Project Stellar

Strengthening COVID-19 Diagnostic and Laboratory systems investments in Africa through Partnerships

Special COVID-19 ECHO session # 53

March 31, 2022

Background

- Accessibility to quality assured diagnostic services are fundamental for quality heath care and sound public health decision-making

- In COVID-19 pandemic response, access to lab. testing services is pivotal for:

  - Timely identification, isolation and treatment of infected persons *(essential for breaking transmission chain)*

  - Epidemiological surveillance

  - Public-health control measures formulation

  - Evidence-based decisions regarding national policies

  - Informed intervention programming & informed resources appropriation

" …The most effective way to prevent infections and save lives is by breaking the chain of transmission. And to do that, you must test and isolate. You cannot fight a fire blindfolded. And we cannot stop this pandemic if we don't know who is infected. We have a simple message for countries: test, test, test."

- Dr. Tedros Ghebreyesus, WHO Director-General

Bottleneck analysis conducted by The Africa CDC through AFTCOR & Partners (Sep-Dec, 2021)

Key profiled bottlenecks limiting coverage and access to COVID-19 testing services. These varied across the AU Member States

Planning & Regulatory
- No COVID-19 testing Strategy
- Registered products

Procurement & Supply Chain
- Low procurement rates
- Insufficient supplies distribution mechanisms

Implementation
- Low testing coverage with only portion of regions activated
- Antigen use cases limited to symptomatic cases

Data Management
- Data reporting largely limited to PCR platform
- Inadequate or lack of currently reporting systems for antigen testing data

Community-level Expansion
- Testing limited to health facilities, no community-based use cases
- Lack of policies to guide transition from facility to community-based testing

On-the-ground partners in the African region and country teams (CTs) have highlighted three key barriers:

Governance and policy
National-level guidance and policies are not aligned with testing needs

- Some countries **have not registered Ag-RDTs** as an approved diagnostic device
- National policies **often hinders scale-up** (e.g. rules prohibiting community health workers and lay cadres from administering tests), or **does not exist altogether**

Limited Resources / Training
Most countries have <50% of their Health facilities offering Covid testing

- Insufficient COVID-19 tests to meet global targets
- Testing is centralized and most health facilities and communities are not yet activated to provide Covid-19 testing services
- Health facilities are **understaffed hence limited** number of staff are **trained on core competencies** e.g., test administration, sample handling, quality assurance, waste management
- Countries **laboratory systems readiness** levels are **inadequate for effective response to emerging disease treats and pandemics**

Data management
Lack of reliable testing data hinders further implementation support

- **Limited training** for HCWs on data recording or management
- Only 30% of countries in African region currently reporting Ag-RDT to central level .
- **Standard data management** tools to allow reporting and tracking of testing rates are not available. Need for integrating COVID-19 data into existing LIS/HMIS ; new digital apps to capture Ag RDT results
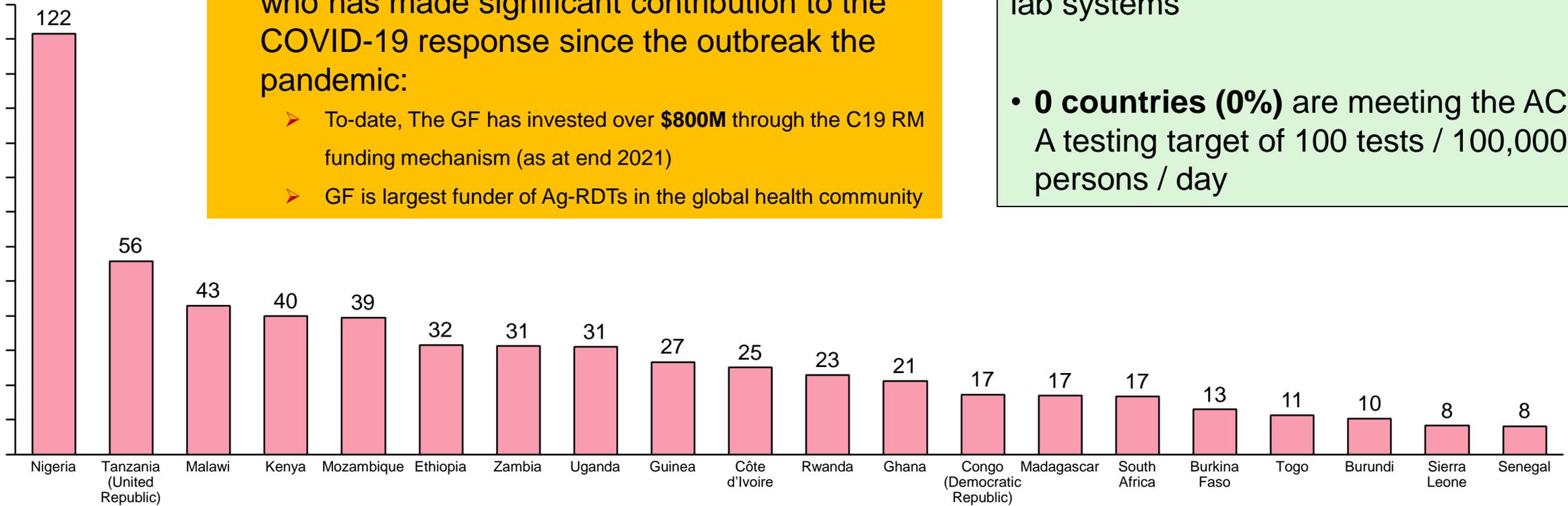
National-level gaps

Community-level gaps

Despite the significant GF investment thru C19RM funding for the Lab Diagnostic Lab System, testing rates remain low in many African countries

THE GLOBAL FUND

Y-axis label: Lab systems and diagnostics C19RM 2021 grants ($M)

Chart data

Country	Value ($M)
Nigeria	122
Tanzania (United Republic)	56
Malawi	43
Kenya	40
Mozambique	39
Ethiopia	32
Zambia	31
Uganda	31
Guinea	27
Côte d'Ivoire	25
Rwanda	23
Ghana	21
Congo (Democratic Republic)	17
Madagascar	17
South Africa	17
Burkina Faso	13
Togo	11
Burundi	10
Sierra Leone	8
Senegal	8

- The Global Fund is one of the key Partners who has made significant contribution to the COVID-19 response since the outbreak the pandemic:
  - To-date, The GF has invested over **$800M** through the C19 RM funding mechanism (as at end 2021)
  - GF is largest funder of Ag-RDTs in the global health community

These **20 African countries** represent **~70% of total C19RM funding** in Dx and lab systems

- **0 countries (0%)** are meeting the ACT-A testing target of 100 tests / 100,000 persons / day

Legend

Not meeting ACT-A testing target

Meeting ACT-A testing target

ACT-A testing target: **100 tests** / 100,000 persons / day*

To Bridget these gaps: The GF, has made available $10M for <u>capacity support</u> to accelerate implementation of C19RM Investments in Diagnostics and Lab systems in prioritized African countries

THE GLOBAL FUND

PROJECT STELLAR

GOVERNANCE

Improve National Diagnostic Governance & Regulation

Scale-up and increase coverage for COVID-19 testing and surveillance

Strengthen Data Management Systems

Project Stellar

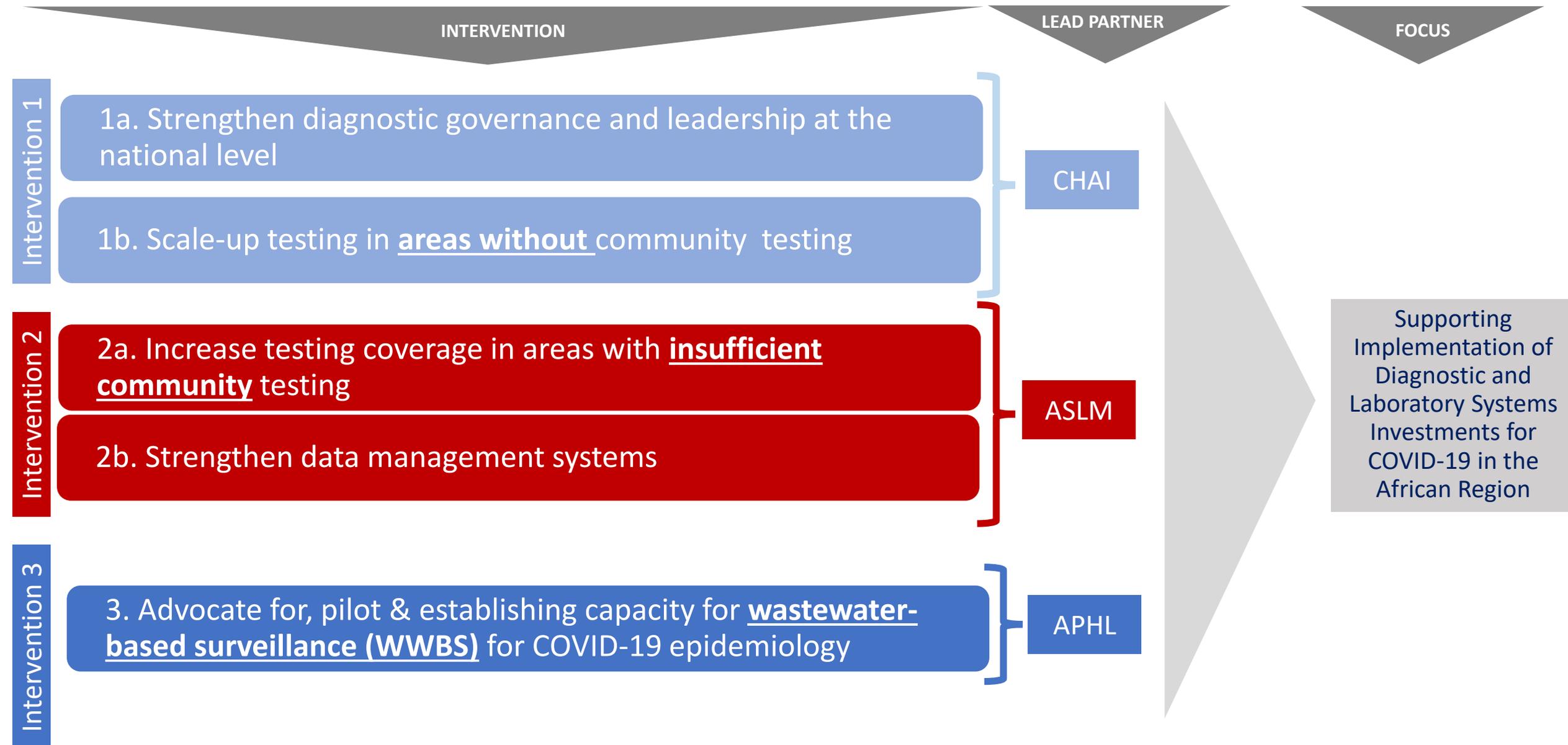|	
Source of Funding	The Global Fund
Focus	Supporting Implementation of Diagnostic and Laboratory Systems Investments for COVID-19 in the African Region
No. countries	30 (Known = 22; TBD = 8)
TA To countries	TA to be through Partners under Stewardship of the Africa CDC
Partners to deliver TA	African Society for Laboratory Medicine (ASLM) Clinton Health Access Initiative (CHAI) Association of Public Health Laboratories(APHL)
Life of Project (LoP)	Mar 2022 – Dec 2023

■ Project Stellar Countries

Created with .mapchart.net
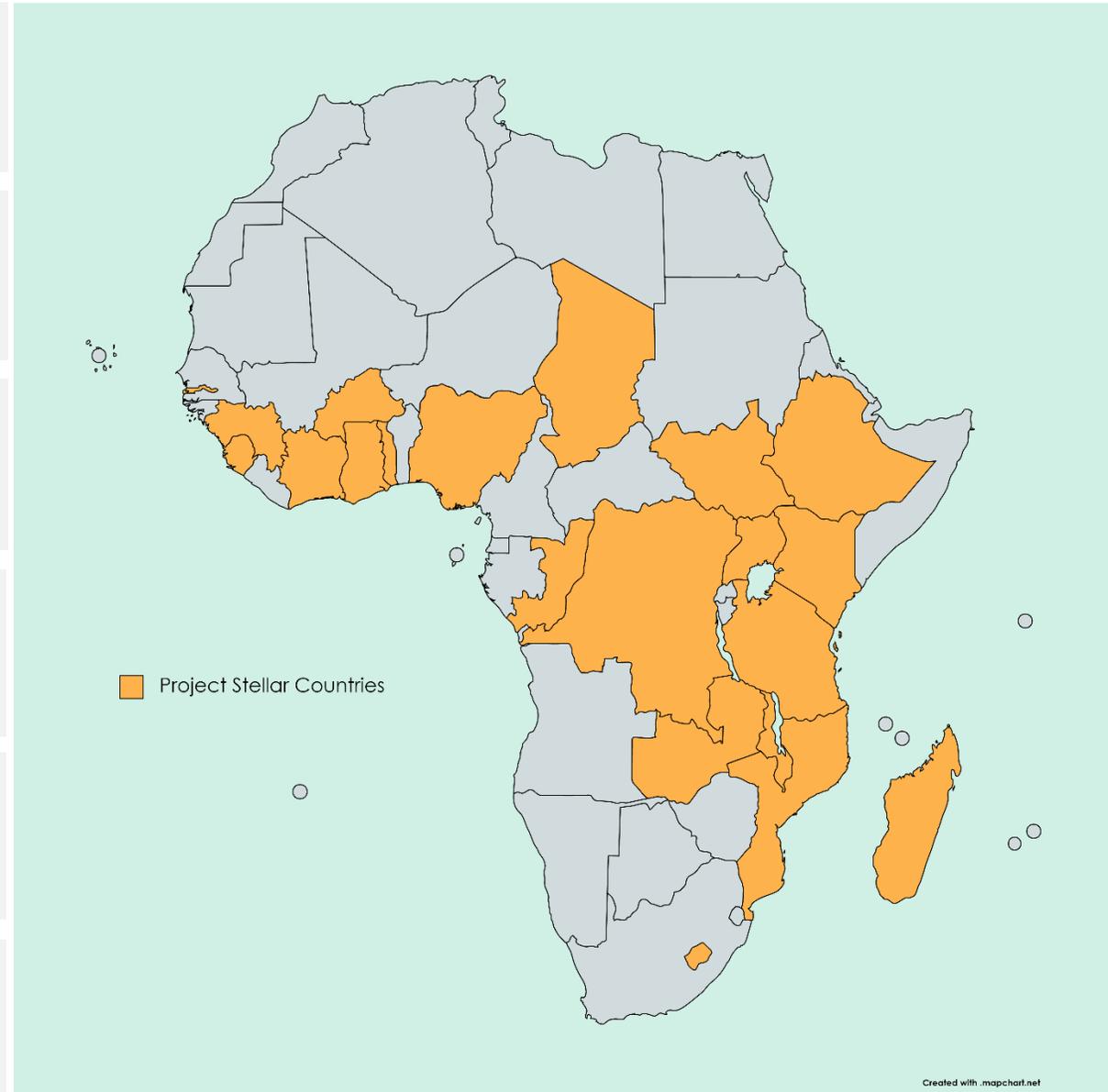
PROJECT STELLAR 3 KEY INTERVENTIONS

INTERVENTION | LEAD PARTNER | FOCUS

Intervention 1

1a. Strengthen diagnostic governance and leadership at the national level

1b. Scale-up testing in **areas without** community testing

CHAI

Intervention 2

2a. Increase testing coverage in areas with **insufficient community** testing

2b. Strengthen data management systems

ASLM

Intervention 3

3. Advocate for, pilot & establishing capacity for **wastewater-based surveillance (WWBS)** for COVID-19 epidemiology

APHL

Supporting Implementation of Diagnostic and Laboratory Systems Investments for COVID-19 in the African Region
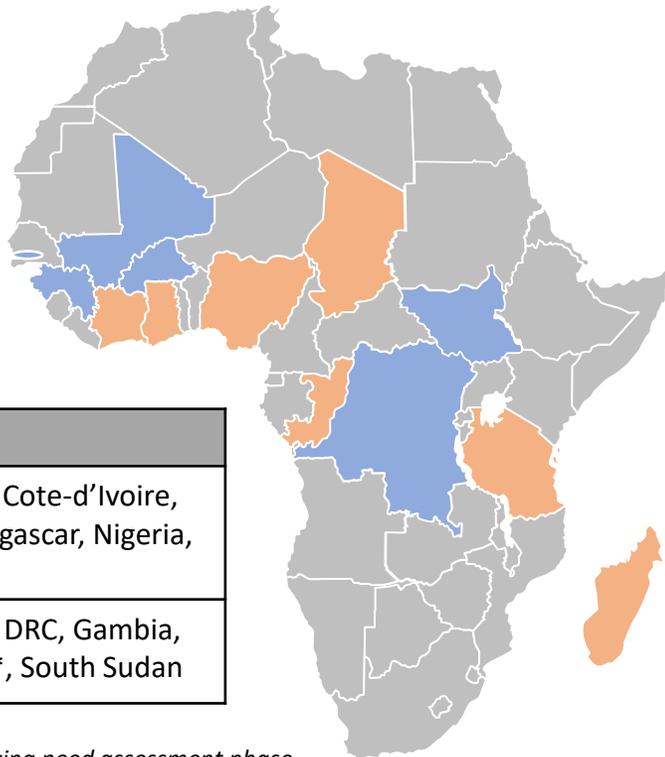
CHAI LEAD: Intervention 1

Key Interventions:

- **Intervention 1a.** Strengthen diagnostic governance and leadership at the national level

- **Interventions 1b.** Scale-up testing in areas without community testing
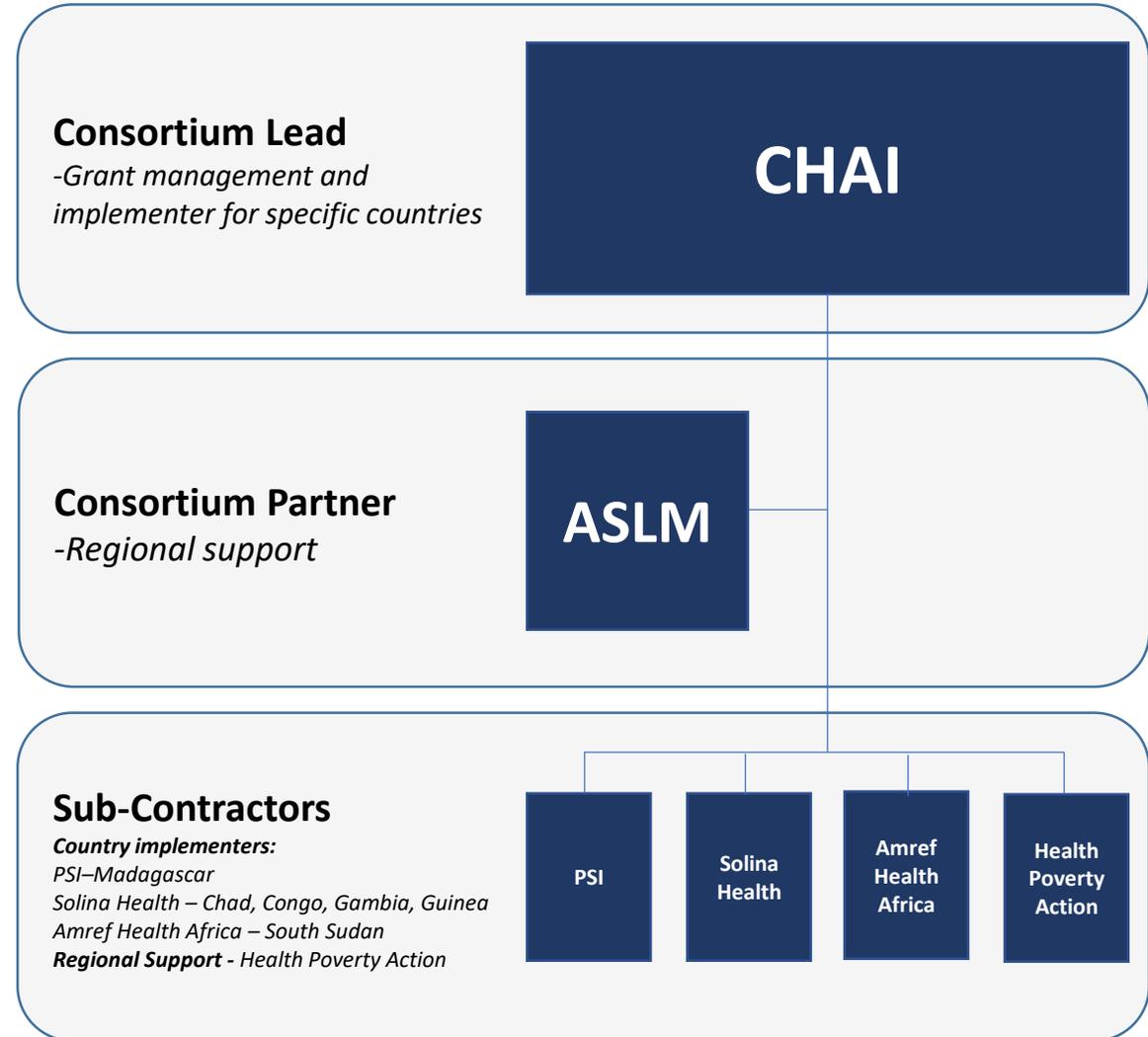
Operational

- **Timeframe**:
  March 8, 2022 - Dec 31, 2023

Interventions	Countries
1a + 1b *(7 countries + 2 TBD)*	Chad, Congo, Cote-d'Ivoire, Ghana, Madagascar, Nigeria, Tanzania
1b only *(6 countries)*	Burkina Faso, DRC, Gambia, Guinea, Mali*, South Sudan

Pending confirmation from MOH following need assessment phase

Project Consortium and Roles

Consortium Lead
-Grant management and implementer for specific countries

CHAI

Consortium Partner
-Regional support

ASLM

Sub-Contractors
Country implementers:
PSI–Madagascar
Solina Health – Chad, Congo, Gambia, Guinea
Amref Health Africa – South Sudan
***Regional Support** - Health Poverty Action*

PSI	Solina Health	Amref Health Africa	Health Poverty Action

ASLM
AFRICAN SOCIETY FOR LABORATORY MEDICINE

LEAD: Intervention 2

- **Intervention 2a:** Increase testing coverage in areas with insufficient community testing

- **Intervention 2b:** Strengthen data management systems

Intervention 2 Project Consortium and Roles

Interventions	Countries
2a only *(7 countries + 2 TBD)*	Botswana, Ethiopia, Lesotho, Malawi, Mozambique, Togo, Zambia,
2b only *(5 countries + 3 TBD)*	Ghana, Kenya, Nigeria, Sierra Leone, Tanzania
2a + 2b *(1 country)*	Uganda
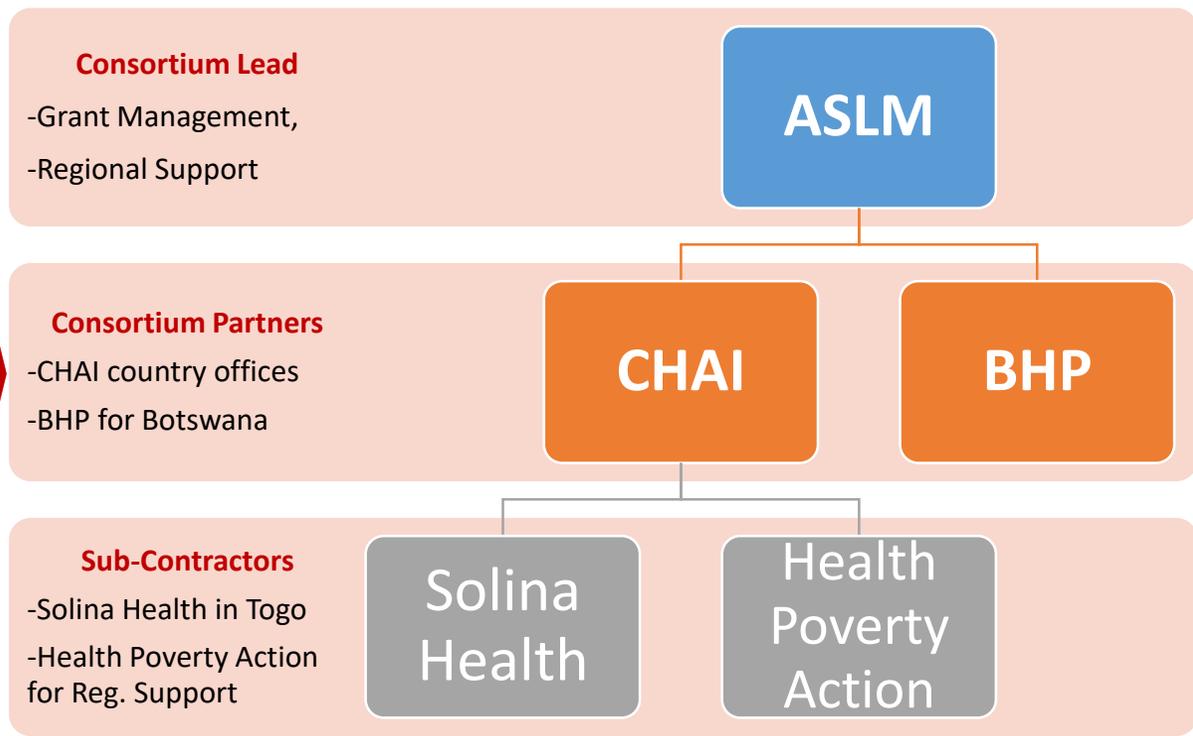
Consortium Lead
-Grant Management,
-Regional Support

ASLM

Consortium Partners
-CHAI country offices
-BHP for Botswana

CHAI   **BHP**

Sub-Contractors
-Solina Health in Togo
-Health Poverty Action for Reg. Support

Solina Health   **Health Poverty Action**

INTERVENTION 2:
INCREASING TESTING COVERAGE & STRENGTHENING DATA MANAGEMENT SYSTEMS

ASLM
AFRICAN SOCIETY FOR LABORATORY MEDICINE

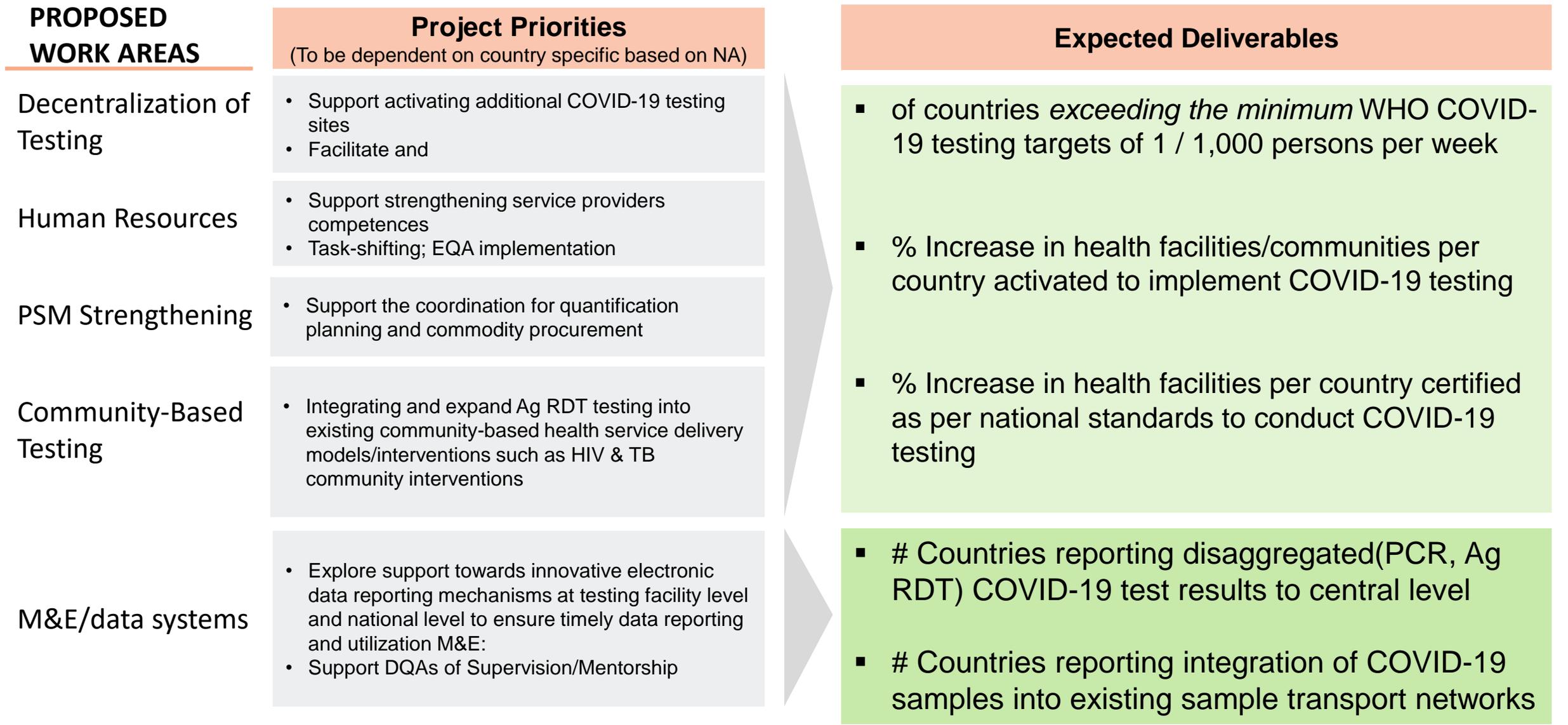| PROPOSED WORK AREAS	Project Priorities (To be dependent on country specific based on NA)	Expected Deliverables
Decentralization of Testing	• Support activating additional COVID-19 testing sites • Facilitate and	▪ of countries *exceeding the minimum* WHO COVID-19 testing targets of 1 / 1,000 persons per week
Human Resources	• Support strengthening service providers competences • Task-shifting; EQA implementation	▪ % Increase in health facilities/communities per country activated to implement COVID-19 testing
PSM Strengthening	• Support the coordination for quantification planning and commodity procurement	
Community-Based Testing	• Integrating and expand Ag RDT testing into existing community-based health service delivery models/interventions such as HIV & TB community interventions	▪ % Increase in health facilities per country certified as per national standards to conduct COVID-19 testing
M&E/data systems	• Explore support towards innovative electronic data reporting mechanisms at testing facility level and national level to ensure timely data reporting and utilization M&E: • Support DQAs of Supervision/Mentorship	▪ # Countries reporting disaggregated(PCR, Ag RDT) COVID-19 test results to central level ▪ # Countries reporting integration of COVID-19 samples into existing sample transport networks

- **COVID-19 outbreaks** remain a serious threat globally

  - **WWBS** provides **early warning (7 days)** of increased transmission.[1]

  - Provides data for **public warnings to reduce spread of disease** and to inform public health actions such as increasing access to vaccines.

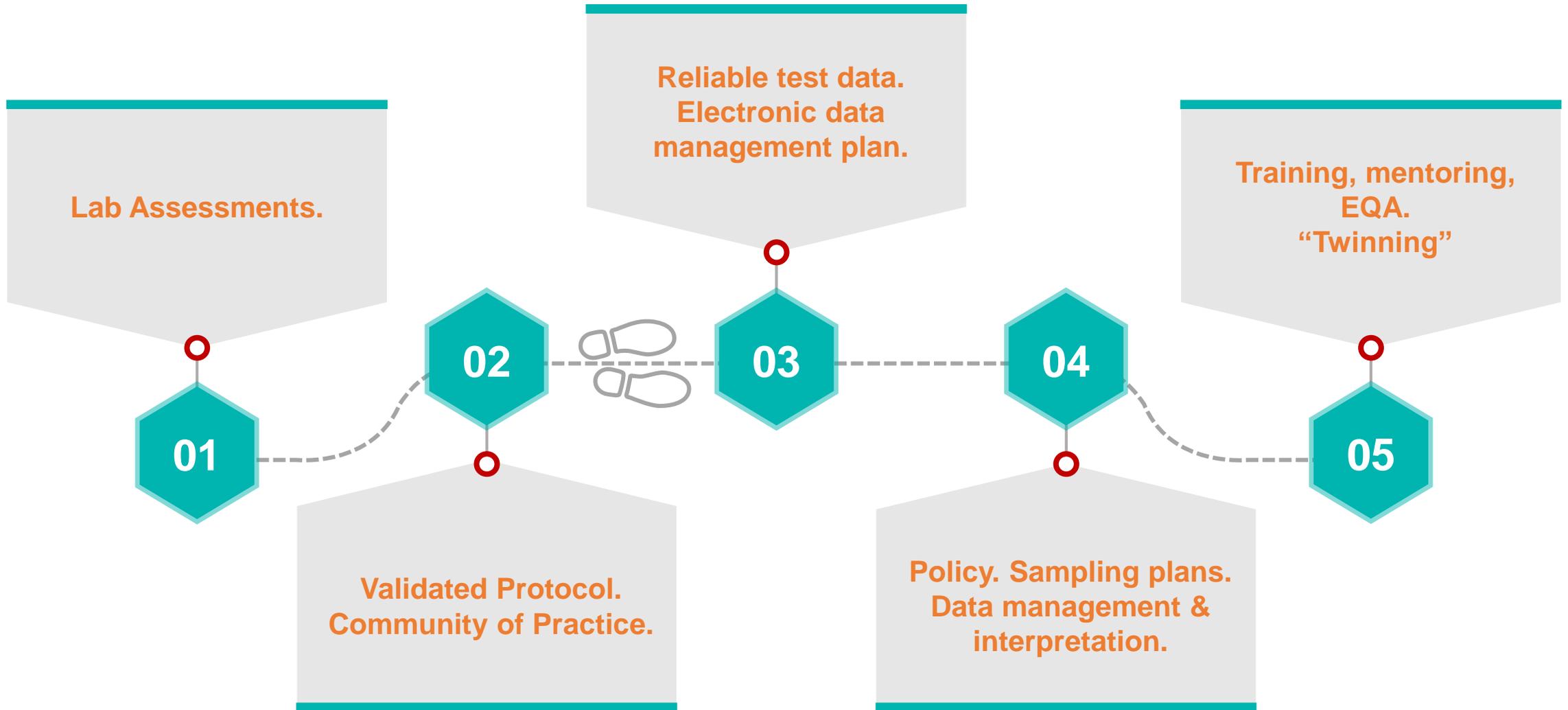 - Cost efficient versus diagnostic testing for COVID-19 **surveillance**.

    - Decrease in public seeking diagnostic testing or increase of rapid antigen test with lack of reporting to MoH.

- **WWBS capability developed now has a future role** in early detection and assessment of other high consequence pathogens and environmental contaminants.

- Results from South Africa NICD WWBS testing in 5 provinces shows value of this surveillance method.

[1]Peccia, Jordan, et al. "Measurement of SARS-CoV-2 RNA in wastewater tracks community infection dynamics." *Nature biotechnology* 38.10 (2020): 1164-1167.

Ethiopia, Kenya, Mozambique, Uganda

APHL

Lab Assessments.

Reliable test data.
Electronic data
management plan.

Training, mentoring,
EQA.
"Twinning"

02

03

04

01

05

Validated Protocol.
Community of Practice.

Policy. Sampling plans.
Data management &
interpretation.

Stakeholder Engagement
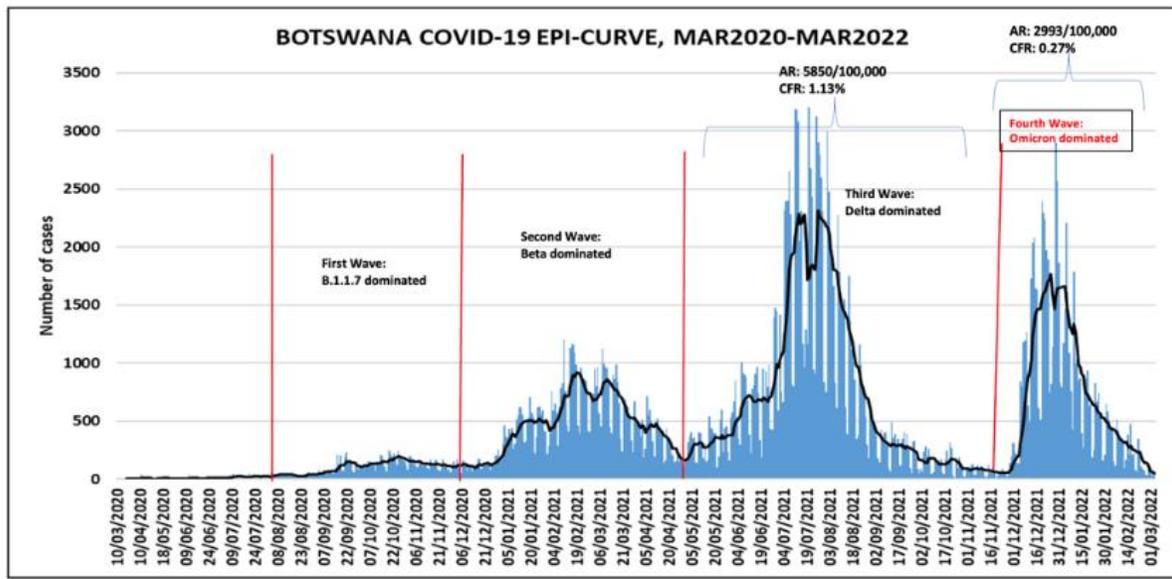
RISKS AND ASSUMPTIONS

Dynamic and evolutionary nature of the COVID-19 pandemic rapidly influences Countries' priority policy needs

- Community demands for C-19 tasting services greatly vary with resurgence of infection
- Emergency of COVID-19 variants

NATIONAL TRENDS: COVID-19 TEST STATISTICS (MARCH 2020-FEB 2022)

BOTSWANA COVID-19 EPI-CURVE, MAR2020-MAR2022

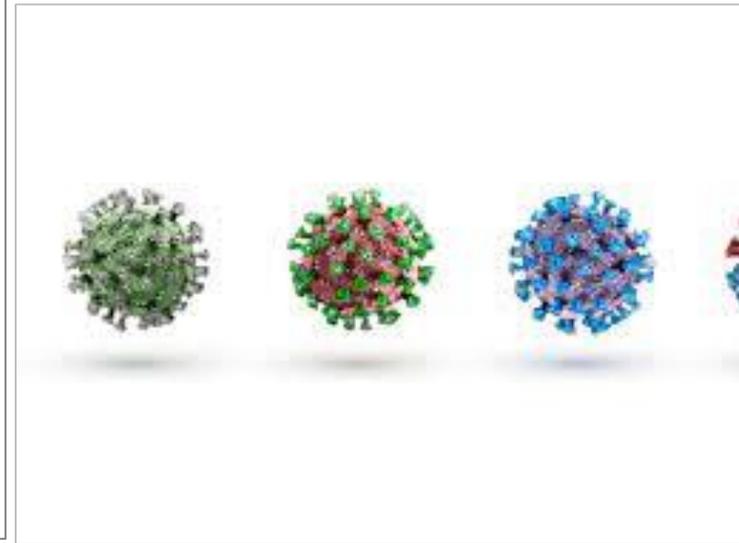**Potential emergence of new COVID-19 Variants**

- In-country GF CCMs & GF Principal Recipient funds flow process vary from country to country, potential risks of delays

- Dynamics arising from other in-country **multiple funding or implementation mechanisms,** e.g perceptions of duplication of efforts
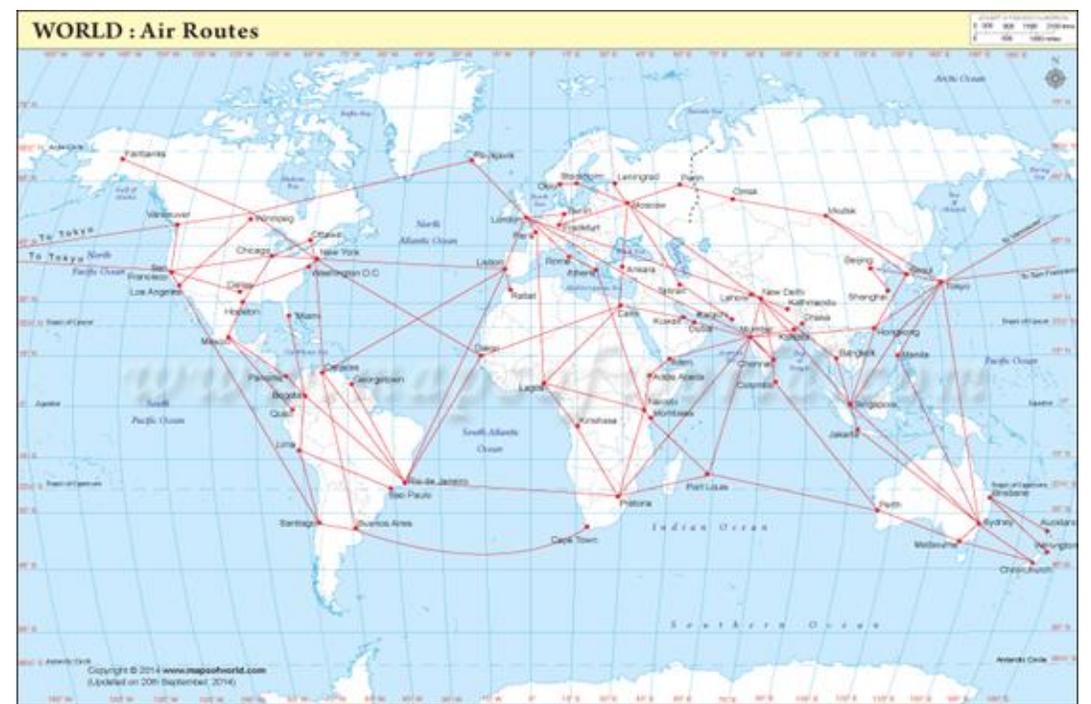
RISKS AND ASSUMPTIONS

Countries across the across the continent and the globe continue relaxing of cross border travel restrictions.....

WORLD : Air Routes

Kenya: COVID-19 travel protocols amended as of March 12 /update 39

COVID-19-related travel restrictions in Kenya amended as of March 12.

Government Scraps Covid-19 Test Requirement For Fully Vaccinated Travellers

🕐 29th March 2022 | 📁 Coronavirus, Coronavirus Zimbabwe & Diaspora, News

Spread This News

By Thandiwe Garusa

FULLY vaccinated travelers will no longer be required to produce 'valid' negative Covid-19 test results at any border post when entering Zimbabwe, information minister Monica Mutsvangwa has said.

Those who are yet to be vaccinated or those not yet fully vaccinated will however need proof of a negative test result.
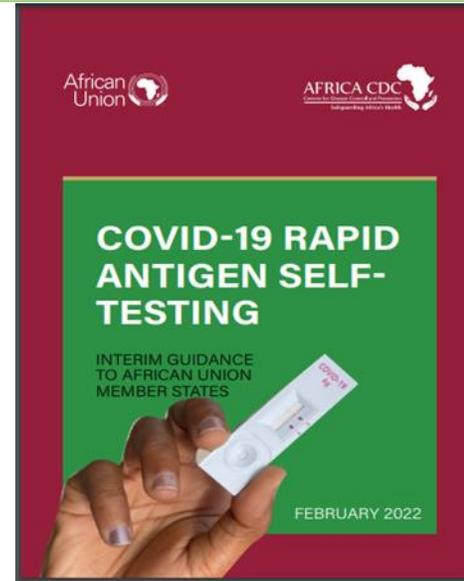
RISKS AND ASSUMPTIONS

Unpredictable In-country political unrests and/or security instabilities....

OPPORTUNITIES

- ▪ Available partners support to procure Ag RDTs e.g GF, to rapidly scale up testing to accelerate testing in community

- ▪ Emergence of new strategic guidance for COVID-19 response;
  - ▪ Self testing concept
  - ▪ Home-based care management for non-severe cases
  - ▪ Community based testing

- ▪ Despite slow rate, Vaccination against COVID-19 is gradually becoming available

- ▪ Existing laboratory systems for other disease programs (HIV, TB, Malaria, etc), transport networks,

- ▪ Data management systems already exist in AU Members states, will only require improvement

- ▪ Growing local continental capacity to conduct genomic sequencing, e.g Omicron detected
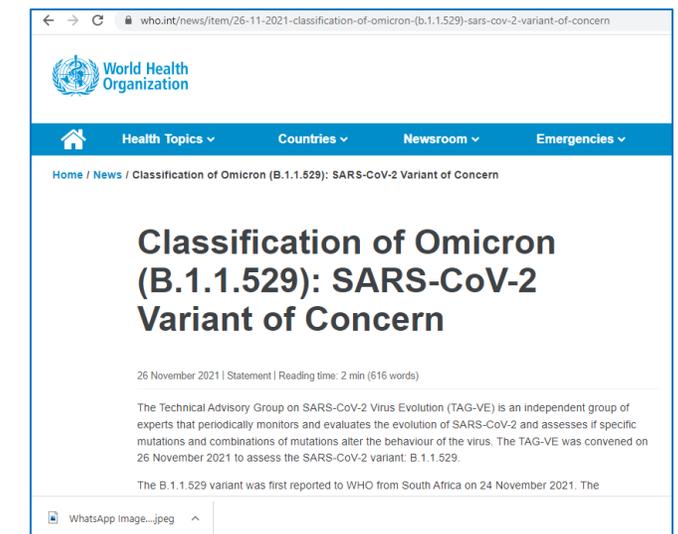

African Union

AFRICA CDC

COVID-19 RAPID ANTIGEN SELF-TESTING

INTERIM GUIDANCE TO AFRICAN UNION MEMBER STATES

FEBRUARY 2022

Use of SARS-CoV-2 antigen-detection rapid diagnostic tests for COVID-19 self-testing

Interim guidance
9 March 2022

World Health Organization

Key points

- COVID-19 self-testing, using SARS-CoV-2 Ag-RDTs, should be offered in addition to professionally administered testing services (*Strong recommendation, low to moderate certainty evidence*). This recommendation is based on evidence that shows users can reliably and accurately self-test, and that COVID-19 self-testing is acceptable and feasible and may reduce existing inequalities in testing access.
- The role and use of COVID-19 self-testing–including why, where and how it should be used–will need to be adapted to national priorities, epidemiology, resource availability, and local context with community input. Clear and up-to-date messaging will be needed to ensure self-test users can understand when to test, the meaning of their test results and post-test responsibilities.
- Self-testing should always be voluntary and never mandatory or coercive. It is important that in certain settings, such as schools and workplaces, self-testing costs are not borne by students or workers.
- Access to affordable and quality-assured SARS-CoV-2 Ag-RDTs, including for self-testing, should particularly be prioritized for settings where there is limited access to NAAT. COVID-19 self-test kits should meet the existing World Health Organization (WHO) standards for Ag-RDTs (≥ 80% sensitivity and ≥ 97% specificity among symptomatic individuals).
- COVID-19 self-testing can be considered for both diagnostic and screening purposes. Depending on the epidemiological situation, a positive self-test result in symptomatic individuals or those with recent exposure could be used for diagnosis, and to facilitate linkage to clinical care and therapeutics.
- For screening purposes, a negative self-test result could enable participation in an activity, such as group activities or indoor gatherings, and confirmatory testing for positive results can be considered.
- Each country is facing a different situation in the pandemic depending on several factors including the intensity of SARS-CoV-2 circulation, amount of population level immunity, capacities to respond and agility to adjust measures. Timely and accurate diagnostic testing for SARS-CoV-2, the virus that causes COVID-19, is an essential part of a comprehensive COVID-19 response strategy. As the pandemic continues and the virus evolves, policy adjustments related to SARS-CoV-2 testing approaches and services, including COVID-19 self-testing, will

who.int/news/item/26-11-2021-classification-of-omicron-(b.1.1.529)-sars-cov-2-variant-of-concern

World Health Organization

Health Topics ˅   Countries ˅   Newsroom ˅   Emergencies ˅

Home / News / Classification of Omicron (B.1.1.529): SARS-CoV-2 Variant of Concern

Classification of Omicron (B.1.1.529): SARS-CoV-2 Variant of Concern

26 November 2021 | Statement | Reading time: 2 min (616 words)

The Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE) is an independent group of experts that periodically monitors and evaluates the evolution of SARS-CoV-2 and assesses if specific mutations and combinations of mutations alter the behaviour of the virus. The TAG-VE was convened on 26 November 2021 to assess the SARS-CoV-2 variant: B.1.1.529.

The B.1.1.529 variant was first reported to WHO from South Africa on 24 November 2021. The

WhatsApp Image...jpeg

IMPLEMENTATION PHASES

Phase 1

- Stakeholders engagements
- Conduct deep dive analysis to identify country context priority needs

Mar-Apr 2022

Phase 2

- Country specific work plans development based on country identified priorities

April-May 2022

Phase 3

- Implementation of workplans,
- M&E

May2022-Dec 2023

Thank you...