pandemic preparedness known as joint external evaluations or JEEs, prior to the COVID-19 pandemic. In many instances, these evaluations have been translated into national action plans for health security (NAPHS).

Multi-year, typically costed, NAPHS are usually converted to annual, prioritized operational plans based on established country governance and oversight, e.g., led by Ministries of Health.

#### **Recommendations for C19RM Reinvestment**

- Engage the national IHR focal point and the COVID-19 response head.
- Identify priority NAPHS activities which are consistent with C19RM guidance (information note) which is based on related WHO response operational pillars.
- Develop a proposal and engage PR(s) and CCM to establish proposal as a suitable priority for re-investment.

#### **5. Lab strengthening, surveillance, integration packages for C19RM Reinvestment**

Three packages of investments can be considered by countries for reinvesting C19RM funds:

- 1) Promote integration of COVID-19 testing in the routine care cascade for HIV, TB, malaria, respiratory and acute febrile illnesses.
- 2) Support to strengthen integrated laboratory systems and Dx networks.
- 3) Integrate disease program lab-based surveillance under one umbrella with associated data analysis capacities and support to genomic surveillance / bioinformatic activities.

**Packages 1 and 2** cover activities across all C19RM funded countries and are broad laboratory strengthening activities essential to systems development.

**Package 3** activities should focus on countries with established surveillance systems such as: severe acute respiratory illness (SARI), influenza-like illness (ILI); acute febrile illness (AFI) and waste-water surveillance (e.g., polio network, enteric pathogen surveillance and Project Stellar pilot programs).

## **Package 1: Promote integration of COVID-19 testing into routine care cascade**

### **National Planning and Response**

- Activities for developing National Essential Diagnostic (EDL) list. Ensure minimum stock levels of Dx kits per tier.
- Establish and maintain blood banks; support availability of centralized serological testing capacity.
- Establish/extend warranty/maintenance contracts for existing and new lab equipment.
- Train/certify national or regional biomedical engineers on equipment maintenance.
- Expansion of training and refresher courses to end-users (TOT, on-site) on Ag RDT and SARS-CoV-2 molecular assays.

### **Technical Assistance**

- Conduct Diagnostic Network Optimization assessments covering automated (high throughput, POC instruments) and manual platforms.
- Revision/development, dissemination and training on multi-pathogen testing strategies and algorithms.

### **Infrastructure**

- Minor rehabilitation of laboratory site infrastructure for unidirectional flow for molecular testing.
- Upgrade of equipment for continuous electrical supply (i.e., solar, UPS, generator, fuel).
- Upgrade to ensure lab meets biosafety standards e.g., safety showers, eye wash stations, engineering control, spill kits, restricted access, cold chain monitoring etc.

### **Procurement**

- Quantification and Procurement of professional use /self-tests Ag RDTs, PCR kits / related consumables, swabs, control material for SARS-CoV-2.
- Adopt novel POC and multi-disease testing for febrile illness.
- Procurement of ancillary equipment (e.g., automated extractors, timers, centrifuges, fridges, freezers, pipettes, vortex, heat blocks).
- Procurement of biosafety cabinets (including certification and maintenance contract).

**Table 2. Package 1: Promote integration of COVID-19 testing in the routine care cascade for HIV, TB, malaria, acute febrile illness**

**Package content**

Expected outcome		Reinvest funds to support
P1.1	National Essential Diagnostic list	In country activities for developing National Essential Diagnostic (EDL) list – ensure National minimum stock level of DX kits per tier.
P1.2	Efficient diagnostic network for molecular testing in country with high utilization rates for equipment	Conduct Diagnostic Network Optimization / Assessment covering automated (high throughput, POC machines) and manual platforms – TA support available.
P1.3	Availability of minimum stock level (to allow for 3 months of testing) for SARS-CoV-2 Ag RDTs and PCR kits (with collection swabs) – based on testing level past 10 months	Quantification and procurement of Ag RDTs, SARS PCR kits / related consumables, swabs, control material for SARS-CoV-2.
P1.4	National strategies for integrating COVID-19 diagnostics into routine clinical management and sero-epidemiological monitoring of population immunity to SARS-CoV-2	Revision / development, dissemination, and training on multi-pathogen testing strategies and / or algorithm (TA Support available).
		Adopt novel POC and multi-disease testing for acute febrile illness – may include procurement of multi-pathogen testing devices, PCR instruments (thermocyclers) and / or non-HIV/TB/malaria/COVID-19 Dx e.g., syphilis, flu A / B, HBV, HCV, HPV, LFTs, FBC, kidney function tests
		<ul style="list-style-type: none"> <li>• Procurement of ancillary equipment (automated extractors, timers, respiratory timers, centrifuges, fridges, freezers, pipettes, vortex, heat blocks).</li> <li>• Procurement of biosafety cabinets (including certification and maintenance contracts).</li> </ul>
P1.5	Equipment Maintenance	<ul style="list-style-type: none"> <li>• Establish/extend warranty and /or maintenance contracts for existing and new lab equipment.</li> <li>• Train/certify national biomedical engineers on equipment maintenance.</li> </ul>
P1.6	Upgrade of infrastructure for testing sites in case installation of additional equipment or to meet biosafety standards	<ul style="list-style-type: none"> <li>• Minor rehabilitation of laboratory site infrastructure for unidirectional flow for molecular testing.</li> <li>• Upgrade systems for continuous electrical supply (i.e., solar, UPS, generator, fuel).</li> <li>• Upgrade to ensure lab meets biosafety standards – safety showers, eye wash stations, engineering controls, spill kits, restricted access, cold chain monitoring.</li> </ul>
P1.7	Self-Testing and linkages to care and treatment	<ul style="list-style-type: none"> <li>• In country activities for developing and dissemination of Self testing policy and guidance.</li> <li>• Quantification, procurement, and distribution of self-testing kits for both private and public sector.</li> </ul>
P1.8	End-users trained and competent on multi-pathogen testing at health facility /community level	Expansion of training and refresher courses to end-users (TOT, training on-site) on Ag RDT and SARS-CoV-2 molecular assays.

## **Package 2: Support to strengthen integrated lab systems and Dx networks**

### **National Planning and Response**

- Establish national central data repositories and integrated laboratory information management systems and data solutions at community level for long-term use.
- Developing costed National integrated Sample Transport System (STS) plan and /or extending/expanding existing contracts for STS.
- Payment for registration to EQA/PT schemes.
- Support establishment of National EQA schemes and ISO17043 accreditation.
- Support to ISO15189 accreditation; paying accrediting bodies to assess and accredit new or recertify existing labs.
- Support to National certification of labs.

### **Procurement**

- Procurement of IT equipment – hardware, software, mobile tablets / phones, internet bundles.
- Procurement of equipment for waste management, including leasing of incinerators, payment of incinerating fees or support waste transport.
- Procurement of transportation supplies (swabs, labels, PPE, triple packaging, etc.).
- Ready access lab funds to test specimens from outbreaks.
- Funds and mechanisms for specimen referral to external reference labs when needed.
- Equipment, reagents and training for differential diagnoses for outbreak surveillance.

### **Technical Assistance**

- Support for interconnectivity for electronic Medical Register, LMIS and HMIS. Data solutions for community level facilities.
- Support for data analysis, dashboards and mechanisms of returning results to the response teams or other stakeholders
- Support to develop HCW policies and operational plans.
- TA for review of transportation routes, expansion of existing network, costing exercise.
- Support to develop National Quality policies and operational plans for establishing/maintaining national /international accreditation schemes.
- TA supporting efficient stock management, statistics on consumables, controls and calibrators sourced.
- TA support to improve robustness of supply chain systems, including cold chain capacity, shelf life.

### **Human resources**

- Minor rehabilitation of laboratory site infrastructure for unidirectional flow for molecular testing.

- Upgrade of equipment for continuous electrical supply (i.e., solar, UPS, generator, fuel).
- Upgrade to ensure lab meets biosafety standards e.g., safety showers, eye wash stations, engineering control, spill kits, restricted access, cold chain monitoring.

**Table 3. Package 2: Support to Strengthen Integrated lab systems and Dx networks**

**Package Content**

Lab systems		Expected outcome	Reinvest funds to support
P2.1	Human Resources for Health (HRH)	Trained laboratory, HCW and community staff to support surge multi-pathogen testing.	Hiring additional human resources to support surge testing (using payment for performance contracts or incentives).
P2.2	Lab Information System (LIS)	Updated/established integrated Lab Information System (LIS) with interoperability solutions to national databases (HMIS / DHIS2), LMIS, EMR.	<ul style="list-style-type: none"> <li>• Establish national central data repositories and integrated laboratory information management systems and data solutions at community level for long-term use.</li> <li>• TA support for interconnectivity for eMR, LMIS and HMIS. Data solutions at community level.</li> </ul>
			Procurement of IT equipment – hardware, software, mobile tablets / phones, internet bundles.
			TA support for data analysis.
P2.3	Waste Management	Functional Integrated Healthcare Waste (HCW) Management Plan; costed and implemented with adaptation to COVID-19 testing where relevant.	TA support to develop HCW policies and operational plans.
P2.4		Appropriately equipped healthcare waste management capacity.	Procurement of equipment for waste management, including leasing of incinerators or support to transport of waste or payment of incinerating fees.
P2.5	Sample Transportation	Tiered up-dated network for sample transport system (HIV / TB, epidemic prone diseases such as COVID-19, cholera, dengue, influenza, typhoid fever).	TA for review of transportation routes, expansion of existing network, costing exercise.
P2.6		Efficient and integrated sample transportation system (aiming at improved turnaround time).	<ul style="list-style-type: none"> <li>• Developing costed National integrated STS plan.</li> <li>• Decentralize diagnostic service delivery with adoption of integrated sample transport systems – transport of all samples HIV, TB, malaria and COVID-19, samples for other diseases and tests.</li> <li>• Payment for transportation based on performance contracts – national, regional, and global.</li> <li>• Funds available to support STS plan – get funds for contracting private sector – postal services, Boda Boda riders, R4H.</li> </ul>
			Hiring additional drivers and sample collectors.

Lab systems		Expected outcome	Reinvest funds to support
			Procurement of consumables for transportation (swabs, labels, PPE, UN boxes).
			Training on safe sample collection and handling for collecting staff / drivers.
P2.7	Quality Management System (QMS)	Robust national QMS plan; strengthening towards accreditation.	<ul style="list-style-type: none"> <li>Funds for establishing / maintaining national/regional /international accreditation schemes (TA support if needed)</li> <li>TA support to develop National Quality policies and operational plans.</li> </ul>
			Payment for registration to EQA/PT scheme
			Procurement of EQA/PT panels for HIV, TB, malaria, COVID-19 and others.
			Support establishment of national EQA schemes and ISO17043 accreditation.
			Support to ISO15189 / 17043 accreditation – paying accrediting bodies to assess and accredit new or recertify existing labs.
			Support to national certification of labs.
P2.8	Procurement and Supply Management (PSM)	Updated LMIS and supply chain management.	TA supporting efficient stock management, statistics on consumables, controls and calibrators sourced.
			TA support to improve robustness of supply chain systems, including cold chain capacity, shelf life.

### Package 3: Integrate disease program lab-based surveillance under one umbrella with associated data analysis capacities and support genomic surveillance and bioinformatics

#### National Planning and Response

- Pilot or expand **routine** environmental surveillance programs to identify emerging pathogens and antimicrobial resistance.
- Link specimens collected through sentinel and event surveillance to lab testing
- Support cross-sectional and longitudinal serosurveys.
- Fee payment for sequencing services (pay for performance).

#### Procurement

- Procurement of sequencing instrumentation and ancillary equipment.
- Procurement of bioinformatic software.
- Procurement of sequencing reagents.

#### Human resources and training

- Hiring and training additional staff to meet surge capacity.
- TA and training support for bioinformatics.
- Establish a dedicated workforce to support NGS wet lab and analytical capacity.

Package 3: Integrate all disease program lab-based surveillance under one umbrella with associated data analysis capacities to support genomic surveillance / bioinformatics		
Expected Outcome		Package Content
		Reprogram funds to support
P3.1	Implemented integrated surveillance plan and sampling strategy	<ul style="list-style-type: none"> <li>Development of an integrated surveillance plan</li> </ul>
P3.2	Expanded surveillance capacity via national, regional, and global integrated networks (HIV, TB, SARS-CoV-2, flu etc.)	<ul style="list-style-type: none"> <li>Payment of fees for sequencing services (pay for performance)</li> <li>Support cross-sectional serosurveys</li> <li>Establish dedicated workforce to support all aspects of NGS wet lab and analytical capacity</li> <li>Procurement of reagents for sequencing</li> <li>Procurement of sequencing and ancillary equipment</li> <li>Procurement of bioinformatic software licenses</li> <li>Pilot or expand existing environmental surveillance programs to identify emerging pathogens and antimicrobial resistance</li> <li>Hiring and training staff to meet surge capacity</li> <li>TA and training support for bio-informatics</li> </ul>

## 6. COVID-19/Pandemic Surveillance and Response

In order to implement a country-owned COVID-19 surveillance in sync with the evolving pandemic, the following workstreams are recommended:

- Transition COVID-19 surveillance to sustainable and stable systems for COVID-19 and respiratory diseases by
  - Implementing event-based surveillance connected to laboratory testing to rapidly detect emerging variants and hotspots
  - Enhancing sentinel surveillance for uniform, consistent data to identify near real time surges or waves of COVID19.
  - Genomic sequencing of surveillance specimens to understand virus changes.
- Continue to strengthen routine HMIS, including digitalization and epidemic intelligence
- Enhance response functions of the public health system

**Table 4. COVID-19 and respiratory disease surveillance: Minimum Package for investment**

1. Early warning surveillance	2. Data Systems, Epi Intelligence	3. Rapid Response
<ul style="list-style-type: none"> <li>• Develop framework and training materials for event-based surveillance for respiratory diseases.</li> <li>• Revise &amp; roll-out training of sub-national training packages for event-based surveillance that includes all stakeholders in the detect-report-response chain</li> <li>• Develop &amp; maintain clinician and broad community reporter networks for reporting events</li> <li>• Stabilize CHV/CHWs to detect &amp; report events</li> <li>• Strengthen frontline FETP</li> <li>• Strengthen and right size all elements of sentinel surveillance for respiratory diseases such as existing Influenza like Illness (ILI) and Severe Acute Respiratory Infections surveillance (SARI)</li> </ul>	<ul style="list-style-type: none"> <li>• Support procurement and roll out of reporting tools for CHWs, communities &amp; hospitals</li> <li>• Implement IT systems to link event reporting to notifiable systems i.e., IDSR</li> <li>• Strengthen IT systems to enhance epi-lab linkages for testing and results return Provide funds to district surveillance focal points for triage, verification, risk assessment</li> <li>• Fund event management systems that track and record signals and confirmed events at the local and national level</li> <li>• Connect surveillance to diagnostics including sequencing capabilities</li> </ul>	<ul style="list-style-type: none"> <li>• Pre –position specimen collection kits at points of collection</li> <li>• Hire or support salaries of surveillance staff to do event investigation, risk assessment and response</li> <li>• Provide ready access funds for event response teams to respond to outbreaks</li> <li>• Conduct simulation exercise at the local level to test the functionality of all elements of early warning surveillance, lab and response.</li> </ul>
<ul style="list-style-type: none"> <li>• Develop, publish national policy &amp; strategy for integrated, multi-sectoral early warning surveillance</li> <li>• Implement integrated early warning surveillance</li> <li>• Programs for workforce development &amp; retention: Advanced FETP</li> </ul>	<ul style="list-style-type: none"> <li>• Support infrastructure for receiving, storing data</li> <li>• Invest in automated systems for data analyses, interpretation and visualization</li> <li>• Develop and deploy training packages for workforce to perform data analyses, interpretation and use</li> </ul>	<ul style="list-style-type: none"> <li>• Conducting respiratory simulation exercises at all levels to test functions</li> </ul>

## 7. Supply chain

### Informing supply chain reinvestment

Since the start of the pandemic in 2020, a significant volume of COVID-19 health products including diagnostics (Dx) and personal protective equipment (PPE), have been injected into national and community health systems. This represents just over \$2 billion (~60%) of the C19RM spend anticipated to go towards health products and a further 5.1% earmarked towards strengthening of health product and waste management systems (HPWMS). While timely actions were of the essence at the beginning of the pandemic response, volatile situations including upstream supply availability, long lead times, freight space reliability and constraints changing country priorities, as well as challenging demand forecasting, may have caused a mismatch of demand and supply across the health systems – from central to community levels.

Routine resupply of other health products for HIV, TB and malaria, including long-lasting insecticidal nets (LLINs) has also been disrupted with afore mentioned global supply chain challenges, putting immense pressures on supply chain systems to effectively govern, store, distribute and monitor the use of these health products while building up appropriate levels of strategic inventory. These disruptions have raised the need for more dynamic planning for short to long term operational and strategic supply chain priorities including order management, implementation arrangements, distribution planning and data reviews to avoid further exacerbating the strain that supply chains face today.

### Effective supply chain governance

Investments in supply chain governance including the creation, review and renewal of national strategic plans, directly work to strengthen the oversight of key supply chain functions and governance bodies. These investments further help to support country stewardship and the journey to self-reliance by facilitating central coordination teams within Ministries of Health, PRs that will support robust planning and monitoring of performance.

They will also work to ensure that articulated strategies have pandemic preparedness approaches that will accelerate the agility of national supply chains to meet their demands, irrespective of the disruption they are facing.

### Investment areas include the following activities:

- **Costed Supply Chain Strategies**  
Support development or refreshing and implementation of costed long term national supply chain transformation strategies that lay out financing needs and long-term national supply chain priorities.
- **Logistics Management Units**  
Support to develop, re-structure, implement a logistics unit or supply chain governing body to support and coordinated supply chain activities including consistent data use.

- **Leadership Development**

Accelerate programs on supply chain leadership development through programs such as [STEP 2.0](#), to help support effective governance.

- **Continuous Improvement**

Build a culture of continuous improvement through in-action / after-action reviews of the COVID-19 supply chain system and promote individual and collective learning.

### **Flexible capacity for efficient surge management**

National health supply chain systems are expected to have not only the base capacity to serve regular demand, but also flexible capacity to manage surge demands with agility, effectiveness and efficiency. Surge demand flexibility may include managing country specific strategic stockpile of critical health products, including Dx and PPEs through existing capacity or outsourced logistics providers. It could also warrant distributing an increased throughput of health products, piloting new products introductions (NPIs) such as self-testing, managing reverse logistics for Dx products to avert expiries or where unavoidable, for effective healthcare waste management. These set of investments should also prioritize warehousing safety and security to prevent accidents, fires or loss of health products.

#### **Investment areas include the following activities:**

- **Storage & Distribution Network Design and Optimization**

Strategic needs assessments of the current storage and transport capacity, including future needs and efficiency evaluation, such as, diagnostic network optimization.

- **Determining logistics activities for insourcing and outsourcing**

Map waste: design and optimize waste management networks, such as, installing small-scale incinerators at public hospitals and/or off-site transport and storage, to enable safe, effective and efficient handling of healthcare waste. Plan, evaluate and implement alternative operations, such as, vendor managed inventory (VMI).

- **Warehouse process optimization & Inventory Management**

Improve warehouse operations, including safety and security, making best use of existing storage facilities. Implement operational best practices in warehouse and inventory management to reduce expiries and loss.

### **Accelerating agility using data**

Poor end-to-end visibility, siloed and non-interoperable health product management systems, often lead to inefficient planning, increased wastage and supply chain systems that are not able to quickly pivot to frequently changing demand. Data-driven decision-making at all levels of the supply chain can help avert such issues. The availability of high-quality data is however dependent on information systems that support all the processes of the supply chain at all levels, including the central, facility and community levels.

The Global Fund grants can be used to support the implementation of standards-based health product information systems to permit fulfilment of reporting requirements, such on stock and consumption reporting and analytics on the efficiency and effectiveness of downstream supply chain processes. The Global Fund also supports investments which are standards-based, high-value investments that promote good supply chain decision-making through quick and agile data analytics.

**Investment areas include the following activities:**

- **Maturing information systems**  
Support maturing of information systems (LMIS, WMS, etc...) to ensure they are fit for purpose for effective SC monitoring.
- **Data Analysis, Visualization & Use**  
Implementation of data analytics and visualization upstream and downstream visibility for decision making and awareness. See LMU activity above on creating data use teams.
- **Interoperability/Integration and Disposal**  
Interoperability implementation between one or more health product management information system and data visualization systems.

## **8. Community health workers**

### **Overview**

Community Health workers (CHWs) include all types (including peers and other types of CHWs supported by community-led and community-based organizations) play a vital role in enhancing prevention, detection and response to outbreaks and pandemics (such as COVID-19), maintenance of routine health services for HIV, TB, malaria and broader primary health care (PHC), public health campaigns and responding to human rights and gender-related barriers to services.

To be effective, CHWs must be trained, paid, supervised, equipped, protected and linked to the health system, which requires funding across health policy and systems components (see the table).

As countries consider changes to the current C19RM interventions through re-investment planning and Portfolio Optimization, they are encouraged to move away from piecemeal funding for CHWs toward systematic investment across the eligible health policy and systems components, aligning with WHO normative guidance and supporting systems' readiness to scale.

**Countries are encouraged to:**

- Undertake an analysis of funding gaps across the health policy and systems components to determine what is already covered by other funding sources, what gaps remain and what to include in C19RM reprogramming requests.
- Use the **CHW Programmatic Gap Table** to undertake the funding gap analysis.

**Table 5.**

<b>Investments in health policy and systems support to optimize CHWs</b>
<b>HRH:</b> Governance, leadership capacity, coordination, policy & planning for CHWs (including as part of broader HRH), HRH analysis, development & maintenance of a CHW master list (CHWML) hosted in a registry, mobile/digital CHW payroll systems.
<b>HRH:</b> Selection, competency-based pre-service training & certification & maintenance of certification for CHWs, competency-based in-service training for CHW supervisors, and other district, regional, or national/program staff with roles requiring training to support CHWs, strengthening institutions/systems that provide training for CHWs.
<b>HRH:</b> Remuneration (e.g., salary, allowances see the Global Fund Budgeting Guidance) costs for CHWs and CHW supervisors based on contracting agreement (written agreement specifying role & responsibilities, working conditions, remuneration, workers' rights).
<b>HRH:</b> Supportive supervision, including salaries for CHW supervisors and costs for implementation of supportive supervision of CHWs, as well as for supportive supervision of CHW supervisors.
<b>Community engagement:</b> Support to community engagement in community health care planning, selection, CLM, quality improvement and reduction of barriers to accessing services.
<b>Equipment:</b> Transportation (e.g., bicycle or motorcycle inc. maintenance and fuel or transportation allowance), backpack, uniform, rain gear and boots, flashlight, thermometer, shakir tape, respiratory timers for respiratory illness.
<b>Commodities:</b> RDTs for malaria diagnosis, ACTs for malaria treatment and rectal artesunate for pre-referral treatment of severe malaria.
<b>Commodities:</b> Condoms, lubricant, PrEP, PEP, POC EID, RDTs, and others for HIV services relevant to the CHW role.
<b>Referral and counter-referral system:</b> Allowances for transportation and meals for patients, caregivers and CHW.
<b>Supply chain system:</b> Last mile distribution to health facility or CHW (can be done as part of CHW supervision).
<b>Health management information system, surveillance and M&amp;E:</b> Registers, paper-based job aides, routine reporting forms, mobile digital health tools (e.g., phones/tablets, sim cards, communications allowance) for CHWs and CHW supervisors.
<b>Health finance:</b> Development of and support for sustainable financing pathways for CHWs.

## Considerations

- Ensure systematic investments across health policy and systems supports, filling gaps to the extent possible within available funding envelopes.
- Where funding envelopes are inadequate for filling funding gaps across health policy and systems supports across all geographic areas:
  - Ensure investments across health policy and systems supports are covered across geographic areas where the Global Fund currently invests in CHWs and other community health cadres before expanding / scaling to new geographic areas.
  - Prioritize investment in high value / high volume investments (e.g., development and maintenance of a national georeferenced CHW master list hosted in a registry); support to analysis, policy and strategic planning for CHW and broader human resources for health (HRH), support to CHW integrated supportive supervision, in-service training for CHWs (e.g., on their full service package or as needed on new pieces for COVID-19, pandemic preparedness, HIV, TB, malaria, risk communication and community engagement and stigma reduction), resupply of CHW transportation and other equipment, scale-up of digital tools for CHW supervisors and CHWs, community mobilization.
- Feasibility of execution of activities within the C19RM implementation period.
- Consider investments that would enable countries to use C19RM to start CHW investments that would normally have to wait until the 2024-2026 investment cycle. C19RM funding can initiate investments that can be continued and expanded further in the next cycle.
- Ensure investments will be continued in the future through Global Fund funding in the 2024-2026 investment cycle or through other funding sources.

Date Published: 20 May 2022

Date Updated: 20 May 2022

# Annex 6: Refocusing C19RM Investments to Maximize Impact

## Introduction

The COVID-19 pandemic is evolving and implementing countries are strongly encouraged to rethink how C19RM funds need to be adapted to countries' needs in a very dynamic pandemic context. Whereas the COVID-19 pandemic is not yet over and investments in this area are still needed, C19RM funds provide an opportunity to invest in building health systems' capabilities across a spectrum of potential epidemic scenarios, strengthen resilience and prepare for the next pandemic.

This annex contains programmatic and process information to optimize C19RM investments and outlines strategic priorities for implementing countries to consider when making reinvestment decisions. The annex will be progressively updated to include new areas like "test and treat" strategies or novel therapeutics, that PRs will also be able to consider when revisiting their programs.

Section 2.4 of the C19RM Guidelines ([English](#) | [French](#) | [Spanish](#)) sets out the process for reinvesting C19RM savings or funds projected to remain unutilized as needs change. **C19RM funds must remain invested in C19RM eligible interventions.** For reinvestments of HIV, TB and/or malaria funding from regular grants, the [Global Fund Operational Policy Note on Grant Revisions](#) and the [Global Fund Guidelines for Grant Budgeting](#) continue to apply. Details on C19RM eligible investments can be found in section 1.6 of the C19RM Guidelines ([English](#) | [French](#) | [Spanish](#)).

## Guiding Principles

Some guiding principles for decision making to refocus C19RM investments for impact:

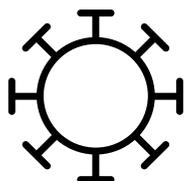
- An important opportunity for countries to bring forward RSSH and Pandemic Preparedness plans for execution under C19RM, especially to expand the scope and scale of initiatives already underway, including further strengthening community systems and Community Health Workers, supply chain, laboratories, surveillance, data systems and inter-operability, waste management and other areas within the

C19RM scope. C19RM can cover a first execution phase of health system plans, with later phases potentially part of country funding requests for future Global Fund investment cycles.

- While implementation of C19RM and core grants remains a priority, implementing countries are encouraged to take time to review, analyze and identify reinvestment priorities based on specific country context.
- Any refocusing or prioritization of C19RM interventions for reinvestment should be done based on Principal Recipients' regular engagement with Country Coordinating Mechanisms and national COVID-19 response and pandemic preparedness authorities.
- Investment decisions need to be evidence-based and consider COVID-19 response gaps. They should also consider any C19RM Unfunded Demand, available funding from other sources, capacity needs and risks associated with the new programmatic areas of work.
- Countries should have a high level of implementation readiness in new areas of work, including linking to resilience and sustainability, and preparedness for future pandemics. Focused reinvestments would ensure activities are completed by the end of 2023 which is the end date for utilization of C19RM funds.

## Key Priority Areas

Three key areas have been identified as high value reinvestment opportunities. Countries are strongly encouraged to revisit readiness opportunities within existing C19RM scope to scale up programs and fill any existing gaps:



### **1. COVID-19 Control and Containment**

#### **Interventions: Diagnostics, Therapeutics (including Oxygen), IPC/PPE**

Investing in both new COVID-19 responses, including novel therapeutics and self-testing, as well as existing interventions such as decentralized COVID-19 testing (next section), and IPC packages within the broad scope of C19RM.



### **2. COVID-19-related Risk Mitigation Measures for Programs to Fight HIV, TB and Malaria**

Including additional freight, warehousing, and distribution costs of getting health products to people.



### **3. Expanded Reinforcement of Key Aspects of Health Systems**

Reinforcement of health systems and infrastructure (including surveillance and data systems, laboratory strengthening and integration, supply chain and waste management) to boost the COVID-19 response, HIV, TB and malaria interventions and preparedness across a spectrum of epidemic scenarios.

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*The following sections are under progressive development, the Global Fund will inform PRs when new information is published – 19 May 2022*

## **2. COVID-19 Control and Containment Interventions**

### **2.1 Invest in new approaches and interventions Test & Treat, Self-Testing**

Amid the evolving scientific understanding of the virus and the pioneering of new treatments, there are a range of new options for fighting COVID-19 that can be promising reinvesting opportunities.

- **Scale-up novel treatments, scale-up 'Test & Treat'.** Establish a pathway for early diagnosis and treatment of COVID-19.
- **Accelerate service-delivery innovation and scale-up of novel therapeutics** in line with country readiness (policy, regulatory, operational guidance and others) and supporting most at risk populations.
- **Accelerate new product introduction and phase implementation in select countries**, through developing clinical care pathways for the most vulnerable populations, including novel oral antivirals and with appropriate pharmacovigilance.
- **The Global Fund will provide regular updates on novel therapeutics covering: WHO guidance, Global Fund's positioning on procurement and market shaping, and expected operational challenges.**

#### **(a) Self-testing**

Expand the use of self-testing kits to identify COVID-19

- **C19RM can serve as the primary funder and procurer of self-tests** for countries that are ready or advancing to readiness.
- **Support development of national technical and implementation protocols** for appropriate use of self-tests.
- The Global Fund currently working with FIND, WHO and other partners **on developing implementation guidance**, including operational updates for PRs to drive uptake of self-tests

#### **(b) C19RM Investment Priorities for Diagnostic Network Strengthening**

As COVID-19 case numbers are declining across the globe, most countries are scaling down their emergency responses to the pandemic. Countries are reassessing the changing epidemiological risks of SARS-CoV2 infection, relaxing their public health social measures (PHSM), and considering longer term strategies to integrate COVID-19 into case management and surveillance strategies for respiratory pathogens. During this

important phase of emergency recovery to control and sustainability, countries are encouraged to maximize the value of C19RM investments, through re-orienting interventions to strengthen key components of integrated national laboratory systems, diagnostic networks, and integrated surveillance system. Recommended approaches for reinvesting C19RM funds / savings across integration of services and surveillance are set out below:

- **Include COVID-19 testing within the package of essential diagnostics and promote access via self-testing and linkages to care and treatment.** Interventions should focus on increasing both private sector availability of COVID-19 self-tests (via pharmacies), and public sector distribution to high-risk populations (for example, via programs targeting people living with HIV, hypertension, diabetes or TB outreach programs). Individuals with respiratory symptoms coming to the health facilities for care provide a good entry point for distribution of self-test kits for their family members and contacts. Continued interventions to ensure widespread access to professional-use tests at health facilities and surge capacity remain important. Consolidating and institutionalizing strategies for the quality assurance of Ag RDTs delivered in non-laboratory testing sites are important to address within the overall framework of quality management systems and can be applied to additional non-COVID-19 RDTs used at community level. In addition, countries should consider strengthening the lab-clinic interface to enable appropriate differential diagnosis, clinical care and initiation of treatment, as required. Test and treat interventions benefit high risk populations, which include individuals with at least one risk factor for progression to severe disease (e.g., the elderly, people with immune-deficiencies, cardiovascular disease, hypertension, diabetes, or other chronic ailments).
- **Promote integration of COVID-19 testing into routine care cascade for HIV, TB and malaria and febrile and respiratory illnesses.** Countries should consider revising/updating testing algorithms for integrated community case management (iCCM), acute respiratory infection management, and adoption of novel Point of Care (POC) and multi-disease testing platforms. Decentralization of diagnostics service delivery is increasingly feasible at community level but requires careful coordination and potential health financing reforms across disease programs.
- **Strengthen integration of laboratory systems leveraging COVID-19 system improvements.** Investments in system integration may include cross-program coordination in human resource management, integrated quality management systems (e.g., proficiency testing panels, site supervision and mentoring), and robust integrated Sample Referral and Result Return Systems. Investments in geospatial mapping of diagnostic networks and developing capacity for systematic cost-efficiency and route optimization exercises are encouraged, to inform plans for infrastructure and equipment procurement, and maximize efficient utilization of available infrastructure.

**Establish or strengthen community level diagnostics data systems and interoperability with national HMIS.** Digital innovations to improve data reporting at community level will enhance surveillance capacity to rapidly detect resurgence of incident cases and as an early warning to inform response measures. Furthermore, investing in planning and preparatory work to establish national central data repositories and **integrated laboratory information management** systems capable of HMIS inter-operability will have a sustained impact beyond the pandemic and support other disease programs.

- **Integration of SARS-CoV2 detection into routine surveillance including indicator based and event-based systems.** Adapting and expanding existing sentinel and event-based surveillance is an essential component for stabilizing and transitioning systems in country to detect surges, hotspots and emergence of COVID-19 variants of concern (VoC). This requires investing in the development of systems to link surveillance with testing facilities, genomic surveillance and next generation sequencing capabilities and response.
- **Establish platforms for sero-epidemiological monitoring of population immunity to SARS CoV2.** Making data-driven decisions on how much resources to allocate towards supporting COVID-19 vaccine delivery services and other continued response efforts requires better tools to understand transmission. Representative cross-sectional serosurveys can provide aggregate ‘snapshots’ of infection history and immunity, however countries are strongly encouraged to design integrated platforms for sero-surveillance with a longer-term vision beyond COVID-19, to generate capacity for ‘precision public health’ to monitor additional major diseases and provide insights into how disease occurrence is interrelated with other health risk factors. Countries are encouraged to invest in establishing and maintaining blood banks and/or programs that use residual bloods from health care facilities for routine, systematic, age-stratified determinations of COVID-19 immunity, that can also support broader immunization program goals. In effect ensure availability of centralized serological testing capacity to help streamline cost-effective laboratory processing and promote multi-analyte testing.
- **Establish Environmental Surveillance (ES) for detection of SARS-CoV2 from wastewater samples.** Programs to pilot or expand existing environmental surveillance programs are strongly encouraged, to complement classical case-based surveillance systems. ES provides highly efficient methods for early warning of novel disease outbreaks and enables monitoring trends in population level transmission that is independent of shifts in health seeking behavior and access to clinical testing services. Furthermore, ES applications may be easily adapted to address additional applications (e.g., endemic and emerging pathogens, antimicrobial resistance determinants) and provides a clear path forward for building laboratory capacities related to pandemic preparedness. Countries should

consider establishing surveillance testing at the human and animal interface, since animals are demonstrated to be major coronavirus reservoirs.

- **Enhance capacity for genomic sequencing**, in conjunction with sustained support to routine case-based surveillance, environmental surveillance, and surveillance at the animal-human interface.
- **Integrate molecular testing platforms into routine use for other priority pathogens** by leveraging diagnostic/sequencing/laboratory capacity developed throughout the pandemic for strengthening broader epidemic/pandemic preparedness.
- **Strengthen infrastructure and capacities for Healthcare Waste Management (HCWM)**. The COVID-19 pandemic has generated a massive increase in volumes of plastic and laboratory waste, due to the unprecedented increase in testing, single-use face masks and shields discarded every day. Countries are encouraged to develop policies and incentives across diseases (for example, extended producer responsibility, polluter pays principle, and formalized waste collection value chain) that support the following: (1) to develop systems for safe disposal of reagent and chemical waste e.g. high temperature incinerators for GeneXpert cartridges; and (2) avoid and reduce waste from disposable PPE made from plastics, and to promote countries to manufacture products for reuse (circular economies) by recycling and safe disposal of PPE and other healthcare waste streams.
- **Support strengthening of governance structures and national laboratory directorates**. Countries should consider dedicating resources to the following: (1) to develop/revise national lab policies and lab preparedness and response plans in light of COVID-19 lessons learnt; (2) to improve the governance and management of more integrated lab networks, empowering lab directorates; (3) to conduct lab systems after-action reviews; (4) to develop cross-border testing strategies (e.g. testing for travel and Point of Entry); and (5) to improve new diagnostics selection, validation, procurement and delivery mechanisms through fast-track procedures and strengthened regulatory authorities.

### **(c) Take opportunities within existing C19RM scope for scale-up and filling gaps in diagnostics, therapeutics and IPC**

*Leverage reinvesting for scale-up, to address gaps and bottlenecks based on the evolving national COVID-19 response priorities and lessons learnt from implementation.*

#### **Community and decentralized testing**

- **Scale-up and decentralize integrated testing** through investing in human resources surge capacity, enhancing data systems at community level, integrated sample transfer systems and digital connectivity.
- **Community-level and led outreach mobilization campaigns**, designed to scale-up testing rates for COVID-19 in conjunction with active case finding and outreach mobilization for HIV, TB and malaria and other endemic notifiable diseases.
- Consider underlying system strengthening needs (for example **data systems or human resources**) to effectively scale up such approaches and invest accordingly.
- Important to ensure **COVID-19 testing capability** (even if positivity and mortality are falling at the moment) to enable effective use of new COVID-19 therapeutics including Test and Treat, scaling-up community testing, and scaling up routine COVID-19 surveillance integrated into national surveillance and diagnostic strategies.

#### **Disease surveillance**

- **Facilitate country-appropriate shifts from epidemic to routine surveillance systems**, digital health information systems and standards-based tools enabling data interoperability and case / indicator-based surveillance for new and re-emerging diseases.
- Expand early warning and response capacity by strengthening event-based surveillance approaches and targeted support to response.
- Supporting **field epidemiology (and laboratory) training programs**.
- **Population-based sero-surveillance** to guide national responses, high through-put sero-surveillance platforms, biobanking.
- **Next-generation sequencing** from clinical and environmental samples.
- **Waste water based surveillance**.

#### **Medical oxygen support**

- Targeting gaps in oxygen supply, distribution and delivery-related health products identified by in-country assessments and operational plans.

- Including liquid O2 (considering ACT-A O2 TF market shaping initiatives) and other bulk O2 production equipment.

## **2.2 Infection prevention and control and protection of the health workforce**

Supply of Personal Protective Equipment (PPE) for healthcare workers was a well-known worldwide challenge in the early stages of the COVID-19 pandemic. It resulted in unnecessary risk to healthcare workers, patients and visitors and disrupted essential health services. The Global Fund played a leading role in supporting implementing countries by facilitating access to PPE and other IPC commodities in the context of global shortages, lockdowns, and high prices.

IPC is a specialized program that is much more than PPE itself. It includes protocols, training, environmental controls (infrastructure), and ways to monitor the correct use and disposal of PPE and other healthcare supplies. Investing in the system results in greater value for money and more sustainable impact than the single provision of PPE, especially at a time when the acute shortage of PPE is no longer as challenging as it was at the start of the pandemic.

Refocusing C19RM investments brings the opportunity for implementing countries to strengthen systems to be able to better respond to the current pandemic and prepare for future ones. For example, countries can consider to further develop IPC infrastructure at the national and healthcare facility levels and improve the safety of routine healthcare.

There is a range of possible interventions that implementing countries can consider, depending on countries' IPC programs maturity, their COVID-19 epidemiological situation, and other contextual elements, as described below. The Global Fund can provide further technical advice on these technical areas and Principal Recipients can contact their Global Fund Country Teams should they have any questions.

### **1. Ensure adequate supplies of necessary health products (PPE, disinfectants, and others) for a new surge of COVID-19 or other airborne pathogens**

- Identify the amount of PPE and other health products used in the worst wave of COVID-19 for the country (Delta or Omicron) and ensure that a corresponding amount of PPE and other health products are available in central warehouses ready to be distributed.
- Identify and close gaps in external (outside of the country) or internal supply chains so that a ready supply of PPE is available and can be distributed to healthcare facilities and community health workers.

### **2. Strengthen national and sub-national IPC programs according to the [WHO minimum requirements](#) for IPC as referenced on this [C19RM Technical Information Note](#).**

- Consult with Principal Recipients to identify IPC experts in the country that can assess current status of IPC national programs and identify gaps.
- Use WHO [IPCAT-2](#) tool to assess national IPC programs and identify gaps that can be strategically filled in one year.
- Encourage PRs and MOHs to use the [WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes](#).

### **3. Strengthen IPC at key healthcare facilities**

- Consult with Principal Recipients to identify IPC experts that can assess the current status of IPC programs at the regional referral hospital level (also review status at district level hospitals or other primary healthcare centers if funds allow).
- Use the WHO [IPCAF](#) tool, the WHO [Infection prevention and control health-care facility response for COVID-19](#) tool, the CDC [Facility Infection Prevention and Control \(IPC\) Assessment for Coronavirus Disease \(COVID-19\)](#) tool or other tools developed by the Ministries of Health that are appropriate for the country's context to identify gaps in IPC that can be addressed within one year.

### 3. COVID-19-related Risk Mitigation Measures for Programs to Fight HIV, TB and Malaria

*C19RM does not cover core HIV, TB and malaria commodities, including through reprogramming (only TB molecular tests are eligible).*

#### HIV mitigation

- Critical HIV program adaptations, including covering additional service and management costs related to pandemic disruptions and protection of high-risk groups. For example, covering additional costs to enable community level HIV services (ART re-fill) that reduce congestion at secondary and tertiary facilities.

#### TB mitigation

- **TB/COVID integrated testing** (including TB cartridges) given the similarity of TB and COVID-19 in symptoms. Integrated testing for COVID-19 and TB can improve the detection of both diseases, help reduce the gap in diagnosis, and optimize the use of testing resources. TB testing should be increased to make up the loss due to COVID-19 and reach targets.
- **Diagnostic equipment** scale-up for multi-pathogen use such as imaging equipment (digital chest X-ray with CAD/AI), O2 and others.

#### Malaria mitigation

- **Campaign adaptations:** LLIN, SMC, IRS (including freight/PSM) if higher costs due to COVID-19.

#### Across three diseases

- **Increased freight, distribution and/or warehouse costs** due to impact of COVID-19 on global supply chains; can cover additional procurement and supply chain costs both in-country and to the country.
- **HRH surge capacity** for HIV, TB and malaria adaptations to maintain service delivery in the COVID-19 context.
- **Community mobilization** and increasing capacity of CHWs and CLO/informal community health care for COVID-19 response and other HIV, TB and malaria purposes including stigma reduction.
- **Multi disease tools for TB, HIV, malaria or COVID-19:** such as chest x-ray, pulse oximeter and patient monitoring tools
- **PR capacity:** additional enabling capacity, including human resource costs and technical assistance, to plan, manage and oversee the C19RM interventions, especially in new and re-focused areas

## 4. Expanded Reinforcement of Key Aspects of Health Systems

*Leverage reinvesting for scale-up, to address gaps and bottlenecks based on the evolving national COVID-19 response priorities, lessons learnt from implementation and the maturity of health and community systems.*

*Ensuring alignment with relevant technical frameworks including the International Health Regulations (IHR), the Global Health Security Agenda/Joint External Evaluations, WHO Benchmarks for IHR Capacities, and, where available, National Action Plans for Health Security (NAPHS).***RSSH: Support Systems and Infrastructure to Enable COVID-19 Responses and Pandemic Preparedness**

- **Surveillance and Data Systems:** Facilitate country-appropriate shifts to routine from surveillance systems e.g., Integrated Disease Surveillance and Response (IDSR), Influenza like Illness (ILI)/ Severe Acute Respiratory Infections (SARI); digital health information systems and standards-based tools enabling data interoperability and case / indicator-based and event-based surveillance for existing, new and re-emerging diseases. Improve data system (including e-reporting) to address data gaps and improve use of data for decision making.
- **Lab-based surveillance:** continue supporting structural improvements in lab systems, including long-term investments in workforce, and improving laboratory information systems (e.g., e-reporting), optimization and strengthening in the context of PP.
- **HRH:** focus on enabling HR surge capacity, lab technicians/specialist and specialized training in early warning and response capacity via field epidemiology training programs, including for community health workers linked to event- and community-based surveillance capacity.
- **Support to vaccine delivery services:** Cross-cutting support to monitoring & evaluation, community engagement and risk communication info-demic management (vaccine hesitancy, demand creation), and workforce surge capacity (via training).
- **Community engagement and leadership:** Support for community and CS engagement in national PP/COVID coordination and decision-making platforms and processes. Investment in capabilities required to meaningfully contribute and consult with community stakeholders most impacted.
- **Community systems:** Investment in community systems including for relevant research and advocacy; program design, development, management, monitoring and evaluation; community-led monitoring, community mobilization.
- **Gender based violence:** strengthening integration/scale up of GBV related prevention

- and referral pathways into care, support and treatment within existing programs and activities (e.g.: peer outreach, CHW, RCCE). Consider whether needs of specific communities are adequately met through existing programs (e.g.: refugees, IDPs, key populations).
- **Community-led monitoring:** increase scale/scope of community led monitoring related programs and interventions.
- **Supply chains:** improve storage capacity at central and peripheral levels; stocks and deliveries monitoring; in-country distribution to address bottlenecks and reach last mile, especially for IPC/PPE products.
- **Health Product Waste Management:** mitigate the increased waste volumes due to covid-related response (e.g., PPE, diverse health care waste, diagnostics, sharps from vaccination campaigns) through investments in waste management infrastructure & planning; green procurement.