

Building a complementary approach to HIV service delivery for key populations using health facilities in collaboration with community-based organizations in Liberia

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Introduction

Key populations (KPs), including female sex workers (FSWs), men who have sex with men (MSM), transgender (trans) people, prisoners, and people who use drugs, have specific risk behaviours and other vulnerabilities that place them at increased risk of HIV¹. In addition, they play an important role in the dynamics of HIV prevention and transmission both within and outside of KP communities, as KPs and the general population are frequently interconnected through their sexual networks. For example, in a pooled cross-sectional study in three countries in sub-Saharan Africa, 54% of MSM had concurrent relationships with heterosexual partners, while studies in Malawi and Nigeria reported concurrence of heterosexual and same-sex partners among 56% and 47% of MSM, respectively^{2,4}.

In Liberia, HIV prevalence is 2.1% in the general population. In 2018, HIV prevalence was reported as 9.6% among people who use drugs, 16.7% among FSWs, 27.6% for trans people, and 37.9% for MSM⁵. Liberia has an estimated 163,031 FSWs and 74,634 MSM, almost half of whom are in Montserrado County⁶.

Health leadership in Liberia, including the Ministry of Health (MOH), National AIDS and STI Control Program (NACP), and National AIDS Commission (NAC), is committed to ensuring that all members of the country's population, including KPs, have access to HIV services. As such, the national HIV prevention strategy outlines KP programming as an important component of the national HIV response. The country's initial KP-focused efforts (2018–2020) were funded by Global Fund and produced notable achievements, including the identification of the groups comprising KPs in Liberia's epidemic (i.e., MSM, FSWs, and trans people), KP mapping and size estimation, and training of peer outreach teams⁶.

During this first phase of KP programming, Global Fund's implementing partner in Liberia implemented HIV services in a drop-in centre (DIC). DICs, along with community-led delivery of antiretroviral therapy (ART) and KP-led health services, have traditionally been considered safe, "friendly" options for KPs to access services provided by health workers

trained to support their specific needs. In addition, DICs cater to KPs by offering convenient hours and locations⁷⁻¹⁰.

However, the sustainability of DICs is not guaranteed, as they can be expensive to run and typically depend on support from donors. In addition, in some contexts such as Malawi, DICs have been misconstrued by the broader community as avenues promoting behaviours which are socially unacceptable¹¹. Likewise, KP beneficiaries of standalone DICs in Liberia, where social and moral disapproval of KPs and their behaviours also exists, have reported being targeted for violence^{12,13}. These scenarios have called for countries to revisit and/or diversify the models they use to ensure safe access to HIV services among KPs.

One possible option is to involve public and/or private health facilities. Yet, this is often not considered due to concerns over health care workers' stigmatization of and discrimination against KPs¹⁴ which frequently deter KP individuals from accessing HIV services despite their high risk and need for these services. For example, only 9% of MSM in a study conducted in Malawi, Namibia, and Botswana reported having disclosed their sexual orientation to health care workers due to stigma and discrimination, potentially hindering their access to services they need¹⁵. However, effective training of facility-based health workers on the provision of welcoming and KP-friendly services has brought about good results in KP-focused service delivery¹⁶ and could be incorporated into models that include health facility-based programming for KPs.

Liberia's experience with HIV service delivery using these models—DICs as well as facility-based programming—was a key focus in the country's planning for the next iteration of its KP programming. In December 2018, the Linkages across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) project funded by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the United States Agency for International Development (USAID) and led by FHI 360 convened a situation analysis and advocacy meeting with key stakeholders in Monrovia, in collaboration with NACP, NAC, and the USAID/Liberia Mission.

Table 1. Comprehensive package of services provided in the KP programming through the integrated model

Populations Served	Package of Services
All KPs (FSWs, MSM, trans people)	<ul style="list-style-type: none"> • Prevention messages • Distribution of condoms and lubricant • HIV services • Sexually transmitted infection screening and management • Tuberculosis prevention, screening, and management • Reduction of stigma and discrimination • Gender-based violence screening and response • Psychosocial counselling and support
HIV-positive KP individuals	<ul style="list-style-type: none"> • Antiretroviral therapy (ART) • Index testing services • Viral load testing • Linkage to treatment support/peer navigator • Support groups for KP individuals living with HIV • Initial and follow-up adherence counselling • Differentiated service delivery, including multi-month dispensing of ART

Table 2. Key trainings to support health worker provision of stigma- and discrimination-free HIV services and KP empowerment

Training Name	Participant Group	Topics Covered
Health4All training ¹⁷ (4 days)	Clinical staff from health facilities, national coordinating staff at NACP, CSO KP representatives	Importance of KPs in HIV prevention and prevention dynamics, stigma and discrimination, clinical services needed by KPs
“Whole-of-site” workshops (half day per facility)	All staff at health facility (security, reception, administrative, medical personnel)	General awareness about KPs and their need for and rights to HIV services free from stigma and discrimination
Monitoring and evaluation (M&E) training	CSO M&E officers and data clerks, and focal point persons of national coordinating agencies such as NACP, NAC, and the Montserrado County Health team	The LINKAGES data management system and how it aligns with the national M&E system This training informed the review and revision of the national HIV M&E tools to allow reporting of KP data.
Microplanning training for peer outreach worker teams	All peer educators, peer navigators, and their supervisors	Empowerment concept for peer outreach workers to understand their environment, risks, and how to use their own data to improve KP programming. The KP teams were also trained on the concept of self-worth and skills to fight stigma.
Safety and security measures	All peer educators, peer navigators, and their supervisors	Preparation of the peer outreach workers to overcome their fear of community violence and build skills to stay safe

In addition to public health officials from the Government of Liberia, other stakeholders included implementers of Global Fund KP programming and civil society organizations (CSOs), including KP-led organizations. Based on the experience of Global Fund partners who had implemented DIC-based provision of KP services and fuelled by strong

commitment and collaboration from NACP and NAC, the stakeholder group decided to pivot future KP programming to an integrated model consisting of KP-led CSOs working directly with existing public and private health facilities to deliver services. These health facilities were already providing HIV services to individuals not identified as members of

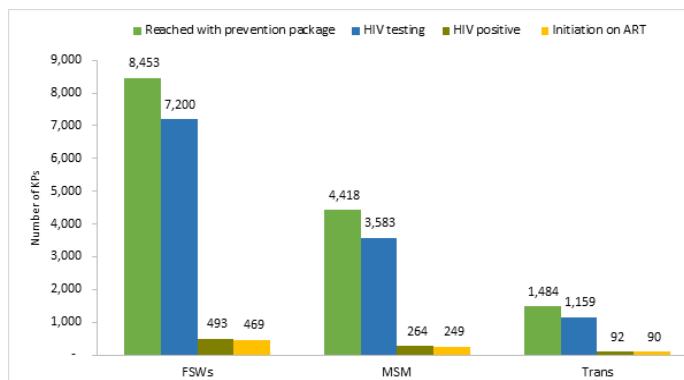


Figure 1. Cumulative HIV cascade for LINKAGES Liberia by KP (May 2019–September 2020)

KPs. LINKAGES' role was to facilitate the identification of KP individuals through KP-led CSOs and link them to HIV services at health facilities, as well as to enhance HIV services through technical support and health system strengthening, which also served to benefit all clients.

Here we describe LINKAGES Liberia's experience successfully implementing the integrated model despite a challenging environment of stigma and discrimination towards KPs among health care workers and communities. We also present lessons learned that could inform scale-up of the model in Liberia and other country contexts.

Programme Description

From January 2019 to September 2020, LINKAGES Liberia worked with the Government of Liberia to improve access to and the quality of HIV services for KPs. By strengthening the HIV response in both public and private health facilities and engaging critical community service providers, LINKAGES sought to increase local capacity to provide KP-friendly HIV services; reduce stigma and other barriers to HIV prevention and service uptake; improve HIV case finding, linkage to care, treatment, data collection, and ensure effective use of data for decision-making and ongoing programme enhancement. LINKAGES collaborated with NACP, NAC, facilities, and KP-focused CSOs to plan the intervention, ensure alignment with the national HIV program, and deliver the next phase of high-quality, sustainable HIV services for KPs.

LINKAGES Liberia's Integrated Model for HIV Service Delivery

LINKAGES Liberia's integrated model featured purposeful coordination of a community package of preventive HIV services for KPs with a health facility package. The services were provided through 13 health facilities (four private and nine public) and nine CSO partners in four districts of Montserrado County which are further subdivided into seven health districts: Greater Monrovia (Bushrod, Central Monrovia, Somalia Drive), Commonwealth, St. Paul River, Careysburg, and Todee. The comprehensive package of HIV services provided is detailed in Table 1.

Facilities for the intervention were selected by NACP and USAID/Liberia according to HIV client burden, and CSO selection was based on the organizations' experience and interest. Health facilities and CSOs were then systematically paired according to the proximity of their catchment areas in order to optimize HIV service delivery for KPs, and their responsibilities were clearly delineated and harmonized, as described in Strategy 1 below.

LINKAGES employed three main strategies to develop and successfully implement the integrated model:

Strategy 1: The partnership for the integrated KP programming model was based on strong leadership and participation by each entity.

Each entity in the partnership—government agency partners, health facilities, and CSOs—contributed to the development and/or implementation of the model based on their unique skillset and expertise.

NACP's strong leadership in facilitating the introduction of LINKAGES to the health facilities and ensuring that the KP programming was well implemented was effective to motivate health facilities' adoption of services for KPs. NACP's participation in the project engagement meetings and supervisory events, including data quality assessments, HIV testing outreach, and meetings with health facility, CSO, county, and district leadership, accentuated the emphasis on HIV services for KPs. NAC facilitated the introduction of LINKAGES to key KP-led CSOs in the country, helping LINKAGES avoid missing key partners. LINKAGES provided quarterly updates on programme implementation to NACP, NAC, the County Health Office, and health facility directors to inform their decision-making. This close involvement demonstrated high-level commitment by the country's health leadership and created an atmosphere conducive to service delivery for KPs.

CSO peer outreach teams brought to the partnership their longstanding strengths in working with KPs in the community. They were responsible for mobilizing KP individuals through peer outreach networks, providing prevention services such as condoms and lubricant, sensitizing them on HIV testing and sexually transmitted infection screening, and referring them to health facilities. For their part, the health facility clinical staff applied their expertise in health service delivery to provide the HIV testing and ART services and link the KP clients with other services such as for tuberculosis and/or sexually transmitted infections, as required.

Strategy 2: Trainings were tailored to the needs of facility-based health workers and CSO staff.

One core component of LINKAGES Liberia's implementation of the intervention consisted of training all facility-based health workers and CSO peer outreach teams who would play a role in service delivery for KPs. The full participation of NACP and NAC leadership in attendance at the trainings was a testament to the relevance of the trainings for all staff. Those for health workers focused on expanding awareness of the specific health needs of KPs and addressed stigma and discrimination. CSO peer outreach teams were trained in "microplanning," an approach in which KP individuals self-identify their own needs and work on self-empowerment.

One intended benefit of microplanning is that it encourages HIV service uptake. Table 2 outlines the key trainings provided.

Strategy 3: New staff positions were created dedicated to strong coordination between CSOs and facilities.

To ensure a seamless, well-coordinated experience for KP individuals across the merged community and clinical service package, one staff member from each CSO and another from each facility were recruited to serve as coordinators.

A peer outreach worker focal person or coordinator appointed by each CSO was responsible for facilitating the navigation of KP individuals who were not comfortable

going to health facilities on their own. A corresponding clinical staff member (nurse, physician assistant, or medical doctor) at each facility was designated as the linkage retention coordinator to link the KP individuals referred by the CSOs to the services they needed, as well as to influence clinical staff colleagues to provide KP-friendly services. The linkage retention coordinator was also responsible for referring KP walk-ins not already part of peer community support systems to CSOs so that they could receive the services being provided through the peer outreach system. In addition, the linkage retention coordinator facilitated test and treat (early treatment, with emphasis on same-day initiation of ART), tracked individuals living with HIV who had been lost to follow-up and facilitated their return to treatment, supported treatment adherence and viral load testing, and tracked viral suppression. To ensure that this capacity-building support LINKAGES provided to staff did not undermine the sustainability of services after the project, the officer was selected by hospital management from a team of their existing medical volunteers not yet employed by the facilities but who were anticipating employment from the same facility. This means their engagement with LINKAGES was an opportunity for them to be prepared continuity of work in the same facility. LINKAGES also introduced index testing services in Liberia in collaboration with NACP, which contributed significantly to HIV case finding in the project-supported facilities and catchment areas.

Monitoring, Evaluation, and Data Use

Programme monitoring, evaluation, and data use took place at multiple levels. Peer educators and peer navigators were foundational to the process through their role in monitoring the successes, gaps, and risk levels of their peers. In addition to learning how to conduct microplanning, the peer educators and peer navigators were trained on understanding their peer networks, risk profiles, risk management, and using their own data to improve their welfare. Hot spot mapping was also conducted to learn their characteristics and estimate the size of KPs at each hot spot to further inform microplanning.

At the next level, outreach workers/field officers (local supervisors) from CSOs monitored how well the peer educators and navigators managed their peers on a weekly basis. The supervisors then shared the gaps and successes identified with project coordinators during monthly meetings. At the top level, the LINKAGES Liberia programme team routinely supervised and mentored CSO leaders to assess the quality of their peer outreach services and conducted monthly meetings to brainstorm about successes and challenges for effective programming. Monthly coordination meetings were also held with clinical staff of the 13 implementing facilities to enhance learning and ensure application of best practices. Monitoring also included collecting KP service user perceptions of the quality of the health services they received. This was done through a questionnaire on LINK18 (a client-feedback platform accessed on Android tablets) following facility visits; conversations with the project team via phone; and in-person communication with linkage retention coordinators, who facilitated the resolution of any negative issues being experienced.

All programme data were collected routinely as part of service delivery for the purposes of site-level performance reporting; as such, ethical approval was not required for the collection or analysis of these data. Documentation of programme activities was paper based. All peer educators and

peer navigators were responsible for coordinating referrals for health facility services using a paper form tracked by the project, while facility staff used the Ministry of Health registers to document HIV services. LINKAGES Liberia harmonized the data from community referrals with those generated at facilities using weekly and monthly summary sheets. Following data review and cleaning, the data were analysed weekly and used to generate HIV cascade charts.

Lessons Learned

The project learned several invaluable lessons from the experience which may be helpful for other countries interested in rolling out a similar integrated model for KP programming, as well as for scale-up in Liberia.

Systematic, mixed-methods research is warranted to formally assess and describe effects of the merged facility/CSO model.

Through its collaboration with government and CSO partners in Liberia, LINKAGES facilitated the implementation of an HIV service delivery model that “merged” facility and CSO services in a challenging environment of stigma and discrimination. Our experience implementing the model suggests the potential for measurable positive outcomes, should it be continued. Systematic mixed-methods research is warranted to collect evidence for informed decision-making in this regard.

Several of the authors of this communication had personal experience and awareness of the stigma and discrimination taking place in the facility setting. Although formative research to assess this prior to model implementation was not within the purview of LINKAGES Liberia, the first-hand knowledge of these dynamics informed the design of the preparatory trainings with health care workers and stakeholders for the merged model. Likewise, we did not formally assess the effects of the merged model and the associated trainings through a research study.

In the absence of data, one reason we believe our activities are worth sharing with other programme planners and practitioners is that the routine programme data showed strong uptake of HIV services across the cascade. From May 2019 to September 2020, 14,355 KP individuals were reached in the project coverage area. Of those eligible, 95% (12,267/12,918) accepted HIV testing, which was conducted by facility staff. Of those who tested HIV positive (849/12,267; 7% case-finding rate), 808 were immediately linked to ART services (95% linkage rate) as per the national test-and-treat protocol. The breakdown of the cascade by KP is presented in Figure 1.

Again, research is needed to discern the factors contributing to uptake in the model. In particular, qualitative research involving participants in all roles (e.g., health facility teams, peer outreach workers, and KP individuals) could identify and illuminate these factors, as well as provide insight on ways to improve the model design and implementation based on evidence. For example, the following might be considered:

- Whether ongoing engagement with and mentorship of health facility teams has helped them acquire the skills to be welcoming and accepting of KP individuals coming to facilities for services
- Knowledge, attitudes, and practices of those trained with regard to KPs, as indicated through pre- and post-training assessments among facility teams

- Perspectives on the value of partnership with peer outreach workers for effective HIV service delivery to KPs
- Perceptions of changes in the relationship between the KP recipients of care and health care workers in the facilities which subsequently helped many KPs to access HIV testing services in health facilities through peer referrals and walk-ins with subsequent linkage to treatment
- Whether training and mentorship empowers KP peer outreach coordinators to help their peers fight stigma more effectively

Strong collaboration between LINKAGES Liberia and Government of Liberia agencies was critical to the successful delivery of high-quality HIV services for KPs in existing public and private health facilities.

At project inception and throughout implementation, LINKAGES Liberia coordinated with NACP and NAC to ensure the intervention was responsive to the country's goal of setting up strong HIV programming for KPs at the community level to accelerate the uptake of HIV services, as well as to stimulate local ownership—both key factors in the sustainability of KP programming over the long term. During project planning, NACP and NAC were very clear about their need for an approach they could both manage and sustain. NACP and NAC opted for an integrated approach to KP service delivery embedded within health facilities but with strong coordination with KP community structures, because such coordination was reportedly not strong in the previous programmes.

To fulfil this mandate, LINKAGES ensured good collaboration between NACP, and NAC beginning in the preparatory phase of the project, ensuring intimate involvement of the country's health leadership in key processes and their long-term ability to sustain the programme. This participatory approach extended to health facility leadership and CSO stakeholders, who were also involved in all aspects of design and in other preliminary activities such as hot spot mapping and KP size estimation, brainstorming on anticipated challenges in the health facilities, and participatory training for health care workers on the provision of welcoming and friendly services to KPs. LINKAGES also supported the facilities by recruiting additional health care workers/volunteers as recommended by facility directors to strengthen their ability to deliver HIV services.

The purposeful coordination of CSO and facility functions encouraged staff to see themselves as working toward a common goal rather than having separate mandates.

LINKAGES Liberia encouraged strong collaboration between CSOs and health facilities by establishing two corresponding staff positions: the CSO focal point in the community and the facility LRC. The synergistic functions and ongoing interactions between these two counterparts quickly created a strong bond reflective of their mutual commitment to work together to provide a positive experience for KP individuals availing HIV services and potential to resolve issues of service dissatisfaction.

Fighting stigma and discrimination in health facilities is possible but requires an iterative process of training, monitoring, and mentoring staff.

LINKAGES Liberia's approach to addressing potential issues of stigma and discrimination toward KPs among

service delivery staff drew from the Diffusion of Innovation Theory, which asserts that people's adoption of practices follows established societal expectations and that the popularity of a new idea takes considerable time to spread through a population or society.¹⁹ The project team therefore made an ongoing investment to support service delivery staff to transform their understanding and treatment of KPs. This iterative process started with initial Health4All trainings conducted by FHI 360 for facility-based clinical staff to establish a baseline of requisite skills for KP-friendly service delivery¹⁷.

CSOs need capacity building in technical skills, organizational management, and safety and security in order to provide strong peer support to KPs.

CSOs with the skills to manage peer outreach support systems are essential for effective implementation of integrated KP programming. During the intervention, many CSOs required extensive capacity building at both the technical and organizational management levels to mobilize peers. Among the other benefits of peer support for KP individuals is their increased understanding of how stigma—both self-stigma and stigma from others—affects their ability to seek health services.

Acknowledgement and Disclaimer

“This work was made possible by the generous support of the American people through the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). The contents are the responsibility of the LINKAGES project and do not necessarily reflect the views of USAID, PEPFAR, or the United States Government.

LINKAGES (cooperative agreement #AID OAA-A-14-00045) was led by FHI 360 in partnership with IntraHealth International, Pact, and the University of North Carolina at Chapel Hill”.

Limitations and Challenges

Our recommendation of the integrated KP programming as developed and implemented in Liberia comes with some caveats. First, the delivery of HIV services to KPs through drop-in centres in Liberia was not scaled up by the other partners who implemented it before and simultaneous with the LINKAGES-supported intervention reported here; therefore, we do not know if it would have also been able to increase KP access to services. Second, while the lessons from our implementation experience are likely relevant to KP-focused programs in other settings, the interventions described here were not rigorously evaluated; as a result, our conclusions are not generalizable to other contexts.

Third, LINKAGES supported only a subset of health facilities in Montserrado County (although these facilities serve nearly 70% of the recipients of HIV care in the county); as such, the project did not have the opportunity to learn from the dynamics of health facility-CSO coordination and service access in the remaining facilities.

Fourth, implementation challenges such as staff turnover and departmental transfers in health facilities could affect sustainability in the absence of ongoing locally led training opportunities. Fifth, challenges related to space and wait times in the health facilities, and the associated discomfort due to stigma and inconvenience for KP individuals accustomed to quicker service require continued attention. Lastly, the KP

CSOs has weak technical and organizational management capacity which the project continued addressing.

Conclusions

The community-facility model implemented by LINKAGES Liberia offers an additional option that could serve as an alternative or complement to DIC-based HIV service delivery for KPs. Its main strengths lie in its leveraging of existing health structures, clinical staff, and CSO expertise. Furthermore, this unique collaboration between health facilities and CSOs underscores the critical role of local CSOs in the country's health system. Nonetheless, the collection of evidence is critical to ensure informed decision-making regarding scale-up.

A challenge for the sustainability of the model over the long term concerns the requirement for significant investments in staff training and mentoring—which must be supported both financially and through human resources. Implementation in Liberia was possible through U.S. Government funding, but going forward, sustainable financing options that are not donor dependent will be needed to make this a viable option. LINKAGES Liberia's experience showed that it is feasible to reach KPs with HIV prevention, care, and treatment services that meet their needs through a model that builds linkages between and the capacity of community-led and facility-based services. This model, developed jointly by government health agencies, CSOs, LINKAGES, and other stakeholders, should now be integrated into the national HIV response and scaled up. At a minimum, it is recommended that training and mentoring of facility staff be integrated into the national curriculum for health care providers, capacity building of peer leadership structures in the CSOs should be ongoing, and CSOs must be included in domestic financing of the country's HIV response. Continued strong links between the community, health facilities, and government health agencies are also essential. The sustainability of this KP programming is within reach if the government undertakes to continue investing in it.

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