
Accelerating the Implementation and Scale-up of Comprehensive Programs for HIV Prevention, Diagnosis, Treatment and Care for Key Populations

LINKAGES Approach and Lessons Learned

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Acronyms and Abbreviations

ART	antiretroviral therapy
DRC	Democratic Republic of the Congo
FSW	female sex worker
HIV	human immunodeficiency virus
KP	key population
LINKAGES	Linkages Across the Continuum of HIV Services for Key Populations Affected by HIV
MSM	men who have sex with men
PEP	post-exposure prophylaxis
PEPFAR	The U.S. President's Emergency Plan for AIDS Relief
PODI	distribution point
PrEP	pre-exposure prophylaxis
STI	sexually transmitted infection
UIC	unique identifier code
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development
WHO	World Health Organization

Introduction

In all countries where there is an HIV epidemic, certain subgroups of the population are at greater risk of HIV than others. These “key” populations include female sex workers (FSWs), men who have sex with men (MSM), transgender people, and people who inject drugs. While biological and behavioral factors contribute to their vulnerability to HIV, key populations around the world also face stigma, discrimination, and the threat of criminal prosecution, which pose serious barriers to their ability to access high-quality health care and other essential services. To have a sustained impact, any national HIV program must therefore ensure that interventions reach key populations and that services are available, accessible, acceptable, and affordable.

Linkages Across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) is a five-year project to strengthen HIV prevention, diagnosis, treatment, and care among key populations. Its goal is to reduce HIV transmission among key populations and extend life for those who are HIV positive.¹ It aims to accelerate the ability of partner governments, civil society organizations, and private sector health care service providers to plan, deliver, and optimize a package of comprehensive services, at scale, for HIV prevention, care, and treatment. This “LINKAGES cascade” of services is illustrated in Figure 1. It is aligned with the UNAIDS 90–90–90 targets²— that by 2020, 90 percent of all people living with HIV will know their HIV status, 90 percent of people diagnosed with HIV will receive sustained antiretroviral therapy (ART), and 90 percent of people receiving ART will have viral suppression (meaning that HIV is at undetectable levels and there is effectively no risk of transmitting the virus to others).

The LINKAGES project began implementation in 2014, and by 2017 was partnering with 29 countries in Africa, Asia, and the Caribbean. In addition to promoting routine HIV testing and counseling among members of key populations, actively enrolling those living with HIV into care, and carrying out interventions that enable them to remain in care, LINKAGES also: (1) helps countries to adopt and scale up evidence-based approaches to service provision; (2) helps key population members mobilize and advocate for changes in discriminatory laws and the conduct of police, health care workers, and policymakers; and (3) works with governments to make programs sustainable for the long term.

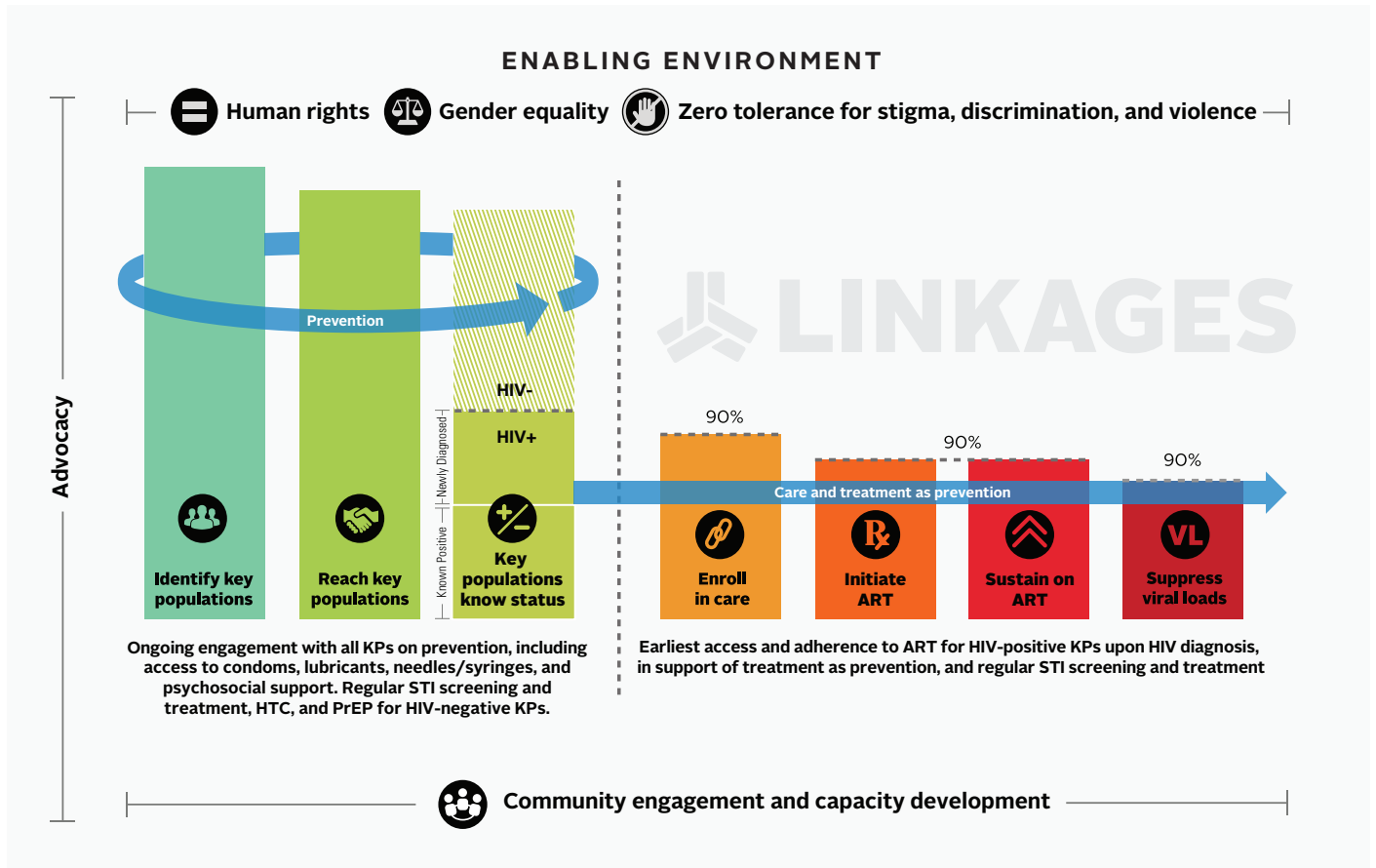
LINKAGES has now established a global program acceleration initiative that uses existing partnerships to accelerate and strengthen the delivery of the comprehensive package of services at scale. This initiative provides phased technical assistance, building on the principles of community participation and real-time use of data, to inform programs in the field.

This document: (1) outlines the acceleration initiative; (2) describes the process and the progress made under it using examples from four countries: Côte d’Ivoire, Democratic Republic of the Congo (DRC), Malawi, and South Sudan; and (3) discusses some of the lessons learned. This information may be of interest to those designing and implementing programs for HIV or other diseases, including public health officials and program managers, civil society organizations, advocates, funding agencies, and policymakers.

¹LINKAGES is funded by the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) via the U.S. Agency for International Development (USAID). It is implemented by FHI 360 in partnership with Pact, IntraHealth International, and the University of North Carolina at Chapel Hill.

²90–90–90: *an ambitious target to help end the AIDS epidemic*. Geneva: Joint United Nations Programme on HIV/AIDS; 2017.

FIGURE 1. The LINKAGES cascade



1 Accelerating Implementation

In 2015, LINKAGES established its global acceleration initiative to enhance delivery of the comprehensive package of health services for key populations that forms the core of its activities. Here, “acceleration” means leveraging existing partnerships to simultaneously speed up the rate of implementation, scale up geographical coverage and reach within and across countries, and improve standards for implementation of program components at the country level. Seventeen LINKAGES countries are included in the acceleration initiative: Angola, the Bahamas, Barbados,

Botswana, Burundi, Cameroon, Côte d’Ivoire, DRC, Haiti, Jamaica, Kenya, Malawi, Mali, Mozambique, South Sudan, Suriname, and Trinidad & Tobago. The components of the initiative are described below.

Common Core Program

The common core program includes seven areas that are applicable globally but which can be adapted to suit local conditions. These program areas, and the elements that fall under them, are summarized in Table 1. The program areas are shown linked to the LINKAGES cascade in Figure 2.

TABLE 1. Common core program areas as defined in LINKAGES

<p>1. ENGAGE KEY POPULATIONS IN POPULATION SIZE ESTIMATION, MAPPING, AND PROGRAM PLANNING</p> <ul style="list-style-type: none"> • Conduct national-level population size estimation and mapping • Conduct local-level population size estimation and mapping • Conduct hot spot-level population size estimation and mapping • Plan the program using mapping and size estimation data 	<p>5. CLINICAL SERVICES</p> <p><i>General considerations for establishing and providing clinical services:</i></p> <ul style="list-style-type: none"> • Assess current services and the service needs of key populations • Organize effective, high-quality, available, and accessible services • Organize referral systems and track referrals <p><i>Considerations for specific clinical services:</i></p> <ul style="list-style-type: none"> • Condom and lubricant promotion • Sexually transmitted infection services • Pre-exposure prophylaxis (PrEP) • Post-exposure prophylaxis (PEP) • HIV testing services • Antiretroviral therapy • Prevention, screening, and management of common infections and co-infections • Harm reduction for people who inject drugs • Other drug and alcohol dependence services • Sexual and reproductive health services, including family planning • Management of sexual violence • Mental health services
<p>2. KEY POPULATION EMPOWERMENT AND ENGAGEMENT IN PROGRAMS</p> <ul style="list-style-type: none"> • Develop staffing of programs and teams by key population members • Establish and manage drop-in centers • Support key population groups through capacity development and organizational strengthening • Foster oversight of clinical services and other services by the key population community 	<p>6. PROGRAM MANAGEMENT</p> <ul style="list-style-type: none"> • Contract, hire, and train staff • Establish and implement policies and procedures on data safety, confidentiality, and ethics • Establish systems for supportive supervision and technical support
<p>3. STRUCTURAL INTERVENTIONS</p> <ul style="list-style-type: none"> • Identify, design, and implement strategies to prevent and respond to violence against members of key populations • Develop strategies for reducing stigma in health care settings 	<p>7. MONITORING AND DATA USE</p> <ul style="list-style-type: none"> • Develop or adapt data collection tools • Ensure the quality of data collection, analysis, and reporting • Regularly review and analyze data for use in programming
<p>4. PEER OUTREACH (SEE NEXT PAGE FOR DEFINITION)</p> <ul style="list-style-type: none"> • Map or validate key populations and set outreach targets • Develop or adapt microplanning tools • Recruit peer educators • Train peer educators • Implement and manage peer outreach • Provide support for professional development • Support retention in care of HIV positive members of key populations • Expand outreach to members of key populations through the enhanced peer outreach approach 	

Outreach

In the LINKAGES context, “outreach” is when a peer educator — someone who is a key population member and is trained in outreach — meets with other key population members, either one-on-one or in group settings, to deliver a package of services. This package includes offering or providing:

- Referral to HIV testing and counseling
- Information, education, and communication
- Condoms and lubricant (and/or sterile needles/ syringes for people who inject drugs)
- Referral to screening for, prevention of, and treatment of sexually transmitted infections (STIs)
- Referral to ART for individuals who know they are HIV positive and are not currently receiving ART
- Referral to prevention, diagnosis, and treatment of tuberculosis
- Referral to screening for, and prevention of, viral hepatitis
- Referral to reproductive health services, if applicable

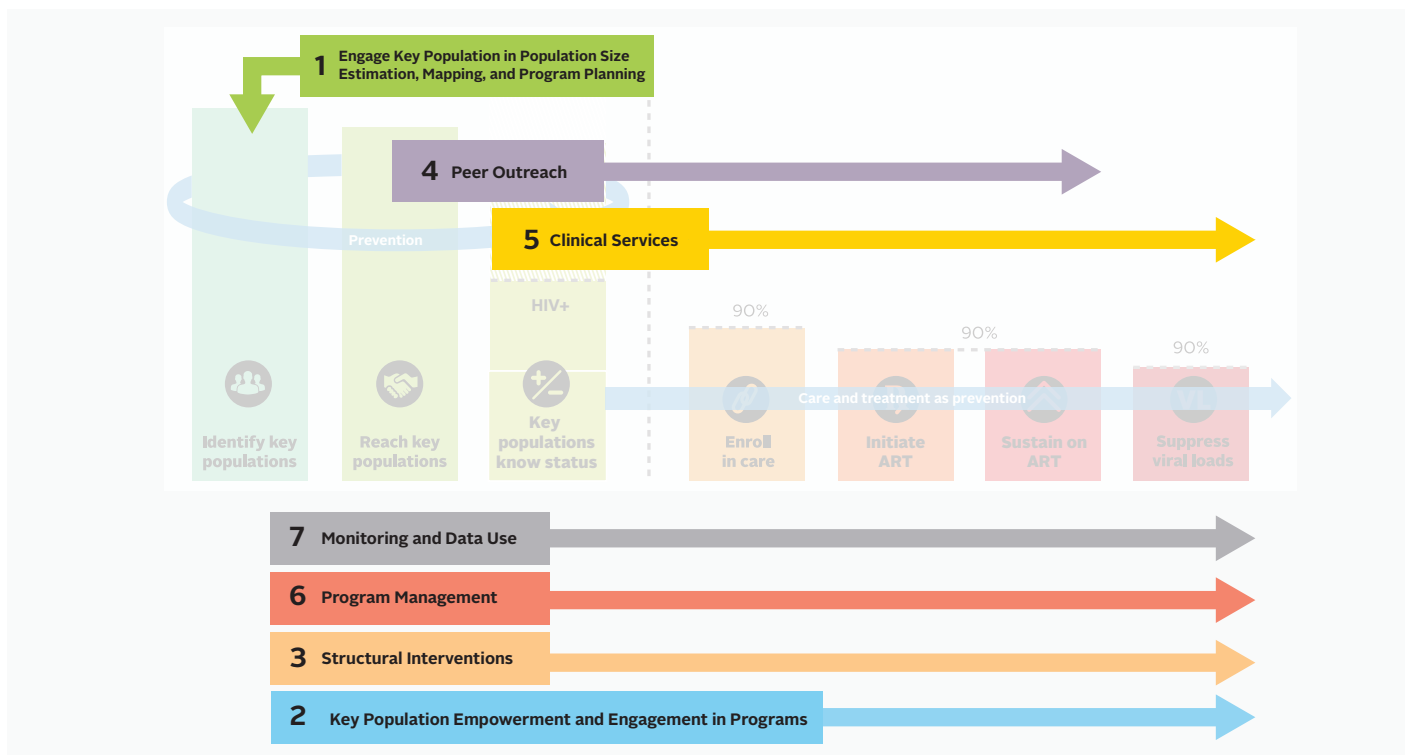
Program Implementation Guide for Acceleration

LINKAGES developed a Key Population Program Implementation Guide (the Acceleration Guide)³ to assist countries in implementing the acceleration initiative. The initial version was released in March 2016, and an updated version incorporating feedback from the first year of implementation was released in January 2017.

The guide focuses on site-level implementation, and ensures cohesion of technical competence across the seven program areas tied to the LINKAGES cascade. It draws on global guidelines, including: best practices in development of common minimum programs and standards from the Bill & Melinda Gates Foundation’s Avahan HIV program;⁴ the 2014 World Health Organization (WHO) consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations (revised in 2016);⁵ as well as the series of tools developed by United Nations partners, the Bill & Melinda Gates Foundation, and key population networks that provide practical guidance on implementing HIV programs for specific key populations.⁶ The Acceleration Guide also includes a simple self-assessment tool to identify programmatic needs.

The Acceleration Guide serves as the basis for training, technical assistance, and mentoring in the LINKAGES common core program, as well as for monitoring, program management, and evaluation. It is designed to be user-friendly and easy to apply, with step-by-step guidance.

FIGURE 2. Acceleration program areas aligned with the LINKAGES cascade



³Key Population Program Implementation Guide. Washington, DC: FHI 360; 2016.

Monitoring Guide and Toolkit

LINKAGES has also developed a Monitoring Guide and Toolkit to support systems that track delivery of services to key populations.⁷ This guide and toolkit aim to help programs develop a “data-use” culture, where data are not simply collected, but *analyzed* and used at all program levels, including by frontline workers, to improve service quality, coverage, and program management.

The Monitoring Guide lays out a strategic approach to monitoring programs for key populations, and provides data collection tools modeled on good practices from programs around the world to monitor geographic and population-level coverage, program infrastructure, capacity building, behavioral interventions, biomedical interventions, and structural interventions, all aligned with the program areas in the Acceleration Guide. It also describes how to implement periodic outcome and quality assessments, and how to use monitoring data for decision making.

The toolkit section is designed to be used on a day-to-day basis by program managers, and as a mentoring resource by those providing technical assistance to country programs.

Program Acceleration Teams

To rapidly scale up programming at the site level in LINKAGES countries, LINKAGES has also established “program acceleration teams” that work to reduce bottlenecks and provide frequent technical assistance across the cascade to country-level programs. These teams include technical staff from LINKAGES, from resource partners such as academic institutions with experience implementing programs for key populations, and from multilateral organizations, as well as expert consultants and other providers of technical assistance.

LINKAGES contracted the University of Manitoba to provide technical support in all seven program areas of the guide, with a focus on programmatic mapping, size estimation, peer-led outreach,⁸ microplanning,⁹ and programmatic monitoring. Teams of technical experts were assigned to a set of countries, including Côte d'Ivoire, DRC, Haiti, Kenya, Malawi, and South Sudan, and the project also provided support to Jamaica and the Eastern Caribbean.

To draft the clinical section of the Acceleration Guide, LINKAGES partnered with WHO, which provided technical

assistance to roll out the clinical components to enhance service delivery for STIs and HIV across clinical service providers. During this rollout, WHO and clinical acceleration teams reinforced links between clinical services, outreach, and programmatic monitoring in LINKAGES countries. The LINKAGES deputy director for program acceleration carried out overall coordination of acceleration teams.

LINKAGES also established systems to reinforce and communicate progress on key interventions, monitor priority indicators, and improve quality through supportive supervision. Acceleration teams then provided technical assistance according to the standardized monitoring and supervision tools in the Monitoring Toolkit.

Regional Acceleration Workshops

In 2016 and 2017, LINKAGES held a series of regional acceleration workshops. A first series of these, in the first half of 2016, for country teams from Africa and the Caribbean, focused on:

- Mapping and size estimation
- Microplanning and peer outreach
- Programmatic monitoring
- Violence prevention and response

A second series focused on clinical acceleration, including strategies and tools to:

- Increase links to care and treatment adherence, including anticipating “test and start” (immediate initiation of ART for people diagnosed with HIV), case-finding (i.e., identifying individuals living with HIV), addressing loss to follow-up, and offering additional models of service delivery appropriate for key populations
- Optimize outcomes by coordinating outreach and clinical work
- Introduce new services such as PrEP and periodic presumptive treatment of STIs, and assist ministries of health with guideline revisions, adapting protocols, and training staff
- Reduce stigma against key populations by health care workers, and improve the clinical competency of health care workers

⁴*Avahan Common Minimum Program for HIV prevention in India*. New Delhi: Bill & Melinda Gates Foundation; 2010.

⁵*Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations*. 2016 update. Geneva: World Health Organization; 2016.

⁶*Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions* (the SWIT). Geneva: World Health Organization; 2013.

⁷*Implementing comprehensive HIV and STI programmes with men who have sex with men: practical approaches for collaborative interventions* (the MSMIT). New York: United Nations Population Fund; 2015.

⁸*Implementing comprehensive HIV and STI programmes with transgender people: practical approaches for collaborative interventions* (the TRANSIT). New York: United Nations Development Fund; 2016.

⁹*Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical approaches for collaborative interventions* (the IDUIT). Vienna: United Nations Office on Drugs and Crime; 2017.

⁷*Monitoring Guide and Toolkit for Key Population HIV Prevention, Care, and Treatment Programs*. Washington, DC: FHI 360; 2016.

⁸Peer-led outreach is conducted by peer educators, KPs who are trained to have regular, one-to-one meetings with their peers to provide information and education, encourage them to go for routine medical check-ups and HIV testing, and provide prevention commodities such as condoms and lubricant. See the section below on peer outreach for more information.

⁹Microplanning is a method of outreach that helps peer educators identify KPs most at risk and prioritize them for outreach. See the section below on peer outreach for more information.

The initial workshops included visits to high-performing sites, and the training contents were in line with the Acceleration Guide, which served as the key tool. Workshops also addressed how country teams could plan for scale.

Workshops in 2017 in Africa and the Caribbean focused on facilitating knowledge exchange among LINKAGES country teams, with teams presenting examples of technical achievements and challenges in a round-robin format.

The project also gave countries that joined LINKAGES after the initial workshops “mini” versions that enabled them to visit key population learning sites. In addition, the project provided bespoke acceleration workshops for

countries with specific needs, for example when a new geographical program area or a new local implementing partner was added.

Country Acceleration Plans and In-country Technical Assistance

At the end of each workshop, country teams drafted individual acceleration plans outlining when the key program areas of acceleration would be implemented in their respective countries, and noting any technical assistance required. Targeted in-country acceleration technical assistance was then initiated based on country acceleration plans (Figure 3).

FIGURE 3. Numbers of countries reached with targeted acceleration technical assistance, by program area (March 2016 — June 2017)

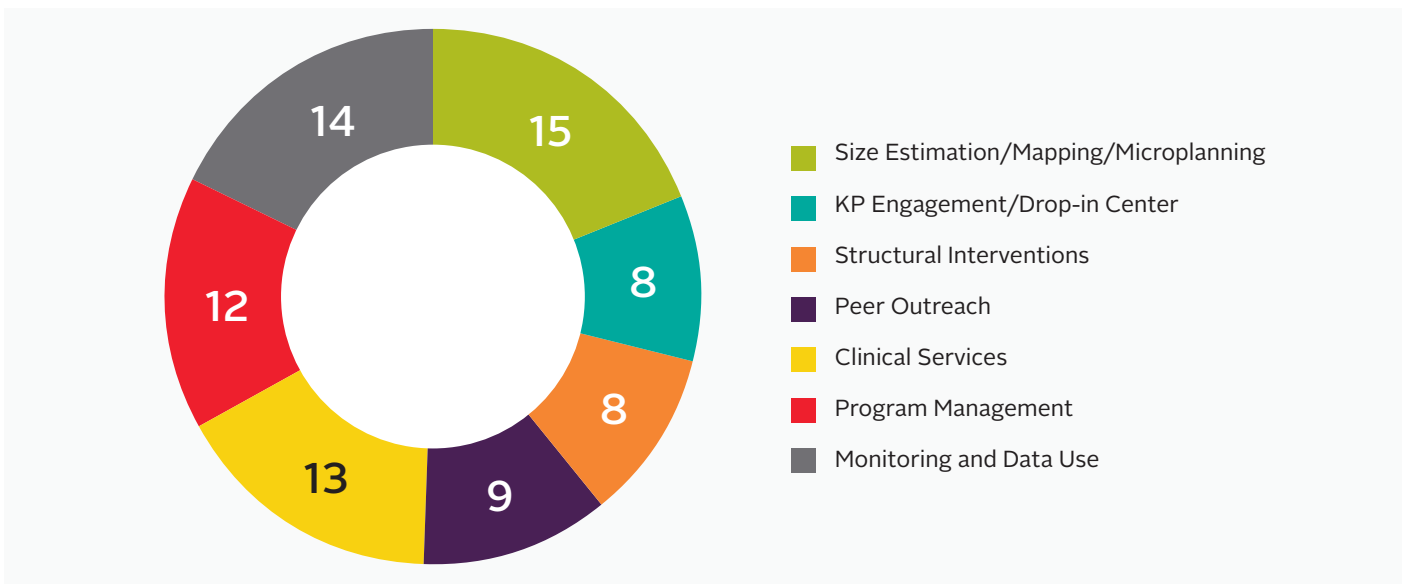
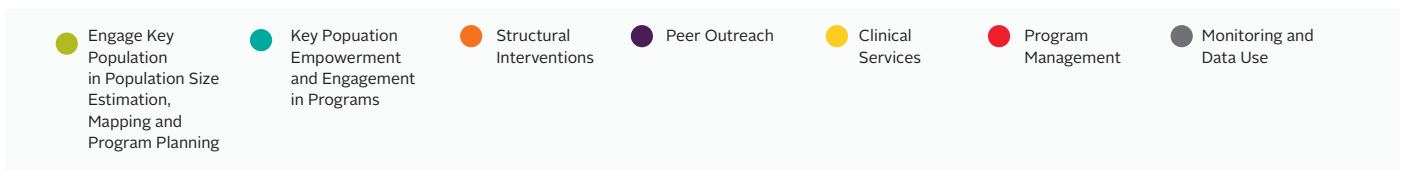
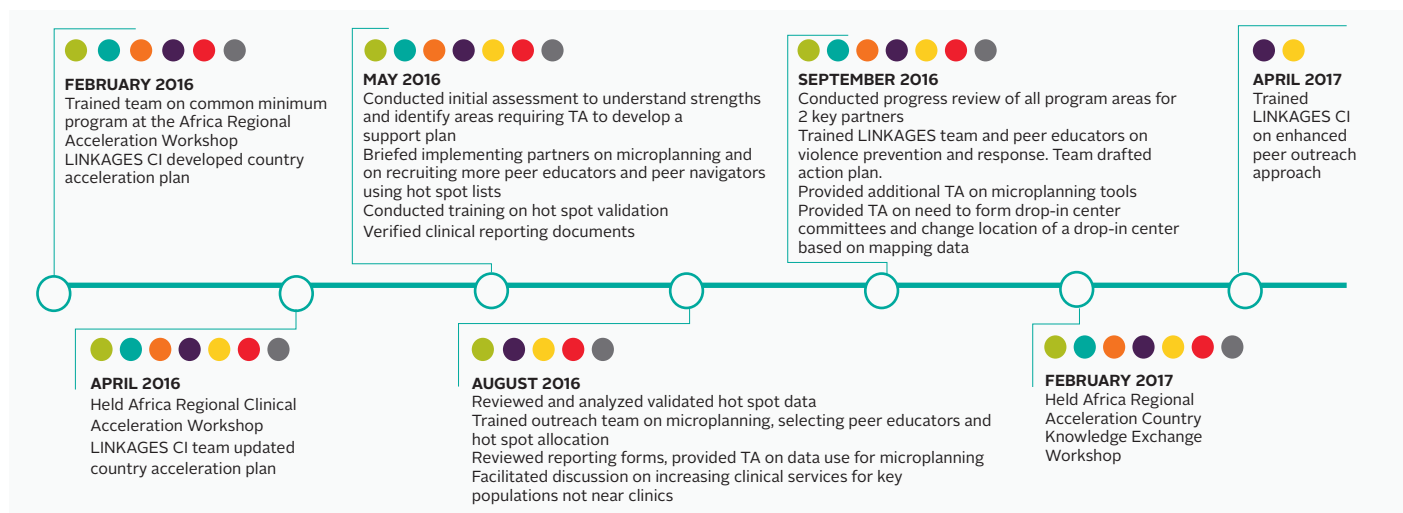


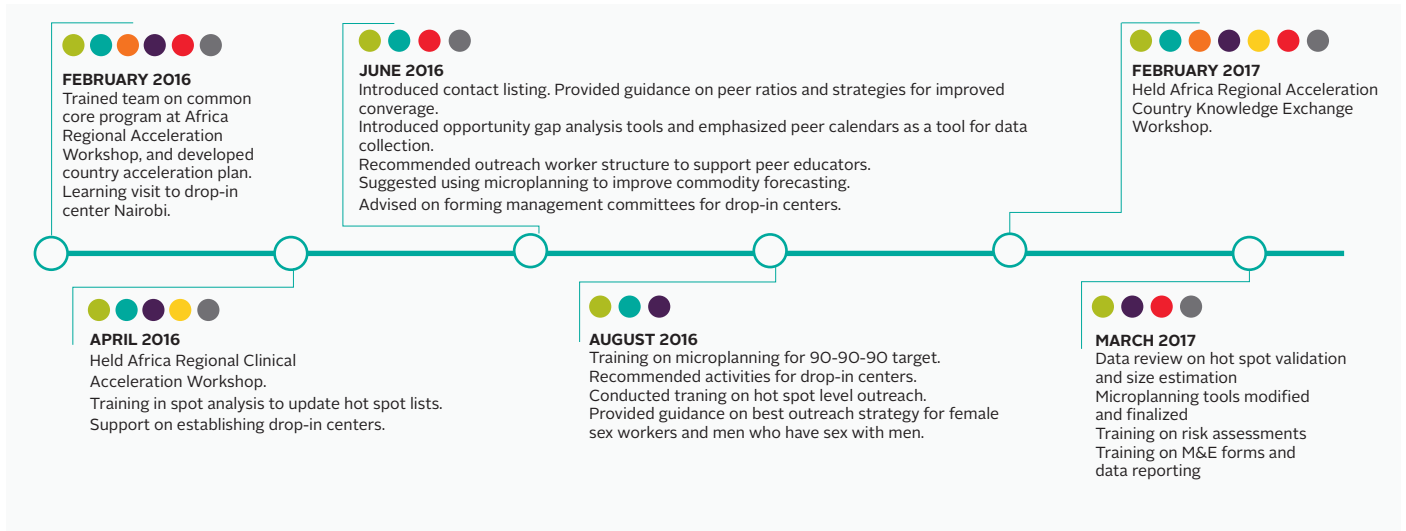
FIGURE 4. Timeline of technical support offered to LINKAGES programs under the acceleration initiative



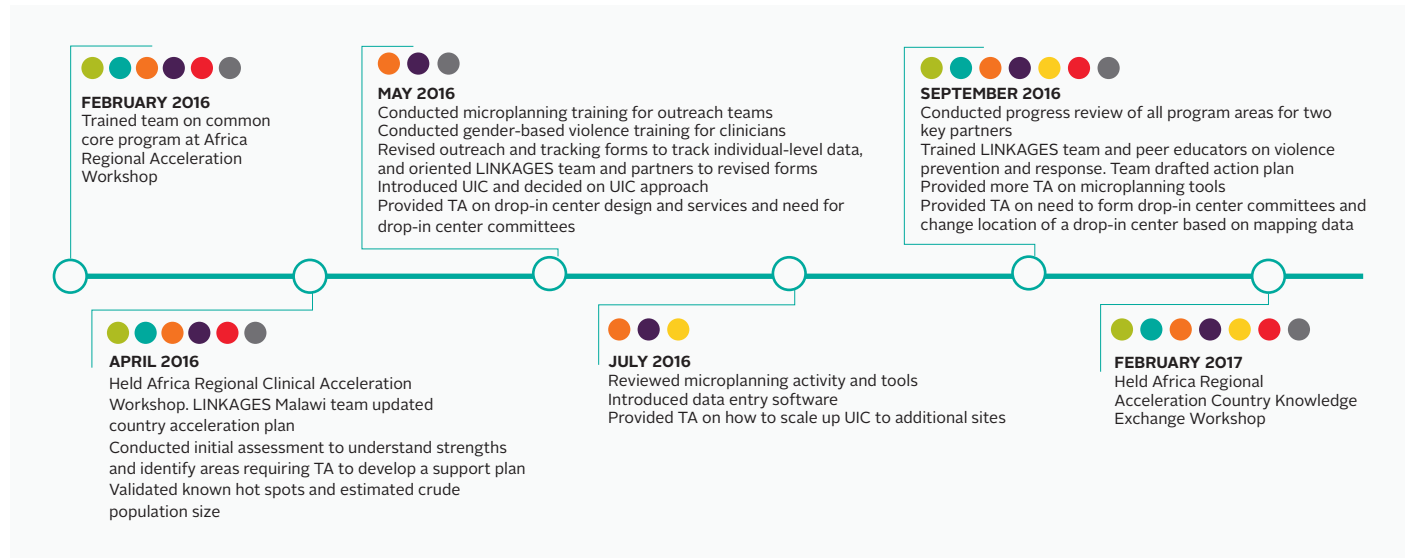
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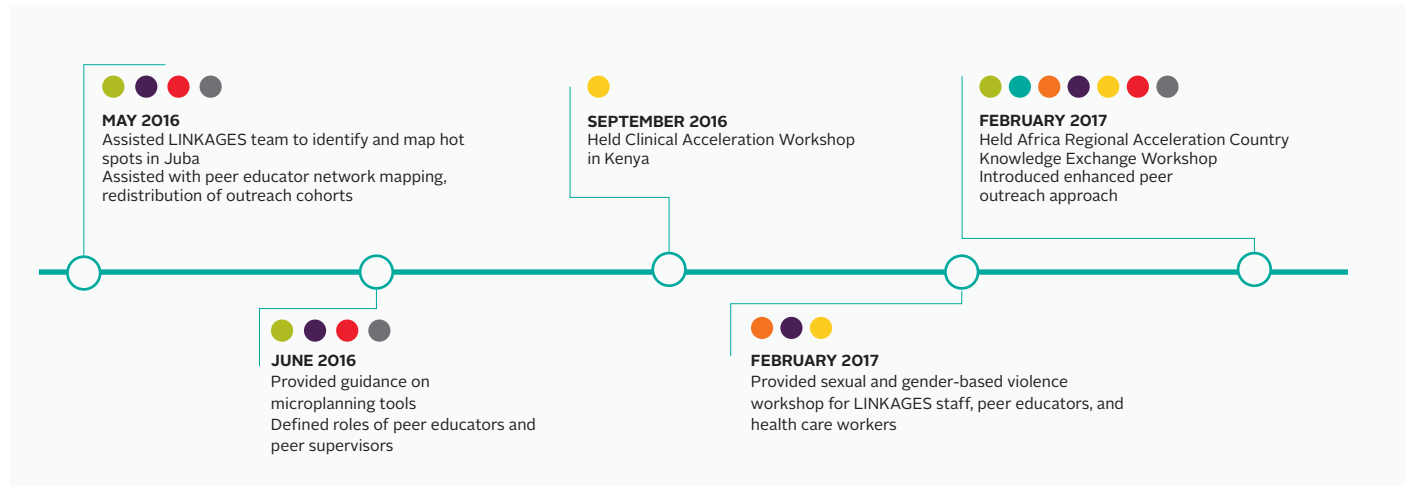
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Note: M&E = monitoring and evaluation, TA = technical assistance, UIC = unique identifier code

2 Progress Under the Acceleration Initiative

This report focuses on four of the countries that received technical assistance under the acceleration initiative: Côte

d'Ivoire, DRC, Malawi, and South Sudan. In each of these, the LINKAGES country team partnered with local NGOs and community-based organizations, which delivered services to FSWs and MSM (Table 2).

TABLE 2. The LINKAGES project in four countries

Côte d'Ivoire		
	Target number of FSWs: 23,566¹⁰	Target number of MSM: 7,123
Region/Province	District/Health Zone/Town	Implementing Partner
Abidjan 2	Anyama, Cocody-Bingerville, Abobo-Ouest, Abobo-Est	ONG BLETY, ONG Arc-En-Ciel Plus, ONG Alternative Côte d'Ivoire (ACI), Association de Soutien à l'Autopromotion Sanitaire Urbaine (ASAPSU) Abobo, Clinique Espace Confiance d'Anyama
Haut Sassandra	Daloa, Issia	ONG BLETY, ONG ACI, Service Assistance Pharmaceutique et Médicale (SAPHARM)
Loh Djiboua	Divo	ONG BLETY, ONG ACI
Gbeke	Bouaké-Sud, Bouaké-Nord-Est, Bouaké-Nord-Ouest	ONG BLETY, ONG Arc-En-Ciel Plus, RSB Bouaké
Marahoue	Bouaflé, Sinfra	ONG BLETY, ONG ACI
Gôh	Oumé	ONG BLETY, ONG ACI
Indenie-Djuablin	Abengourou	ONG BLETY, ONG ACI, GBH-CI Abengourou
N'Zi-Iffou	Bongouanou	ONG BLETY, ONG ACI
Boukani-Gontogo	Bondoukou, Tanda	ONG BLETY, ONG ACI, Infirmerie Notre Grenier
Agneby-Tiassa-Me	Agboville, Akoupé, Tiassalé, Adzopé	ONG BLETY, ONG Arc-En-Ciel Plus
Belier	Yamoussoukro	ONG BLETY, ONG ACI, ASAPSU Yamoussoukro
Abidjan 1 Grands Ponts	Adjame-Plateau-Attecoube	ONG BLETY, ONG Arc-En-Ciel Plus
DRC		
	Target number of FSWs: 11,500	Target number of MSM: 3,500
Region/Province	District/Health Zone/Town	Implementing Partner
Kinshasa	Masina II, Kikini, Kingasani, Bandalungwa, Binza Meteo	Progrès Santé Sans Prix (PSSP), Si Jeunesse Savait
Haut Katanga	Lubumbashi, Kenya, Kamalondo, Sakania	World Production, Bak Congo
Lualaba	Lualaba, Manika, Dilala, Fungurume	Faradja, Lamuka
Malawi		
	Target number of FSWs: 6,771	Target number of MSM: 4,294
Region/Province	District/Health Zone/Town	Implementing Partner
Central	Lilongwe	Centre for the Development of People (CEDEP – MSM), Family Planning Association of Malawi (FPAM – FSWs)
Southern	Blantyre, Mangochi	Pakachere (FSWs), CEDEP (MSM)
	Machinga, Zomba	Youth Net and Counselling (YONECO – FSWs)
Northern	Mzuzu	FPAM (FSWs), CEDEP (MSM)
South Sudan		
	Target number of FSWs: 4,770	
Region/Province	District/Health Zone/Town	Implementing Partner
Jubek	Juba	Charity Aid Foundation (CAF), Integrated Development Organization (IDO), South Sudan Network of People Living with HIV (SSNEP)
Yei River	Yei	South Sudan Community Change Agency (SOSUCCA), Action for Development (AFOD), National Empowerment of Positive Women United (NEPWU)
Imatong	Nimule	Humans Must Have Access to Essential Services (HUMAES)

¹⁰ The targets for the number of key population members to be reached were often set by USAID/PEPFAR, and did not always reflect the populations size estimates calculated by LINKAGES and its country partners (see next section). However, budgets were determined on the basis of these targets.

Engaging Key Populations in Programmatic Population Size Estimation, Mapping, and Planning

Mapping key populations and estimating their size is an essential step to make outreach as efficient and effective as possible. It ensures that resources are allocated efficiently for: (1) staffing, including peer educators and outreach supervisors, (2) infrastructure service points and location, including clinical and other services, and (3) HIV prevention commodities, including adequate stocks of condoms, lubricant, needles, and syringes.

In Côte d'Ivoire, a LINKAGES acceleration team assisted the country team in a workshop for program staff and peer educators. Topics included the basic concepts and methodology of programmatic mapping, interview techniques, and data collection.¹¹

The mapping methodology had three stages. In the first stage, the team developed a rough list of “hot spots”, (places where female sex workers met prospective clients or where men who have sex with men find sex partners), by talking with key population members and people in their networks, such as taxi drivers, food vendors, brothel owners, brothel managers, hotel staff, and bar staff.

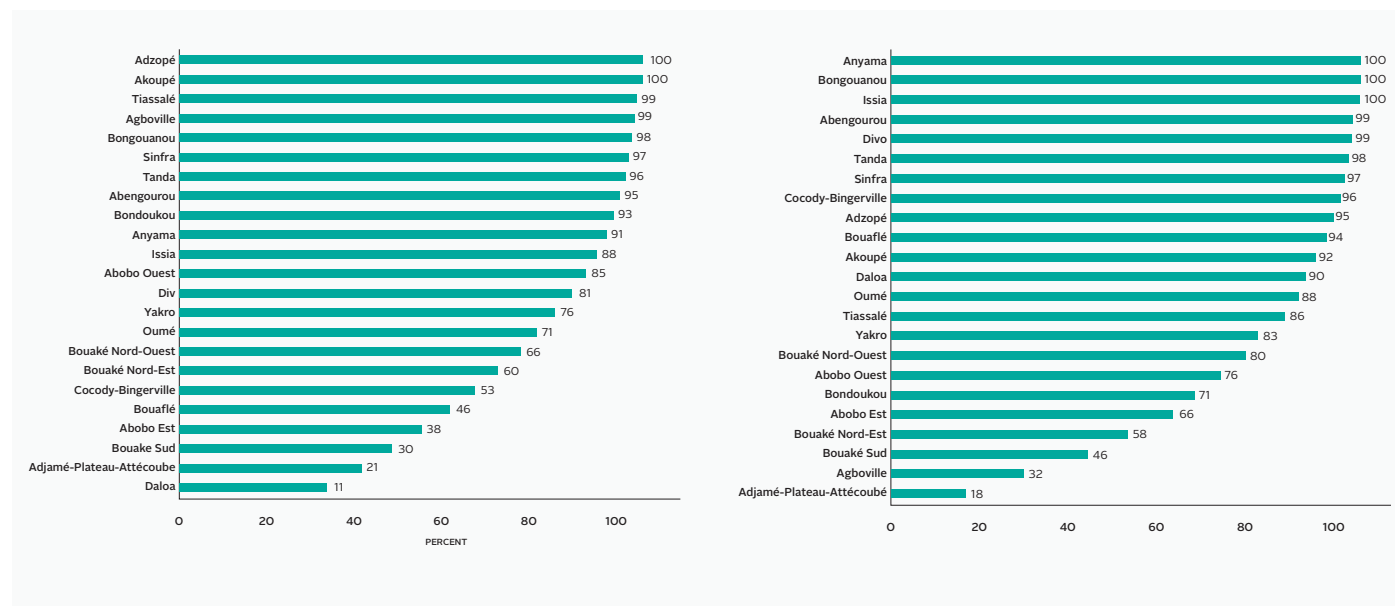
In the second stage, the team validated this information by visiting the identified sites and talking to members of key populations there. They gathered information on the exact location of hot spots, the minimum and maximum numbers of sex workers present, and the peak days and times for activity. They also gathered information on whether or not key population members were participating in HIV prevention programs, and whether condoms and lubricant were available. By talking to multiple informants at each site, the team was able to triangulate the data and derive a reliable estimate of numbers.

In the third stage, the team visited and validated any previously unrecorded hot spots identified by informants, leading to a comprehensive list of hot spots, with data on the key population members at each one. Throughout the mapping process, the team also followed protocols on data security to ensure that information was handled and stored securely, and that the confidentiality of respondents was not compromised.

LINKAGES staff further carried out a pilot exercise at two sites in Abidjan, with the help of staff and peer educators from local implementing partners, and Ministry of Health representatives. Once the pilot had been completed and the method reviewed and refined to correct gaps, the team carried out mapping and size estimation in July and August 2016 across the other communes (groups of villages) where LINKAGES Côte d'Ivoire was active. As before, the local implementing NGOs were trained to do the work alongside peer educators and health ministry staff. The team then carried out further validation toward the end of the year, following a technical support visit in August.

These population size estimates served as a basis for making the initial allocation of resources, to help LINKAGES target outreach more efficiently. For example, in Côte d'Ivoire, 81 percent of the estimated population of FSWs were found to be in 11 of the 23 districts, and 90 percent of the MSM in 12 districts (Figure 5). Hot spot lists and size estimations were also key to planning outreach at the micro level, for example in calculating how many peer educators are required at each site or knowing the best days and times to reach key population members.

FIGURE 5. Cumulative coverage of key populations in Côte d'Ivoire, by district



¹¹ For further information on programmatic mapping, see [Using programmatic mapping to improve program access and coverage for key populations: guidelines for countries](#). Geneva: The Global Fund to Fight AIDS, Tuberculosis and Malaria; 2014.

In South Sudan, where there has been civil conflict since 2013, violence in some areas limited the ability of peer educators to move around safely, and displacement of people rendered earlier mapping exercises out of date. But with guidance from the acceleration team during a technical assistance visit in May 2016, the LINKAGES team, together with its implementing partners and their peer educators, was able to assess hot spots in Juba, developing a list of about 170, some of which were new to the project. These they mapped in a similar manner as described above.

Peer educators also mapped their own networks so that they themselves could be assigned to clusters of hot spots where they were known to key population members, increasing their ability to build rapport and ensuring that they would not need to travel too far to work. By the time of the acceleration team's second visit a month later, the South Sudan team and its partners had completed programmatic hot spot mapping in the other three towns in the project.

Empowering Key Populations and Engaging Them in Programs

In most LINKAGES countries, key populations are highly marginalized and stigmatized because of their sexual identity or behaviors, or because of their drug use. They often face discrimination or violence from health care, social services, legal and educational systems, law enforcement, the military, and religious organizations, and also from family and community members. An HIV diagnosis can lead to even greater stigmatization, and key population members living with HIV may even be discriminated against by other members of their own key population. Fearing discrimination and possible legal consequences, many naturally hesitate to come forward for HIV-related services.

In response to this, LINKAGES employs a community empowerment approach, which seeks to help key populations identify as a group with common needs and goals, to advocate for their own issues and solutions. Empowered communities are also more likely to demand, use, and improve the quality of services for HIV prevention, diagnosis, treatment, and care. A basic but effective way of starting this process — or of catalyzing it where it has already begun — is to offer key population members a safe space to meet, form friendships, and develop a sense of community. Drop-in centers are thus a key part of the LINKAGES project. These are facilities located in places that are acceptable and easily accessible for most mapped key population members, and open at times that are convenient for them. They host social gatherings, meetings, and program-related activities, often including clinical services. Ideally, they are run by key population members themselves.

When LINKAGES introduced drop-in centers in DRC, they were a new concept in that country, but during the Regional Acceleration Workshop in February 2016, the DRC country team had the chance to visit one in Nairobi, run by Health Options for Young Men on HIV/AIDS/STIs (HOYMAS), an implementing partner serving MSM, to learn more about the concept and see how a center might be run.

Following an April 2016 technical assistance visit to DRC, the project established three drop-in centers: two in Kinshasa, and one in Haut Katanga. Two serve both FSWs and MSM, while one of the Kinshasa centers is only for MSM. An additional center opened in 2017. Between October 2016 and June 2017, from one quarter to one half of the key population members in the two provinces visited these centers in each quarter (three-month period).

Following advice from the acceleration teams during a TA visit to DRC in June 2016, each drop-in center formed its own management committee, which meets monthly and is responsible for running the center and setting the rules of conduct. Key population members elected by the community members serve as president, secretary, counselor, treasurer, community mobilizer, and maintenance agent. The committees also plan ways to attract more members to the centers. LINKAGES DRC has since offered trainings for committee members as well.

Other community empowerment activities include “open days”, when key population members are encouraged to bring friends along, and advocacy work. The DRC country team also emphasizes economic strengthening activities as a principal strategy for empowering and engaging key populations. Since January 2017, 14 savings and loans groups have been started, each with around 20 members who meet weekly, save money, and make plans to use their savings and take loans in order to improve their position economically. By the end of June 2017, the groups had collectively saved the equivalent of nearly US\$9,000.

Structural Interventions

Structural interventions address the systemic barriers to effective HIV prevention, diagnosis, treatment, and care that key populations face. The two most common interventions under LINKAGES are: (1) training and sensitization to reduce stigma and discrimination by health care providers and law-enforcement agents; and (2) programs to identify and respond to violence.

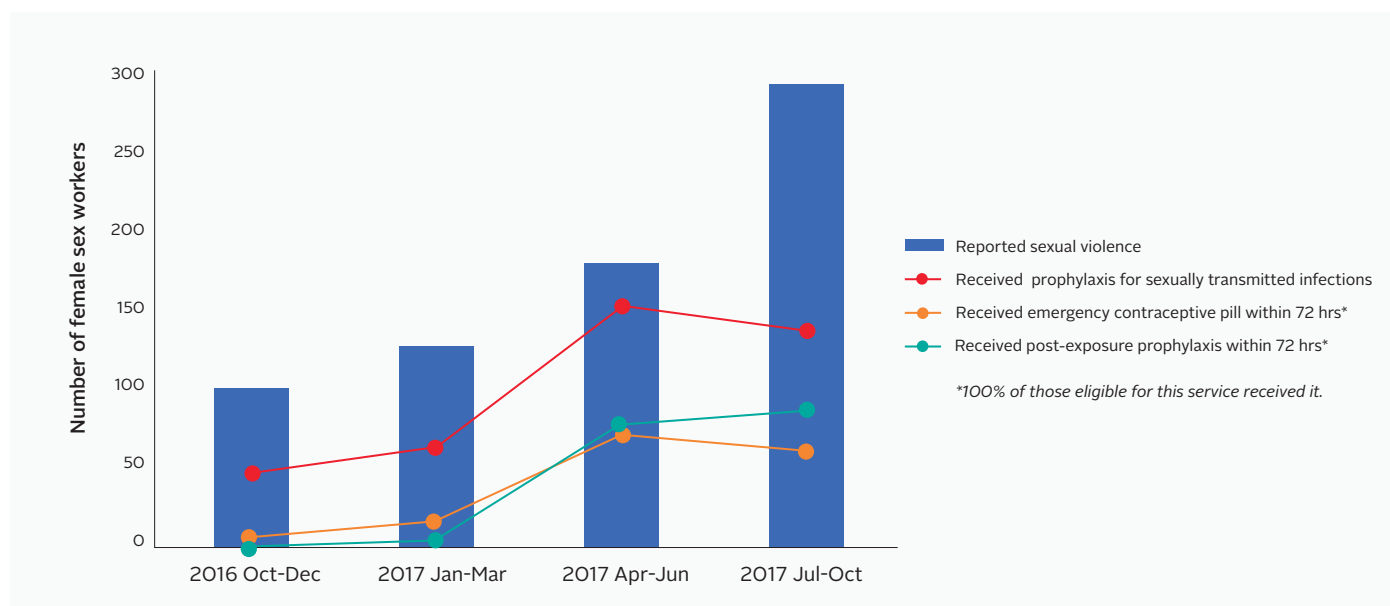
In South Sudan, sex workers have been harassed and arrested, and police sweeps of the frequent gathering places of MSM have pushed many among this population into hiding, which forced the LINKAGES team to begin its outreach efforts to this population again from scratch. As a first step in trying to make it safe for key populations to receive services,

LINKAGES staff have advocated with government officials and other community leaders to explain the services they are providing. The project team also conducted a basic training of service providers in most health care facilities, with key population members participating as panel members. Peer navigators¹² now meet with health care providers to address misconceptions about sex workers and about people living with HIV. Health care staff have also come to see peer navigators as part of the service delivery team. Likewise, by sharing their own experiences of living with HIV with other sex workers, peer navigators reduce stigma among community members themselves too.

Stigma and discrimination also lead to physical, sexual, and emotional violence, while, in countries like South Sudan, civil conflict also plays a role. Whatever the cause, preventing and responding to violence should build on what key populations are already doing informally to address

crises, such as mobilizing resources to bail out an arrested sex worker, or helping in cases of illness. An assessment in 2016 by the LINKAGES South Sudan team led to the hiring of a coordinator for sexual and gender-based violence. The team has trained sex workers to identify cases of sexual and gender-based violence, to reduce their personal risk, and to make referrals to services. In February 2017, a LINKAGES consultant and the sexual and gender-based violence coordinator trained 21 health care workers, 3 peer educators and 3 LINKAGES staff in identifying and responding to violence, including using screening tools and offering first-line support such as emergency contraception, STI testing, and basic counseling. Over the course of 12 months, reports by female sex workers of sexual violence increased,¹³ as did their access to, and uptake of, PEP, emergency contraception, and STI prophylaxis (Figure 6).

FIGURE 6. Reports of sexual violence by female sex workers, and related services received, LINKAGES South Sudan



LINKAGES Malawi has developed several strategies to address sexual and gender-based violence, including a training of 25 drop-in center managers, health care workers, LINKAGES staff, and police officers in March 2016. The acceleration team helped the country team develop a training module on sexual and gender-based violence, to form part of peer educator training. The Malawi team also created a single-page screening tool that could be integrated into the questions that peer educators and peer navigators use each time they meet with a key population member. This ensures that screening and data collection for sexual and gender-based violence are a routine part of their work. Subsequently, 150 peer educators and 34 peer navigators were trained on screening and reporting for sexual and gender-based violence.

In September 2016, the acceleration team also trained trainers from the Malawi and South Sudan teams on establishing crisis response systems, and the Malawi team developed an action plan for rolling out crisis response. This involves establishing a dedicated team of key population members, contactable via a publicized phone number, who will provide immediate assistance to someone who is a victim of violence or suffers some other kind of crisis, e.g., harassment, robbery, or wrongful arrest. Crisis response teams are trained to support the individual, to advocate with police or health care authorities where necessary, and to document details of the incident and how it was resolved.

Using LINKAGES guidance, outreach workers and peer educators from Pakachere, an implementing partner in

¹²Peer navigators are HIV positive key population members who are trained to help their peers living with HIV to access and remain on ART, and to undergo viral load testing, and to access other services that they need.

¹³An increase in reported cases is an indication that the new system is gaining the confidence of key population members, rather than that it is failing to prevent violence.

Malawi, have also promoted messaging around reporting cases of violence within 24 hours. Of the 57 cases reported from October 2016 to August 2017, over 80 percent were reported within 24 hours, and 79 percent were responded to within 72 hours. Among these 57 cases, 42 percent of services provided included supporting FSWs to register a case/complaint with police, 26 percent included referrals to legal support, 21 percent included psychosocial counseling, and 11 percent included medical care.

Peer Outreach

Peer-led outreach is an essential approach of the LINKAGES project. Peer educators are key population members who are trained to provide outreach to their peers, and who have regular, one-to-one meetings with them to provide information and education, encourage them to go for routine medical check-ups and HIV testing, and provide prevention commodities such as condoms and lubricant (see box on page 6).

In DRC, peer-led outreach was new to LINKAGES' implementing partners, and the Regional Acceleration Workshop in February 2016 helped the country team identify its needs and get support for instituting the approach. The team helped implementing partners recruit and train peer educators. Although the National AIDS Program already had a training module for peer educators for the general population, it was necessary to adapt it for peer educators working with key populations.

The February workshop also introduced microplanning, a method of outreach that helps peer educators identify those key population members most at risk and prioritize them for outreach.¹⁴ Peer educators use simple tools to tailor their outreach to the specific needs and vulnerabilities of each individual, and to keep records so that they can track their work more efficiently, and analyze and plan their outreach more effectively. For example, they can record the quantity of condoms and lubricant that each key population member uses during a typical week, in order to supply the right amount at each visit, and they can note the vulnerabilities and risk factors that may affect the services delivered.

Peer educators also use the tools to record services delivered, such as condoms and lubricant distributed, information given, or a referral for an STI check-up or an HIV test. The tools can be designed or adapted for use by peer educators with low literacy skills, by using pictures or symbols rather than text. Microplanning enables peer educators to manage their own work with minimal supervision, which makes the program more efficient and sustainable, as well as increasing community empowerment. It drives the use of data at the grassroots level to improve programming, while also providing data for the overall program monitoring system.

During a technical assistance visit to DRC in April 2016, peer educators were trained to use spot analysis, a process of compiling all the information learned during mapping of each hot spot, in order to ensure that the information is up to date and to prioritize outreach based on: (1) the number of key population members at each spot and (2) their relative vulnerability. A visit in June introduced: (1) "contact listing", which enables peer educators to work with the community members they know best and have a rapport with, and which reduces the chance of peer educators overlapping with one another's contacts; (2) opportunity gap analysis tools; and (3) peer plans, including calendars to record outreach.

The LINKAGES DRC team rationalized its lists of key population members so that each peer educator would have a similar number of individuals to reach. A refresher training on microplanning was provided during a technical assistance meeting in March 2017. The DRC team modified some of the microplanning tools for the local context, and developed a detailed guide for use by the implementing partners.

In Côte d'Ivoire, the acceleration team gave guidance in August 2016 to the country team and implementing partners on establishing microplanning as part of peer educators' activities. In November and December, technical assistance teams held two workshops, in Abidjan and Bouake, which trained a total of 67 peer educators and implementing partner staff. These tools included spot mapping and spot analysis, contact listing, an individual peer plan, a 90-90-90 Framework analysis, and opportunity gap analysis. The tools were translated into French, and the presentations used in the workshop were also translated to serve as a reference document. LINKAGES is currently collecting feedback on the tools from peer educators to see how they can be improved and made more user-friendly.

The South Sudan team redesigned microplanning tools suggested in the Monitoring Toolkit as well, to take into account the limited literacy of some peer educators, using illustrations and as little text as possible. Where needed, peer educators with low literacy were paired for outreach with ones who could read and write.

In order to offer support and referrals across the LINKAGES cascade, peer navigators have also been engaged and trained to work with key population members living with HIV. Peer navigators are HIV positive key population members who help others to access and remain on ART, and to undergo viral load testing. They use their training and their own experience living with HIV to answer questions and link the individual to services. In Malawi, 129 peer navigators have been trained for the three implementing partners working with female sex workers, and LINKAGES plans to train navigators for MSM. In DRC, guidance was provided on microplanning for the 90-90-90 target, so that peer educators and peer navigators

¹⁴For more information, see [Micro-planning in peer led outreach programs—a handbook](#). New Delhi: Bill & Melinda Gates Foundation; 2013.

understood their role in ensuring that key population members were tested regularly, and that those living with HIV were connected with treatment and care services.

The Regional Acceleration Workshop in February 2017 also introduced the enhanced peer outreach approach, an intensive, targeted outreach methodology that aims to increase HIV testing uptake and case-finding, and link those who are HIV positive to services. This is done by engaging key population members to contact people in their own social or sexual networks who have not previously been reached by the project, and encourage them to be tested for HIV.

In Côte d'Ivoire, after finalizing an implementation plan during a technical support visit in April, the project piloted the enhanced peer outreach approach with a month-long campaign in June 2017, for female sex workers in 14 communes and for men who have sex with men in 8 communes. The acceleration team provided technical support

to monitor implementation, analyze the results, and make plans to sustain the gains of enhanced peer outreach. The campaign reached 3,476 FSWs and 714 MSM; 90 percent of them had not previously been registered with the project. All were tested for HIV, and those who tested HIV positive were offered ART.

In both key populations, the enhanced peer outreach approach accounted for a disproportionate share of those testing HIV positive and beginning ART during the period April-June 2017 (Figures 7 and 8). The case-identification rate among female sex workers was 5.6 percent, compared with 1.7 percent among those reached by conventional peer outreach methods. Among MSM, enhanced peer outreach yielded a case-identification rate of 15.4 percent, compared with 5.9 percent using conventional peer outreach. This indicates that the new approach was effective in reaching those at higher risk of HIV.

FIGURE 7. Contribution of enhanced peer outreach approach to HIV case-finding among female sex workers, LINKAGES Côte d'Ivoire, April — June 2017

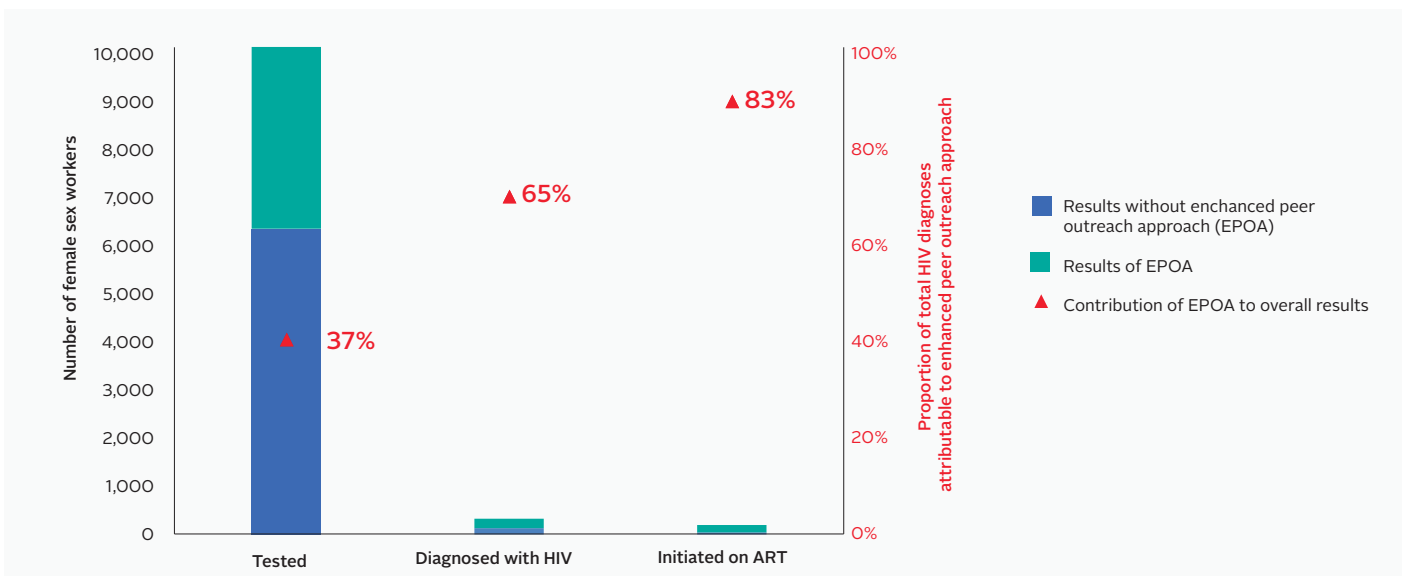
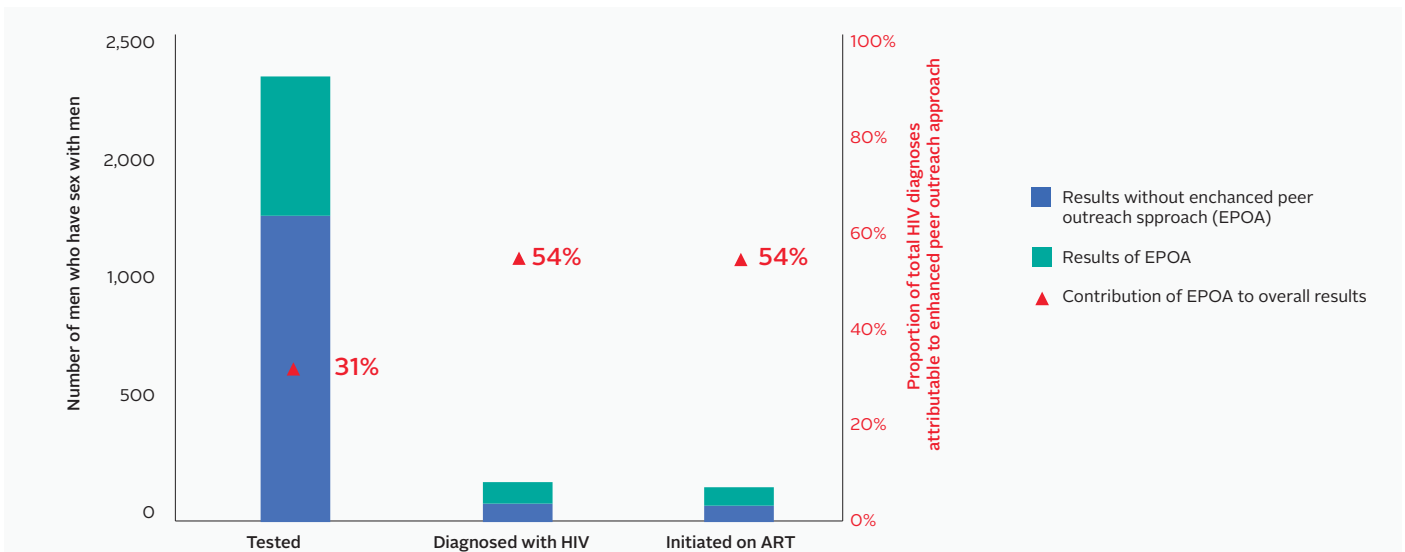


FIGURE 8. Contribution of enhanced peer outreach approach to HIV case-finding among men who have sex with men, LINKAGES Côte d'Ivoire, April — June 2017



Clinical Services

Clinical services are typically provided through a combination of community-based outreach and referrals to public health facilities. Peer educators use microplanning tools to track key population members who are due for routine STI check-ups or HIV testing. Where available, mobile services are organized in that locality at a convenient time, and the peer educator takes responsibility for encouraging them to attend. Alternatively, staff refer key population members to public health facilities, while peer navigators assist those diagnosed HIV positive to access ART and remain in treatment, as described previously.

In Malawi, the range of services offered to FSWs at drop-in centers includes HIV counseling and testing, STI screening and management, PEP, referrals, and screening for cervical cancer. Services like family planning and screening for sexual and gender-based violence have been added as staff capacities have been built, in part in response to the acceleration workshops.

LINKAGES also received authorization in March 2016 to provide ART in five of the drop-in centers. But gaining

approval to offer ART was not straightforward because drop-in centers are not considered part of Malawi's national health infrastructure. To get around this, the project arranged with district health offices to have the centers listed as sub-units of the local government-run health facility. Likewise, LINKAGES was able to negotiate with the Ministry of Health to establish a separate supply chain for free STI drugs at drop-in centers. This ensures that key population members can reliably receive STI treatment, which might not be available at public health facilities due to stock-outs. More recently, the project has opened three drop-in centers for MSM.

Expanding the range of clinical services beyond HIV testing enabled the Malawi project to broaden the appeal of drop-in centers for key population members (Figure 9). Peer educators encourage them to attend the centers to receive resources and support for their health and well-being, regardless of their HIV status. During a technical assistance visit in September 2016, the LINKAGES acceleration team recommended reinforcing peer educators' communications skills to promote regular quarterly health check-ups to key population members.

FIGURE 9. Expansion of drop-in centers and trend of visits by female sex workers, LINKAGES Malawi

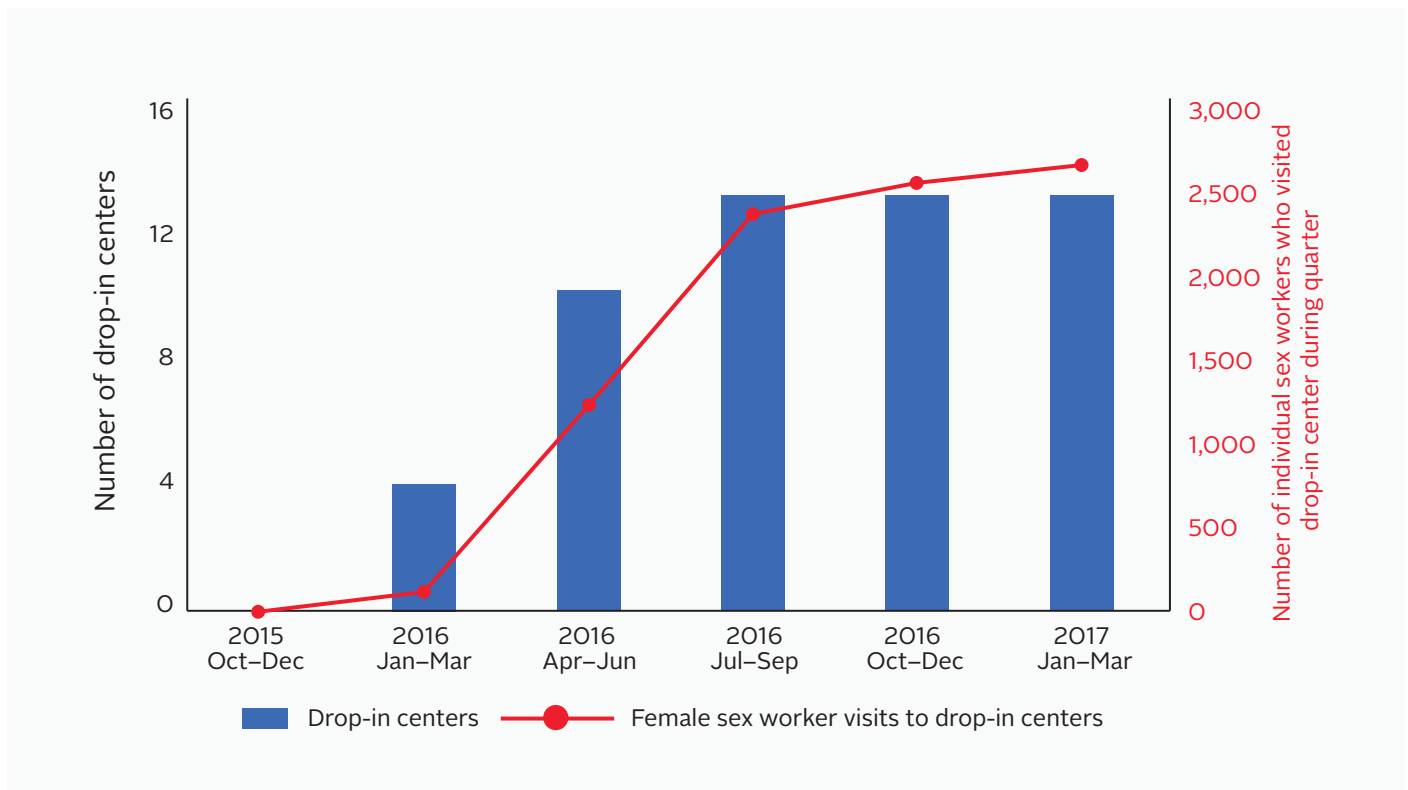
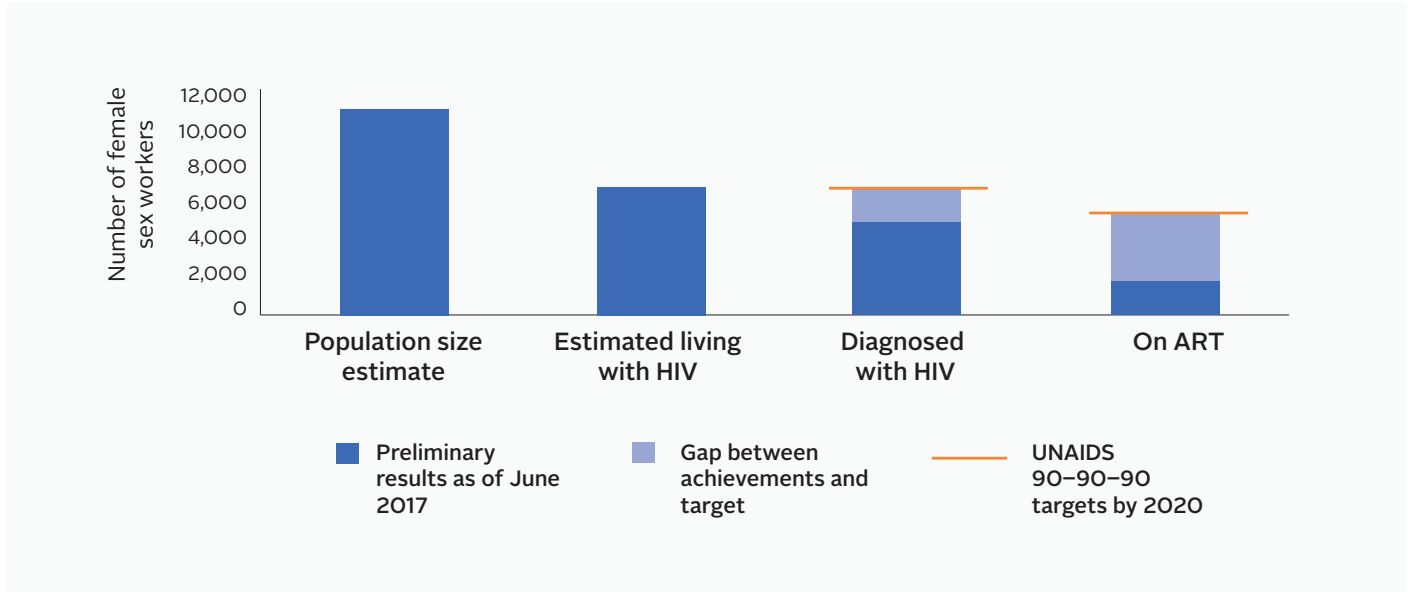


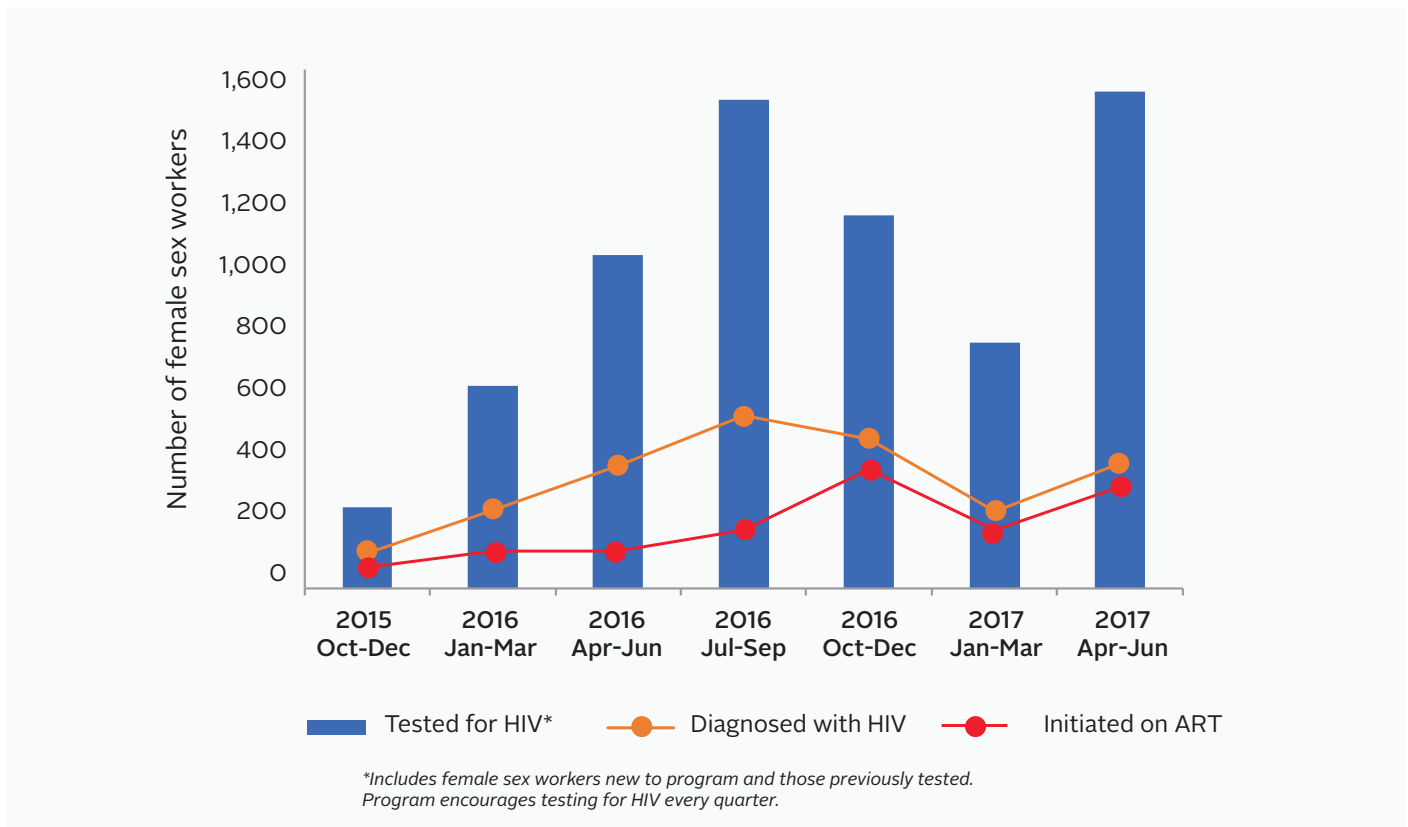
FIGURE 10. Cumulative HIV diagnosis and treatment cascade for female sex workers (preliminary results as of June 2017), LINKAGES Malawi



The gap between the number of FSWs diagnosed with HIV in the LINKAGES Malawi project and those initiated on ART (Figure 10) is largely explained by the fact that clinics did not adopt the WHO-recommended “test and start” approach until nearly the end of 2016. Beginning October 2016, a far higher

proportion of those testing HIV positive were initiated on ART (Figure 11, as shown by the narrowing gap between the two lines), and this proportion increased in the first quarter of 2017 as some drop-in centers began offering ART.

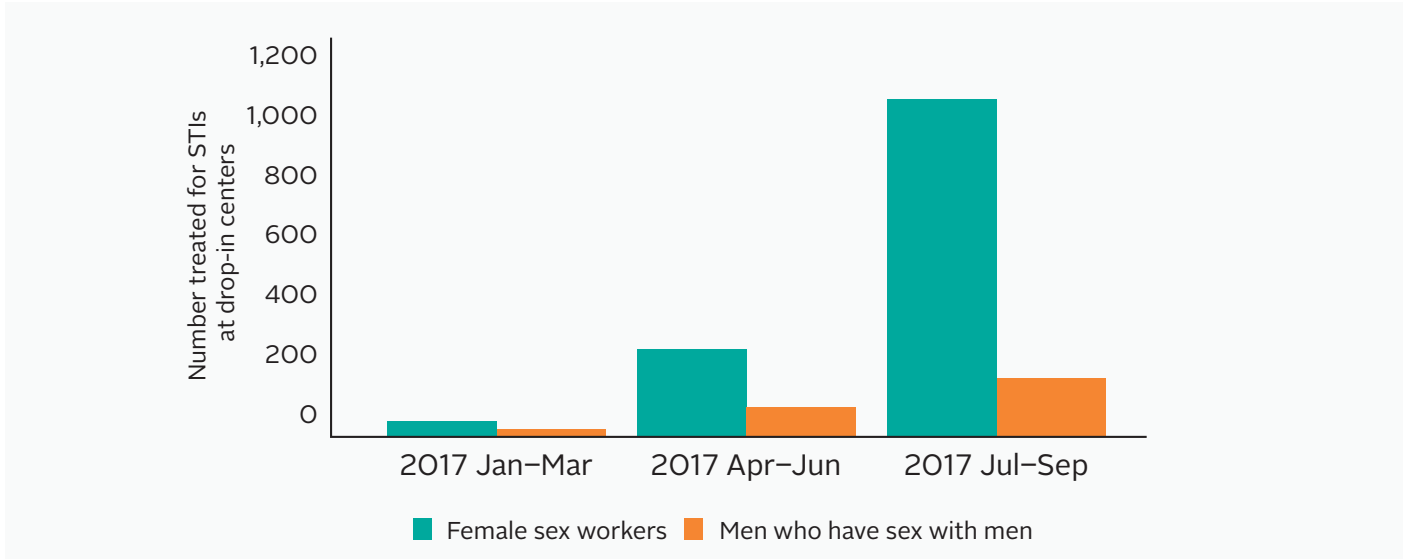
FIGURE 11. Enrollment in care and treatment for female sex workers living with HIV, LINKAGES Malawi



In DRC, drop-in centers provide condoms and lubricant, and offer HIV testing and counseling, and, since late 2016, screening and referrals for STIs (Figure 12). Other services have been added, including PEP and screening and referrals

for sexual and gender-based violence. The project also found that MSM prefer to come to the center to get tested because they tend not to meet at hot spots.

FIGURE 12. Screening and treatment of sexually transmitted infections at drop-in centers, LINKAGES DRC



LINKAGES DRC has also established community-based distribution points (PODIs) at drop-in centers to provide ART to key population members living with HIV who are adherent to ART. While PODIs for the general population exist in DRC, the PODI/drop-in center model for key populations is new. Each drop-in center is staffed by a nurse who dispenses medication and also conducts STI screening and treatment.

to March 2017 (Figure 13), and a dip in October to December 2016 was due to an intensive focus on contact listing and microplanning exercises during October, which led to fewer HIV testing outreach sessions, although the number of FSWs (and MSM) who were tested during visits grew during this period (Figure 14). The proportion of those diagnosed with HIV who were initiated on ART grew from 43 percent in the second quarter of 2016, to 82 percent a year later (Figure 13, as indicated by the narrowing gap between the two lines).

The number of female sex workers tested for HIV in DRC fluctuated over the course of the 12 months from April 2016

FIGURE 13. HIV case-finding and ART initiation among female sex workers, LINKAGES DRC

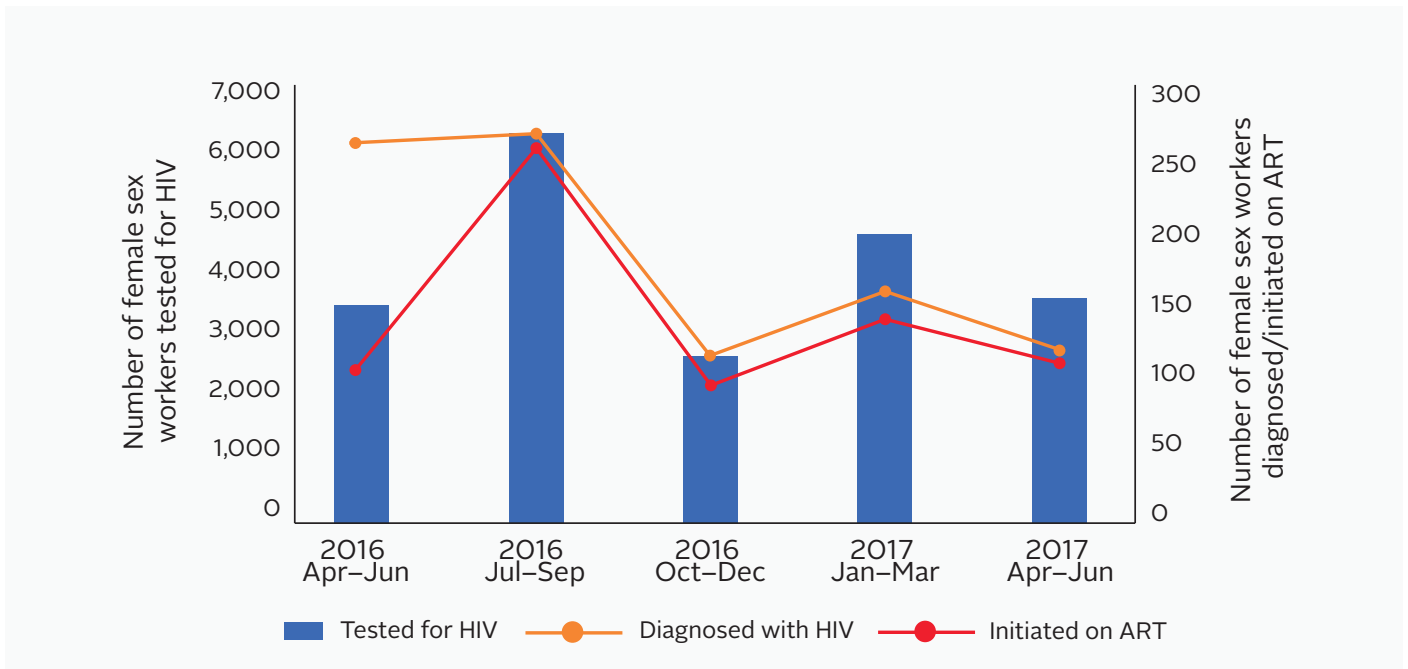
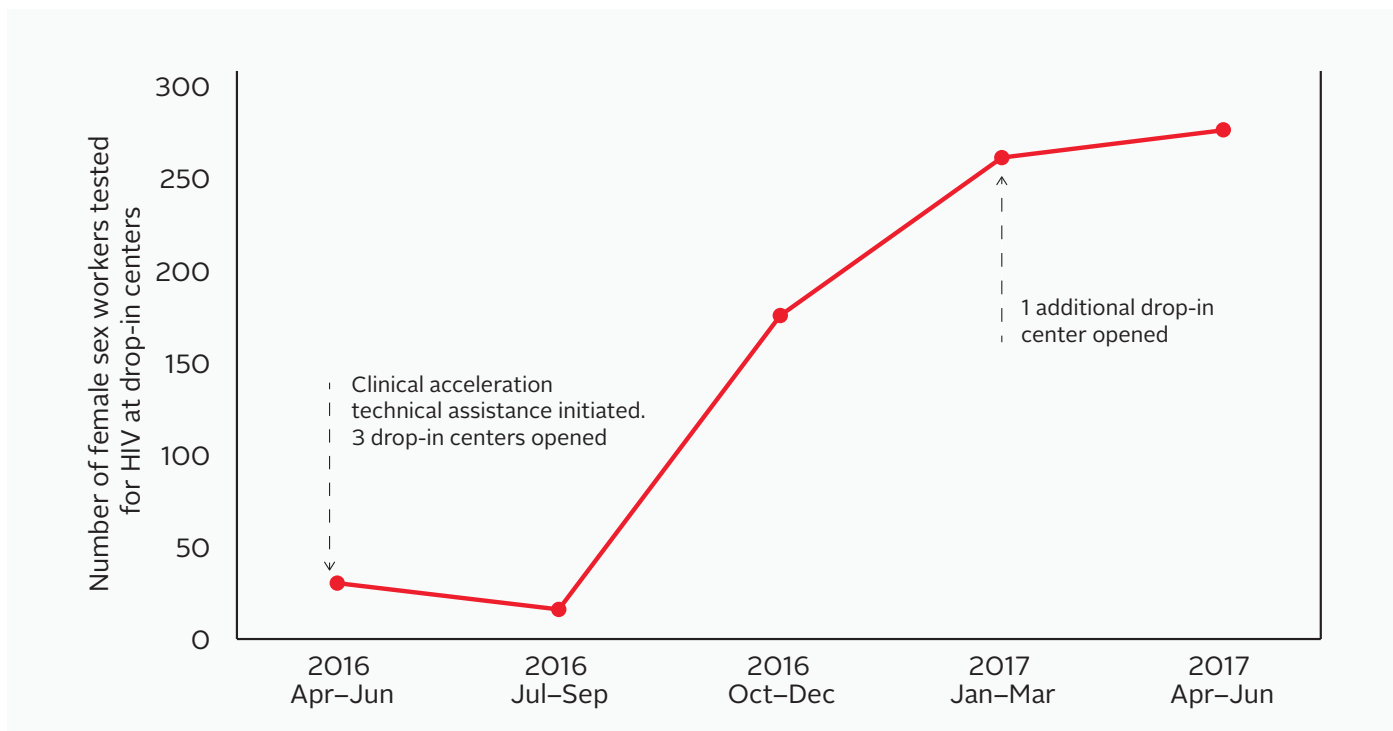


FIGURE 14. HIV testing of female sex workers at drop-in centers, LINKAGES DRC



In South Sudan, while there was a steady increase in late 2015 and the first half of 2016 in the number of FSWs screened for STIs (Figure 15), and those tested for HIV and initiated on ART (Figure 16), the outbreak of conflict in the summer of 2016 caused a significant drop. However, by

early 2017 the number of STI screenings and HIV tests had surpassed the previous levels, and there was also a closer congruence between the numbers of those diagnosed with HIV and those initiated on ART (Figure 16).

FIGURE 15. STI screening of female sex workers, LINKAGES South Sudan

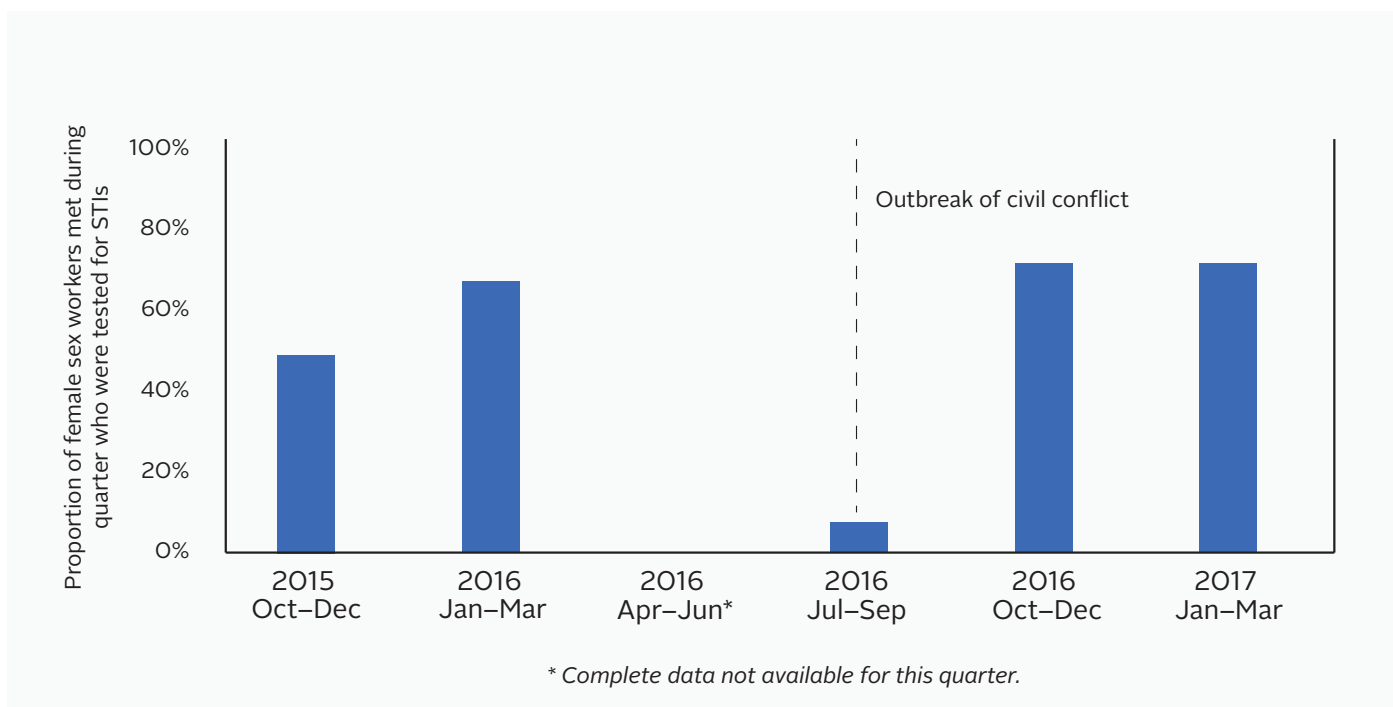
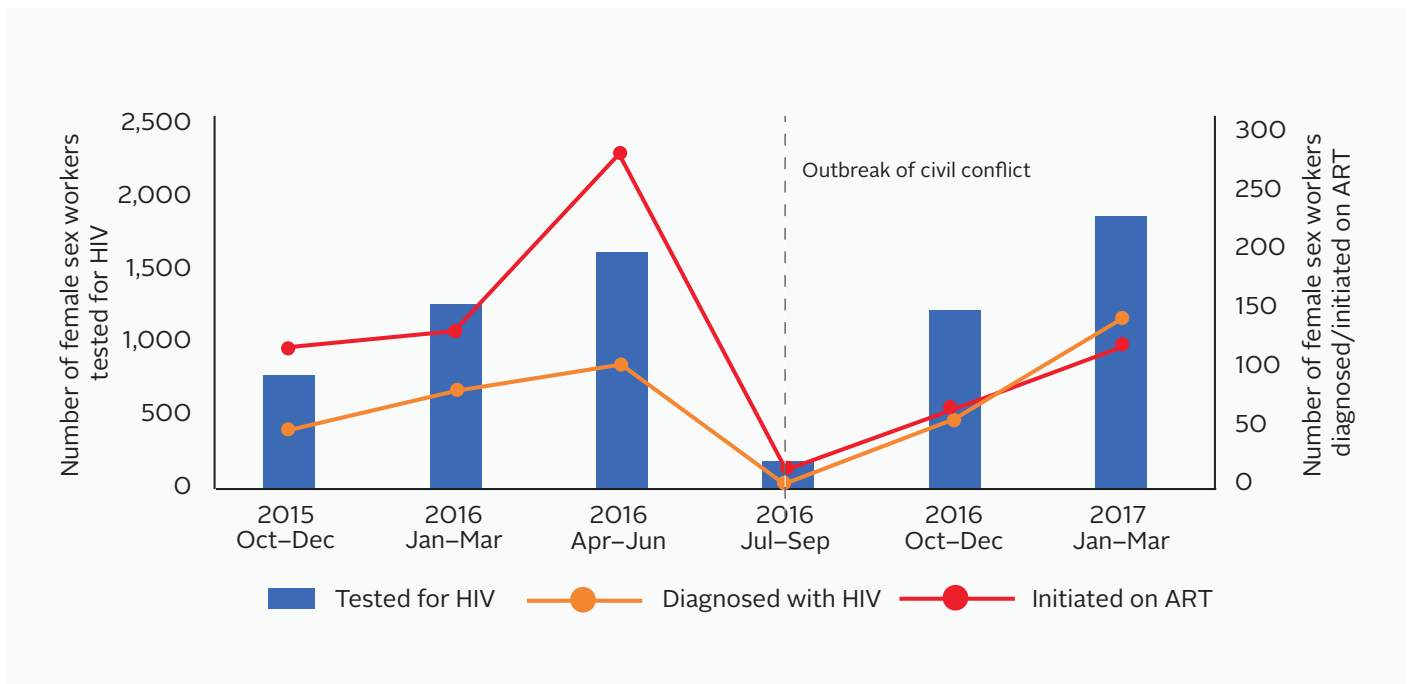


FIGURE 16. HIV case-finding and ART initiation among female sex workers, LINKAGES South Sudan



In South Sudan, referrals to public facilities became more important after the Ministry of Health withdrew permission for the LINKAGES drop-in center in Juba to provide clinical services to key populations. HIV testing and counseling services had begun at the center in February 2016, and the project obtained permission to provide ART in April, but the Ministry of Health withdrew approval less than two months later, and clinical services were ended, although the drop-in center remains open as a condom depot and a gathering place for FSWs for health education and other activities.

The LINKAGES team responded by working to co-locate and integrate its clinical service delivery at the Juba Teaching Hospital. Given the problems of stigma, and health care workers' inexperience with key populations, co-location has proven a more effective approach than simply making referrals. A LINKAGES clinical officer and nurse provide a "friendly face" to welcome and treat key population members, but they also work with other patients. This has the effect of mainstreaming care for key population members, while modeling good clinical practice to other staff.

In other LINKAGES locations in South Sudan where the project does not have clinical staff of its own, it partners with public facilities to provide services. This means building relationships between providers and the community outreach team. Where possible, a nurse from the facility joins in with outreach to key populations for HIV and STI testing and family planning services. Most ART centers in these areas now designate a specific day of the week for clients

from key populations. Initially, staff of the local LINKAGES implementing partner attended the center on that day to support service delivery, but as providers have grown used to offering services to key populations, the need for this has lessened. At least one health care worker at each facility is trained in delivering key population-friendly services, and they are encouraged to share this learning with colleagues. The LINKAGES South Sudan team has developed a standard operating procedure for handling referrals from the community, which outlines the responsibilities of the project manager, project nurse, and the supervisor of peer educators and peer navigators. It gives step-by-step guidance for HIV testing and counseling and service referrals for both HIV-positive clients and HIV-negative clients, including following up if they miss appointments. Monthly meetings between implementing partners, peer navigators (who are themselves living with HIV), and facility staff address problems and ensure that things run smoothly.

In September 2016, the LINKAGES South Sudan team, accompanied by staff from the Ministry of Health, attended a LINKAGES clinical workshop in Kenya. The acceleration team arranged this because the ongoing conflict made it impossible to receive technical support on clinical services in-country. The workshop not only built skills for clinical services, but also resulted in greater support from the Ministry of Health for services for key populations and the LINKAGES project. Since the Nairobi workshop, the Ministry of Health has also supported the formation of a sub-group on key populations within the national Technical Working Group on HIV.

Program Management

The acceleration teams have noted and supported several characteristics of strong program management in the LINKAGES countries. First, each member of the country team has a clearly defined role. Second, they are visibly invested in capacity building of their implementing partners, and in particular of outreach staff. Third, they are committed to spending time in the field to get a good understanding of the realities of programming on the ground. In Malawi, for example, country team members accompanied the acceleration team on their field visits and learned themselves through the capacity building and mentoring offered to the implementing partners. One of the team members attended the entire workshop on sexual and gender-based violence offered to implementing partner staff and outreach workers, in order to signal the importance of the intervention, and to understand how the implementing partners received the concepts and training.

The Malawi team created action plans for itself to respond concretely and promptly to recommendations provided during technical assistance visits. It also developed tools to mentor implementing partners and monitor their performance. These included guiding questions for individual members of staff, specific to their role as outreach workers, drop-in center staff, or project coordinators. The team conduct mentoring visits monthly or quarterly as needed, and perform follow-up visits to check whether improvements have been made.

LINKAGES has encouraged country teams to adapt the program to their local context, while ensuring that the parameters of the common core program are met. In Malawi, the team reduced the length of the screening tool on sexual and gender-based violence in the Monitoring Toolkit from three pages to one, to make it easier for peer educators to use. This tool and the microplanning tools were translated into the local language, and the Malawi team decided to include literacy among the criteria for selecting peer educators, to ensure they would be able to use the tools effectively.

In South Sudan, outreach had to be adapted to cope with logistical challenges, such as the difficulty of getting government security clearance for transporting supplies. The solution was to make two large shipments a month and stockpile commodities locally so that they could be distributed from there. When the civil conflict made it difficult to move supplies by road, LINKAGES South Sudan

formed partnerships with humanitarian organizations such as the World Food Programme, which delivers HIV test kits, STI drugs, and condoms and lubricant by air on behalf of LINKAGES.

In DRC, the country team increasingly took ownership of planning the agendas for technical assistance visits, revising tools, creating action plans, and providing training to implementing partners. This management capacity was especially valuable given that the insecure political environment made it impossible for the acceleration team to visit to provide technical assistance from fall 2016 to early 2017.

Monitoring and Data Use

Continual data analysis is essential to improving program performance, and the acceleration teams introduced the LINKAGES Monitoring Guide and Toolkit to each of the LINKAGES countries. During technical assistance visits the team explained the tools and the forms used for data collection and monitoring. Some programs had already developed their own data collection tools, and where necessary they revised these to be consistent with the Monitoring Guide and Toolkit. This ensured that microplanning could be carried out effectively, so that the number of key population members actually being reached and the services they were receiving were clearly tracked. With technical assistance from the acceleration team, country programs trained implementing partners in data monitoring, and peer educators learned how to use the microplanning tools.

Table 3 lists the tools in the Monitoring Guide and Toolkit, and Table 4 shows how dashboard indicators were calculated. See Annex 1 for annotated examples of dashboard graphs created using these indicators.

TABLE 3. LINKAGES program monitoring tools

Name	Completed by	When completed
Hot spot validation form	Peer educators	When validating existing or newly mapped hot spots
Hot spot list	Program manager/ M&E* officer	Prior to starting intervention
Infrastructure status	Program manager	At start of program
Staff register	Program manager	At start of program
Peer educator register	Program manager/ staff outreach supervisor	When peer educators recruited
Capacity building register	Program manager	At the end of each training session
Outreach enrollment form	Staff outreach supervisor/peer educator	When KP* member is first enrolled in the program
Master register	M&E officer	Regularly updated to provide a complete list of KP members enrolled in the program
Individual tracking sheet (peer calendar)	Peer educator (with help of staff outreach supervisor)	Whenever peer educator provides services to KP members
Peer educator compilation sheet by sites	Staff outreach supervisor	Monthly
Condom outlet register	M&E officer	At start of program, and as new outlets are added
Condom and lubricant inventory register	Program manager	Monthly
Needle and syringe inventory register	Program manager	Monthly
Condom and lubricant outlet inventory/distribution register	Program manager	Each time outlet is supplied with commodities
Needle and syringe outlet inventory/distribution register	Program manager	Each time outlet is supplied with commodities
Clinic enrollment form	Clinic staff	When KP member visits clinic for services for first time
Referral slips	Clinic staff	When a KP member is referred for any services outside implementing partner's system
Clinic visit form	Clinic staff (preferably clinician)	Each time KP member receives services
KP individual tracking sheet for clinical services	Clinic staff	Quarterly
KP PLHIV* tracking sheet	Clinic staff	Regularly updated to provide a complete list of KP PLHIV enrolled in the program
Peer navigator form	Peer navigator	When peer navigator provides services in the field
Crisis management register	Staff outreach supervisor	When a crisis incident occurs
Advocacy/sensitization register	Staff outreach supervisor	When an advocacy or sensitization session is conducted
Referral register (non-medical services)	Staff outreach supervisor	When referral is made
Support group register	Staff outreach supervisor	When KP group is formed, and when meetings are held
Tool for assessing peer educator communication	Staff outreach supervisor	When conducting an assessment of peer educator
Assessment of referral service point	Program manager	Semi-annually

*PLHIV = person living with HIV; KP = key population; M&E = monitoring and evaluation

TABLE 4. Indicators for program monitoring

Note: Unless labeled “custom”, indicators are those specified by PEPFAR. Custom indicators were developed by each country to monitor the services offered. Data for indicators were compiled monthly for use at the local level and reporting to LINKAGES, and were reported quarterly to USAID.

Indicator name	Indicator definition
PREVENTION	
KP_PREV	Number of key population individuals reached with individual and/or small group HIV preventive interventions that are based on evidence and/or meet the minimum standards required (box on page 6)
PP_PREV	Number of priority populations reached with standardized, evidence-based interventions required that are designed to promote the adoption of HIV prevention behaviors and service uptake.
(custom)	Number of male condoms distributed to key population individuals by outreach staff during the reporting period
(custom)	Number of female condoms distributed to key population individuals by outreach staff during the reporting period
(custom)	Number of lubricants distributed to key population individuals by outreach staff during the reporting period
STI_SCREEN (custom)	Number of key population individuals screened for STIs during the reporting period
STI_DIAG (custom)	Number of key population individuals diagnosed with STI during the reporting period
STI_TREAT (custom)	Number of key population individuals treated for STI during the reporting period
HTS_LINK	Number of key population individuals reached who are successfully referred to another facility for testing
HTS_TST	Number of key population individuals who received HIV testing and counseling services and received their test results
HTS_TST_POS	Number of key population individuals who received HIV testing and counseling services and received a positive test result
TREATMENT AND CARE	
(custom)	Number of key population individuals successfully referred to ART by a peer educator
CARE_NEW	Number of HIV positive key population individuals newly enrolled in clinical care during the reporting period who received at least one of the following at enrollment: clinical assessment (WHO staging) or CD4 count or viral load testing
COMM_SUPP_RET (custom)	Number of HIV positive key population individuals who are provided with HIV-related care in the community, i.e., outside of health facility
TX_NEW	Number of key population individuals newly enrolled on ART
TX_CURR	Number of key population individuals currently receiving ART
TX_LINK_NEW (custom)	Number of key population individuals newly enrolled on ART at a site not supported by LINKAGES
TX_LINK_RETURN (custom)	Number of HIV positive key population individuals who were lost to follow-up and re-enrolled at a site that provides ART
TX_RET	Proportion of key population individuals known to be on treatment 12 months after initiation of ART
TX_PVLS	Proportion of key population individuals with a suppressed viral load documented in the medical record within the past 12 months
OTHER SERVICES	
GBV_REPORT	Number of key population individuals reporting sexual or gender-based violence
GEND_GBVS	Number of key population individuals receiving care post sexual or gender-based violence

The project introduced unique identifier codes (UICs) in some countries as well, to strengthen monitoring. A UIC can be assigned to each client when they enroll in the program or first receive services from it. It can be generated from data that the client will find easy to recall about themselves, e.g., a combination of letters from their name, parts of their date or place of birth, their gender, or eye color. By using the same prompt questions, each service provider can then generate an individual client's UIC without the client having to remember the complete code themselves. Recording the UIC each time the client receives services makes it easier to track service delivery in real time at the individual and program levels, and to monitor and analyze outreach. It also helps to ensure that individual clients are counted only once when aggregating service data and calculating the number of people reached.

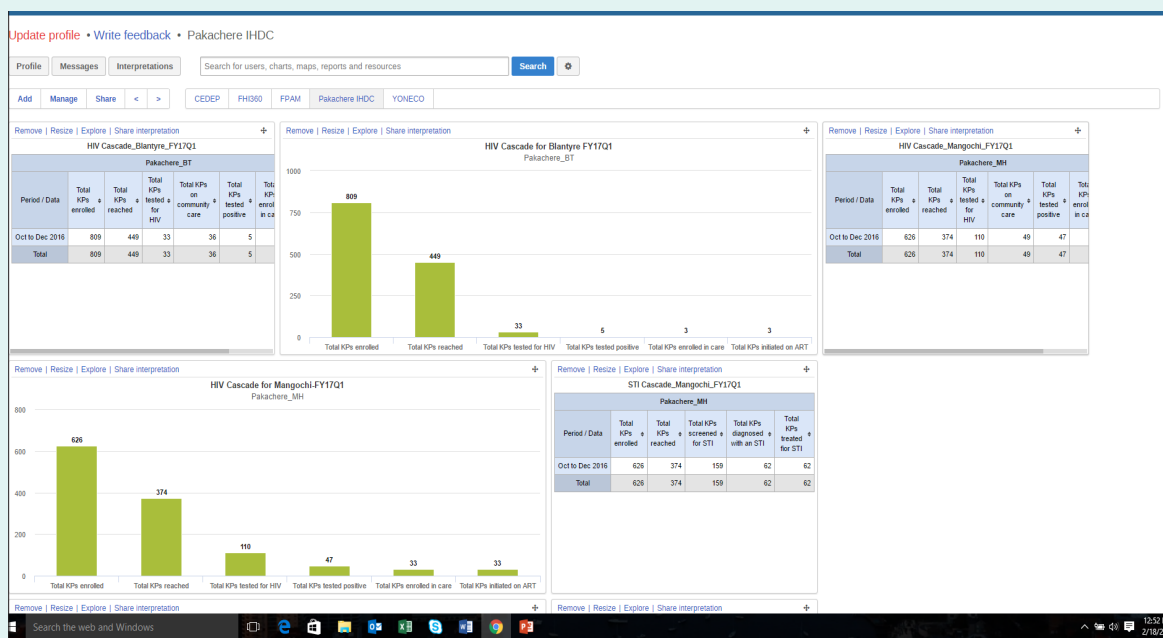
LINKAGES drafted a guidance document on UICs in 2016, describing approaches and technical considerations for designing a UIC at the national level and implementing it across the full scope of activities, as well as issues related to confidentiality, data security, client consent, and biometric UICs. The draft guidance document was accompanied by a toolkit with instructions and worksheets on the steps required to design and implement UICs.¹⁵

The UIC is part of a computerized data management system, the DHIS2 system, which was developed with input from implementing partners, peer educators and peer navigators (see box on this page). In Malawi DHIS2 was introduced by during a technical assistance visit in September 2016. The acceleration team trained the system users and helped them

A computerized data management system

DHIS2 now also uses eCascade for data entry and analysis. This is available for use on smartphones and tablets as well as laptops and desktop computers. Workers in the field can use eCascade in real time,

which can help increase the completeness and accuracy of data. Upon logging in, the user sees a ready-designed dashboard (shown below), and can generate reports themselves without needing the services of the M&E officer.



Rolling out the system in Malawi required inputting the registration data of all key population members from their enrollment forms, before follow-up data could be entered. This necessary task was time-consuming, and sometimes hindered by power outages or lack of Internet connectivity in some drop-in centers. Adequate resources of time and technical support must be

planned for when introducing this kind of system, with ongoing support to ensure it is fully and consistently implemented. However, the investment can help programming; one of the implementing organizations in Malawi quickly learned to extract and analyze individual-level and hot spot-level data in order to make local programming decisions.

¹⁵ For further information on UICs, see [Considerations and guidance for countries adopting national health identifiers](#). Geneva: UNAIDS; 2014.

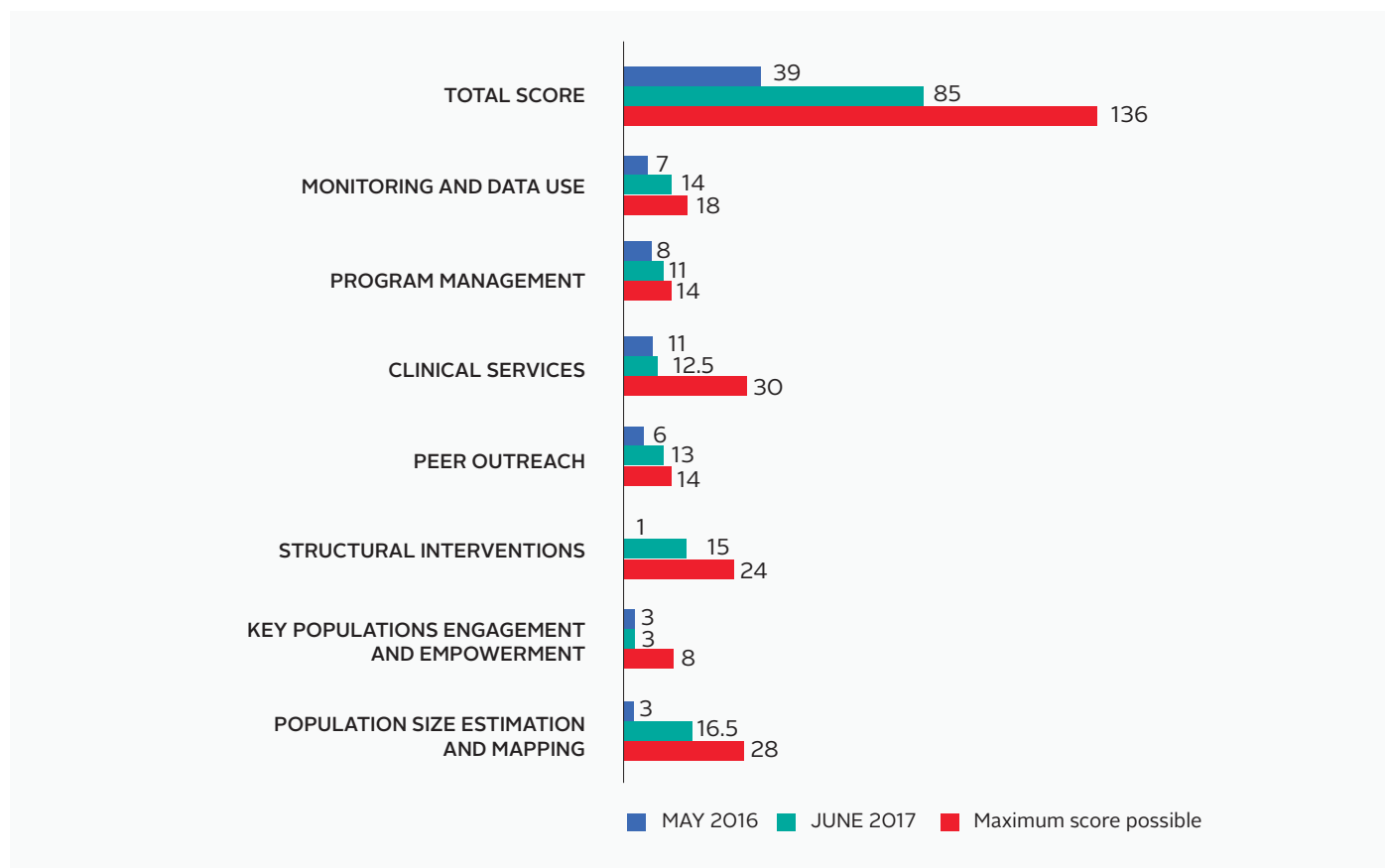
develop a user guide. Malawi was one of the first LINKAGES countries to computerize its data, and by September 2017, UICs were in use in 13 countries, including Côte d'Ivoire, DRC, Malawi and, South Sudan, mostly designed with technical assistance from LINKAGES acceleration teams.

The project also required each country team to do a periodic self-assessment, using the checklist that is part of the Acceleration Guide. The checklist allowed the team to evaluate its progress on each of 68 elements under acceleration. For each element, the project assigned a score

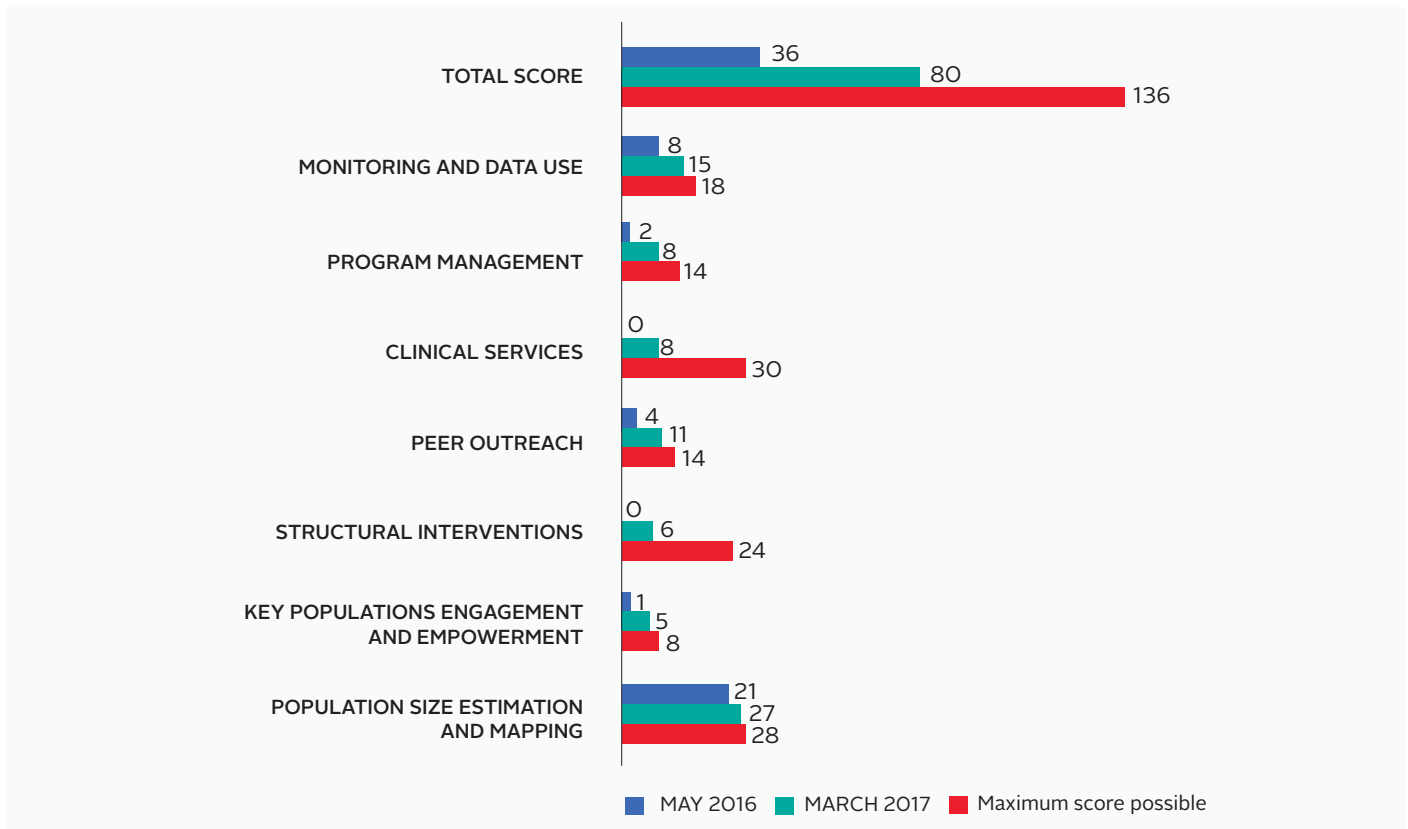
of 0 (not yet addressed), 1 (partially done), or 2 (completed). Thus, the maximum score is attained when all elements have been completed. The checklist allowed country teams to rapidly and easily establish a baseline measure of their own implementation status, and to track progress over time. They also used the self-assessments to identify areas where they needed technical assistance. Self-assessment results for the four countries described here are shown in Figure 18. LINKAGES also prepared a more detailed checklist for use by technical assistance teams and consultants. An excerpt is shown in Annex 2.

FIGURE 18. Progress under the acceleration initiative, measured by self-assessment checklist

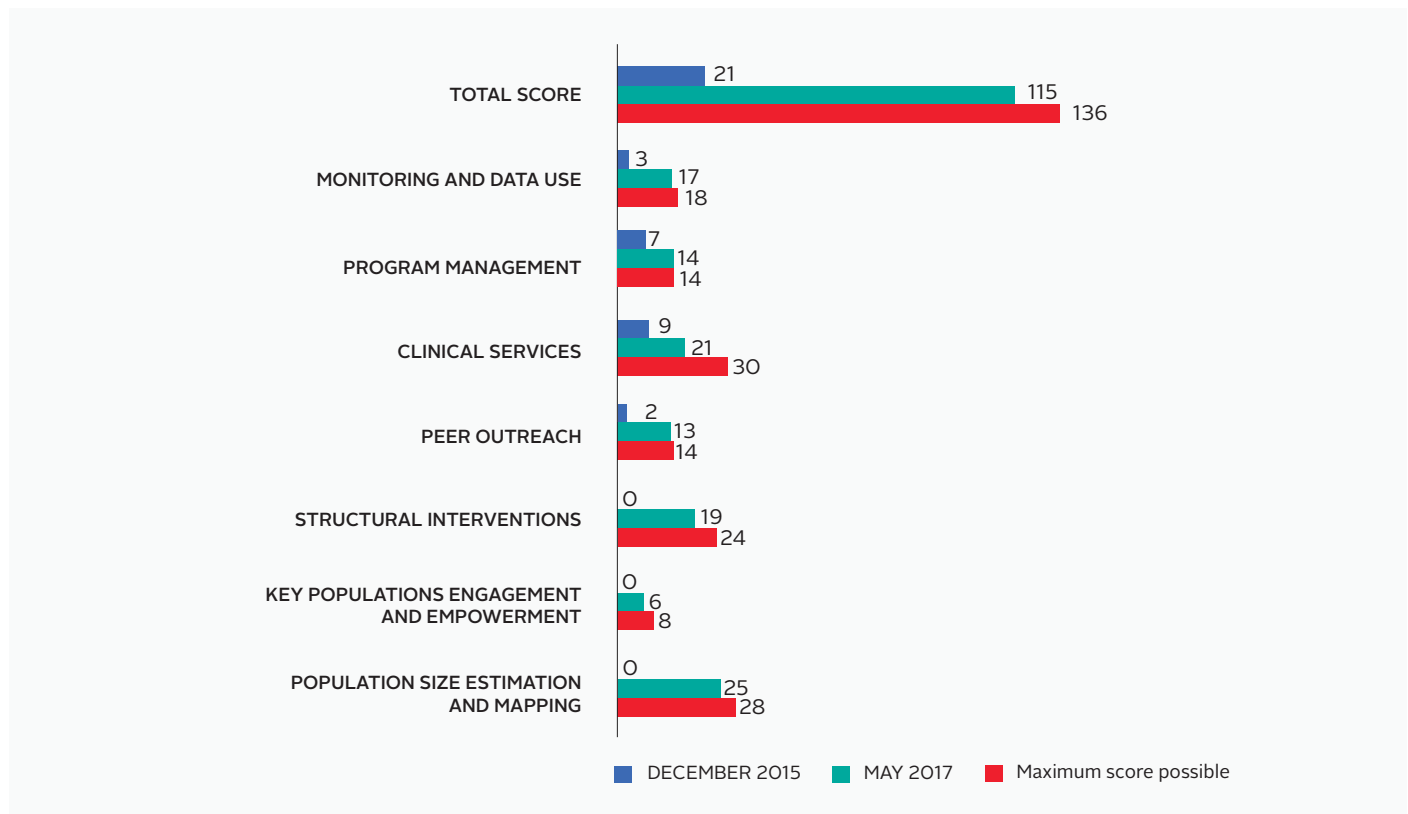
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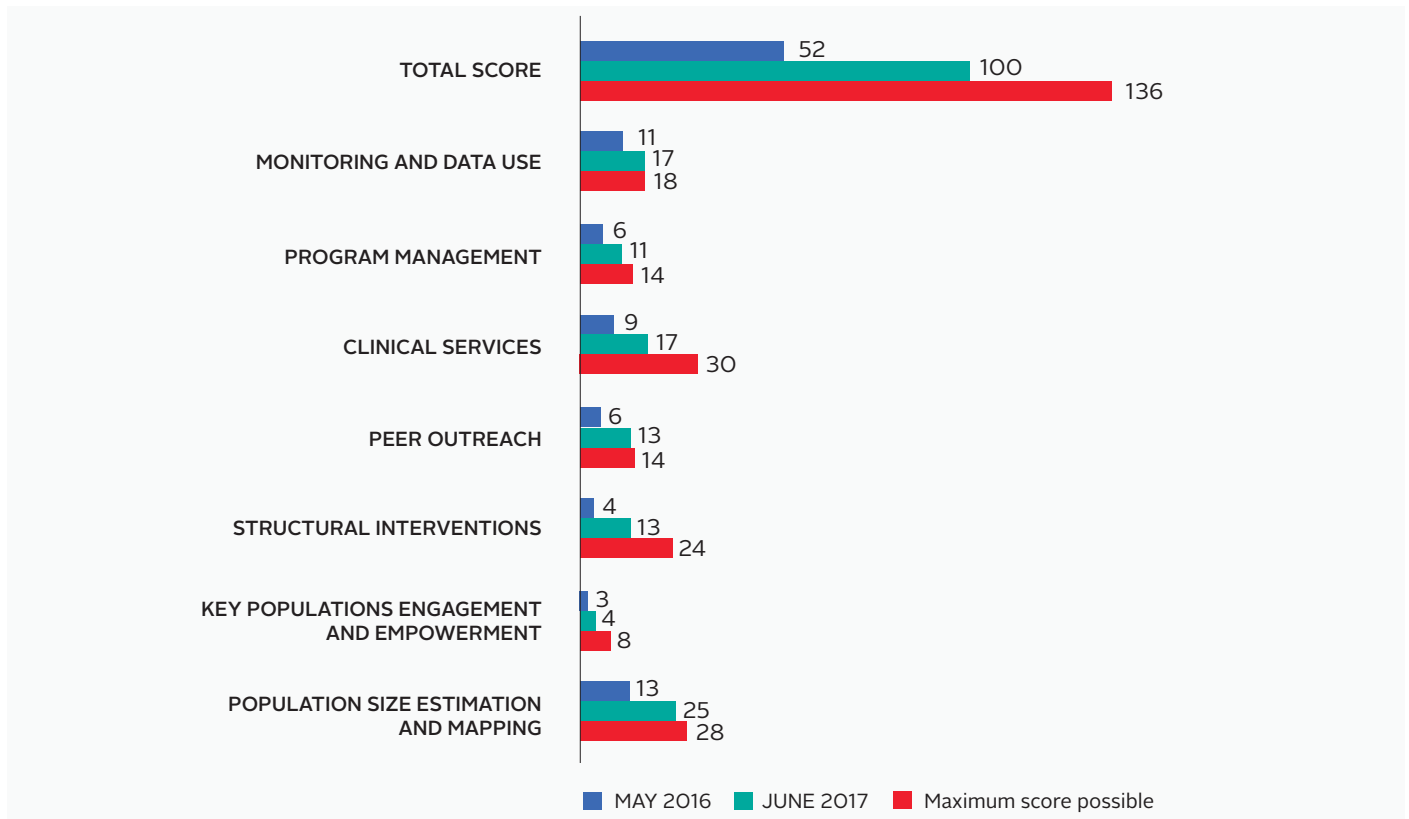
DEMOCRATIC REPUBLIC OF CONGO



MALAWI



SOUTH SUDAN



3 Lessons Learned

A standardized approach with a core service package:

The common core program ensured that a package of essential services across the LINKAGES cascade could be delivered consistently in each country, described in documents such as the Acceleration Guide, with support given by technical assistance teams. There was flexibility to tailor services and service delivery approaches to the local context in each country.

Overall coordination of technical assistance against an operational plan:

Following the initial Regional Acceleration Workshops, each country devised its own acceleration plan, which assessed its long-term technical assistance needs. Technical assistance teams then supported the country teams in systematically implementing the plan. Periodic self-assessments using checklists allowed program managers to gauge progress for themselves quickly and easily. There was consistency in the acceleration team members assigned to each country, so that they could build upon their previous work and insights. Each country team had a backstop at LINKAGES headquarters to provide technical advice on program implementation, and the acceleration initiative was overseen by the senior technical advisor at the LINKAGES headquarters.

Sharing of lessons between countries: Site visits to established and high-performing sites were an important stimulus to learning, and to designing components such as drop-in centers and clinical services. Programs can draw upon

regional experience to develop communities of practice and provide local and regional technical resources for other programs in need of assistance in implementation and scale-up.

Adaptability of program implementation tools to varied settings:

Microplanning has proved a successful approach to peer-led outreach in HIV prevention programs with key populations in India, including under the Avahan initiative. LINKAGES demonstrated that this approach could be applied in other countries, with similar benefits — improved program coverage, increased empowerment of key population members and their greater ownership of the program, and a data-use culture at the ground level that fed into monitoring systems and that enabled close analysis of program progress via dashboards.

Cascades and visual tools to support program managers:

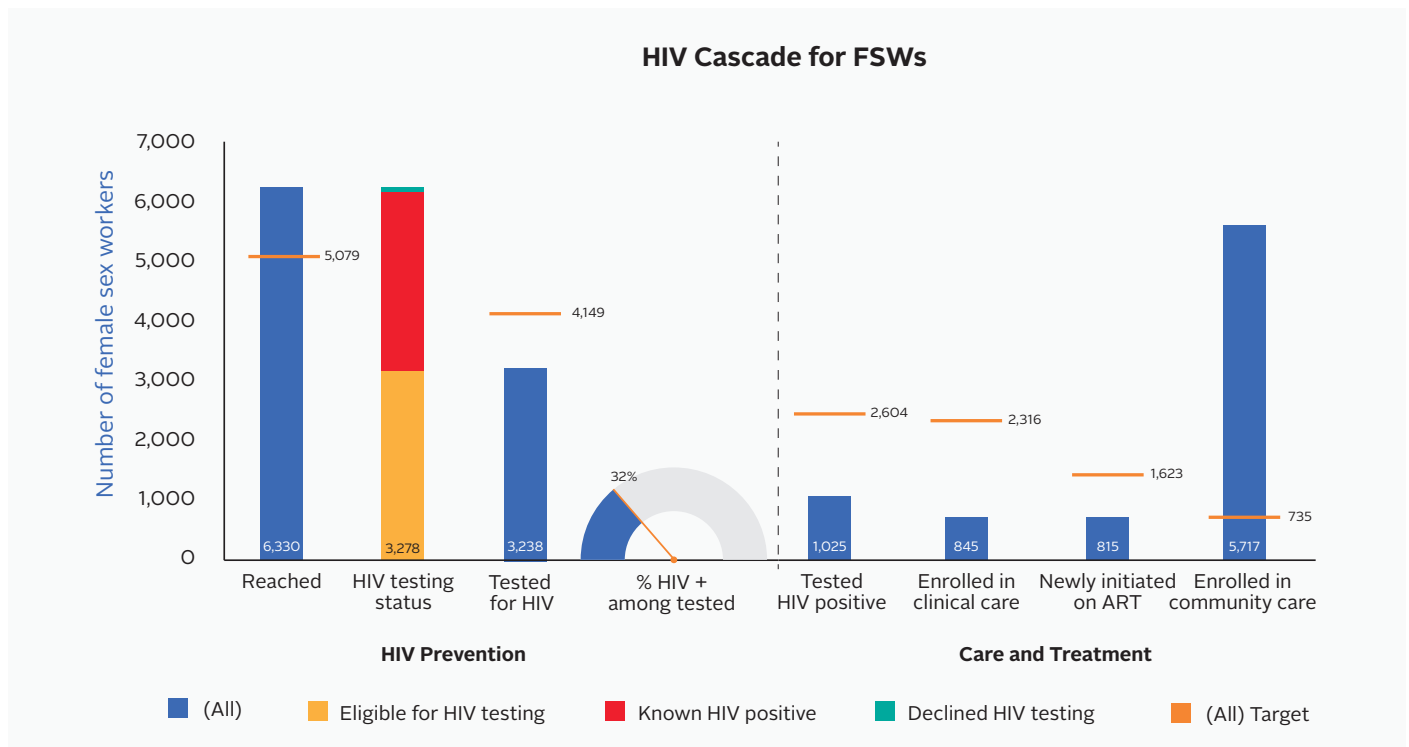
The LINKAGES cascade served as a framework for project design and implementation. The Acceleration Guide linked project components to the framework, and dashboard tools were designed to show indicators for each component of the cascade (see Annex 1). This made gaps in outreach or service delivery more readily apparent, so that they could be quickly addressed.

These lessons may be transferable to other contexts, both geographically and for other health or development challenges, where a program needs to scale up rapidly to achieve coverage with interventions that are consistent, effective, and sustainable.

ANNEX 1. Analyzing a Sample Monitoring Dashboard

The graphs below are examples of the kinds of data that are displayed on the LINKAGES monitoring dashboard, and how they can be used to analyze program performance and identify areas of concern or opportunities for improvement. In this case, they show progress across the cascade from October 2016 to June 2017 for FSWs in the LINKAGES Malawi project.

The first dashboard graph shows the complete cascade of outreach, which includes reaching key population members with an offer of a referral to HIV testing (as well as other services), testing itself, enrollment in clinical care for those who are HIV positive, initiation on ART, and enrollment in community care, i.e., care and support outside the health facility. The horizontal target bars show the cumulative



number of people expected to be reached, tested, etc. during these nine months. The “dial” is a case-finding indicator showing the proportion of those tested for HIV who tested positive. This gives an at-a-glance sense of whether the project is reaching and testing those most at risk. The proportion testing HIV positive is below target, suggesting that more needs to be done to identify sex workers at high risk of HIV who do not know their HIV status; but it could also indicate that the HIV case-finding target is not realistic and needs to be revised.¹⁶

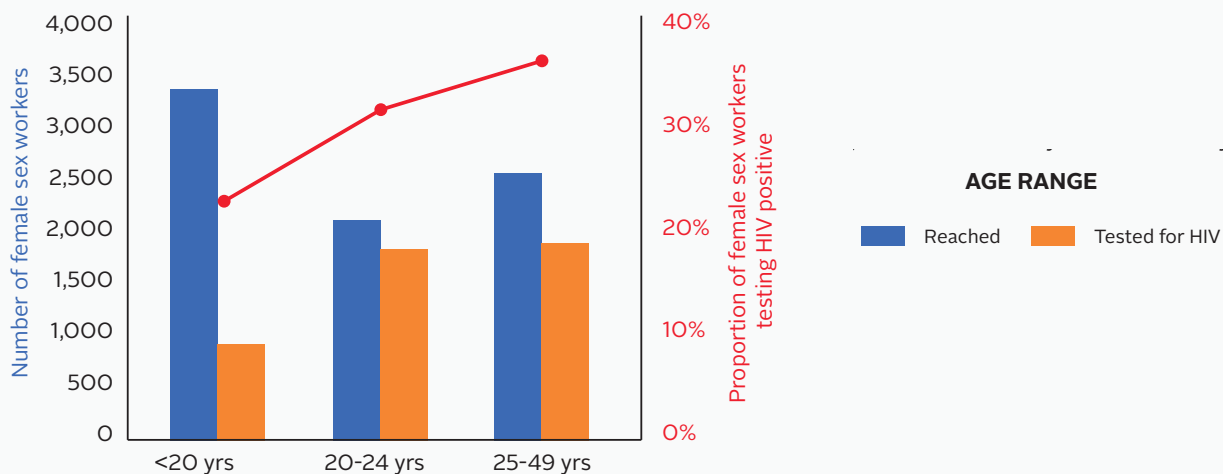
Breaking down the same information by age group (see first graph on p.30), it becomes apparent that uptake of HIV testing is considerably lower among the youngest sex workers. This is a cause for concern because the HIV case-finding rate jumps from 23 percent among those under 20 years of age to 32 percent for those aged 20 to 24, which indicates that a significant proportion of young FSWs become infected within a few years of beginning sex work. Looking at these data, a program manager might choose to devote more

resources to encouraging younger sex workers to be tested for HIV, or examine whether there is a reason that younger ones are less willing to be tested, such as lack of awareness about HIV or HIV testing, fear of engaging with the program, or lack of rapport with peer educators who may be older than they are. At the same time, it will be important to engage with older sex workers, among whom the case-finding rate is high (38 percent).

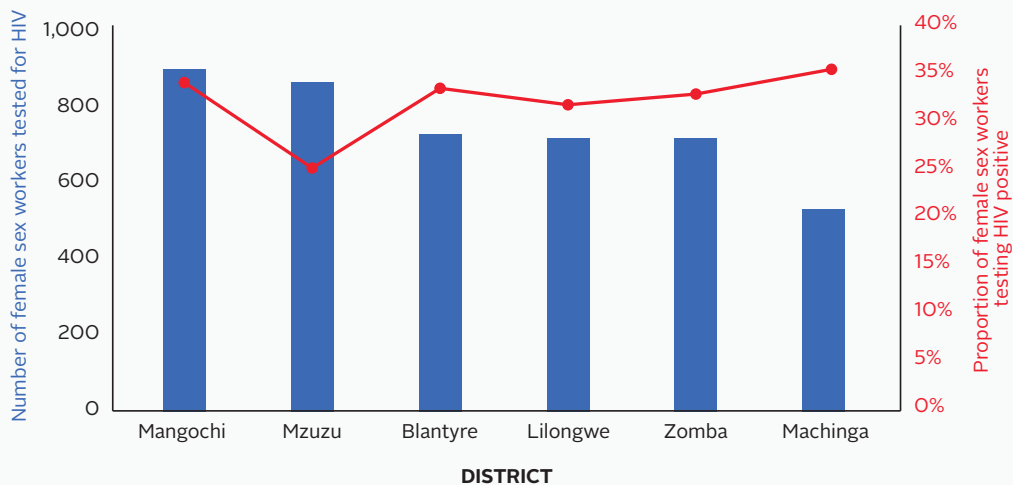
An analysis of the HIV case-finding rate by district (second graph on p.30) shows that it is significantly lower in one district, Mzuzu, than in the others. The implementing partner for FSWs in that district, FPAM, also has a lower case-finding rate than the other implementing partners. This should lead the program manager to discuss with the implementing partner what the possible reasons for this might be, and to strategize to ensure that peer educators are reaching those FSWs likely to be at highest risk of HIV. This might involve a closer analysis of hot spots, or reinforcing training and supervision on microplanning.

¹⁶ Targets are often set based on estimated HIV prevalence, without taking into account the number of key population members already identified as HIV positive. Since only those who do not know their HIV status are invited to be tested, it is to be expected that the case-finding rate among this subgroup will be lower than the overall prevalence in the key population.

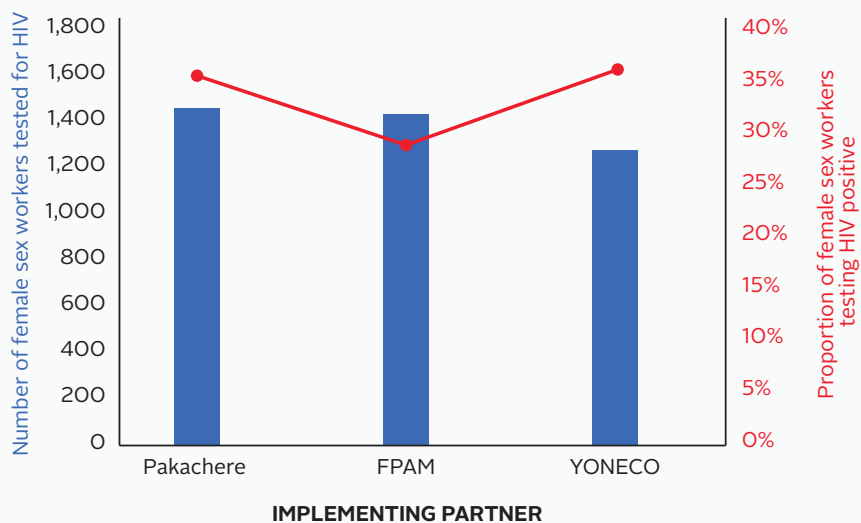
Contacts, HIV testing, and case-finding among female sex workers, by age group

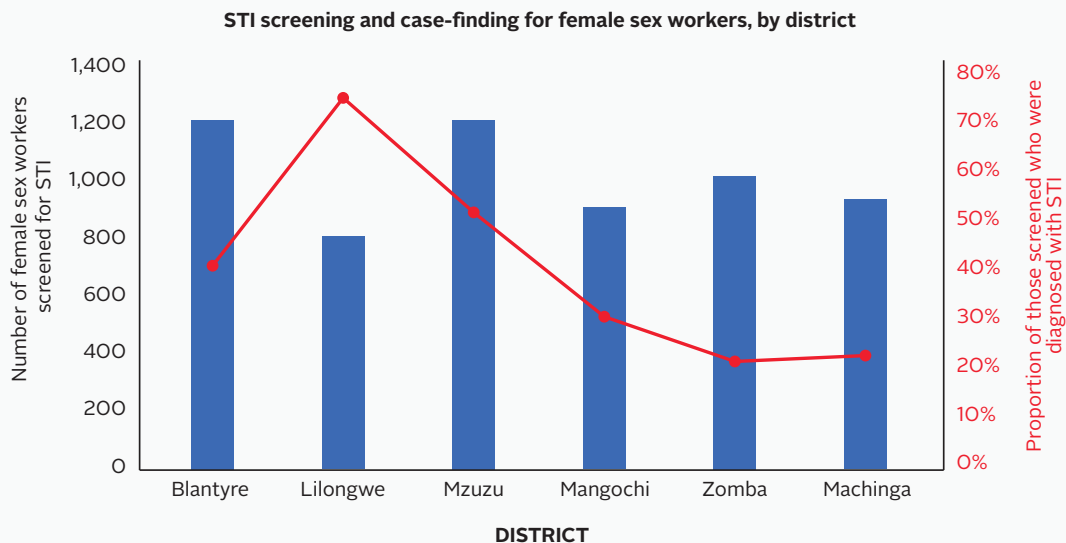


HIV testing and case-finding among female sex workers, by district



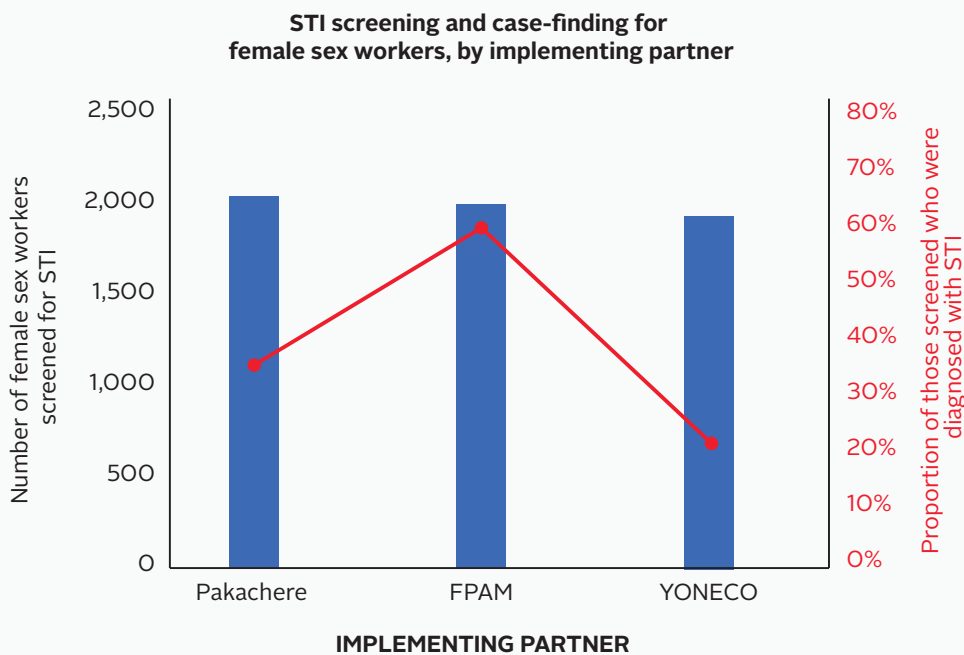
HIV testing and case-finding among female sex workers, by implementing partner





A similar kind of analysis can be done with STI screening and diagnosis. Although the absolute numbers of those screened in Lilongwe are the lowest among six districts/towns, the STI prevalence among those screened is highest there. However, case-finding is considerably lower (only 20 percent to 30 percent) in three other districts/towns, which are in

the purview of Pakachere and YONECO (see below). This information confirms that the program manager should work with these implementing partners to ensure that FSWS likely to be at highest risk of STIs (those with the most partners or who use condoms less consistently) are referred for screening.



ANNEX 2. Technical Assistance Checklist

Below is an excerpt from the checklist designed for teams or individual consultants providing technical assistance to LINKAGES partners under the acceleration initiative. It follows the sequence of the LINKAGES Acceleration Guide. The numbers in the left-hand column refer to the program elements and steps in the guide, to help the technical assistance team refer back to it with the country team members. For each question there is a yes/no box, and a space to make notes. The form is designed to be used over two successive visits, in order to track progress over time. Most of the questions are relevant to the start-up phase of the activities (roughly 0 to 4 months). Questions that are shaded are relevant to the roll-out phase (roughly month 5 onward).

Note for those providing technical assistance: This checklist is not a monitoring and evaluation form. It is simply a memory aid to help you ask questions that will uncover the areas where you can focus your work. The people you are providing technical assistance to should feel that you are interested in them and their work, and this checklist should not get in the way of that. Always remember that technical assistance is not a “box-ticking” exercise with right and wrong answers, but a dialogue between partners.

Element 4.2 Develop or adapt microplanning tools		Date of visit: _____		Date of visit: _____	
		Yes	No	Yes	No
4.2.1	Have microplanning tools been developed or adapted?				
4.2.2	Have staff and peer outreach workers been trained to use the tools?				
4.2.3	Are tools in use by peer outreach workers for planning and for recording outreach?				
4.2.4a	Is there a plan for regular refresher training (10-12 days per year), or for refreshers to be incorporated into monthly meetings?				
4.2.4b	Are regular refresher trainings taking place?				
4.2.5a	Are tools being used for monitoring outreach (both outreach indicators and peer outreach worker performance)?				
4.2.5b	Is there progress in reach and coverage of key population members?				
4.2.6	Are mobile phones or other technologies being used by peer outreach workers to record data?				

Element 4.3 Recruit peer outreach workers		Date of visit: _____		Date of visit: _____	
		Yes	No	Yes	No
4.3.1a	Has a comprehensive scope of work been written?				
4.3.1b	Is remuneration for peer outreach workers consistent across IPs?				
4.3.1c	Is remuneration for peer outreach workers fair, to account for lost income opportunities?				
4.3.2a	Does the program have guidelines on recruiting and training peer outreach workers?				
4.3.2b	Does the program have guidelines on retaining, assessing, and promoting peer outreach workers?				
4.3.3	Is there a supportive supervision system in place (clear ratios, clear expectations of regular supportive supervision of individuals (weekly) and groups (monthly))?				
Element 4.4 Train peer outreach workers		Date of visit: _____		Date of visit: _____	
4.4.1	Has a curriculum been developed/adapted?				
4.4.2	Have trainers been identified and trained?				
4.4.3	Has an initial training taken place?				
4.4.4	Has feedback been gathered to improve the training?				
Element 4.5 Implement and manage peer outreach		Date of visit: _____		Date of visit: _____	
4.5.1	Do peer outreach workers have a clear portfolio of key population members to contact?				
4.5.2a	Does the program have a written minimum package of services for peer outreach workers?				
4.5.2b	Is a minimum package of services being consistently delivered?				
4.5.4	Is data from outreach being recorded by peer outreach workers on microplanning (peer) calendars and plans?				

