



October 2020

Reaching Impact, Saturation and Epidemic Control (RISE)

Antiretroviral Therapy Optimization

The Global Challenge

While extraordinary progress has been made to achieve the UNAIDS 95-95-95 goals of HIV epidemic control, critical work continues to advance the HIV epidemic response including expanded availability and uptake of HIV Antiretroviral Therapies (ART). Of the estimated 38 million people living with HIV (PLHIV) in 2019 worldwide, 81% were aware of their HIV status. Of these, 82% (about 25.4 million) were enrolled in antiretroviral therapy (ART), and 88% of those in treatment had achieved viral suppression. To help accelerate progress on ART optimization, the U.S. President's Emergency Plan for AIDS Relief's (PEPFAR's) and U.S. Agency for International Development (USAID) have provided generous funding for RISE, a 5-year global project (2019–2024) 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, and viral load suppression.

For the millions of PLHIV, the goal of reaching and maintaining an undetectable viral load is key to living long, healthy lives. Although new and improved drug regimens, such as TLD—for adults, a single-tablet, three-drug (tenofovir/lamivudine/dolutegravir [DTG]) antiretroviral taken once a day — offer promise of increased treatment efficiency, adherence, tolerability, safety, and convenience for PLHIV, countries face enormous planning and operational challenges as they transition PLHIV to optimal treatment regimens. RISE works with countries to break down these barriers, helping in-country stakeholders to understand the latest global evidence and its implications for the national HIV response, and providing targeted technical assistance in data-driven planning, management, and monitoring of new product introduction, and capacity-building for key clinical and supply chain interventions.

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.



Our Technical Focus in ART Optimization and multi-month dispensing

Epidemic control relies on robust delivery systems and supply of safe and effective treatments. RISE works with ministries of health and other stakeholders to reduce the time it takes for optimized drugs and treatment regimens to reach PLHIV in low- and middle-income countries in the context of the COVID-19 pandemic. RISE ART optimization efforts, led by ICAP, focus on rapidly initiating those who test positive for HIV on ART, providing multi-month dispensing retaining PLHIV in care using differentiated service delivery models, and supporting patients on ART to achieve viral suppression. To this end, RISE provides technical assistance and direct service delivery in the following areas:

- **Support transition to optimal regimens including TLD.** RISE offers policy and implementation support for transition to DTG-based regimens based on updated global clinical guidelines. We work with country stakeholders to revise national guidelines and strengthen supply chain management for improved forecasting, quantification, and distribution of DTG-based regimens in support of transition to TLD and optimal regimens for children.
- **Promote adherence and retention in care.** To ensure clients begin treatment as soon as possible after an HIV diagnosis, RISE promotes same-day ART initiation and community ART initiation to reach key and priority populations. We support training of expert clients, peer navigators, linkage nurses, and case managers to provide intensified support for ART initiation and adherence in the first 6 months, when dropout risk is high, and through viral suppression.
- **Initiate and scale up differentiated service delivery (DSD) models.** RISE works with stakeholders at the district, community, and facility levels to scale up DSD models to address the specific needs of different clients. For stable patients, RISE promotes fast-track ART refills, community ART groups, community pick-up points, and private pharmacies. We promote DSD to optimize care for key populations, adolescents (including expansion of the Operation Triple Zero approach), patients with advanced disease, and unstable clients. We promote the use of expert clients, peer navigators, and support groups to ensure a broad reach. RISE also works to ensure that all PLHIV, including children, receive 3 to 6 **multi-month dispensing** (via 90- to 180-pill bottles where available).
- **Strengthen health systems to ensure appropriate and quality care.** RISE supports countries to improve their data management systems and data use for quality improvement and better clinical decision-making. For example, RISE can assist in the development of improved client monitoring systems to track health facility testing yield and time to ART initiation and scale up of viremia clinics to improve viral suppression.

Examples of Our Work in ART Optimization

RISE partner ICAP brings extensive experience in supporting country transition to optimized ART regimens. With technical leadership from ICAP, RISE-Nigeria is expanding access to TLD and MMD for adults, adolescents, and children across four RISE-supported states (Adamawa, Akwa Ibom, Cross River, and Niger states). During COP19, RISE-Nigeria expanded DSD models to support and strengthen adherence and retention, with adaptations to continue this progress within the context of COVID-19. Preliminary COP19 performance data demonstrate RISE's achievements in ART optimization, DSD and MMD: of the 62,868 adults >15 years on ART, 60,105 (96%) were on TLD at the close of COP19. Across the four RISE-supported states, 39% of RISE-Nigeria supported clients are receiving MMD3-5 (24,674) and 56% are receiving MMD6+ (36,090). RISE works closely with supported facilities, MOH counterparts, and other IPs to ensure adequate stock of TLD to allow for rapid scale up of MMD, particularly in the context of COVID-19.

Additionally, continuing work begun under a previous program, ICAP leads RISE-Kenya's technical assistance to the Government of Kenya on the transition from the use of first-line suboptimal regimens. Prior to ICAP's TA, clients were developing resistance and viral suppression rates were low among children, adolescents, and men. ICAP's technical assistance through the RISE-Kenya project serves as a blueprint and example of how RISE can support PEPFAR countries as they work toward viral suppression among ART clients. ICAP's efforts in Kenya include:

- Supported Kenya's National AIDS and Sexually Transmitted Infection Control Programme (NASCOP) and the national technical working group to develop a plan for incremental phase-in of DTG 50 mg, starting with clients currently on a nevirapine-containing regimen consisting of two or more pills per day.
- When TLD became available, assisted in revising and rolling out the 2018 National ARV Guidelines, which included TLD as a preferred treatment option.
- Supported NASCOP's efforts to rapidly transition 400,000 patients to TLD by developing ARV optimization training materials and helping to facilitate online provider training sessions.
- Supported the development and dissemination of communications materials on TLD to both clients and providers, and provided onsite mentorship to select high-volume facilities.

Through ICAP-supported efforts, 2,476 providers across all 47 counties in Kenya completed training on ARV optimization, pharmacovigilance, and commodity reporting. These health providers now monitor ART patients for drug toxicity at every consultation, leading to overall improvements in data quantity and quality. As of mid-2019, 381,943 PLHIV in Kenya were on DTG-based regimens, including more than 120,000 on TLD.

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

- Grand Rounds Webinar. OPTIMIZE: Introducing a New Generation of ARVs in Low and Middle-Income Countries (2017): https://icap.columbia.edu/tools_resources/icap-grand-rounds-webinar-archived-recording-optimize-introducing-a-new-generation-of-arvs-in-lmic/
- Health Care Worker Training on the Introduction of Dolutegravir for the Treatment of HIV Infection (2018): <https://optimize.icap.columbia.edu/resource/hcw-trainingonthe-introduction-of-dtg-for-the-treatment-of-hiv/>
- Health Care Worker Training on the Introduction of Dolutegravir for the Treatment of HIV Infection. Supplemental Module: Pregnancy and Breastfeeding (2018): <https://icap.columbia.edu/ptb-dtg-pbfbw>
- Health Care Worker Training on the Introduction of Dolutegravir for the Treatment of HIV Infection. Supplemental Module: Toxicity Monitoring (2018): <https://icap.columbia.edu/ptb-dtg-toxicity>
- Checklist to Guide Optimal ARV Introduction: <https://optimize.icap.columbia.edu/resource/checklist-to-guide-optimal-arv-introduction/>
- ARV Transition Readiness Assessment for Country Program Managers (2018): <https://optimize.icap.columbia.edu/resource/country-readiness-assessment/>
- ICAP Presentation: Introduction of New ARVs in the Context of Differentiated Service Delivery (2018): http://cquin.icap.columbia.edu/wp-content/uploads/2018/03/Sugandhi_OPTIMIZE.FINAL_.pdf
- OPIMIZE- Accelerating access to safer, simpler and more affordable antiretroviral treatment for individuals living with HIV <https://optimize.icap.columbia.edu/>

RISE Technical Areas

To learn more about our work, visit our website at <https://www.jhpiego.org/riase>, 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

For more information about RISE, contact:

At RISE: Kelly Curran, RISE Project Director (kelly.curran@Jhpiego.org)

At USAID: Elizabeth Berard, USAID Agreement Officer's Representative (EBerard@usaid.gov)