

LINKAGES MALI

Summary of Achievements

October 2016–September 2020

The Linkages across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) project was implemented in Mali from October 2016 through September 2020 in partnership with civil society organizations (CSOs), government stakeholders, and key population (KP) and priority population (PP) individuals, with support from the U.S. Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). LINKAGES Mali implemented innovative programming designed to increase the impact, quality, and efficiency of HIV services for members of KPs (men who have sex with men [MSM] and female sex workers [FSWs]) and priority populations (clients of FSWs and their non-KP stable partners) who face the greatest risk of HIV. The FHI 360-led LINKAGES team successfully demonstrated that strategies such as risk segmentation, enhanced peer outreach approach (EPOA), risk network referral (RNR), index testing, peer navigation, linkage to antiretroviral therapy (ART) and case management, and online outreach offered new and impactful ways to engage previously unreached members of KPs and PPs and link them to high-quality HIV services. In addition, the monitoring of clients was facilitated by the introduction of unique identifier codes (UICs), while the use of dried blood spot (DBS) samples improved viral load (VL) monitoring. Over the life of project, LINKAGES Mali worked to introduce and scale up these innovations as well as reduce stigma and discrimination that have hindered efforts to achieve epidemic control. This brief summarizes the achievements of the LINKAGES project in Mali.

BACKGROUND

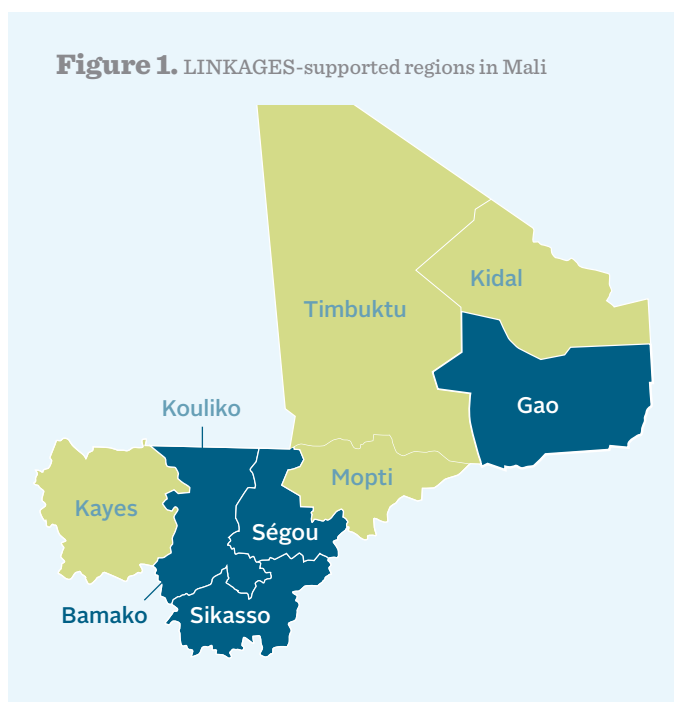
In Mali, HIV prevalence is 1.1% among the general population but 24% among FSWs and 13% among MSM¹ Given the high HIV prevalence among KPs, LINKAGES implemented an HIV program targeting them as well as clients and non-KP stable partners of FSWs, who are considered a priority population.

From October 2016 through September 2020, LINKAGES Mali conducted programmatic activities in 23 health districts in four regions — Bamako, Ségou, Sikasso, and Gao (Figure 1). Implementation at the field level was done by local subawardee partners: Association de Recherche, de Communication, et d'Accompagnement à Domicile des Personnes Vivant avec le VIH et le SIDA (ARCAD-SIDA); Association pour la Protection et la Promotion de la Famille (APPF); Initiative Malienne D'Appui Au Développement Local (IMADEL); and SOUTOURA. Each partner provided HIV prevention, care, treatment, and support interventions to FSWs, MSM, clients of FSWs, and PLHIV in their assigned health districts.

Bordered by seven countries, Mali constitutes a major crossroads for many migrant populations in the West African subregion and sub-Saharan Africa as a whole. Societal stigma and discrimination toward MSM and FSWs remain high in the country and are firmly entrenched among health care workers in health facilities, resulting in reduced access to health services for KPs.

Highlights

- Increased the overall case-finding rate from 2% in 2016 to 11% in 2020 for key and priority populations using risk assessment, index testing, and the enhanced peer outreach approach
- Launched online outreach for key populations, which produced a case-finding rate of 22% in the last quarter of 2020
- Improved the linkage-to-ART rate for newly diagnosed individuals from 28% in 2016 to 93% in 2020
- Assisted with development of the National Toolkit of Service Delivery Packages for Key and Prison Populations in Mali in 2019, which informed national strategic planning

Figure 1. LINKAGES-supported regions in Mali**Table 1.** Approaches to build and support key and priority population programming

Areas	Approaches
Health Policy	<ul style="list-style-type: none"> • Direct technical assistance to the Mali Ministry of Health (MOH) through the Mali National High Council to Fight AIDS (HCNLS) and the national HIV program (Unit for the Fight against HIV/AIDS [CSLS])
Technical	<ul style="list-style-type: none"> • Microplanning and routine mapping • Risk segmentation • EPOA • Index testing, including RNR • Peer navigation plus • Case management • Use of DBS
Data Management and Decision-Making Tools and Systems	<ul style="list-style-type: none"> • Unique identifier codes (UICs) for service users • Peer outreach tools using a simplified paper-based system • Reporting system to track data weekly, monthly, and quarterly • Decision-making using programmatic data and evidence-based approaches • Dissemination of programmatic results and best practices • Development and use of DHIS2 Tracker (called KOLOCHI)
Virtual Initiatives	<ul style="list-style-type: none"> • Online-to-offline outreach approach • Interface Voice Response (IVR) platform to assess quality KP-friendly service delivery from community partners and government clinics
Organizational Strengthening	<ul style="list-style-type: none"> • Use of organizational performance index (OPI) to strengthen program management capacity of the local subaward partners • Regular training coupled with formative field support supervision to reinforce learning and build expertise

KEY PROGRAMMATIC ELEMENTS

Since 2012, Mali has experienced serious social and political conflict in the project regions, particularly the central and northern areas. Despite the backdrop of unrest, LINKAGES Mali developed and implemented numerous innovative approaches to build a strong HIV prevention, care, treatment, and support program focusing on FSWs, MSM, and FSW clients, as outlined in Table 1. The project's robust partnership with local government authorities within the supported health districts and with local partners combined with the use of these approaches resulted in progressive increases in case finding and linkage to ART over the life of project.

SERVICE DELIVERY IMPACT

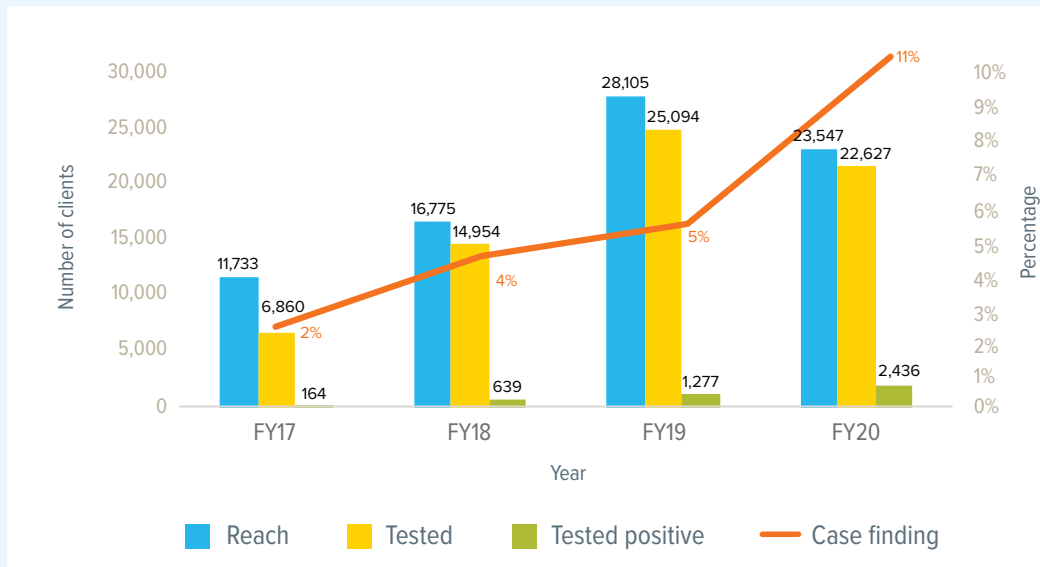
Over the life of project, LINKAGES Mali contributed to the national HIV response by reaching 96,380 clients with prevention services, testing 79,727, among whom 4,461 were found to be living with HIV; and linking 3,527 HIV-positive clients to ART.

The trend analysis by fiscal year, shows that case finding increased from 2% to 11% in 2020 (Figure 2). Similarly, linkage to treatment increased from 34% to 85% in 2020 (Figure 3).

Figures 4 through 6 describe the quarterly trend in case finding and linkage to treatment by population group. For case finding, the project reported an increase from 2% to 10% in 2020 among FSWs (Figure 4), from 0% to 14% in 2020 among MSM (Figure 5), and from 0%

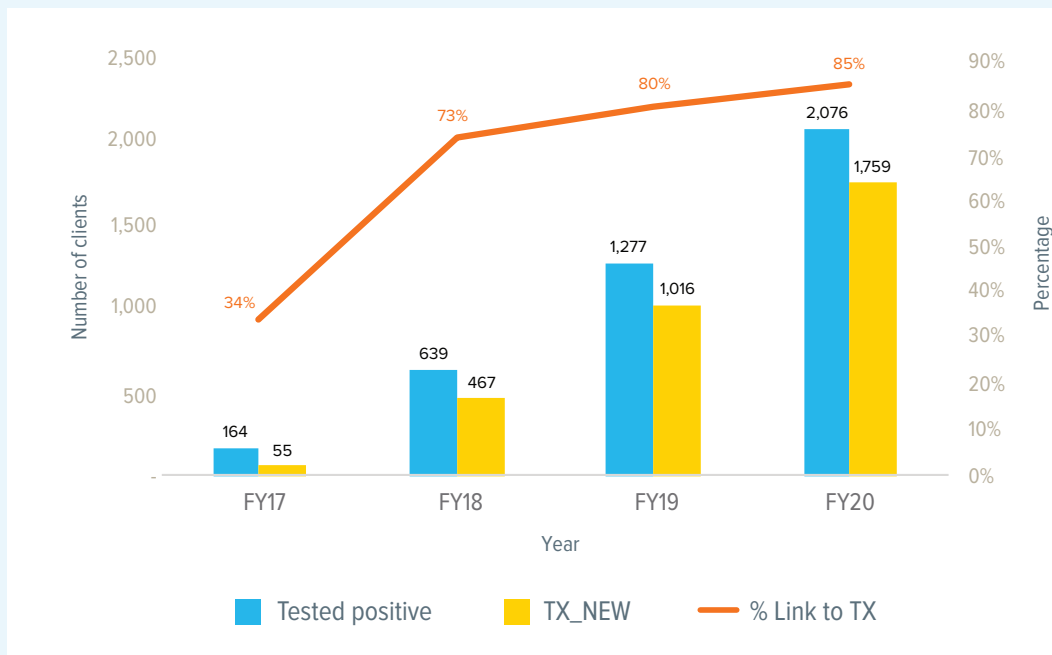
to 5% in 2020 among clients of FSWs (Figure 6). Likewise, linkage to treatment also improved over time among each population group, approaching the 95% PEPFAR benchmark by the end of project for all groups.

Figure 2. Case finding among all clients, October 2016–September 2020*

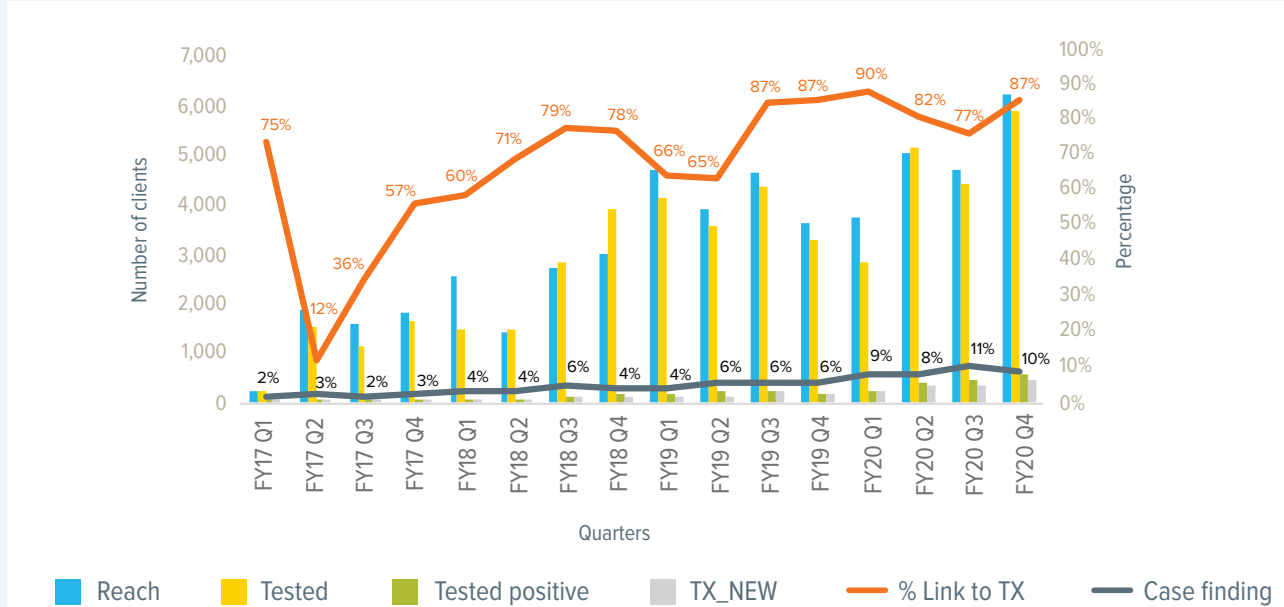


*FY17: Oct 2016–Sep 2017; FY18: Oct 2017–Sep 2018; FY19: Oct 2018–Sep 2019; FY20: Oct 2019–Sep 2020.

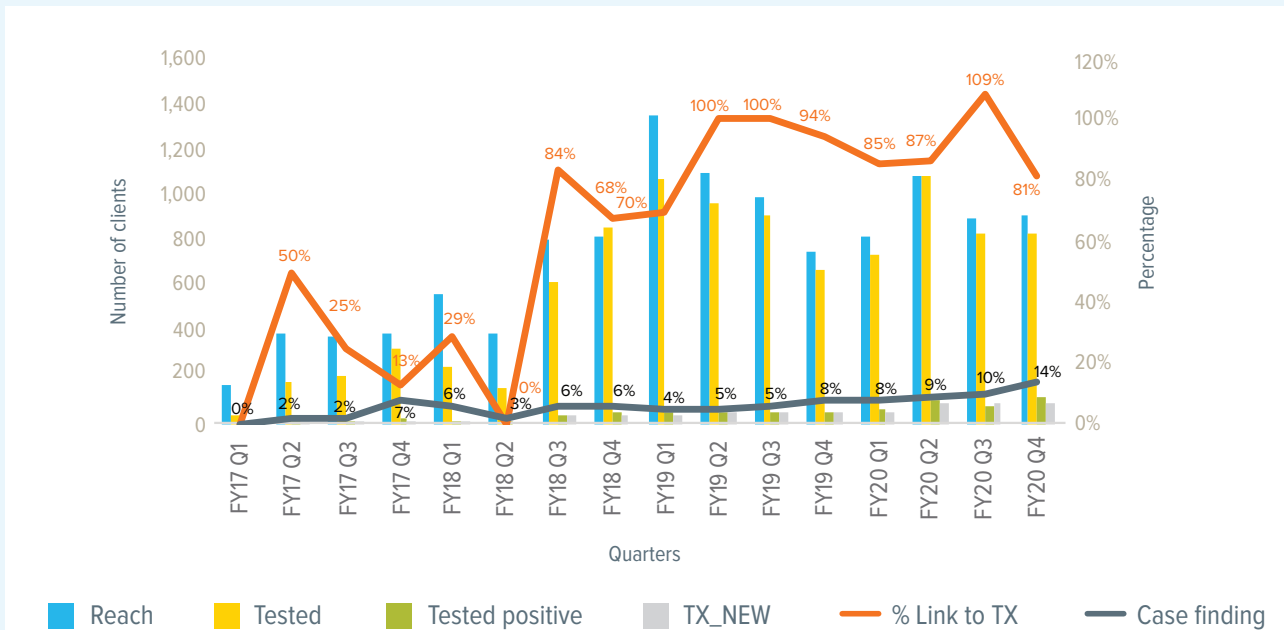
Figure 3. Linkage to treatment among all clients, October 2016–September*



*FY17: Oct 2016–Sep 2017; FY18: Oct 2017–Sep 2018; FY19: Oct 2018–Sep 2019; FY20: Oct 2019–Sep 2020.

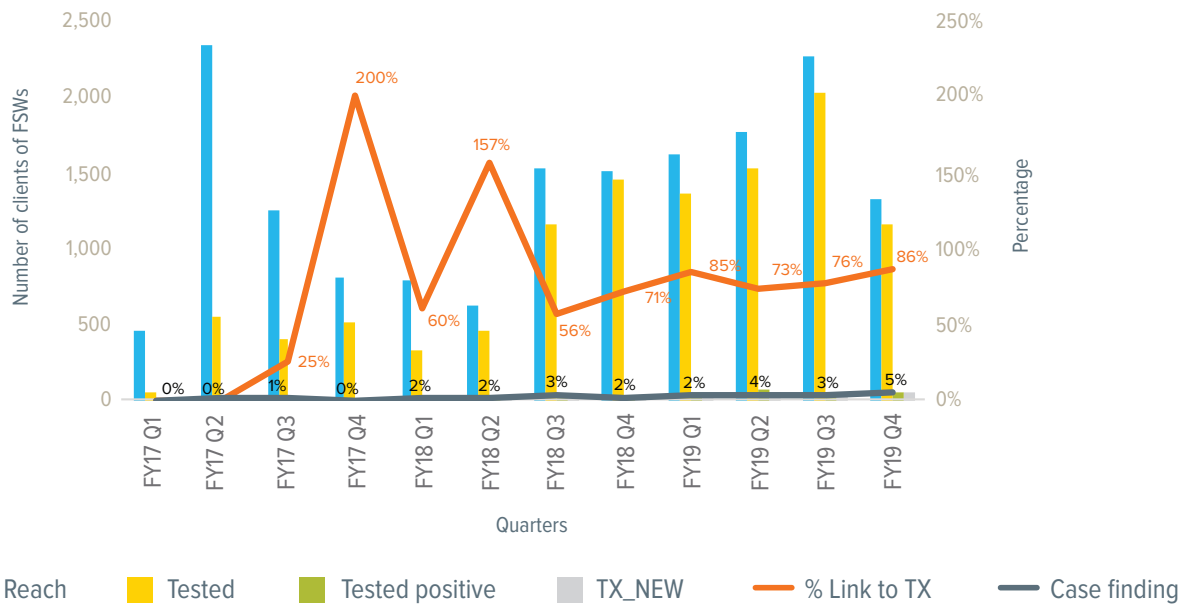
Figure 4. Quarterly trend in prevention, case finding, and linkage to ART among FSWs, October 2016–September 2020*

*FY17: Oct 2016–Sep 2017; FY18: Oct 2017–Sep 2018; FY19: Oct 2018–Sep 2019; FY20: Oct 2019–Sep 2020.

Figure 5. Quarterly trend in prevention, case finding, and linkage to ART among MSM, October 2016–September 2020*

*FY17: Oct 2016–Sep 2017; FY18: Oct 2017–Sep 2018; FY19: Oct 2018–Sep 2019; FY20: Oct 2019–Sep 2020.

Figure 6 . Quarterly trend in prevention, case finding, and linkage to ART among clients of FSWs, October 2016–September 2020*



*FY17: Oct 2016–Sep 2017; FY18: Oct 2017–Sep 2018; FY19: Oct 2018–Sep 2019; FY20: Oct 2019–Sep 2020.

“ My participation in the meeting [held at Soutoura’s clinic] completely changed my perspective. Growing up in an (MSM) community, there’s no awareness of all the risks. I learned what behavior I should adopt to prevent STIs and HIV, about gender-based violence in a high-risk context like ours, and the STI treatment offered at the clinic. [...] Overall, I feel well equipped to live a safe sexual life without risk of getting STIs or HIV, and I help my peers to benefit from the same services as I do.”

20-year-old MSM client, Soutoura, Bamako

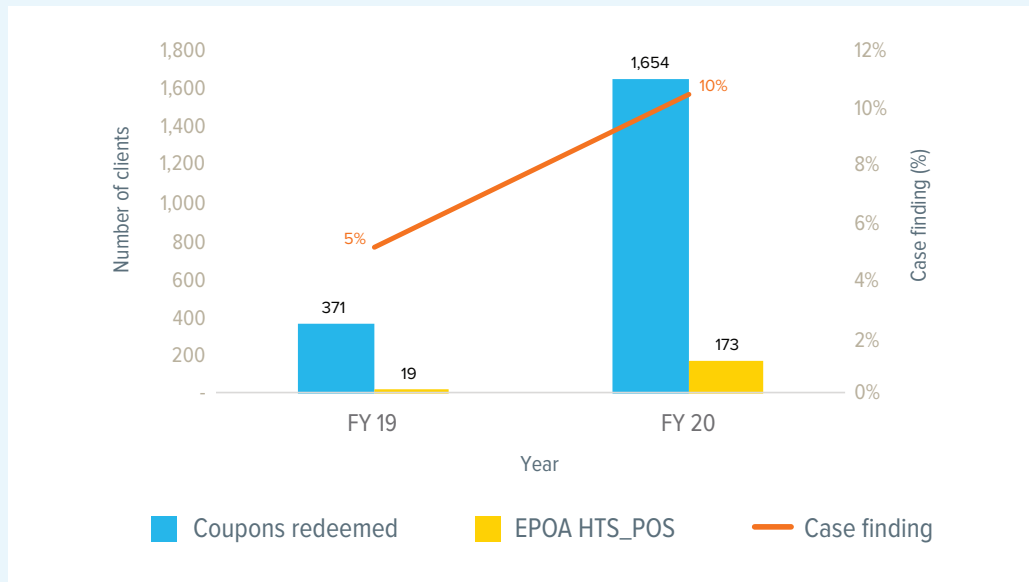
TECHNICAL HIGHLIGHTS

HIV RISK ASSESSMENTS FOR TARGETED INTERVENTIONS

Peer educators were trained to conduct HIV risk assessments to determine risk profiles (low, medium, and high) and to offer differentiated services according to the profile, allowing for more targeted HIV testing and informed decision-making interventions.

ENHANCED PEER OUTREACH APPROACH

EPOA², a peer-led coupon-based referral network strategy, was employed to successfully access hard-to-reach networks of KPs to offer HIV prevention, testing, and treatment services in ways that ensured their privacy. LINKAGES Mali conducted EPOA in the Ségou, Tominian, and Bamako regions, particularly in areas where the case-finding achievement was below target in FY19 and FY20. Case finding increased from 5% in FY19 to 10% in FY20 (Figure 7). Overall, EPOA contributed to 7% of all newly diagnosed KP members within the same period.

Figure 7. Case finding among all clients, October 2018–September 2020*

*FY19: Oct 2018–Sep 2019; FY20: Oct 2019–Sep 2020.

INDEX TESTING AND RISK NETWORK REFERRAL

Index testing is a case-finding approach that focuses on eliciting the sexual or needle-sharing partners and biological children of HIV-positive individuals and offering them HIV testing services. Index testing is a completely voluntary service offered to people living with HIV (PLHIV); they are free to accept or decline. To increase HIV case finding, LINKAGES Mali introduced the index testing strategy at all project sites in July 2020 as part of the HIV testing services (HTS) standard of care. In the last year of the project, index testing was offered to 48% (1,135 of 2,371) of HIV-positive KP individuals, and 66% (745 of 1,135) accepted the service (Figure 8). Although this represents a relatively low offer and acceptance rate among index clients, a very high case-finding rate among the contacts was reported (50%; 517 of 1,040 excluding known positives), highlighting the value of this targeted testing approach.

Extending beyond index testing, the project also offered risk network referral (RNR). RNR is when providers offer PLHIV additional, self-guided options to informally extend links to HIV testing and other services to a broader set of social- and risk-network members who have an elevated risk of HIV infection. This broader set of network members may include other friends and acquaintances who live and work within the same area or have similar risk behaviors.

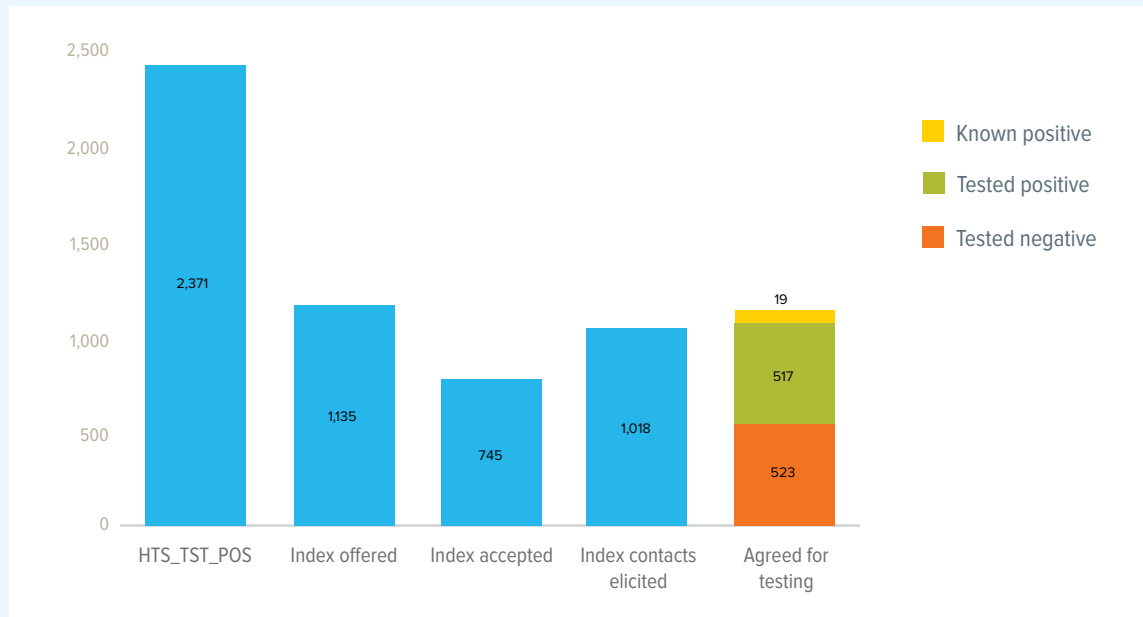
PEER NAVIGATION PLUS

provides support to community and to public health systems to enroll clients in care, initiate them on treatment, and help them remain treatment adherent. In peer navigation plus, peer navigators provide additional support to clients that goes beyond standard navigation, such as tracking clients who are lost to follow-up and bringing them back into treatment. The strengthening of the monitoring and evaluation system enables same-day follow-up calls for missed appointments.

Implementing this strategy enabled LINKAGES Mali to improve retention of clients on ART and increase access to viral load (VL) monitoring. An individual client tracking process enabled program monitoring of clients' retention in treatment and VL suppression. Only 67 clients were identified as lost to follow-up during the life of the project, showing a 95% success rate for the monitoring approach.

Also, as part of peer navigation plus, both peer educators and peer navigators were trained to collect DBS samples for VL testing. Using both the transportation system of National Program for AIDS, Tuberculosis and Hepatitis (CSLS-TBH) and the national reference laboratories for processing samples and issuing results, LINKAGES Mali achieved improvements

Figure 8. Index testing cascade among index KP members, October 2019–September 2020



in overall numbers of VL tests conducted. It also achieved a substantial reduction in turnaround time; as a result, district health care teams received VL results in less than two weeks.

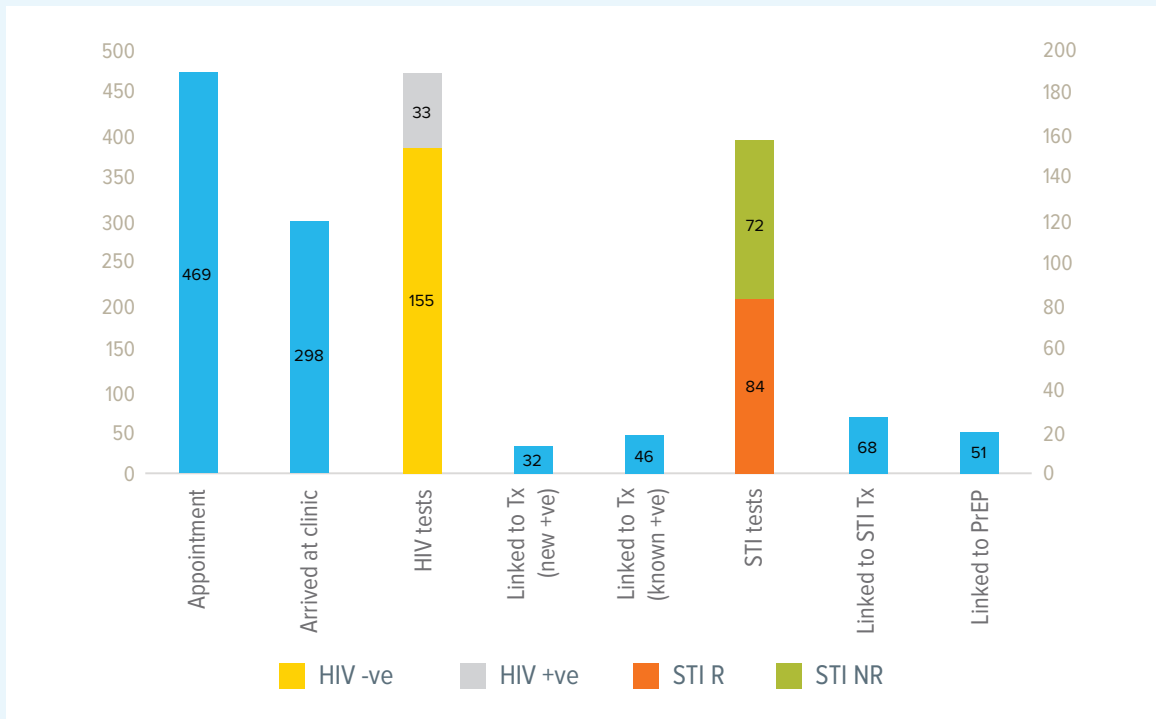
At the national level, LINKAGES Mali conducted VL monitoring as part of the standard of care, also thanks to the strong collaboration among staff at the community, government health facility, and national referral laboratory levels.

ONLINE OUTREACH

To expand the reach of the project to KP members, the LINKAGES team developed an online outreach approach using social media, such as Facebook, WhatsApp, and Instagram. Three online peer educators were trained to conduct virtual outreach activities including risk assessments, facilitating appointments for HIV testing, and supportive follow-up for PLHIV. HIV case finding through this approach was 17% (33/188); virtually all HIV-positive clients were linked to treatment; 54% who received STI screening were found to be reactive with 81% (68/84) starting treatment; and 51 HIV-negative clients were initiated on pre-exposure prophylaxis (PrEP) (Figure 9).

“ The LINKAGES project contributed on a global scale to the decrease in gaps in the cascade of HIV care among key populations. Thanks to the different intervention strategies, the identification of the most hidden groups is easier. The project made it possible to improve our practices related to effective targeting of the high-risk groups.”

ARCAD-SIDA program manager

Figure 9. Online cascade among all clients, April–September 2020*

*STI R: reactive; STI NR: STI non-reactive; PrEP: pre-exposure prophylaxis

ABOVE-SITE ACHIEVEMENTS

POLICY IMPACT

The LINKAGES Mali team worked jointly with local and international collaborators: the MOH (HCNLS, CSLS, and National Institute of Public Health Research [INRSP]), USAID implementing partners (Johns Hopkins University, Palladium, Chemonics), Global Fund (implemented by Plan Mali International), Solthis (ATLAS project), United Nations organizations (UNAIDS, UNICEF), and the World Health Organization (WHO). In particular, the project was supported by UNAIDS and CSLS in its use of all technical approaches and was included as a key player in the development of the national KP program implementation manual, National Toolkit of Service Delivery Packages for Key and Prison Populations in Mali. This toolkit will enable the MOH to provide appropriate supervision in the field to all HIV KP programs and will inform national annual and strategic planning.

In addition, the project team led discussions in the national technical working group about adoption of a national UIC model for KP programs in Mali.⁴

“ When I participated in a chat session facilitated by a peer educator, I learned all that time I had been taking enormous risks, so I didn’t hesitate to take my HIV test. The result was positive. Suddenly, my life was totally upended, and I told myself I was just waiting to die. But the peer educator supported me and put me in contact with a peer navigator, who supported me psychologically and helped me adhere quickly and confidentially to ARV treatment. My 12-month-old baby also tested positive and was able to benefit from ARV treatment thanks to LINKAGES.”

27-year-old FSW client, Soutoura, Bamako

LINKAGES Mali also contributed to the development and the review of numerous national guidelines and protocols—the national HIV testing strategy, the national HIV management protocols, and a virtual system to assess stigma and discrimination in facilities through client feedback, to name a few.

FUTURE DIRECTION

Much of the work supported under LINKAGES in Mali transitioned to the USAID- and PEPFAR-supported Meeting Targets and Maintaining Epidemic Control (EpiC) project in October 2021. Under EpiC, also led by FHI 360, several strategic approaches and activities are planned to close remaining gaps and accelerate progress. Innovative coordination between community and health facility interventions will be facilitated for a more comprehensive HIV prevention, care, treatment, and support structure. In addition, EpiC will:

- Strengthen the existing client-centered case management system by offering services tailored to specific risks of clients, enhancing ART adherence support and monitoring, prioritizing support for clients at high risk of not linking to or interrupting ART and those non-virally suppressed, standardizing tracing activities, and tracking key custom indicators along the case management cascade.
- Focus on viral load monitoring by collecting samples at the community level, exploring pay-for-performance strategies to reduce turnaround time, empowering clients through undetectable=untransmissible (U=U) messaging, and real-time tracking of VL data.
- Ensure effective transition of all clients currently on ART to the new antiretroviral regimen — tenofovir, lamivudine, and dolutegravir — as soon as the medication becomes available in country.
- Increase HIV case finding by expanding index testing and the EPOA, reinforcing peer navigation, and developing strategies for stronger case management.
- Enhance prevention at the community level by expanding access to PrEP and HIV self- testing.
- Use electronic data collection and reporting through the DHIS2 tracker “Kolochi” platform (<https://dhis-epicmali.fhi360.org/dhis-web-commons/security/login.action>) to reduce paper use and human error in data entry and aggregation, and increase rapid decision-making at field and central levels.

- Improve online outreach through the Ibadon app (<https://ibadon.com/>) for booking appointments and conducting self-assessment for HIV risk.

REFERENCES

1. Mapping and size estimation report of KPs in Mali for MSM (Integrated Bio-Behavioral Survey [IBBS] 2014) and for FSWs (IBBS 2009).
2. For more information about EPOA, please see the LINKAGES [Enhanced Peer Outreach Approach Implementation Guide](#).
3. For more information on peer navigation, please see the [LINKAGES Peer Navigation Implementation Guide](#).
4. For more information on the UIC model, see [LINKAGES. Unique Identifier Codes Create Continuity and Improve Client Tracking for LINKAGES Mali. Durham \(NC\): FHI 360; 2019.](#)

Linkages across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES)

was a global cooperative agreement funded by USAID through PEPFAR. Led by FHI 360 with partners Pact, IntraHealth International, and the University of North Carolina at Chapel Hill, LINKAGES worked in 40 countries from 2014 to 2021 to reduce HIV transmission among key populations — sex workers, men who have sex with men, transgender people, and people who inject drugs — and to improve their enrollment and retention in care.

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