October 2020

Reaching Impact, Saturation and Epidemic Control (RISE)

Laboratory Services

The Global Challenge

For the approximately 38 million people living with HIV worldwide and the health care workers who serve them, access to accurate, timely, and comprehensive laboratory services is vital—from initial testing and diagnosis to initiation on antiretroviral therapy (ART) to viral suppression and ongoing monitoring. However, in many low- and middle-income countries, laboratories lack adequate equipment, supplies, qualified staff, and access to information. Such deficits can lead to delays in diagnosis and treatment and increase the likelihood of losing clients to follow up. In response, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Agency for International Development (USAID) have provided generous funding for RISE, a 5-year global project (2019-2024) led by Jhpiego, that supports countries to achieve and maintain epidemic control by providing strategic technical assistance and direct service delivery to improve HIV prevention, case finding, treatment programming, and viral load suppression. Strengthening laboratory services to provide consistent and quality care is a key component of this effort.

With broad experience in health system strengthening and laboratory support across our consortium partners, RISE is well-positioned to provide comprehensive support to national laboratories to conduct assessments, implement effective quality management systems, build capacity for proper analytical testing, and continuously refine interventions to assure the quality of diagnostic services. With technical leadership from ICAP, RISE brings a comprehensive, collaborative technical approach to building laboratories' managerial and technical capabilities, with the goal of strengthening clinicians' ability to identify deficiencies and opportunities for improvement, optimize the use of existing resources, and scale up the range of diagnostic services.

The RISE consortium (Jhpiego, ICAP, Management Sciences for Health, Anova Health Institute, BAO Systems, Johns Hopkins Bloomberg School of Public Health, and Mann Global Health) brings unrivaled expertise in taking evidence-based programming to scale and transitioning to local implementing partners for sustainable, self-reliant, and resilient health systems. We have a history of meeting ambitious targets through provision of high-quality, cost-efficient services matched with innovative and human-centered demand-creation approaches.

PEPFAR U.S. President's Emergency Plan for AIDS Relief

USAID FROM THE AMERICAN PEOPLE

RISE Reaching Impact, Saturation and Epidemic Control

Our Technical Focus in Laboratory Services

RISE offers support to countries to establish sustainable laboratory programs by strengthening laboratory policies, infrastructure, systems, and personnel. Drawing on the expertise of the RISE team, and ICAP in particular, our support is guided by the laboratory network model, which links lower- and higher-tier laboratories to make a range of laboratory services available in close proximity to clinical facilities. We focus our technical expertise in laboratory services in the following areas:

- **Optimizing laboratory networks to improve access to laboratory testing.** RISE supports the development of integrated and functional laboratory networks, optimization of specimen referral and transport networks, optimal placement of point-of-care instruments, and improved supply chain management systems along all tiers of national laboratory networks.
- **Building capacity of clinical laboratories.** RISE works with countries to strengthen laboratory systems and scale up routine viral load testing, develop reliable referral testing services for early infant diagnosis and ART monitoring, and plan and implement laboratory renovations, including equipment procurement, installation, calibration, and maintenance and provision of laboratory supplies.
- **Strengthening service delivery.** RISE promotes improved access to viral load testing, reduced turnaround time so that clients receive results in a timely manner, and prompt action by providers for clients with elevated viral loads.
- **Improving quality through the development of policies, training materials, and guidelines.** RISE works with ministries of health and national laboratories to develop and revise laboratory diagnosis policies, strategies, guidelines, and operational manuals. We provide technical assistance in the development and revision of training curricula, standard operational procedures, and job aides on laboratory processes and procedures, as well as direct training and mentorship of laboratory staff.

Examples of Our Work in Laboratory Services

Our support for laboratory services spans the development of pre-service education materials to working with laboratories and technicians to strategies and systems for managing laboratory equipment and supplies. The following highlights demonstrate the breadth of our work:

- In Côte d'Ivoire, the Democratic Republic of Congo, Ethiopia, Eswatini, Kenya, Mozambique, Nigeria, Rwanda, and Tanzania, RISE partner ICAP delivered PEPFAR-supported technical assistance to implement the Stepwise Laboratory Improvement Process Towards Accreditation in more than 90 high-volume secondary and tertiary clinical laboratories working toward World Health Organization– African Regional Office accreditation.
- ICAP supported the national planning and rollout of quality management systems, the scale-up of accreditation programs, and the design and implementation of a specimen transportation system in the laboratory networks of Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Mozambique, and Tanzania.
- In Ethiopia, South Sudan, and Mozambique, ICAP supported the introduction of PIMA point-of-care CD4 testing in hard-to-reach facilities. In Eswatini, ICAP supported the establishment of a routine pediatric HIV case reporting surveillance system to improve monitoring and tracking, as well as the scale-up and decentralization of integrated HIV and TB care services, including capacity-building for laboratory sample transport and logistics.
- In Liberia, Jhpiego worked with the Liberia Association of Medical Laboratory Technologists (LAMLT) to develop pre-service education quality improvement standards and LAMLT licensure and accreditation processes—the first ever for that country. These standards, now used in 100% of Liberia's laboratory schools, are producing a better equipped and fit-for-purpose MLT health workforce.

RISE Project Principles

- Break the cycle of HIV transmission and reach those at highest risk for HIV.
- Scale up proven and innovative approaches, using human-centered design thinking to inform the development and implementation of locally driven, adaptive solutions.
- Implement interventions that address structural drivers.
- Strengthen local partners and build networks for resilient systems.
- Impart a culture of quality, data use, and accountability.
- Rapidly mobilize to respond to immediate country needs and establish strong working platforms to achieve the bold vision of epidemic control by 2020.
- Work with local partners to tailor impactful, innovative, evidence-based services to targeted populations, particularly at-risk adult men and women, including key populations.

Tools & Resources

- Standards of Care for Laboratory Services Toolkit: https://icap.columbia.edu/tools_resources/standards-of-care-for-laboratory-services/
- Viral Load Cascade Self-Assessment Scorecard: https://aslm.org/resource/viral-load-cascade-self-assessment-scorecard/
- Quick-Guide on Sample Transport: https://aslm.org/wp-content/uploads/2019/11/BookletLabCoPCookbook1-2018-07-20-Web.pdf?x11001
- Quick-Guide on Routine Viral Load Test Result Utilization: https://aslm.org/wp-content/uploads/2019/11/BookletLabCoPCookbook2-2019-06-05-A4WebQuality.pdf?x11001
- Infection Prevention and Control (2018): http://resources.jhpiego.org/resources/infection-prevention-and-control-reference-manual-health-care-facilities-limited-resourc-0

RISE Technical Areas

To learn more about our work, visit our website at https://www.jhpiego.org/rise, and see our briefs on:

- RISE Introductory Brief & Project Overview
- Health Systems Strengthening
- HIV Prevention: Oral Pre-Exposure Prophylaxis
- HIV Prevention: Voluntary Medical Male Circumcision
- Engaging Men in HIV Testing, Linkage, and Retention in Care
- Antiretroviral Therapy Optimization
- Strategic Information
- Key Populations
- TB/HIV Integration
- Laboratory Services

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