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ABSTRACT BOOK

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ORAL ABSTRACT PRESENTATIONS

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1

The Le Kip Kip Cluster Randomized Trial: A Community Mobilization Campaign to Increase HIV PrEP Uptake among Women at Risk for HIV Acquisition in South Africa

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Background: Pre-exposure prophylaxis (PrEP) has the potential to reduce HIV acquisition risks among marginalized young women, but limited uptake, poor adherence, and early discontinuation have limited real-world impact. Women, particularly adolescent girls and young women (AGYW) and female sex workers (FSWs) face many challenges taking daily oral PrEP, including side effects, stigma, disclosure concerns and negative social influences around PrEP. We present results of a cluster-randomized trial evaluating the impact of a social influence campaign, Le Kip Kip, designed to improve sustained oral PrEP uptake.

Methods: The trial leveraged the implementation infrastructure of TB HIV Care (THC), a South African non-profit with a decentralized mobile PrEP program, to implement and evaluate a branded social influence. Ten sites across four provinces were randomized 1:1 to the THC program standard of care (SoC) arm versus Le Kip Kip intervention arm including a geographically targeted social media campaign alongside promotion by the PrEP programme team (the basic intervention package). Within the intervention arm, geopolitical wards were further randomized to four sub-arms: a=Basic; b=Basic+PrEP champions to spread messages to AGYW and FSW; c=Basic+community mobilization teams targeting leaders and the broader neighborhood; d=Basic+PrEP champions+community mobilization teams. The primary outcome was the incidence rate ratio (IRR) of PrEP initiations during the 12-month study period; PrEP persistence. Poisson regression was used to estimate IRR and logistic regression to compare the uptake between arms. Reach was evaluated using social media metrics and appropriateness and acceptability using qualitative interviews with 36 community members and 29 implementers guided by the REAIM (reach, effectiveness, appropriateness, implementation and maintenance) framework.

Results: The Le Kip Kip campaign reached 3,892,131 individuals on social media and 42,633 through community mobilizers (n=90). For PrEP champions (n=124) the most commonly reported topics of discussions were PrEP information, PrEP continuation and PrEP experiences. Based on the qualitative interviews, rebranding PrEP as Le Kip Kip made it attractive, understandable, relevant, and credible, helping implementers engage the community and increase PrEP awareness. The adjusted IRR of the 5 Le Kip Kip intervention sites versus 5 SoC sites was 1.22 (95% CI 0.56, 2.66), p-value=0.61. In the wards that were randomized within intervention sites, there was a positive dose response relationship between the intensity of the campaign strategy enhancements (Le Kip Kip sub-arms) and PrEP uptake. The adjusted IRR of PrEP initiation in the enhanced sub-arms compared to no additional components were b: 0.73 (95% CI 0.33, 1.62), p-value=0.44; c: 1.47 (95% CI 0.67, 3.23), p-value=0.34 and d: 2.36 (95% CI 1.16,4.82), p=0.02.

Conclusion: This trial demonstrates that social influence campaigns appear to drive most value in places where social media is complemented with in-person mobilization strategies. Combining mobilization strategies that raise awareness at multiple levels (community, social networks [family, partners, friends]) alongside social media, can help change community perceptions and destigmatize PrEP, which have the potential to drive uptake. Social media campaigns that de-medicalize PrEP and community mobilization can be applied to other emerging PrEP modality options like Lenacapavir.

2

Strong Reach, Weak Linkage: A Cluster Randomized Trial Engaging Religious Leaders for Blood Pressure Control in Rural Tanzania

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Background: Hypertension is a leading driver of cardiovascular disease in sub-Saharan Africa, yet awareness, treatment, and control remain low in rural settings. Faith-based organizations are trusted, far-reaching community structures, and partnering with religious leaders can positively influence health behavior. Using the RE-AIM framework, we evaluated the effectiveness of training religious leaders to engage their communities about blood pressure (BP) on mean community BP in rural Tanzania.

Methods: We conducted a hybrid type I cluster randomized trial across 20 rural Tanzanian communities (10 intervention, 10 control) to evaluate the effectiveness of our Religious Engagement in Health Intervention. This intervention was developed with community participation and involved strategies of training and mentoring religious leaders. In intervention communities, six leaders from each church or mosque were invited to attend a 2-day seminar where they learned to deliver BP education and screening within their religious institutions and communities. Participating leaders were supported by mentorship meetings at 1, 3, 9, 10, and 11 months. The primary outcome was change in mean systolic BP from pre-intervention to 12 months post-intervention, comparing intervention and control arms, with different randomly selected community members at each time point. Secondary outcomes included change in diastolic BP, body mass index, waist circumference, physical activity, and awareness/treatment for hypertension. Implementation outcomes were assessed across aspects of RE-AIM, including intervention fidelity and adoption.

Results: Of 164 communities assessed, 49 met eligibility criteria and were stratified by size and randomly ordered. Twenty communities were randomly selected and randomized to study arm. Baseline assessment began March 2023, with the intervention delivered April 2023-April 2024. Reach was substantial: approximately 89% of invited religious leaders attended educational seminars, and 29.5% of community members in intervention communities reported receiving BP education from religious leaders compared to 0.3% in controls. Implementation fidelity was consistently high across seminars (mean 121/126, SD=4.8) and mentorship meetings (mean 25.7/27, SD=1.7), and qualitative interviews confirmed that religious leaders enthusiastically adopted BP education and screening within their religious institutions. Despite this, effectiveness was limited; no meaningful reduction in systolic BP was observed (0.5 mmHg greater reduction in intervention vs. control communities; 95% CI: [-1.9-0.8]; p=0.45), with no improvements in secondary outcomes. Lack of effectiveness can be attributed to health-system barriers which emerged at multiple levels. At the individual level, those identified with high BP struggled to access treatment due to clinic wait times, unaffordable treatment cost, and low perceived need for treatment in the absence of symptoms. At the community/societal level, silos between community-based religious leaders and health facility-based clinicians led to barriers in connecting community BP screening to chronic disease care navigation.

Conclusions: Although the Religious Engagement in Health Intervention achieved strong reach and implementation fidelity, it did not translate into a community-level reduction in BP. We highlight a gap in the care cascade, where community members identified with high BP struggled to link to treatment. These findings underscore the need for implementation strategies that strengthen health system linkage while addressing contextual determinants to increase BP control following community-based BP education in sub-Saharan Africa.

3

Scaling Community-Led HIV Service Delivery: Implementation Outcomes and Impact among Key Populations in Resource-Constrained Settings in Kenya

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Background: Persistent inequities in access to HIV and other infectious disease services continue to undermine global health gains, particularly among key populations such as sex workers, incarcerated individuals, and other marginalized groups. In resource-constrained settings, structural barriers—including stigma, criminalization, mobility, and exclusion from national health financing schemes—limit the effectiveness of conventional facility-based service delivery models. While community-led interventions have shown promise in addressing these gaps, robust evidence on their implementation effectiveness, scalability, and integration within national health systems remains limited. This study evaluates the implementation outcomes and impact of a community-led HIV service delivery model in Kenya.

Methods: We conducted a 12-month mixed-methods implementation study in Taita Taveta County, Kenya. Quantitative program data were analyzed to assess trends in HIV testing uptake, linkage to care, retention, and treatment adherence among key populations. Qualitative data were collected through focus group discussions and key informant interviews with beneficiaries, peer educators, and health system stakeholders to explore implementation experiences, barriers, and facilitators. The RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance) guided the evaluation of implementation outcomes, including acceptability, feasibility, fidelity, and sustainability.

Results: The community-led model significantly improved service reach and engagement. HIV testing uptake increased by 60.3%, from 54% (1,589 individuals) in Q1 to 98% (2,903 individuals) in Q4. Linkage to care improved over time, while treatment adherence among clients on antiretroviral therapy remained consistently high, as reflected by stable appointment attendance and medication refill rates. Peer-led outreach enhanced trust and acceptability, contributing to increased engagement of first-time service users (2,956 in Q1 to 2,974 in Q4). Retention in care among highly mobile populations improved markedly from 61% to 96%, supported by differentiated service delivery and decentralized outreach approaches. Strengthened collaboration with public health facilities resulted in a 40% increase in successful referrals and improved service integration.
Despite these gains, sustainability challenges persisted. Only 54% of clients were successfully linked to national health financing schemes, highlighting ongoing structural exclusion. Program continuity was further affected by funding variability across implementation cycles. Nevertheless, strong community ownership and adaptive delivery approaches enabled uninterrupted access to essential HIV services.

Conclusion: Community-led service delivery models are effective and adaptable strategies for improving equitable access to HIV services among marginalized populations in resource-constrained settings. The observed gains in service uptake, retention, and system integration underscore their potential to complement and strengthen national health systems. However, sustained impact will require deliberate policy alignment, integration into national health financing mechanisms, and long-term investment in community systems. These findings provide critical implementation evidence to inform scale-up and accelerate progress toward inclusive universal health coverage.

4

From Hotspot Mapping to Community Outreach: EPCON-Guided TB and HIV Case Finding among Pregnant Women in Rural Northwest Nigeria

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Background: Nigeria continues to face substantial gaps in tuberculosis (TB) and HIV case detection, particularly in rural communities where distance to facilities, delayed care-seeking, stigma, and limited access to diagnostic services can delay diagnosis and treatment. Pregnant women who do not attend facility-based antenatal care may be missed by routine TB and HIV services, despite having contact with community-level providers such as traditional birth attendants and Mentor Mothers. Data-driven hotspot mapping may help programmes focus outreach on locations where undiagnosed TB and HIV are more likely to be found, while community provider networks can support entry into households and traditional birth homes. Under the Global Fund GC7 grant, the Institute of Human Virology Nigeria deployed the EPCON-AI hotspot mapping platform to guide integrated TB and HIV case-finding in rural northwest Nigeria. This study described the reach, diagnostic yield, and linkage outcomes achieved through a hotspot-guided community outreach model.

Methods: Between July and October 2025, EPCON-AI analysed routine programme and epidemiologic data to identify high-priority TB/HIV locations across seven states in northwest Nigeria. The hotspot outputs were used for microplanning, selection of outreach sites, and deployment of trained community providers. Traditional Birth Attendants, Mentor Mothers, and Community Health Volunteers were trained to conduct TB symptom screening and HIV testing through home visits, outreach campaigns, and services at traditional birth homes. The approach focused on pregnant women who are not routinely accessing formal antenatal or health services. Individuals with presumptive TB were referred for diagnostic evaluation, while women testing HIV positive were linked to antiretroviral therapy through structured referral pathways. A cross-sectional analysis of routine programme data was conducted to assess priority locations reached, TB screening outcomes, HIV testing uptake, case detection, and documented linkage to treatment and care.

Results: Hotspot mapping identified 323 priority locations for targeted outreach. Across these locations, 155,181 pregnant women were screened for TB, and 6,382 (4.1%) were identified as presumptive TB cases. Diagnostic evaluation confirmed 174 TB cases, all of whom were linked to treatment. Among 145,089 women eligible for HIV testing, 145,079 (99.9%) were tested, identifying 49 new HIV cases; all were linked to antiretroviral therapy. These findings show high TB screening reach, near-complete HIV testing uptake among eligible women, and documented linkage to care within a hotspot-guided community case-finding model.

Conclusion: EPCON-guided hotspot mapping helped translate routine programme data into targeted community outreach across rural northwest Nigeria. When paired with trusted community providers, the approach reached large numbers of pregnant women, detected previously undiagnosed TB and HIV cases, and achieved documented linkage to treatment.

5

"Your Dignity Is Crucified": An Implementation Science Analysis of the Mismatch between Service Delivery Models and Lived Realities of Mobile Men's Lives: Findings from Rapid Ethnographic Assessments in South Africa and Uganda

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Background: Mobile men in sub-Saharan Africa experience significant HIV risk, but remain underserved by conventional HIV prevention and clinics. Existing service delivery models are largely designed for geographically stable, clinic-attending, mainly female, populations, creating structural misalignment with men whose livelihoods involve mobility. This study draws on rapid ethnographic assessment data to examine how mobility, shifting work patterns, and social identities shape engagement with HIV prevention. Using the RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance) framework, we assessed how different Pre-Exposure Prophylaxis (PrEP) delivery models align with the lived realities of mobile men.

Methods: Three Rapid Ethnographic Assessments were conducted between January 2024 and June 2026 in high-mobility settings across South Africa (Mdantsane Taxi Rank, Eastern Cape; uMkhanyakude, KwaZulu-Natal) and Uganda (Masaka/Kalungu districts) as part of the Mobile Men study. The study delivered HIV testing, oral and long-acting PrEP through community-based HIV services including mobile clinics tailored to mobile men. Data collection used community mapping, transect/spiral walks, structured observations, key informant interviews, focus groups and natural group discussions, informal conversations, and community group discussions, before, during and after the study. Participants included mobile men, healthcare providers, community members, and local stakeholders between the ages of 18-60 years. Data were analysed thematically and interpreted through the RE-AIM framework.

Results: RE-AIM analysis showed that PrEP engagement depended on the extent to which services were aligned with mobility patterns, experiences with healthcare services, and work demands. Reach was consistently low through conventional healthcare facilities due to limited accessibility, rigid operating hours, rudeness from staff, and concerns about stigma. In contrast, community-based PrEP services achieved greater reach by providing care in locations aligned with men's daily mobility patterns. Community-based PrEP delivery was perceived as highly effective in addressing key barriers to HIV prevention engagement, particularly by providing convenient, confidential, and tailored services aligned with daily mobility patterns. However, community-based service availability and the constraints of PrEP scheduling (especially two monthly injectables) was not always responsive to the urgency and unpredictability of men's lives, where participants stated HIV prevention was a low priority. Adoption and implementation were driven by flexibility, confidentiality, and respectful care, with participants describing conventional clinics as rigid, and as sites of "crucified dignity" and reduced service utilisation. Maintenance of engagement required convenient, person-centred services, with multi-site access, flexible timings, and multi-month dispensing. While the repeated REAs highlighted growing awareness of PrEP over time, sustained use was limited by the disjuncture between mobility and PrEP scheduling.

Conclusion: The findings reveal a structural mismatch between PrEP service delivery models and the lived realities of mobile men. Addressing this gap requires reorienting HIV prevention from static, clinic-based systems toward flexible, person-centred models embedded within the social and economic spaces men inhabit. Aligning services with mobility patterns has the potential to improve reach, sustained use, and overall HIV prevention outcomes in high-burden settings.

6

Applying the Consolidated Framework for Implementation Research to Explore Barriers and Facilitators to Implementation of Tuberculosis Preventive Therapy for Children Living with HIV in Lusaka, Zambia, 2024-2025

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Background: Tuberculosis (TB) remains a leading cause of morbidity and mortality among children living with HIV (CLHIV), despite the proven effectiveness of tuberculosis preventive therapy (TPT). In Zambia, TPT coverage among CLHIV continues to lag behind adults and the set target, reflecting persistent implementation challenges. This study described how TPT for CLHIV is delivered in selected health facilities in Lusaka, Zambia, and explored barriers and facilitators to its implementation from the perspectives of health providers.

Methods: A qualitative exploratory study was conducted in three high-volume health facilities in Lusaka District. Eighteen semi-structured interviews were held with diverse health cadres involved in paediatric HIV and TB services. The interviews explored TPT delivery pathways, as well as barriers and facilitators to implementation. Data were analysed thematically using MAXQDA 24 guided by the Consolidated Framework for Implementation Research (CFIR).

Results: Provider accounts showed that TPT delivery followed a sequence of routine steps within paediatric HIV services, including TB screening, assessment of eligibility, exclusion of active TB, treatment initiation, caregiver counselling, documentation, follow-up, and completion monitoring. Reported barriers included the complexity of weight-based dosing, long treatment duration, lack of child-friendly formulations, limited provider training, caregiver resistance, stigma and lack of resources. Facilitators included integration of TPT into routine services, availability of diagnostic tools, use of SmartCare, NGO support, provider motivation, TPT champions, Mentor mums and Community based volunteers.

Conclusion: TPT implementation in CLHIV faces multi-level barriers and enablers. Simplified, child-friendly and shorter regimens, continuous provider training, strengthened community sensitization, and sustained resource support are recommended as critical to improving TPT implementation and coverage.

8

From Parallel HIV Programming to System-Embedded Service Delivery: Analysis of Donor Transition Readiness Intervention in Nigeria

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Background: PEPFAR-supported HIV programs in many low- and middle-income countries have historically operated through vertically managed, donor-financed staffing and operational structures. Anticipated funding contraction has intensified concerns regarding fiscal dependency, fragmented governance, and program sustainability. Implemented by Caritas Nigeria under the PEPFAR HIV program, a transition-readiness intervention was introduced in Abia State to shift from parallel donor-managed service delivery toward system-embedded integration within public health facilities. We assessed whether embedding HIV functions into routine facility structures, alongside structured governance and quality reforms, improved institutional readiness without compromising service performance.

Methodology: Between 2023 and 2025, 15 ART facilities were included in a quasi-experimental study. Eight facilities adopted a system-embedded model integrating HIV tasks into government-employed staff roles, expanding Continuous Quality Improvement (CQI) beyond HIV indicators, and instituting quarterly health system readiness audits. A difference-in-differences analysis compared facilities over 24 months. Primary outcomes were composite transition-readiness scores (governance, workforce integration, commodity security, data stewardship), proportion of HIV services delivered by government staff, donor-dependent salary expenditure, 12-month retention, and viral suppression. Multivariable regression adjusted for baseline performance and facility size.

Results: Government-staff delivery of HIV services increased from 34% to 71% in embedded facilities versus 35% to 43% in parallel facilities ($p<0.001$). Composite readiness scores improved by 46% in embedded sites compared with 13% in parallel sites (difference-in-differences $\beta=0.37$, $p=0.001$). Project-funded salary expenditure declined by 28% in embedded facilities without significant change in retention (92.8% vs 91.5%) or viral suppression (95.6% vs 94.3%). CQI expansion was associated with improvements in non-HIV indicators, including reduced outpatient wait times and fewer essential medicine stock-out days.

Conclusions: In this PEPFAR-supported program implemented by Caritas Nigeria, embedding HIV service delivery within public facility systems significantly strengthened governance and transition readiness while maintaining core clinical outcomes. These findings suggest that deliberate integration, rather than maintenance of parallel donor structures, can enhance institutional resilience during donor retrenchment.

9

Impact of Unconditional Cash Grants Integrated with Stepped-Up Adherence Support on Viral Load Re-Suppression among Children and Adolescents Living with HIV in Eswatini

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Background: Despite Eswatini achieving the UNAIDS 95-95-95 targets in 2021, treatment outcomes among children and adolescents living with HIV (CALHIV) remain suboptimal. In 2025, only 93% of CALHIV were retained on antiretroviral therapy (ART), and 87% achieved viral suppression, compared to higher rates among adults. National program data indicated that approximately three in ten CALHIV experienced at least one treatment interruption during the year. Household-level barriers, including caregiver neglect, transport challenges, and food insecurity, were identified as major contributors to treatment interruption. With more than 4,000 CALHIV across 34 Constituency, the risk of treatment interruption and poor viral load (VL) outcomes remains a significant concern. Integrated clinical and structural interventions are needed to improve treatment outcomes. This study assessed the impact of unconditional cash grants on VL re-suppression among CALHIV by comparing VL outcomes before and after enrolment in a cash grant program.

Methods: Between 2023 and 2024, Young Heroes implemented a coordinated community–facility model across 34 Constituency, reaching 4,156 CALHIV. The program identified and linked back to care CALHIV who had interrupted treatment. Children and adolescents with advanced HIV disease and VL >1,000 copies/ml were enrolled in a three-month intensified adherence support package. Interventions included multidisciplinary case conferencing, psychosocial counselling, appointment reminders, escorted facility visits, and monthly home visits. To address socioeconomic barriers, participants received unconditional cash grants of USD 31.22 per month. Routine program data for 58 CALHIV with high viral loads (33 females, 57%; 25 males, 43%) were retrospectively analyzed.

Results: Following three months of intervention, 54 (93%) of the 58 CALHIV achieved viral suppression (<1,000 copies/ml), including 30 females (56%) and 24 males (44%). Four participants (7%)—three females and one male—remained unsuppressed. Persistent food insecurity and adolescent behavioral challenges were identified as contributing factors among those who did not achieve suppression. Caregivers reported that the cash grants reduced financial constraints related to transport and food, alleviated household stress, and improved their ability to support treatment adherence.

Conclusions: Unconditional cash grants integrated with intensified adherence support may help address non-biomedical barriers to HIV treatment adherence and improve viral load suppression among CALHIV in Eswatini. Cash transfers appear to function as a structural enabler by mitigating socioeconomic barriers that contribute to treatment interruption. Expanding integrated health and social protection interventions may strengthen treatment outcomes, promote equity, and accelerate progress toward epidemic control among children and adolescents living with HIV.

10

The Local Bowl Initiative in Northern Cross River State: A Community-Based "See–Cook–Feed" Model for Improving Complementary Feeding and Reducing Child Malnutrition

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Background: Malnutrition remains a public health emergency in Nigeria, with devastating consequences for vulnerable households. Despite strong agricultural production of staple foods e.g., yams and cassava, Cross River State in southern Nigeria still records about 35-40% cases of undernutrition among children under five years in rural communities due to inappropriate complementary feeding practices – children under two years are often fed with hard, unprocessed staples such as boiled yam with palm oil, which are developmentally unsuitable and contribute to poor nutritional outcomes.

Intervention: The Center for Clinical Care and Clinical Research Nigeria (CCCRN), through the US Government-funded THRIVE Project, piloted a Local Bowl Initiative to address the "knowledge-to-practice gap" using a community-based "See–Cook–Feed" model over 3 months (April–June 2025) in 6 communities. Pregnant women and lactating mothers were trained on transforming locally available foods into soft, nutrient-dense complementary meals suited for feeding children under two years of age. Additionally, group nutrition education sessions are held, followed by intensive one-on-one household mentoring support. Children were actively fed during learning sessions to reinforce acceptance and caregiver confidence. Some children identified with Severe Acute Malnutrition (SAM) were linked to treatment centers, while others mobilized to participate in MNCH week activities at the Health facilities. Digital monitoring tools were used to track key nutritional indicators, including anthropometric measurements, and the data were analyzed using Excel.

Results: Data from the monitoring tracker showed measurable improvement in at least one key nutritional indicator: 84% of enrolled children (153/182) showed MUAC improvement (average increase of 0.8 cm), increased weight gain (average 12%), and improved dietary intake consistency (from 34% at baseline to 72% at endline). In addition, Facility records showed improved treatment adherence among children with SAM, with a 38% increase in adherence and a referral completion rate of 92%. Caregivers significantly improved competence in preparing age-appropriate complementary foods, with 78% independently preparing nutrient-dense meals during home visits. Adoption of improved feeding practices was observed throughout follow-up assessments.

Conclusion: Initiatives that combine practical, mentoring, real-time monitoring, and linkage between the community and the health facility can rapidly translate knowledge into sustained behavior change and improved child health outcomes. The initiative presents a scalable and context-appropriate model for accelerating reductions in child malnutrition in resource-limited settings.

11

Implementing Electronic Medication Monitors for Tuberculosis Treatment Support in Ethiopia: A CFIR-ERIC Qualitative Study

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Background: Digital adherence technologies such as electronic medication monitors are increasingly promoted for tuberculosis (TB) care, yet their uptake in low-resource settings depends on how well devices fit the daily lives of people receiving TB treatment and frontline workflows.

Objective: This study identified barriers and facilitators to implementing electronic medication monitors for TB treatment support in Ethiopia and generated context-sensitive candidate implementation strategies.

Methods: We conducted a qualitative implementation study with 17 people receiving TB treatment who had used electronic medication monitors and five healthcare workers from TB prevention and control services in Ethiopia. Semi-structured interview guides were informed by the Consolidated Framework for Implementation Research (CFIR), covering innovation characteristics, outer setting, inner setting, individual characteristics, and implementation process. Transcripts were anonymized and analyzed in NVivo 15 using combined deductive framework coding and inductive thematic analysis. Implementation determinants were mapped to CFIR constructs and then linked to the Expert Recommendations for Implementing Change (ERIC) strategy taxonomy to generate candidate strategies for low-resource TB service settings.

Results: The analysis generated 101 coded references to barriers and 312 coded references to facilitators. Major barriers clustered in four domains: limited technical and contextual fit, including unstable networks, frequent power outages, battery-life constraints, language and reminder mismatches, inconvenience in carrying the device, and insufficient localization of device capacity or form; weak integration with institutional resources and workflows, including limited staffing, budgets, accessories, network support, and maintenance, alongside parallel electronic and paper-based recording that increased frontline workload; insufficient training and information support for people receiving TB treatment, managers, and colleagues regarding device logic, data use, and privacy boundaries; and external social and infrastructural constraints, including TB-related stigma, privacy concerns, misconceptions about audio/video monitoring, and uncertainty about sustainable technical and financial support. Facilitators included reduced travel and time costs, remote adherence monitoring, intuitive operation, training and telephone support, family reminders, and healthcare worker recognition of the device's value.

Conclusions: Electronic medication monitors have implementation potential for TB treatment support, but scale-up requires a shift from technology deployment to system integration. CFIR-ERIC mapping informed five candidate strategy bundles: localize device structure and reminders; assess readiness and secure staffing, funding, and network resources; integrate digital and paper records into a formal implementation blueprint; build a communication network involving people receiving TB treatment, families, and providers; and use small-cycle testing and feedback to refine implementation continuously.

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Acceptability, Feasibility and Appropriateness of an Adapted Data to Care Vertical HIV Prevention Intervention in a South African Context

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Vertical HIV transmission prevention requires continuous engagement of mother-infant pairs (MIPs). In South Africa, transfers between facilities create a vulnerable point in the care continuum. Data-to-Care (D2C) approaches show promise but lack evidence from low- and middle-income settings. This study evaluated the early implementation outcomes of the REMInD intervention, a novel D2C strategy leveraging the Western Cape's Provincial Health Data Centre to identify MIPs with HIV care gaps and support re-engagement.

Using a convergent mixed-methods design guided by Proctor's conceptual model of implementation research, we assessed acceptability, appropriateness, and feasibility among mothers (n=83 surveys; n=30 interviews) who experienced the REMInD intervention and key informants (KIs) (n=9 surveys and interviews). Quantitative data used validated measures (AIM, IAM, FIM); qualitative data were analyzed inductively.

High scores were observed across all outcomes: mothers (AIM mean=4.69/5; IAM=4.79/5); KIs (AIM=4.67/5; IAM=4.50/5; FIM=4.47/5). Mothers' acceptability was driven by feeling cared for and supported, though concerns about unintended HIV status disclosure were noted. Mothers viewed the intervention as appropriate because it directly addressed personal barriers (e.g. lack of support). KIs' acceptability and appropriateness derived from the intervention's capacity to resolve systemic patient-tracking gaps. Feasibility was high among KIs, who viewed the intervention as doable and integrable into existing workflows without adding major burden.

The REMInD D2C intervention was perceived as highly acceptable, appropriate, and feasible by both recipients and potential implementers. Findings support progression to real-life implementation to assess these and other implementation outcomes.

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Artificial Intelligence in HIV Programming: Balancing Innovation, Patient Confidentiality, and Data Security in Real-World Health Systems

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Background: Artificial intelligence (AI) is increasingly being used in HIV programmes through tools such as predictive analytics, risk stratification models, and decision-support systems. These tools are supporting earlier identification of patients at risk of dropping out of care, improving viral load monitoring, and strengthening overall programme performance and efficiency.
However, this expansion is taking place within health systems that were not originally designed to fully support AI-driven processes. In many low- and middle-income countries (LMICs), HIV data is distributed across multiple platforms, including facility records, national health information systems, and donor databases that often operate in silos, with limited interoperability and inconsistent data standards. As AI tools rely on large-scale data integration, their introduction in such environments highlights important considerations around data governance, privacy protection, and system readiness.

Objectives: This study assesses the readiness of HIV data systems for safe and responsible AI integration. It specifically explores operational gaps within routine HIV data systems, examines how existing governance structures including national data protection laws and HIV programme guidelines align with current and emerging AI use cases, and identifies key ethical and cybersecurity considerations associated with AI adoption in resource-limited settings. Particular attention is given to consent, data ownership, access control, and cybersecurity preparedness.

Methodology: A mixed-methods design was used. First, a scoping review of published literature on AI applications in HIV care and health data security was conducted. Second, a structured policy review examined relevant data governance and digital health frameworks in Nigeria and comparable LMIC settings. Third, implementation-level evidence from routine HIV data systems was synthesised to understand practical data flow challenges and system-level gaps. Together, these approaches provide both a broad evidence base and grounded insight into how AI is currently being introduced into HIV programming.

Findings and Conclusion: Findings show that AI adoption in HIV programming is progressing rapidly and offering clear opportunities for improving data use, service delivery, and programme responsiveness. At the same time, governance frameworks, ethical safeguards, and cybersecurity infrastructure are not evolving at the same pace. In settings where data systems remain fragmented and resources are limited, this creates an important implementation gap that needs to be addressed to ensure safe and sustainable use of AI.
In response, the study proposes a practical framework for responsible AI integration built on four pillars: data integration, governance and accountability, ethical safeguards, and cybersecurity resilience. The framework positions AI as a supportive tool within health systems, emphasizing that its effectiveness depends on the strength of the underlying data and governance structures.
The central argument is not to slow down innovation, but to support it with stronger systems. As AI becomes more embedded in HIV programming, deliberate investment in data protection, governance, and system readiness will be essential to ensure that innovation is both effective and sustainable in real-world health settings.

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Acceptability and Predictors of Interactive Voice Response for Depression Screening among Adolescents and Young People Living with HIV in Uganda

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Background: Depression among adolescents and young people living with HIV (AYPLHIV) in Uganda is under-detected due to overburdened healthcare workers and few mental health professionals. Interactive Voice Response (IVR), an automated calling tool, could enable PHQ-2 self-screening if acceptable to AYPLHIV. We measured IVR acceptability and its predictors in central Uganda.

Methods: We conducted a cross-sectional mixed-methods study with 124 AYPLHIV aged 18–24 at Mukono, Kayunga, and Kawolo Hospital HIV clinics in central Uganda. A structured questionnaire measured four binary IVR-acceptability items: comfort with automated calls, comfort discussing mental health by IVR, perceived privacy, and willingness to participate. We summed these into a composite Score (0–4, high ≥3), and tested predictors with regression. We analysed open ended responses using content-analysis.

Findings: Of 124 participants (median age 21.5; 68.3% female), 79.8% were willing to use IVR for depression screening and 75.0% met high acceptability. Half preferred an IVR call (50.0%) over SMS (27.4%) or a mobile app (22.6%). Participants with more than primary education had lower odds of high acceptability (aOR 0.23, 95% CI 0.06–0.74, p=0.021); phone ownership (92.2%) was too prevalent to test as a predictor. The high-acceptability group strongly preferred to be linked and have their results to be shared in private with their healthcare provider (58.1% vs 22.6%, p=0.001). Four qualitative themes emerged: privacy as the dominant driver, phone-based convenience, infrastructure barriers (smartphone scarcity, data, network), and a wish for IVR to deliver counseling and reminders.

Discussion: Privacy drove willingness, unlike phone ownership, similar to findings from other studies that have shown AYPLHIV worry about unintended disclosure. Participants with greater education may have access to alternative mental health screening options or may prefer a more sophisticated approach than IVR. Participants were also interested in IVR for care beyond depression screening, as they suggested incorporating counseling, encouragement, and adherence reminders, which shows that AYPLHIV need support across the continuum of mental health care.

Conclusion: AYPLHIV find IVR acceptable for depression screening. However, the tool should protect privacy, be able to work on shared handsets, and o warm and supportive content alongside screening. Lower acceptability among more educated participants worth probing.

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Closing the Gap: "Efficacy of Lenacapavir vs Daily Oral PrEP among Epidemiologically High-Risk Groups". A Systematic Review and Meta Analysis

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Background: Increased levels of non-adherence to daily oral PrEP among key populations have led to increased HIV transmission. How then is Lenacapavir effective vs Daily Oral PrEp among key population?
Lenacapavir, a long-acting injectable option, has emerged as a promising innovation solution with the potential to improve adherence and reduce new infections, particularly among key populations such as female sex workers (FSW), men who have sex with men (MSM), and transgender individuals. Aim of the study was to evaluate effectiveness of Lenacapavir vs daily Oral PrEp in HIV Prevention among high-risk groups.

Methodology: A comprehensive search of ClinicalTrials.gov, PubMed and OpenAlex in 2024 for Randomised clinical trial was conducted on phase III or IV on HIV risk individuals. Out of 96 records identified, two trials with a combined total of 8,605 participants were included. First trial enrolled 5338 Cisgender women and adolescent girls 16-25 years from South Africa and Uganda. 2134 received Lenacapavir while 3204 received daily oral PrEp. Second trial included 3267 Cisgender men, transgender women, transgender men, and gender non-binary people aged 16+ years who have sex with men Enrolled across 88 sites in 7 countries (USA, Argentina, Brazil, Mexico, Peru, Thailand, South Africa).2180 received Lenacapavir while 1087 on Daily oral Oral PrEp. Risk of bias done using Cochrane RoB 2across five specific domains (D1–D5), Comparison on lenacapavir together with daily oral PrEp was done ≥12 weeks follow-ups. Data synthesis included qualitative analysis and meta-analyses using random-effects models.

Results: The pooled risk ratio was 0.07 (95% CI: 0.01–0.32), with the confidence interval excluding the null value of 1.0 in Favor of lenacapavir PrEp. Heterogeneity was minimal (I^2 = 15.3%), indicating consistent treatment effects across two studies. The fragility index was 3, showing 3 event modification(s) across trials would reverse statistical significance.

Conclusion: Across 2 clinical trials Lenacapavir Twice-Yearly Injection reduced the risk of HIV infection by about 93% compared with Daily Oral PrEp.

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Theory and Generalizing about Implementation Strategies: The Sound of Two Hands Clapping

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Background: Explanations about how strategies work — their mechanism — shape how we understand effects and their variability across contexts. Although qualitative accounts of how mechanisms interact with context to produce variations in effects are well developed, quantitative implications remain underappreciated.

Methods: We examined the effects of a client-led medication distribution group on on-time medication pickup as an illustrative case. We began by developing a hypothetically complete explanatory theory of how the client groups work, drawing on existing literature to specify five interconnected mediators and the contextual dependencies that act through these pathways. This mechanistic account was represented as a directed acyclic graph (DAG) with corresponding structural causal model and simulated datasets in two contexts where effects differed. We simulated a dataset of 500 clients in each context, which allowed us to estimate true effects in both. To examine how theorization about mechanism shapes estimation, we examined resulting estimates under each of four progressively more complete mechanisms to the known true values. All structural equation models were fit using the sem function in the lavaan package in R.

Results: In the simulation of 500 patients in a rural (source) and urban (target) context, the patient-led medication distribution group increased on-time medication pickup by 18.1% (95% CI, 13.6 to 22) in the rural context and 8.4% (95% CI, 4.7 to 12) in the urban context. Under the naïve explanatory account which included no mediators, extrapolating the original effect of 18.1% from the rural context to the urban context led to a substantial overestimation of the true effect of 8.4%. Adding "opportunity costs" as a mediator (which allows the group's effect to be moderated by rurality) led to an estimate of 12.2% (95% CI, 8.9 to 16), still an overestimate. Adding CAG acceptability (which enabled moderation of differing levels of stigma across contexts), and clinic congestion (which harnessed the influence of staffing) led to an estimate of 7.5%, a slight underestimation of the true effect. Finally, a complete mechanism that also included mediators of activation and social support (which interacted with contextual effects of social capital) led to an unbiased estimate of 8.4% improvement in on-time medication pickup.

Conclusions: Elucidating mechanisms can help advance generalization. As mechanisms are progressively elaborated, estimates that are influenced by context become less biased. When mechanisms are undertheorized, generalizing about effects of implementation strategies may fail.

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Identification of the Core Functions of a Positive Psychological Intervention to Enhance HIV Prevention Outcomes for Women Who Use Stimulants

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Background: Systematically identifying core functions (CFs), i.e., effectiveness-driving features, is key to ensuring adaptations to evidence-based interventions (EBIs) maintain components responsible for intervention success. The CF methodology is a rigorous, systematic approach to identifying these elements and is paramount when adapting interventions to simultaneously address substance use and enhance HIV prevention among people who use substances. We identified CFs of ARTEMIS, a previous iteration of a positive psychology EBI among sexual minority men living with HIV who use stimulants. The CFs are foundational for adapting ARTEMIS to women who use stimulants (WWUS) and are living without HIV for delivery by a peer support specialist to ensure the EBI is culturally appropriate and context specific while preserving its effective elements.

Methods: We 1) developed an overview of ARTEMIS using published materials; 2) conducted semi-structured interviews with ARTEMIS developers and implementers (n=6) to review the overview and identify key elements; 3) analyzed interviews using a priori CF codes and thematic analysis; and 4) conducted member checking with interviewees (n=5) until consensus was reached.

Results: We identified 10 CFs, five of which discussed implementation (delivery) and five of which described intervention (content) core functions. The five implementation core functions were, 1) Interventionists are trained in positive affect skills; 2) Formal supervision is consistent to support the intervention and interventionist; 3) Flexible approach to scheduling sessions within reason; 4) Delivered in one-on-one sessions, prioritizing keeping the same interventionist-participant pairing throughout the intervention to support the therapeutic alliance; and 5) Ability to tailor session delivery to fit the needs of the participant within the limits of both fidelity to the intervention and safety of the participant. The five intervention core functions were, 1) Emphasizes risk reduction over substance use abstinence; 2) Interventionists give participants nonjudgmental, unconditional positive regard; 3) Does not take an approach that employs irrepressible optimism or requires finding the good in everything (i.e., Pollyanna or “don’t worry, be happy” approaches); 4) Substance use is not the sole focus of the conversation; and 5) Presents a set of positive affect skills that build upon each other.

Conclusions: By specifying the CFs of ARTEMIS, we created a stable reference for adaptation to allow us to distinguish the intervention- and implementation- specific features that must be preserved from flexible delivery choices. These functions will anchor our human-centered design workshops, where ARTEMIS is currently being adapted for WWUS living without HIV via peer delivery. Identifying CFs before adaptation gives the field a replicable path to tailoring EBIs for new populations and contexts while protecting effectiveness. This process could be vital as we translate EBIs between the HIV care and HIV prevention cascades.

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Adapt to Advance: A Case Study of the Pre-Implementation Adaptations to the Evaluation of Long-Acting Injectable (LAI) and Teen Clubs in Adolescents (ATTUNE) Study

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Background: Long-acting injectable (LAI) antiretroviral therapy (ART) provides simplified, discrete treatment to overcome barriers to medication adherence, particularly among adolescents living with HIV (ALHIV). Peer navigation (PN) is an intervention that may increase engagement in care and viral suppression among ALHIV through support provided by peer navigators' unique lived experiences and perspectives from living with or being affected by HIV. The Evaluation of Long-Acting Injectable (LAI) and Teen Clubs in Adolescents (ATTUNE) study is a type I hybrid implementation-effectiveness clinical trial to evaluate the effect of both PN and LAIs amongst ALHIV in South Africa (SA). Due to geopolitics and shifting funding priorities, LAIs were no longer available to the study, which presented an implementation challenge, overcome through adaptations made during the study's planning phase.

Methods: A descriptive case study design documented adaptations to the ATTUNE study protocol using the Framework for Reporting Adaptations and Modifications-Expanded (FRAME) during the pre-implementation and planning phases. Adaptations were described through an appreciative inquiry lens, identifying learnings with each adaptation across three focus areas, informed by FRAME: (1) content focus shift (i.e., modifications made to the intervention itself or how intervention is delivered), (2) contextual adaptation (i.e., modifications made to the way the intervention is delivered), and (3) evaluation shift (i.e., modifications made to the way the intervention is evaluated). The final decision for each adaptation was made by the study co-principal investigators.

Results: Three major reactive adaptations for improved feasibility were identified during pre-implementation and planning. The first adaptation was a shift in content focus from an integrated study design to a staged design, with Stage 1 focusing on PN and Stage 2 on LAI ART in ALHIV. Secondly, two contextual adaptations were made to the LAI component itself. The study design format for Stage 2 was adjusted to a nested clinical trial design, providing a more feasible procurement pathway for LAI ART still pending registration in SA. Additional clinical eligibility criteria (weight, pregnancy status, viral load thresholds) for the study population were specified and aligned with requirements for potential LAI ART regimens for Stage 2. Finally, two evaluation adaptations were made to the implementation frameworks and economic evaluation methodology. ATTUNE shifted from a process implementation framework (Exploration, Preparation, Implementation, and Sustainment: EPIS) to an outcomes framework (Reach, Efficacy, Adoption, Implementation, Maintenance: RE-AIM), as no active implementation process steps could be assessed with the delay in LAI implementation, and RE-AIM remained appropriate for PN. A cost-effectiveness analysis (time and motion method) for LAI ART provision was adapted to a costing analysis (Stages of Implementation Completion and Cost of Implementing New Strategies – SIC and COINS) of PN.

Conclusion: Adaptation of youth-focused interventions, particularly for HIV health services and research, is critical. The ATTUNE team's experience shows that structured, documented adaptations during the planning and pre-implementation phase can preserve the core aims of a study, while responding to the constraints presented. Within the current context of ever-changing research priorities, limited funding, and limited access to interventions, researchers must remain resilient and innovate through adaptation.

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Menopause in the Context of HIV: Clinician and Women's Perspectives on Integrating Menopausal Care into HIV Services in Uganda, Guided by the Theoretical Domains Framework

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Introduction: Women living with HIV (WLWH) experience earlier onset and more severe menopausal symptoms; however, evidence-based menopausal care remains largely inaccessible. With antiretroviral therapy (ART) extending survival, the number of WLWH reaching menopause in sub-Saharan Africa is increasing, placing additional demands on HIV systems primarily focused on viral suppression rather than comprehensive care along the life course. There is limited implementation evidence regarding the sustainable integration of menopausal care into HIV services. Using the Theoretical Domains Framework (TDF), this study examined clinician and WLWH perspectives in Uganda to identify multilevel barriers and facilitators to integrating menopausal care into existing HIV service delivery models. The findings aim to inform policy-responsive, person-centered integration strategies.

Methods: This qualitative study was conducted from August to December 2025 at Mbarara and Masaka Regional Referral Hospitals in Uganda. A total of 29 semi-structured in-depth interviews were conducted with purposively sampled participants, including 19 WLWH aged 45–60 years (median 48 [IQR 47–58]; 58% housewives; 63% with primary education or below), comprising 6 premenopausal, 6 perimenopausal, and 7 postmenopausal women, as well as 10 clinicians (40% female; median age 42 [IQR 33–51]) representing junior (n=2), mid-level (n=5), and senior (n=3) cadres. Interviews were audio-recorded, transcribed verbatim, and analyzed using rapid qualitative analysis with deductive coding to TDF domains in Dedoose. Two analysts independently coded the transcripts, resolving discrepancies through consensus and, when necessary, a third independent analyst, until no new themes emerged. The Makerere University School of Medicine Research and Ethics Committee approved the study (#Mak-SOMREC-2025-1240).

Results: Five interconnected determinants impeded integration. (1) Knowledge and Skills: clinicians' limited menopause-specific knowledge and diagnostic skills resulted in symptom misattribution to comorbidities or HIV progression; (2) Knowledge among WLWH: low menopausal health literacy led to misattribution of symptoms to antiretroviral therapy (ART) side effects, delaying care-seeking; (3) Social/Professional Role and Identity: clinicians perceived menopausal care as peripheral to their HIV-focused responsibilities, reducing perceived capability and proactive screening; (4) Environmental Context and Resources: the absence of clinical guidelines, medication stock-outs, inadequate privacy, high client volumes, and reductions in global health funding made integration structurally challenging; and (5) Social Influences and Emotion: stigmatizing norms and derogatory labeling as "elderly" discouraged disclosure and induced shame. Three facilitators were identified. (1) Social Influences: trusted client-provider relationships and shared aging experiences promoted holistic engagement; (2) Environmental Context and Resources: peer and faith-based networks normalized symptoms and supported self-management and adherence; and (3) Beliefs about Consequences: stakeholder consensus indicated that integrated, same-day care models are essential for sustaining long-term HIV outcomes.

Conclusion: Menopause remains underrecognized, frequently misattributed, and structurally unsupported within HIV services in this context. Knowledge gaps, role ambiguity, resource limitations, and stigma represent modifiable, TDF-mapped implementation determinants rather than inherent system characteristics. Trusted client-provider relationships and established peer and faith-based infrastructure provide feasible, community-driven entry points for co-designing clinical guidelines and context-specific implementation strategies. Sustaining these approaches is essential to achieving

comprehensive, person-centered care for the increasing population of aging WLWH in sub-Saharan Africa.

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Blood Pressure Trajectories in Integrated HIV–Hypertension Care: Evidence from the iHEART-SA Trial in Johannesburg, South Africa

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Background: Hypertension is a leading contributor to cardiovascular disease in sub-Saharan Africa, where people living with HIV (PLHIV) face an increasing burden of non-communicable diseases. Integrating hypertension management into established HIV care platforms may improve long-term blood pressure (BP), yet evidence describing longitudinal blood pressure trajectories within integrated HIV–hypertension care programmes remains limited in sub-Saharan Africa.

Methods: We conducted a secondary longitudinal analysis of data from the Integrating HIV and hEART Health in South Africa (iHEART-SA) trial, a stepped-wedge implementation-effectiveness study evaluating integrated HIV–hypertension care in public primary healthcare facilities in Johannesburg, South Africa. Adults with at least one valid blood pressure measurement at baseline and follow-up were included. Linear mixed-effects regression models were fitted to assess blood pressure changes over time since enrolment.

Results: A total 8,771 participants were included; 66% were female and 75% were living with HIV. Baseline was defined as each participant's first visit with both systolic and diastolic blood pressure measurements available. Mean baseline SBP was 137.0 mmHg (SD: 19.8), and mean baseline DBP was 83.1 mmHg (SD: 13.1). At baseline, HIV-negative participants had higher SBP (β = 6.3 mmHg; 95% CI: 4.7–7.9) and DBP (β = 4.0 mmHg; 95% CI: 2.9–5.1) than PLHIV. SBP showed a small downward trend overtime, while DP remained largely stable. Older age was associated with higher SBP (β = 0.40 mmHg/year; 95% CI: 0.35–0.44) and DBP (β = 0.05 mmHg/year; 95% CI: 0.02–0.08).

Conclusions: Similar BP trajectories among PLHIV and those without HIV suggest that integrated HIV–hypertension care can support chronic disease monitoring across patient groups in high HIV-burden primary healthcare settings. Further work should examine whether implementation intensity, clinic capacity, and retention in integrated care influence clinically meaningful BP control.

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Integrating Safety Planning, Problem-Solving Therapy, and Peer Support for Suicide Prevention among Adolescents Living with HIV in Malawi: An Application of the Community-Engaged ADAPT-ITT Adaptation Framework

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Background: Adolescents living with HIV (ALWH) face elevated suicide risk, yet few evidence based suicide prevention interventions exist for adolescents in sub Saharan Africa. Safety Planning is an evidence based approach that targets acute suicidal behavior by co-creating coping strategies for use during suicide related distress. This exercise aimed to utilize ADAPT ITT – an 8-step community-engaged participatory framework for adapting evidence-based practices – to adapt and integrate Safety Planning into the youth-friendly Friendship Bench (problem solving + peer support) model for improving mental health and HIV care engagement among ALWH in Malawi, and to develop a comprehensive suicide prevention program for integration into HIV care.

Materials and Methods: Following ADAPT ITT, we adapted Safety Planning and created the Safety Planning + Friendship Bench protocol through the following steps:

1. Assessment: Clinical expertise, prior research experience, and literature review
2. Decision: Consideration to existing mental health infrastructure in Malawi, the suicide-related policy and legislative environment, and review of existing suicide prevention evidence-based programs; Engagement with our youth community advisory board (Y-CAB)
3. Adaptation: Interviews and focus group discussions with stakeholders (ALWH aged 13-19 who reported suicidal ideation or behaviors, caregivers, healthcare facility staff and leadership, police, teachers, & community and religious leaders); Iterative adaptation workshops with previous youth-friendly Friendship Bench counsellors and peer supporters living with HIV
4. Production: Production workshop with clinician, implementers, and Ministry of Health partners to produce adapted manuals, review formative feedback and materials generated from the adaptation workshops
5. Topical Experts: Developers of Safety Planning and Friendship Bench review manuals
6. Integration: Study team integrated feedback from topical experts; Generates training materials
7. Training: Training-of-trainers model; Trainers train interventionists (lay psychosocial counsellors) with support from the developer of the original Safety Planning Intervention
8. Testing: Theater test a mock Safety Planning session with a Y-CAB member and an audience of key stakeholders; Ongoing pilot hybrid randomized-controlled trial

Results: Findings from the qualitative work informed adaptations related to acceptability, delivery, implementation, content, and feasibility of Safety Planning for ALWH. Participants emphasized the need for improved comfort, attention to HIV challenges, fear of disclosure, stigma, criminalization concerns, and sensitivity when engaging guardians. The final program consists of one Safety Planning session, five problem solving sessions, and six peer support sessions. Key adaptations included revising the written safety plan to address limited emergency services, modifying guardian engagement procedures, integrating suicide assessment into problem solving sessions, and embedding suicide prevention psychoeducation within peer support groups.

Conclusion: This adaptation process generated practical recommendations for utilizing community-engaged participatory adaption approaches like ADAPT ITT, tailoring Safety Planning for ALWH, and delivering evidence-based suicide prevention services in low resource settings. The training-of-training model and theater testing were critical, strengthening capacity building and community engagement. When paired with formative work to assess service preferences, rapid implementation methods may facilitate efficiencies in iterative refinement of content and delivery of evidence-based interventions for ALWH.

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Centering Community in Adaptation: Comparing a Combination of Frameworks (Core Functions + HEIF + DDBT) and ADAPT-ITT in Implementation of HIV Prevention Evidence-Based Interventions

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Background: Adapting evidence-based interventions (EBIs) is essential to ensure contextually relevant and effective HIV prevention strategies. Adaptation approaches differ in how they address community power, intervention fidelity, and implementation readiness. While the Assessment, Decision, Adaptation, Production, Topical experts—Integration, Training, Testing (ADAPT-ITT) framework offers a structured, stakeholder-engaged process, combining Core Functions with the Discover, Design and Build, Test (DDBT) and the Health Equity Implementation Framework (HEIF) preserves mechanisms of action while allowing flexible delivery. This study compares two HIV prevention EBI adaptations that used 1) a combination of frameworks (HEIF, DDBT, and Core Functions) and 2) ADAPT-ITT, to examine how adaptation frameworks shape power sharing, fidelity–fit tradeoffs, and implementation readiness.

Materials and Methods: We conducted a comparative analysis of two HIV prevention adaptation studies using a structured abstraction framework. Data sources included protocols and adaptation documentation. Key factors included target population, community partner roles, adaptation processes, fidelity strategies, and implementation considerations. Analysis was guided by three predefined domains: 1) Power Sharing (degree of community influence over adaptation decisions); 2) Fidelity vs. Fit (strategies used to balance intervention integrity with cultural and contextual adaptation); and 3) Implementation Readiness (extent to which adaptations addressed feasibility, context, and scalability). Data were synthesized using a cross-case thematic comparison approach, with findings organized to identify differences in how each approach operationalized community engagement and implementation in real-world HIV service contexts.

Results: The two studies diverged across every domain. Power sharing: The combined frameworks approach demonstrated high levels of shared decision-making, with community partners engaged iteratively throughout adaptation. Community input directly shaped content and delivery, including a peer delivery model for cisgender women who use stimulants. In contrast, ADAPT-ITT demonstrated moderate power sharing, with community input gathered through focus groups, in-depth interviews, and theater testing. However, final decisions were centralized within the research team, which included CBO staff members. Fidelity vs. Fit: Both approaches maintained core intervention mechanisms but differed in operationalization. The combined frameworks study identified and iteratively refined core intervention and implementation functions, enabling delivery flexibility and EBI integration while preserving theoretical integrity. The ADAPT-ITT study prioritized fidelity to manualized cognitive behavioral therapy principles and minority stress frameworks, with adaptations to language, cultural context, and integration of HIV prevention content (e.g., PrEP), resulting in high structural fidelity with targeted tailoring. Implementation readiness: the combined frameworks approach emphasized feasibility and delivery innovation (e.g., peer implementation, training, and supervision). The ADAPT-ITT study demonstrated strong implementation readiness through a planned pilot with 80 CBO clients, assessing feasibility, and acceptability. While ADAPT-ITT supported near-term evaluation, its sequential and resource-intensive process may limit rapid scale up.

Conclusions: Adaptation frameworks shape intervention content, decision-making power, fidelity strategies, and implementation pathways. Combined frameworks facilitated deeper community engagement and flexibility, supporting innovations in delivery and relevance for underserved communities. ADAPT-ITT provided a structured approach that enhanced rigor, acceptability, and readiness for evaluation. For HIV

implementation science, combined frameworks may be better suited for contexts requiring substantial innovation and community ownership, while ADAPT-ITT may support efficient progression to testing and scale.

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Positioning Communities as Drivers of Effective HIV Programming in Madagascar: Participatory Action Research on Solidarity Structures around Women Living with HIV in Toliara, Southern Madagascar

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Background: Madagascar's most recent HIV prevalence of 1.1% amongst pregnant women marks a transition to a generalised epidemic. Grassroots organisations have been essential to the HIV response but community-level mechanisms remain insufficiently tied to higher-level programming and implementation. This ongoing project aims to generate transformation-oriented knowledge about structures of solidarity around women living with HIV in southern Madagascar, determine strengths, gaps, and needs of existing networks, and develop advocacy strategies mobilising connections between bottom-up changemakers and policy stakeholders.

Methods: We worked within a participatory action research framework with women affected by HIV and the non-governmental organisation SISAL, which has more than 20 years of experience with community-based HIV work. The project extended the qualitative dataset of a larger project with 21 interviews with women and men in different community positions in Toliara. We then conducted a participatory workshop to define existing community-level solidarity networks and their strengths and needs. A second workshop used a Malagasy dialogue format (rehake ambani kily [discussions under the tamarind tree]) to develop strategies addressing advocacy gaps and improving relationships with more powerful actors in policy and programme design.

Results: Community-level solidarity structures are crucial for women living with HIV. They are rooted in family contexts, with certain - particularly female - members as key sources of trust and support while navigating HIV care pathways. The ability to access solidarity structures depends on individual factors such as education and cultural background, and thus varies between individuals. A lack of familial support significantly reduces women's chances of benefiting from solidarity structures. Non-governmental organisations focused on HIV are additional key actors, providing care and psychosocial support and representing the voices of women living with HIV in advocacy settings. Weaknesses of solidarity networks manifest in experiences of stigmatisation, violence, economic challenges, social isolation, and breaches of confidentiality. Women living with HIV feel insufficiently included in programme decision-making processes. Advocacy involving women living with HIV must find ways to ensure confidentiality. However, women also demonstrated active willingness to take on advocacy roles, electing representatives during the workshop itself. Advocacy efforts should strategically prioritise improved access to care, the reduction of stigmatisation, economic autonomy, and the strengthening of community-level solidarity and familial support. As a first action through the project, participants decided to organise financial education sessions for women living with HIV.

Conclusion: As scientific and policy efforts to quantify and mitigate rising HIV prevalence in Madagascar intensify, participatory methods offer a promising avenue to bridge the gap between high-level programming decisions and community-rooted mitigation mechanisms. Women living with HIV can and should be included more directly in advocacy efforts, which promises to improve the inclusion of particularities of the (southern) Malagasy HIV epidemic.
As Madagascar transitions toward a generalised HIV epidemic, grassroots and national HIV responses must expand beyond targeted high-risk group interventions toward whole-community approaches - a shift that participatory methods, which include extended community members, are particularly well placed to support.

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Community-Led Monitoring Converts Community Experience into Real-Time Implementation Evidence for HIV, TB and Human Rights Service Improvement in Nigeria

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Background: Implementation science increasingly recognizes that evidence-based HIV and TB interventions fail when delivery systems do not respond to the lived experience of service users. In Nigeria, gaps in client-centred communication, facility-to-community linkage, commodity availability, stigma and rights protection continue to undermine equitable service uptake and sustained engagement. NEPWHAN implemented a community-led monitoring model under the Global Fund GC7 N-THRIP grant to test whether structured community-generated evidence could be converted into rapid, actionable service-improvement decisions across routine health systems.

Methods: We used a large-scale programmatic implementation design across 13 Nigerian states, with all 39 community-based organizations and community-led monitoring teams functioning throughout Quarter 9. Mixed implementation data were generated through focus group discussions, client exit interviews, facility observations, advocacy visits, remedial action tracking and structured stakeholder review platforms. Implementation outcomes were assessed using reach, fidelity to planned activities, responsiveness, service quality signals, linkage gaps and adoption of remedial actions. Because this was a routine programme assessment rather than a controlled effectiveness trial, the analysis emphasized magnitude, coverage, consistency and implementation plausibility rather than statistical significance testing.

Results: The model generated high-volume, multi-source implementation evidence within one quarter. Seventy-eight focus group discussions achieved 100% of the quarterly target, while 33,392 client exit interviews achieved 95% of target, providing unusually large community-level evidence for routine programme decision-making. The programme identified 420 service delivery and human rights issues, including stock-outs, long waiting time, poor communication, stigma, discrimination and weak referral feedback loops. These issues were brought into 40 structured engagement platforms with facilities, policymakers and state stakeholders, creating a formal pathway from community voice to system response. Performance exceeded the service-quality benchmark: 581 service points were rated satisfactory against a target of 390, representing 149% achievement. The implementation signal was strengthened by documentation of 541 remedial actions, indicating that identified barriers were not only reported but also translated into tracked corrective actions. Advocacy intensity was also high, with 207 documented advocacy issues and 78 advocacy visits, achieving 100% of the target. Importantly, the data also exposed persistent implementation gaps: only 20–40% of clients were linked to community support structures, and 30–50% of respondents in some states reported negative experiences related to waiting time, communication and information quality. These findings demonstrate both the reach of the CLM platform and its ability to detect actionable bottlenecks that routine facility reporting may miss.

Conclusion: Although statistical significance was not estimated, the evidence is scientifically weighty because of its scale, triangulated data sources, full implementation fidelity across 39 community structures, and clear pathway from problem identification to remedial action. NEPWHAN's CLM model demonstrates a practical implementation mechanism for converting more than 33,000 community voices into accountability, advocacy and service-quality improvement. The findings are highly relevant to VISTA because they show how community ownership, real-time data and stakeholder engagement can close the implementation gap between proven HIV/TB interventions and equitable delivery. Future work should embed comparison periods, interrupted time-series analysis or facility-level

implementation outcome measures to quantify effect while sustaining the community-led design.

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Engaging Key Stakeholders in Intervention Adaptation Is Key to Understanding Phenomena in Context

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Background: Caregiver–adolescent sexuality communication (CASC) is a protective factor against current and future sexual and reproductive health (SRH) risks in early adolescents (10–14 years). Masithetheni seeks to strengthen CASC in the urban Western Cape through adaptation of an intervention originally developed and tested in Uganda. Adapting interventions across contexts requires that contextual factors, including community norms, barriers to communication, and systemic drivers of risk, are understood from the ground up. Community engagement (CE) is central to this process, supporting acceptability, feasibility, and long-term sustainability of adapted interventions. This paper describes the operationalisation of a CE approach embedded within a structured implementation framework across the formative and adaptation phases of the study.

Methods: The Six Steps for Quality Intervention Development (6SQuID) model guides the adaptation process, with CE embedded as a cross-cutting principle. A Community Reference Group (CRG) of 15–18 members from Gugulethu and Khayelitsha, including early adolescents, caregivers, community leaders, and CBO and NGO representatives, meets quarterly and is involved across multiple 6SQuID steps. Ad hoc consultations with academics, the Ugandan research team, and decision makers from the Departments of Health and Education have taken place and will continue throughout refinement. Formative qualitative research (in-depth interviews and focus group discussions with early adolescents, caregivers, later adolescents, and community stakeholders) generated evidence on barriers and facilitators to CASC (Step 1), with visual participatory methods supporting early adolescent engagement. A complex systems analysis produced a draft Causal Loop Diagram (CLD) synthesising formative findings, currently being validated with the CRG and key stakeholders using Group Model Building (Step 2). Co-design workshops using nominal group techniques will translate CLD leverage points and the Ugandan prototype into a contextualised intervention (Steps 3–4), with feasibility and acceptability assessed iteratively.

Results: CE has been integral to understanding CASC in context and strengthening the contextual fit and acceptability of the adaptation process. Formalised relationships with a community-based organisation facilitated community access and CRG development. CRG members informed the formative research design, ensured appropriate stakeholder reach, and shaped interpretation of findings. Group Model Building workshops produced a draft CLD reflecting community-identified drivers of and barriers to CASC, including intergenerational power dynamics, gender norms, and caregiver discomfort and knowledge gaps, now undergoing stakeholder validation. CRG members and stakeholders identified leverage points not apparent from academic evidence alone, flagged potential unintended risks and community sensitivities, and iteratively shaped the intervention design plan ahead of co-design workshops.

Conclusions: Embedding structured CE within a theoretically grounded implementation framework supports contextual understanding, intervention acceptability, and conditions for long-term sustainability. Masithetheni demonstrates how formalised community structures, with defined roles, reciprocal responsibilities, and sustained involvement across adaptation phases, can operationalise meaningful participation beyond consultation. The CLD validation and co-design phases underway will further test how community-driven processes shape intervention content and delivery. This process has implications for how implementation fidelity and contextual adaptation are balanced in community-based SRH interventions.

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Beyond End Users: Adolescents and Young Adults as Youth Research Assistants in a Youth-Led HIV Self-Testing Study in Nigeria

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Background: Multiple barriers, including fear, stigma, low perceived risk, and limited youth-friendly services, continue to limit HIV testing among adolescents and young adults (AYA) in Nigeria. HIV self-testing (HIVST) offers a private and flexible approach to expanding access to HIV services. HIVST interventions that engage AYA as peer educators and facilitators have shown promise in addressing stigma and improving access to testing among AYA. However, most studies focus on AYA as end users, limiting understanding of how to sustain AYA-led models. This study explored facilitators and barriers shaping Youth Research Assistant (YRAs') participation in an AYA-led HIVST study in Nigeria.

Methods: Semi-structured interviews were conducted with Youth Research Assistants (YRAs) aged 18–24 years who participated in the Innovative Tools to Expand Youth-Friendly HIV Self-Testing (I-TEST) study, a multi-site HIV self-testing trial among AYA in Nigeria (2021–2023). YRAs supported participant recruitment, HIVST kit distribution, linkage to confirmatory testing, and study data collection. Eligible YRAs from both the pilot and randomized trial phases were purposively sampled. Of 30 eligible YRAs invited, 23 completed interviews; one declined participation, and six did not complete interviews because they were unresponsive, or missed scheduled interviews after thematic redundancy had been achieved. Interviews were conducted in English, audio-recorded, transcribed verbatim, and analyzed using thematic analysis. Two researchers independently coded transcripts, organized data using NVivo 12 and resolved discrepancies through discussion. Recruitment continued until no new themes emerged across successive interviews. No repeat interviews were conducted. Thematic analysis, guided by the Social Ecological Model, identified multilevel implementation determinants of YRAs participation.

Results: 23 YRFs were interviewed in total. At the individual level, personal motivation, HIV knowledge, and communication skills built trust with AYA peers and facilitated YRA participation. At the interpersonal level, mentorship and peer support provided technical guidance, emotional support, and shared problem-solving to enhance participation. At the organizational level, participatory training and responsive supervision were key facilitators, while kit stockouts, and referral gaps undermined participation. At the community level, HIV stigma and restrictive norms around AYA sexuality created barriers to participation. At the structural level, parental consent requirements and rigid study timelines constrained YRFs' ability to reach sexually active adolescents.

Conclusion: Meaningful, sustainable participation of YRAs depends on multilevel conditions beyond individual motivation. Implementation strategies should invest in peer mentorship and ensure consistent resources, while also seeking ways to address stigma and pursue policy reforms that strengthen AYA agency in community-based HIV testing.

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Implementing a Crowdsourcing Strategy to Solicit Locally Appropriate Solutions to Increase Men's Use of HIV Services: A Reflection

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Background: Men are less likely to test for HIV and to initiate and adhere to antiretroviral therapy, resulting in a higher risk of AIDS-related mortality. Identifying how to deliver HIV services that are acceptable and accessible for men remains a persistent implementation challenge. The Division of Social and Behavioural Sciences at the University of Cape Town conducted a small-scale exploratory crowdsourcing project to gather community-generated solutions to inform an intervention linking men to HIV testing and treatment services in the Western Cape, South Africa. This paper reflects on the implementation of that process, examining what worked, what did not, and the implications for community-researcher relationships.

Methods: A Community Reference Group (CRG) of formal and informal community representatives from Khayelitsha and Gugulethu was established to support the design, implementation, and evaluation of the crowdsourcing contest. The contest ran from February to March 2025, promoted using bilingual (isiXhosa and English) materials via WhatsApp and in-person. Community members aged 18 and older submitted ideas, which were reviewed by a community panel using a structured judging tool. Eighteen entries were received, 14 reviewed, and three selected. Implementation processes and community engagement quality were documented reflectively and assessed against Proctor's implementation outcomes framework, focusing on acceptability, feasibility, and reach.

Results: Regular CRG engagement enhanced the research team's understanding of local contexts and enabled tailoring of the contest to community needs, particularly around language and communication. Community members experienced participation as meaningful and, at times, a moral responsibility, reinforcing ownership and validating local knowledge. The crowdsourcing process catalysed household and peer discussions about HIV testing, extending engagement beyond the contest itself.
Several implementation constraints shaped engagement. Initial comprehension of the crowdsourcing concept was uneven, with unfamiliar terminology and varying confidence in articulating ideas limiting participation. Structural barriers, including limited outreach time and reliance on WhatsApp, reduced reach among younger and digitally excluded individuals. Over-reliance on the CRG for dissemination further constrained broader community uptake.
Perceptions of legitimacy and accountability were central to engagement. Participants emphasised the importance of transparent judging, community feedback, and visible recognition of contributions. Excluding non-winning entrants from the prize-giving event was a missed opportunity for inclusive recognition and trust-building. Critically, the process shifted the CRG from a consultative role to an active research partner, contributing to more equitable community-researcher relationships sustained beyond the contest.

Conclusions: Crowdsourcing is a feasible and acceptable approach to community-driven intervention design in HIV services, with potential to strengthen community ownership and shift traditional power dynamics. Meaningful engagement requires accessible communication, diversified outreach, inclusive recognition, and sustained feedback. Communities demonstrate both the motivation and lived expertise to contribute contextually grounded solutions to complex health challenges when given appropriate opportunity and support.

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Differential Viral Load Outcomes among Key Populations and the General Population in Nigeria: Lessons from Community-Led Interventions

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Background: Achieving the third 95 target of the UNAIDS 95-95-95 framework requires equitable viral load (VL) monitoring across all populations receiving antiretroviral therapy (ART). In Nigeria, key populations (KPs), including men who have sex with men, female sex workers, transgender persons, people in custodial centres, and people who inject drugs, face systemic barriers to VL testing due to stigma, criminalization, and poor access to friendly services. This study compares VL coverage and suppression between KP-focused and general-population HIV programs across Anambra, Ebonyi, Gombe, and Kwara states to identify intervention-specific facilitators and gaps to inform programmatic improvements.

Materials and Methods: Routine programmatic data from January to September 2025 were extracted and analyzed from two distinct intervention streams: community-based KP-specific programs (n=5,452 ART clients) and facility-based general population programs (n=78,718 ART clients). VL coverage was defined as the proportion of ART-eligible clients with a documented VL result within the preceding 12 months. VL suppression was defined as <1,000 copies/mL. Descriptive statistics were computed for demographic and clinical variables. Chi-square tests were used to compare proportions of coverage and suppression between KP and general population groups, with statistical significance set at $p<0.05$. Stratified analyses assessed the impact of four service delivery models: (1) community-led tracking and sample collection, (2) One-Stop Shops (OSS) offering integrated KP-friendly services, (3) mobile outreaches, and (4) facility-based sample collection. Each model was compared against routine facility-based services as the reference.

Results: VL coverage among KP clients was 98% (4,343/5,452), significantly higher than the 92% (72,421/78,718) observed in the general population ($p<0.001$). However, VL suppression rates were significantly lower among KPs at 87% (3,985/4,580) compared to 94% (68,076/72,421) for the general population ($p<0.001$). Among KP subgroups served through the OSS model, coverage reached 91% and suppression 90%, approximating general population performance. Community-led tracking achieved the highest KP coverage (96%), while facility-based models for the general population showed the widest coverage-suppression gap. Variation was observed across states, with Gombe showing the narrowest suppression gap and Anambra the widest.

Conclusions: Contrary to common assumptions, KP-focused programs achieved superior VL monitoring coverage compared to general population programs, underscoring the effectiveness of targeted, community-led models such as OSS, community-led tracking, and outreach in reaching networked subpopulations that are often missed by facility-based services. While these interventions excel in VL monitoring, the persistent suppression gap among KPs (87% vs. 94% in the general population) poses a direct threat to epidemic control. Given the disproportionate HIV burden among KPs, failure to close this gap perpetuates onward transmission and undermines national elimination efforts. These findings mandate an urgent strategic shift toward intensified, evidence-based adherence interventions, including psychosocial support, peer navigation, condom and lubricant distribution, PrEP distribution to serodiscordant partners, and differentiated drug delivery models (e.g., multi-month dispensing, community ART refill groups), while simultaneously applying successful community-led outreach models to improve VL coverage among hard-to-reach general population groups. Halting Nigeria's epidemic and epidemics in similar high-burden settings requires closing this critical suppression gap within its highest-risk populations.

GUIDED POSTER TOUR ABSTRACT PRESENTATIONS

HIV, Infectious Diseases, and Global Health Science of Implementation Conference (VISTA) 2026

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Strengthening Childhood Tuberculosis Diagnosis in Private Health Facilities in Sokoto State, Nigeria: Programmatic Evidence from 2024–2025

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Background: Childhood tuberculosis (TB) remains underdiagnosed in many high-burden settings, partly because symptoms are often non-specific and bacteriological confirmation is difficult in children. Missed diagnosis can delay treatment and increase the risk of severe disease, particularly among younger children. In Sokoto State, Nigeria, private health facilities provide an important share of primary healthcare services, but their contribution to childhood TB notification has historically been limited. Under the Global Fund GC7 project, a package of diagnostic and quality-improvement interventions was introduced to strengthen childhood TB screening, evaluation, and diagnosis in private facilities. This study assessed changes in the childhood TB diagnostic cascade during implementation.

Methods: Between January 2024 and December 2025, integrated diagnostic interventions were implemented across participating private health facilities in Sokoto State. The intervention package included provider training on childhood TB screening algorithms, introduction of stool-based Xpert testing, deployment of portable digital X-ray machines, real-time specimen tracking, and weekly performance review meetings to monitor gaps in screening, evaluation, and diagnosis. Routine programme data were reviewed retrospectively to assess the number of children screened, presumptive TB identification, diagnostic evaluation among presumptive cases, childhood TB diagnoses, and the proportion of childhood TB among all notified TB cases. Descriptive analysis was conducted using quarterly programme reports.

Results: During the review period, 385,863 children were screened for TB across participating private facilities. A total of 51,763 children were identified as presumptive TB cases, of whom 44,263 were evaluated. Diagnostic evaluation among presumptive cases increased from 1,195/4,475 (27%) in Q1 2024 to 12,522/12,818 (98%) in Q4 2025 and remained at 97% or above from Q4 2024 onward. Overall, 5,248 children were diagnosed with TB during the two-year period. Quarterly childhood TB diagnoses increased nearly three-fold, from 525 cases in Q1 2024 to 1,475 cases in Q4 2025. The paediatric contribution to total TB notifications rose from 15.3% in 2024 to 22.2% in 2025, reaching 29.9% in Q4 2025. Among diagnosed children, 73% were aged 5–14 years and 27% were under five years.

Conclusion: A combined package of provider training, child-friendly diagnostic options, specimen tracking, portable X-ray, and routine performance review was associated with improved evaluation of presumptive childhood TB cases and increased childhood TB detection in private health facilities in Sokoto State. The findings suggest that private facilities can make a meaningful contribution to closing childhood TB detection gaps when supported with practical diagnostic tools and regular review of the diagnostic cascade. Further work should assess treatment initiation, treatment outcomes, and the relative contribution of each intervention component.

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Community-Led Implementation of Integrated HIV and Sexual Health Services for Women and Girls with Disabilities in Kenya: A Participatory Action Research Approach

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Background: Women and girls with disabilities face compounded barriers to HIV prevention, testing, and care, including structural stigma, inaccessible health facilities, and exclusion from mainstream sexual health programming. Despite higher vulnerability to gender-based violence and HIV acquisition, this population remains systematically underserved by conventional service delivery models.

Implementation Strategy: This study documents a 24-month community-led intervention implemented in partnership with women with disabilities in Nairobi and surrounding counties. The approach centered three core strategies: (1) co-creation of accessible health information materials in multiple formats (Braille, audio, Easy Read, Kenyan Sign Language); (2) training of peer navigators with disabilities to provide disability-competent HIV counseling and linkage support; and (3) advocacy for reasonable accommodation protocols within existing health facilities. Implementation was guided by a participatory action research framework, with women with disabilities leading design, monitoring, and adaptation decisions.

Outcomes: The intervention reached 340 women and girls with diverse disabilities (visual, hearing, physical, intellectual). Uptake of HIV testing increased from 34% at baseline to 78% at endline. Retention in care among HIV-positive participants reached 89%, a 40-percentage-point improvement over district averages for this population. Key facilitators included trust-based peer navigation, explicit anti-stigma messaging, and flexible service delivery (e.g., weekend clinics, home-based testing). Primary challenges involved procurement delays for accessible materials and initial health worker resistance, addressed through iterative training and mentorship.

Conclusions: Meaningful engagement of women with disabilities in implementation design yields measurable improvements in service reach and retention. Findings support scale-up of disability-competent, peer-led models within national HIV programs and highlight the necessity of dedicated funding streams for accessibility accommodations.

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Stated Preferences for Postpartum HIV Services among Pregnant and Postpartum Women Living with HIV in Cape Town, South Africa: Findings from a Discrete Choice Experiment (DCE)

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Background: The postpartum period is a vulnerable time for disengagement from HIV care and viral non-suppression. Differentiated service delivery (DSD) models, including integrated postpartum care, may improve engagement, but implementation is inconsistent and transfers of care remain challenging. We examined peripartum women's preferences for postpartum support and HIV care models to inform person-centred service delivery.

Methods: We enrolled pregnant and postpartum (<6 months) women living with HIV at two peri-urban clinics in Cape Town (November 2025 - June 2026). The DCE used a d-efficient partial profile design consisting of 60 choice sets and 10 attributes. Respondents completed six unique choice tasks, considering six attributes per task. Responses were analysed using a mixed effects multinomial logit model accounting for repeated choices and preference heterogeneity. Continuous preference weights (β) represent the direct change in preference per unit increase while for categorical attributes the differences between levels (Δβ) describe the relative utility impact of shifting attribute levels. Finally, we estimated the conditional relative importance of each attribute (%). Statistical significance was assessed using the delta method.

Results: Among 316 women (median age 32 years; IQR 26–36), 14% were postpartum, 17% started HIV treatment for the first time in this pregnancy. Of the 10 DCE attributes, time spent at the clinic had the highest conditional relative importance (23.3%), followed by how mother and baby received their care (20.0%), availability of support workshops (15.2%), support for linkage between antenatal and postnatal care (9.8%), medication collection location (8.0%), peer support (7.5%), clinic Wi-Fi access (6.1%), type of transfer letter (5.4%), mode of additional counselling (2.3%), and clinic operating hours (2.2%).
Within each attribute, women strongly preferred shorter visit durations (β=-0.30 per hour, 95% CI:[-0.40,-0.19]). They also preferred integrated mother-baby care, delivered either individually or in groups over separate clinic visits. The strongest preference was for one-on-one integrated mother-baby care over separate clinic visits (Δβ=-1.28, 95% CI:[-1.76,-0.78]).Furthermore, they preferred a general transfer letter that allowed them to choose a clinic over a letter specifying one (Δβ=0.35, 95% CI:[0.05,0.64]). For support navigating postnatal care, respondents preferred a phone call (Δβ=0.51, 95% CI:[0.19,0.84]), paper pamphlet (Δβ=-0.46, 95% CI:[-0.84,-0.08]) or an automated message (Δβ=-0.62, 95% CI:[-0.96,-0.28]) over a home visit from a community health worker. They also preferred quick medication collection through pre-packed medication (Δβ=0.48, 95% CI:[0.11,0.85]) or e-lockers (Δβ=0.51, 95% CI:[0.20,0.82]), over collection from the general clinic pharmacy. Respondents valued support workshops (supporting child development, mother and father bonding, return to work, or social service access), peer support (in-person or digital group), and free Wi-Fi (with or without registration), regardless of the specific format offered. Respondents did not prefer additional chatbot support over standard clinic counselling, or for additional Saturday operating hours over weekday-only hours.

Conclusion: These findings suggest that shorter clinic visits and fully integrated, one-on-one mother-baby care are priorities for pregnant and postpartum women living with HIV. DSD models offer greater flexibility, efficiency, and additional support which may better meet the needs of postpartum women living with HIV.

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Innovative Potential of Vending Machines to Expand HIV Prevention Services and Resources: A Narrative Implementation Science Review of HIV-Related Service Vending Machine Projects

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Background: Ensuring access to HIV preventive services, including HIV testing, could reduce the number of new HIV infections among people living with HIV. In the context of limited resources, suboptimal service uptake and utilization among at-risk populations, the influence of social determinants, and geographical variations in optimal access to HIV preventive services, implementing public health vending machines (PHVMs) is an evidence-based and innovative strategy for increasing access and uptake of HIV preventive services via the dispensation of a variety of essential supplies and resources.

Methods: We conducted a systematic literature search (up to March 2026) and a narrative synthesis of peer-reviewed studies documenting the use of vending machines to provide prevention services and resources for HIV and other sexually transmitted infections (STIs), using key search terms guided by the Implementation Outcomes Framework constructs. Using key search terms, we developed a search strategy to search major public health and health services publication databases, namely: PubMed, and APA PsychInfo. Data analysis consisted of frequency counts and averages for demographic data, and deductive analysis of the IOF constructs: adoption, acceptability, and feasibility. Inductive thematic analysis was used in the narrative synthesis of the implementation and effectiveness of PHVMs for HIV prevention.

Results: After reviewing abstracts and titles, 20 articles from 18 studies were eligible for full-text review. After the full-text review, 18 articles from 15 studies were included in the data synthesis. Study duration ranged from 3 days to 20 years; seven countries (USA, France, Australia, Germany, China, Georgia, and the United Kingdom) were represented; and between 1 to 146 vending machines were used in the studies. The review showed that PHVMs were mostly acceptable, increased uptake, and were a feasible means of improving access to HIV prevention services and resources, and those of other STIs. Across studies, the inclusion of other services and items that addressed sexual and reproductive health, harm reduction, and nutritional needs contributed to positive utilization of PHVMs for HIV prevention. Targeted populations such as adolescents and young adults, sexual minorities, and people who inject drugs saw a marked increase in access and utilization of HIV preventive services such as self-testing kits and following through with checking for results. PHVMs presented an opportunity for linkage to health services and more comprehensive care as needed. Incomplete communication and other operational barriers, such as stock-outs at the point of use of PHVMs diluted their effectiveness.

Discussion: The impact of PHVMs for increasing access to HIV/STI prevention is optimal when they serve as complementary service delivery mechanisms, alongside existing traditional service platforms. Future research priorities should focus on closing implementation research gaps by designing and evaluating innovative implementation strategies to ensure the long-term sustainability, maintenance, and cost-effectiveness of PHVMs for HIV prevention.

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Expanding the Reach of Primary Healthcare in Rural Zambia: Evaluating the Impact of a Polyvalent Community-Based Volunteer Programme

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Background: Rural and peri-urban communities in Zambia face significant barriers to accessing quality healthcare, including health workforce shortages and geographic isolation. While Community-Based Volunteers (CBVs) are a cornerstone of the rural health system, their impact has historically been limited by non-standardized training, weak supervision, and a lack of structured incentives. To address this, On Call Africa (OCA), in partnership with the Ministry of Health, piloted a Polyvalent CBV Programme to create a multi-skilled cadre capable of delivering an expanded range of services at the community level. This evaluation assesses the programme's effectiveness in expanding the reach and quality of health services.

Methods: A mixed-methods evaluation was conducted in 2025 across four health facility catchments in Southern Province: two intervention sites (Simoonga and Chalimongela) and two comparison sites (Natebe and Mapatizya). The assessment included a desk review of project documents and routine health data, 16 Focus Group Discussions with community members and CBVs, and 10 Key Informant Interviews with facility staff and OCA personnel. Quantitative indicators were analyzed using a traffic light system against project targets. The evaluation also validated the programme's Theory of Change to establish attribution.

Results: The Polyvalent CBV model proved highly effective in expanding service reach. Key findings include:
- Enhanced Service Delivery: The programme successfully trained CBVs to deliver preventive, promotive, and basic curative services (malaria testing/RDTs, diarrhea management). This led to a significant reduction in long queues and waiting times at health facilities.
- Strong Referral Linkages: A paper-based referral tracking system was fully operationalized, achieving a 100% referral completion rate at both pilot facilities, strengthening the continuum of care.
- Improved Health Outcomes: The programme contributed to notable improvements, including surpassing under-5 immunization targets at one site (Chalimongela: 116% of target) and achieving 100% of post-natal care visits for home deliveries within 48 hours.
- Community and System Satisfaction: Community scorecards showed high satisfaction (89% at Chalimongela, 100% at Simoonga), and facility staff reported reduced burden. The standardized supervision and data tracking systems were successfully piloted and implemented.
- Challenges: The programme fell short of targets for first-trimester ANC visits and contraceptive prevalence rates, highlighting the need for sustained community dialogue. The incentive structure, while timely, created expectations for a continued stipend, posing a sustainability risk.

Conclusions: The Polyvalent CBV programme offers a technically sound, government-aligned framework for expanding the reach of primary healthcare in under-served communities. By integrating a basket of services and robust referral systems, it effectively bridges the gap between communities and health facilities, reducing congestion and improving access. The model is highly replicable and scalable. For successful expansion, recommendations include consolidating the incentive structure (e.g., through income-generating activities), prioritizing youth recruitment, investing in durable enablers (solar-powered equipment), and embedding refresher training for sustained impact. This pilot serves as a leading example for achieving Universal Health Coverage through community-centered primary care.

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Institutionalising Multisectoral Governance for Workplace Tuberculosis Control in Uganda: Lessons from Implementing the Multisectoral Accountability Framework for TB (MAF-TB)

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Background: Tuberculosis (TB) continues to affect economically productive populations disproportionately, yet workplace TB prevention and care remain poorly integrated into public-sector systems across many high-burden countries. In Uganda, the Multisectoral Accountability Framework for TB (MAF-TB) was introduced to strengthen coordination between health and non-health sectors and to expand institutional responsibility for TB prevention and care. This study examined implementation processes, institutional adoption, and operational barriers shaping workplace TB governance.

Methods: A mixed-methods implementation study was conducted between 2023 and 2025 across ministries, departments, agencies, and selected public institutions implementing workplace TB interventions. Data were collected through document review, organisational assessments, programme monitoring, and key informant interviews with policymakers and institutional focal persons. The Consolidated Framework for Implementation Research guided the analysis of political, organisational, and operational determinants of implementation.

Results: High-level political commitment accelerated the adoption of workplace TB interventions and strengthened cross-sector participation. Twenty-five government institutions integrated TB activities into annual operational plans and budgets, while eleven developed integrated TB/HIV workplace policies. Workplace interventions improved TB awareness, screening uptake, referral pathways, and institutional ownership of prevention activities. However, implementation was constrained by weak enforcement of accountability, limited institutional capacity, fragmented operational guidance, and dependence on external financing. Coordination platforms strengthened information sharing and policy visibility but were undermined by inconsistent resource allocation and limited domestic funding.

Conclusions: Institutionalising multisectoral governance can extend TB prevention and care beyond conventional health-sector structures and improve access among working populations. Long-term sustainability requires integrating TB responsibilities into sectoral performance systems, strengthening accountability mechanisms, and expanding domestic financing for cross-sector health interventions. Uganda's experience offers practical implementation lessons for high-burden countries pursuing whole-of-government strategies to strengthen TB control.

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From DHIS2 to Superset: Strategic Visualization of National HIV Data and Peer-Educator Digital Empowerment in Senegal

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Background and Purpose: While Senegal has utilized DHIS2 for HIV data collection since 2014, strategic data exploitation and granular visibility into territorial retention disparities remain limited. Historically, data entry was restricted to database managers, excluding community peer-educators. This study evaluates the national deployment of Apache Superset—an open-source visualization tool—at the Division de Lutte contre le SIDA (DLSI) and details the implementation process of digital health empowerment among peer-educators.

Methods: A descriptive longitudinal and cross-sectional analysis was performed using three integrated data streams: (1) national Superset dashboards encompassing 139 care sites (May 2026), (2) regional Dakar DHIS2 Tracker records (2022–2026), and (3) longitudinal indicators from a pilot site. Qualitative insights documented the 3-year phased digital transition of peer-educators.

Results: Superset analytics exposed significant structural inequalities: 7 major sites concentrated 26.3% of active patients but only 9.7% of lost to follow-up (LTFU), whereas 132 smaller sites concentrated 90.3% of LTFU. Regionally, Dakar's active cohort grew by 29% (4,099 patients), with viral suppression rising from 90.6% to 96.3%, successfully achieving UNAIDS 95-95-95 targets. The pilot site experienced a 40% cohort expansion while maintaining >95% viral suppression. Qualitatively, transitioning peer-educators from paper logs to digital dashboards significantly enhanced data ownership, accountability, and localized tracking precision.

Conclusions: Digital transformation in HIV programming must extend beyond central data collection. Phased, community-led data ownership is highly viable when field workers receive localized support and immediate visual feedback. Apache Superset offers a highly scalable, zero-cost, and robust alternative to proprietary business intelligence software for national health programs in resource-limited settings.

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Improving Linkages to Care: Reducing Delays in Community-Based Referral Systems in Eswatini

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Background: Delays in linkage to care remain a key barrier to effective HIV prevention, treatment, and integrated service delivery in high-burden settings. In Eswatini, delayed referral completion and interruptions in treatment (IIT) contribute to suboptimal health outcomes and reduced program impact. We describe outcomes from the Reaching Impact, Saturation and Epidemic Control (RISE) program implemented by Young Heroes to strengthen community–facility referral systems and reduce delays in care.

Methods: RISE employs a coordinated community–facility model utilizing Home Visitors (HVs) and Expert Mothers (EMs) to identify clients, initiate referrals, and provide adherence and psychosocial support at household and community level. Mobile clinic services were organized to improve access for clients residing far from health facilities. Facility-based Linkage Facilitators coordinated service uptake, tracked referral completion, and supported re-engagement of clients who had interrupted treatment. Referral and Linkage Case Management tools were used to monitor timeliness from referral initiation to service uptake. Program areas included ART refill and re-initiation, TB screening, cervical cancer screening, adolescent participation in Teen Clubs, and pre-exposure prophylaxis (PrEP) initiation among pregnant and breastfeeding women. Routine program data from October–December 2025 were analyzed.

Results: ART refill services achieved a 74% referral completion rate (66/89). PrEP initiation recorded the highest uptake at 82% (607/742). ART re-initiation among clients previously interrupted in treatment reached 69% (45/65), demonstrating effective re-engagement into care. TB screening achieved a 55% completion rate (871/1,577). Cervical cancer screening recorded a lower completion rate of 40% (471/1,163), indicating persistent barriers to uptake of non-HIV preventive services.

Conclusions: Community-led identification, referral, and follow-up supported by facility-based coordination reduced delays in linkage to HIV services and improved treatment continuity, including re-engagement of clients with interrupted treatment. Lower uptake of cervical cancer screening highlights the need for strengthened demand creation and better integration of preventive services within community–facility linkage models. Integrated referral systems are critical to improving linkage efficiency, retention in care, and HIV and TB program outcomes in high-burden settings.

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Reach and Engagement Outcomes of WhatsApp-Based Microlearning Supporting Introduction of Six-Monthly ART Dispensing in South Africa

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Background: In August 2025, South Africa initiated phased national implementation of six-monthly dispensing (6MMD) of antiretroviral therapy (ART). Training of frontline clinicians was required within a short timeframe amid donor funding cuts. Traditional in-person training was not immediately feasible, and once-off virtual training sessions to key provincial stakeholders required further augmentation. We evaluated uptake, engagement, and participant feedback from a WhatsApp-based microlearning intervention designed to support early 6MMD rollout.

Methods: A WhatsApp-based microlearning programme was developed within six weeks and implemented between August and October 2025. Weekly 10–15-minute lunchtime sessions were delivered over eight weeks in WhatsApp groups, each covering 1–3 case-based learning points aligned to national ART guidelines. Content was delivered using text messages, images, polls, and voice-note summaries. Participants were recruited via an online sign-up survey supported by national and provincial stakeholders and enrolled into WhatsApp groups across three sequential cohorts. Participation was measured using WhatsApp "blue-tick" message reads: live/within one hour, within 24 hours, and within one week after lesson delivery. End-of-training and implementation feedback polls were conducted within WhatsApp groups.

Results: A total of 2,275 participants enrolled across three cohorts. Participants were predominantly nurses (62.1%), followed by doctors (10.8%) and pharmacists (10.7%); 58.7% were from the public sector and 27.7% from partner organisations. Participants represented all provinces, with the largest proportions from Gauteng (31.6%), Eastern Cape (21.4%), and North West (15.8%). Across cohorts and sessions, an average of 52.7% of participants read lessons live or within one hour of delivery, increasing to 81.9% within 24 hours and 89.1% within one week. Participation declined over time but remained high throughout the programme. Live participation decreased from 67.1% in Session 1 to 51.1% in Session 8, 24-hour participation from 91.6% to 78.4%, and one-week participation from 95.4% to 84.9%.

Post-training feedback demonstrated high satisfaction, with 291/295 (98.6%) respondents reporting that they were satisfied or highly satisfied with the training. Among respondents able to enrol clients in 6MMD, 258/329 (78.4%) reported having already recommended and prescribed facility-based 6MMD. Before expansion of 6MMD eligibility to all facilities under Phase 3 rollout, 303/311 (97.4%) respondents indicated readiness to implement 6MMD, reporting that they felt comfortable offering and enrolling eligible clients once Phase 3 commenced.

Conclusions: WhatsApp-based microlearning enabled rapid national reach, with high registration of frontline clinicians within weeks of the 6MMD programme launch and sustained engagement with training content. High levels of participant satisfaction, self-reported implementation, and readiness for Phase 3 rollout were observed. This low-disruption, scalable approach offers a practical model for delivering timely clinical guidance to geographically dispersed health workers during accelerated HIV programme rollouts in resource- and time-constrained health systems. It warrants formal mainstreaming in Ministries of Health as a recognised hybrid, blended training modality across programmatic areas.

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Examining Trade-Offs within Rapid Research: A Rapid Best-Worst Scaling Exercise

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Background: The gap between evidence generation and practice uptake is a critical concern for implementation science. A central, though underexamined, dimension of that is pace: how long implementation takes, what conditions accelerate or inhibit it, and what trade-offs are acceptable in pursuit of speed.

Methods: We conducted a real-time, best-worst scaling (BWS) session with participants at an implementation science conference during a 75-minute session to identify which conditions were viewed as essential and which dispensable when pace becomes a primary design constraint. Choice sets included 18 study features across five categories: Governance, Agreements, and Administrative Infrastructure; Research Design, Protocols, and Scientific Preparation; Data & Analytics Capacity; Partnerships, Stakeholder Engagement, and External Relationships; and Operational Resources & Implementation Readiness. Participants answered a series of 11 choice tasks where they chose both the most and the least important features for enabling rapid, high-quality study conduct. We used a pre-programed hierarchical Bayes model to analyze mean preference weights (MPWs), and latent class multinomial logit analyses (LCA) to identify distinct preference groups.

Results: Fifty-six participants completed the BWS with 98.2% reporting working in research and 73.2% in program implementation. We found that partnerships with stakeholders, implementing organizations, community members, and clinical partners were crucial (making up >36% of importance). Access to intervention materials (MPW: 9.0, 95% CI: 7.6–10.4), flexible funding that can be deployed quickly (9.3, 95% CI: 8.1–10.5), and rapid ethics review pathways (7.8, 95% CI: 6.4–9.2) were also highly valued. While well-defined research questions were valued (7.4) as part of the research design, protocols and scientific preparations and tools for conducting rapid, rigorous qualitative analysis and publicly available templates were seen as less important (3.6 and 0.5 respectively). LCA revealed distinct preference profiles among participants with attention to perspectives relevant to rapid research in low-resource settings. While both groups highly valued study partnerships, there were distinct preference groups for 1) having well-defined research questions compared to 2) rigorous analytical tools.

Conclusions: The findings suggest that the ability to generate actional evidence quickly may depend on partnership, governance, and operational readiness. This points to a need for rapid research systems, not just rapid methods.

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Embedding a Multi-Country Quality Improvement Collaborative within a PrEP Choice Implementation Study: Design and Lessons from the CATALYST Study

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Background: The real-world impact of HIV pre-exposure prophylaxis (PrEP) remains constrained by individual, interpersonal, social, structural, and health system challenges. The introduction of multiple PrEP products holds potential to increase PrEP uptake and persistence. Delivering PrEP choice across diverse service delivery settings, however, requires context-specific adaptation. To support this, a multi-country Quality Improvement Collaborative (QIC) was embedded within the CATALYST implementation study, which evaluated an enhanced service delivery package for PrEP choice among women in sub-Saharan Africa. We describe the design, implementation, and early lessons from this QIC and highlight practical adaptations relevant to multimethod PrEP delivery.

Methods: CATALYST was a mixed-methods implementation study conducted across 28 public-sector sites in Kenya, Lesotho, South Africa, Uganda, and Zimbabwe. Participating sites included hospitals, primary health care clinics, community-based facilities, and drop-in centers serving diverse populations and settings. A multi-level QIC structure was established, comprising a central QI faculty, country-level QI advisors, facility-level QI coaches, and existing Ministry of Health-supported, facility-based QI teams. The QI faculty developed a charter with common objectives and indicators, QI training materials, and standardized data collection and documentation tools. During implementation, QI teams conducted root cause analyses to identify PrEP service delivery gaps, and tested context-specific change ideas using Plan–Do–Study–Act (PDSA) cycles. Routine data review and annotated run charts guided decisions to adopt, adapt, or abandon changes. Ongoing coaching, complemented by periodic knowledge exchange sessions, facilitated shared learning. Implementation experiences and tested change ideas were documented in QI briefs. Findings for this abstract were synthesized from QI briefs, coaching reports, and illustrative run charts.

Results: Following charter adoption and training on QI methods, QI teams at each site completed iterative PDSA cycles to address identified gaps related to PrEP choice counselling and informed decision-making, month-one retention, client satisfaction, and service integration. Commonly adopted change ideas included group health education before individual counselling; client triaging systems; peer-supported navigation; differentiated follow-up reminders; and workflow redesign to reduce waiting times, expand entry points for PrEP initiation and continuation, and create one-stop shops for PrEP and other services such as family planning and gender-based violence. For example, at one Zimbabwe site, month-one PrEP return visits increased from 21% in October 2023 to 68% in June 2024 after five PDSA cycles testing appointment and reminder systems and peer-led follow-up; these changes were incorporated into routine practice and spread to other sites.

Conclusion: Embedding a QIC within a multi-country implementation study was feasible and provided a practical mechanism for real-time, data-driven, context-specific adaptation of a complex PrEP choice service delivery intervention across heterogeneous sites. This model was novel in combining QI with implementation science, enabling sites to refine the enhanced service delivery package in response to contextual challenges and accelerate learning while the broader study progressed. The QIC produced practical, potentially transferrable lessons for the scale-up of existing and future multimethod PrEP services. Limitations included variability in site data quality and documentation and early study termination due to foreign aid cuts, which limited observation of full intervention maturation and long-term outcomes.

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Post-Implementation Sustainability of Integrated VMMC Programs in Zimbabwe: Adoption, Implementation Outcomes, and Emerging Health System Constraints

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Background: Integration of donor-dependent, vertical health programs such as Voluntary Medical Male Circumcision (VMMC) within government-owned health systems is a challenge in low-resource settings like Zimbabwe. Through combination prevention, Zimbabwe achieved a 78% reduction in new infections between 2010 and 2024, with VMMC contributing to cost savings and averting up to 13% of the new HIV infections in the country. The OPTIMISE (Optimizing Stakeholder Operating Models for HIV Prevention) project applied the Leadership and Engagement for Improved Accountability and Delivery of Services (LEAD) Framework across five districts to strengthen VMMC integration and sustainability through systematic, iterative data-driven decision-making. LEAD combines organizational development, quality improvement (QI), and participatory action research through multidisciplinary and multisectoral task teams (TTs). We conducted a post-implementation evaluation to characterize what was sustained and identify the multilevel contextual determinants of integration and sustainability.

Methods: A convergent mixed-methods post-implementation evaluation was conducted across five districts in Zimbabwe (Hwange, Lupane, Gwanda, Matobo, and Nyanga). Data was collected 18 months after project completion through key informant interviews, focus group discussions, and quantitative data extraction from DHIS2 and program reports. Data were deductively coded simultaneously to the RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) domains and CFIR (Consolidated Framework for Implementation Research) constructs, using a joint display integration approach. Findings were validated at a workshop with national and subnational stakeholders.

Results: All five district TTs remained functional with minimal attrition, demonstrating sustained operational capacity and effective application of LEAD methodologies to strengthen VMMC and other priority programs (adoption). Sustainability planning was institutionalized through formal integration into district health plans. VMMC service delivery was maintained across all districts post-implementation, with community demand creation partially integrated into routine MOH and community functions (reach). Substantial gains in coverage were observed, with VMMC uptake increasing from 8% to 77% in Nyanga and from 30% to 77% in Hwange, while adverse event rates remained within the ≤2% threshold (effectiveness). The majority of effective change ideas were sustained, including a public–private autoclaving partnership, multisectoral demand creation strategies, and decentralization of services in Hwange, which reduced outreach distances (185 km to 44 km) and monthly costs by approximately 50% (implementation). However, donor partner downsizing reduced outreach capacity and decentralization efforts. While institutionalization appears promising due to strong district leadership, sustainability remains precarious amid declining external funding and limited domestic financing (maintenance).

Conclusions: OPTIMISE generated durable governance structures and LEAD competencies, including data-driven, systematic generation of context-specific solutions to local problems, beyond the funded period. Inner setting factors, such as leadership engagement, redesigning systems and processes, and integration into existing government platforms, are critical sustainability facilitators. Outer setting threats, such as donor transition and absent domestic financing, are the dominant maintenance risk for effective integration of vertical programs. These findings offer a theoretically grounded, replicable model for navigating donor-to-government transition.

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The Sommelier's Guide to Implementation Science: A Metaphor-Driven Method for Advancing Global Implementation Research

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Background: Implementation science (IS) seeks to close the gap between evidence and practice, yet its conceptual complexity, inconsistent terminology, and limited accessible teaching tools continue to constrain uptake, particularly across global and interdisciplinary settings. As global implementation research expands, there is a need for innovative, scalable methods that make IS frameworks, data interpretation, and analytic reasoning more accessible and transferable. This project introduced a metaphor-driven methodological approach, grounded in winemaking, to translate core IS contracts into an intuitive, globally relevant framework that supports learning, application, and cross-context adaptation.

Material and Methods: The author developed an analogy-based conceptual method that systematically maps foundational IS constructs to elements of winemaking, designed as a tool for teaching framework development, and interpretation across diverse settings. Vineyard "terroir" was aligned with multilevel implementation context (e.g., infrastructure, workforce capacity, sociocultural norms), emphasizing context as a measurable and comparable construct across global sites. Levels of wine appreciation (novice to excerpt) were mapped to degrees of IS engagement and methodological rigor. Winemaking processes (e.g., fermentation, blending, and aging) were used to represent implementation strategies and adaptation processes over time. Established IS outcomes (acceptability, feasibility, fidelity, sustainability, and scalability) were operationalized as observable "product characteristics", enabling more concrete interpretation of multidimensional outcomes. This approach represents a theory-informed conceptual synthesis designed to function as a practical, transferable method; no statistical analyses were conducted.

Results: The metaphor-driven method advances IS practice in four key ways. First, it provides a structured approach for making context explicit, measurable, and central to cross-site comparisons and interpretations, which is critical for global implementation research. Second, it differentiates levels of engagement and methodological rigor, defining diverse roles that stakeholders can adopt in their work and settings. Third, it offers a practical framework for linking implementation strategies, contextual factors, and outcomes over time, clarifying mechanisms of action and supporting more rigorous, theory-informed evaluation. Finally, by framing IS outcomes as multidimensional, the model facilitates interpretation of trade-offs (e.g., fidelity vs. adaptation) and support more nuanced analytic approaches. The framework is inherently adaptable, making it suitable fo ruse across diseases, and broader global health contexts where variability in context and resources is high.

Conclusions: Metaphor-driven methods represent a novel "Methods 2.0" approach to advancing global implementation research by improving accessibility, interpretability, and transferability of IS concepts. This framework can lower barriers to entry, strengthen interdisciplinary engagement, and support more nuanced evaluation and reporting of implementation outcomes. In this work, winemaking serves as the anchoring metaphor however, the underlying methodological approach is intentionally adaptable. The same analogy-based framework can be applied using other culturally relevant topics, lived experiences, or professional domains that resonate with specific populations and contexts. This flexibility enables researchers and practitioners to tailor implementation frameworks, data interpretation, and analytic reasoning to align with local context, values, knowledge systems, and priorities. By foregrounding context, adaptation, and longitudinal decision-making, this approach facilitates cross-site learning and strengthens the translation of evidence into scalable, reliable practice across diverse global health settings.

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From Commitment to Action: Implementing a National Multisectoral Accountability Framework for Tuberculosis Control in Uganda

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Background: Global commitments to ending tuberculosis increasingly emphasise multisectoral accountability and action on the social determinants of health. However, evidence on translating whole-of-government TB commitments into operational systems remains limited in many high-burden countries. Uganda adopted a national Multisectoral Accountability Framework for TB (MAF-TB) to formalise coordinated action across government sectors and to strengthen equitable access to TB prevention, diagnosis, and care. This study examined implementation strategies, institutional uptake, and operational lessons from national implementation.

Methods: Between 2020 and 2025, the Ministry of Health and the Office of the Prime Minister coordinated the implementation of MAF-TB across more than 30 ministries, departments, and agencies, in collaboration with civil society organisations and development partners. Implementation strategies included appointing institutional TB focal persons, integrating TB into workplace HIV policies, incorporating TB interventions into planning and budgeting systems, and piloting TB screening within social protection platforms. Programme monitoring data, administrative reports, stakeholder records, and service delivery information were analysed to assess institutional adoption, intervention coverage, and implementation experiences.

Results: TB interventions expanded beyond traditional health-sector structures to include workplace systems, social protection platforms, and institutional governance processes. Cross-sector coordination strengthened accountability, policy alignment, and domestic resource mobilisation. Institutional ownership was reinforced through advocacy, technical support, stakeholder engagement, and annual multisectoral TB conferences. Workplace and social protection interventions improved screening, referral, and linkage to treatment, including the identification of drug-resistant TB cases. However, variable sector readiness, limited operational capacity, and reliance on donor support affected the consistency and sustainability of implementation.

Conclusions: Uganda's experience shows that multisectoral accountability frameworks can translate political commitments into operational improvements in TB service delivery. Integrating TB into existing government systems offers a scalable and sustainable pathway to strengthen equitable access to TB services in high-burden settings. These findings provide important implementation lessons for countries adopting whole-of-government approaches to TB control and universal health coverage.

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Cost-Effectiveness of a Smart Pillbox Intervention for Adherence to Oral HIV Pre-Exposure Prophylaxis

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Background: To evaluate the 6-month within-trial cost-effectiveness of a smart pillbox (DIRECT-PrEP) for improving oral PrEP adherence among men who have sex with men (MSM) in China, with a focus on evaluating health equity across different strata of social vulnerability in resource-constrained settings.

Methods: This economic evaluation, conducted alongside a multicenter RCT (N=442 MSM; 247 intervention, 195 standard care), assessed costs from the health system, multipayer, and societal perspectives. Effectiveness was measured using quality-adjusted life-years (QALYs) and PrEP-adherence days (PADs). Incremental cost-effectiveness ratios (ICERs) were calculated via a Seemingly Unrelated Regression (SUR) model and evaluated against a willingness-to-pay threshold of three times China's per capita GDP ($31,200). Participants were stratified by social vulnerability (e.g., income, education) to assess equity impacts.

Results: The digital intervention significantly improved adherence. The ICERs per QALY gained were $19,575.93 (health system), $19,656.66 (multipayer), and $19,844.42 (societal)—all well below the $31,200 threshold. The cost per PAD gained was approximately $30.46 to $30.86, achieving a >95% probability of cost-effectiveness. Notably, the intervention promoted health equity, demonstrating superior cost-effectiveness among more socially vulnerable participants (ICER per QALY: $16,259–$16,490) compared to less vulnerable peers ($23,514–$23,834). These findings remained robust across sensitivity analyses.

Conclusions: The smart pillbox is a highly cost-effective and equity-promoting strategy for enhancing PrEP adherence in primary healthcare settings within LMICs. Its offline functionality successfully mitigates infrastructural barriers, making it an optimal, scalable tool to support global PrEP rollout while prioritizing socially vulnerable population.

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Assessment of Urine Determine TB LAM Antigen Implementation in Real-World Clinical Practice: Interim Results of an Online Survey of South African Healthcare Workers

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Background: Tuberculosis is the leading cause of death in people with HIV (PWH), partly due to diagnostic delays. The urine Determine TB LAM antigen (Determine-LAM) is a rapid, point-of-care tool showing survival benefit for hospitalised PWH in two randomised trials. Manufacturer guidelines advise 60µL urine is added to Determine-LAM and results interpreted at 25-35 minutes. Any patient-line should be compared to the reference card to assess positivity, and any visible control line confirms validity. World Health Organisation (WHO) guidelines recommended Determine-LAM in subgroups of PWH since 2015, but implementation in real-world settings is not well described. We aimed to explore and describe healthcare worker training, experiences, and decision-making regarding Determine-LAM in South Africa.

Material and Methods: An online anonymous survey was shared with healthcare workers across South Africa in February 2026 and data collection is ongoing. The semi-structured survey includes close-ended, Likert style, and open-ended questions. Eligible participants are adult healthcare workers who have performed ≥1 Determine-LAM and work in South Africa. Data available through 25-Jun-2026 were summarised with medians and proportions. Open-ended responses were grouped into themes and results organised according to the Consolidated Framework for Implementation Research (CFIR) Innovation and Inner Settings domains.

Results: Among 65 responders to date: 55% were female, the majority (62%) were aged 26-35 years, approximately 80% work in inpatient settings, 91% in public healthcare, and most (94%) were doctors. Responders reported accessing Determine-LAM for a median of six years and had frequent experience: 26% reported performing >100 tests, 45%: 30-99 tests and 29%: 1-29 tests. Key challenges were noted around innovation complexity, accessing knowledge/information in the inner setting and compatibility with current clinical workflows. Overall, 43% reported interpreting results within the correct time window, while 52% reported reading the result too early (10-20 minutes). At interpretation, 66% reported having ever used the manufacturer's reference card; consistent reference card availability was also noted as a challenge by those who used the card. Without a reference card, varied and subjective interpretations were described. Formal training on Determine-LAM performance and interpretation was uncommon: 3% were taught at university, 11% by their facility, and the remainder via informal or self-training. After a positive result, most responders (69%) reported that they would start tuberculosis treatment immediately, whereas others reported needing to follow additional steps. Use outside of guidelines was common: 15% reported using Determine-LAM in patients already on tuberculosis treatment, 29% have performed Determine-LAM in HIV-negative adults and 5% on samples other than urine (e.g. cerebrospinal fluid). Responders recommended improved test and reference card accessibility, training and oversight, along with innovation design and cost as areas to improve implementation.

Conclusions: In real-world clinical settings in South Africa, Determine-LAM implementation appears highly variable and does not consistently adhere to guidelines. Formal training, tailoring systems to improve usability, and consistent access (to test and reference card) are needed. While Determine-LAM is available in South African healthcare systems, reported poor fidelity among providers suggests missed opportunities for patients to reap survival benefit observed in randomised trials, and risks over-diagnosis and over-treatment.

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When Innovation Disrupts Demand: Early Warning Signals of a Rapid Shift from CAB-LA to Lenacapavir Injectable PrEP in Ebonyi State, Nigeria

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Background: Pre-Exposure Prophylaxis (PrEP) is a highly effective HIV prevention intervention, reducing the risk of sexual HIV acquisition by up to 99% when used as prescribed. The advent of long-acting injectable PrEP has expanded prevention options beyond daily oral regimens, offering greater convenience and potentially improving adherence. Lenacapavir (LEN), a six-monthly injectable PrEP, represents a major innovation in HIV prevention with the potential to enhance client acceptability and adherence to reinjection schedules. However, this introduction may rapidly influence client preferences, with important implications for commodity forecasting, procurement, and supply chain management. This study assessed early uptake trends of Cabotegravir Long-Acting (CAB-LA) and LEN PrEP in Ebonyi State, Nigeria, between January and June 2026, and examined the potential implications for HIV prevention programming.

Methods: A retrospective cohort analysis of clients initiated on injectable PrEP between Q1 and Q2 2026 was conducted across 6 supported facilities following data extraction from service delivery tools. Trends for uptake of CAB-LA and LEN PrEP were compared using programme monitoring data. Percentage changes between quarters were calculated to assess shifts in client preference and identify potential implications for commodity management.

Results: The result showed a marked shift in injectable PrEP preference following the introduction of LEN PrEP. CAB-LA uptake declined by 70. %, from 87 initiations in Q1 2026 to 26 initiations in Q2 2026. In contrast, LEN PrEP though launched in Q2, increased from zero initiations in Q1 to 263 initiations in Q2, accounting for 91% of all injectable PrEP initiations during the quarter. The rapid uptake of LEN suggests strong client preference for a six-monthly prevention option, likely driven by its convenience, discretion, and reduced adherence burden.

Conclusion: The rapid uptake of LEN PrEP signals a significant shift in client preference and underscores the need for responsive forecasting and commodity management systems. Real-time monitoring of uptake trends can help prevent commodity wastage and optimize resource allocation during the scale-up of new HIV prevention interventions especially in resource limited settings.

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Digitalizing Public Health Data Systems: Nationwide Deployment of DHIS2 for Integrated Disease Surveillance in Nigeria

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Background: The multiple Excel templates used for program reporting across 23 states, with 3,000 PPM hub facilities under GC6, have led to fragmented data systems, lengthy reporting times, and frequent inconsistencies. The expanded mandate under GC7, now covering 36+1 states, more than 20,000 organizational units, and the integration of TB, HIV, NSP, and maternal health interventions, demands a scalable digital reporting platform.

Methods: The Principal Recipient (IHVN) transitioned over 450 indicators and six legacy reporting tools into DHIS2, incorporating enhanced disaggregation and automated validation rules. The platform was architected to accommodate 4,000 PPM hubs, 10,000 community TB screening spokes, and 6,000 service delivery points (SDPs) for pregnant women testing. Capacity-building efforts included virtual introductory sessions followed by clustered in-person trainings across all states, reaching 774 Linkage Coordinators (one per LGA), five state headquarters staff in each of the 36+1 states, two headquarters staff from each of the 10 sub-recipients, and approximately 30 PR headquarters and regional personnel—amounting to more than 1,000 newly onboarded users. A post-training assessment was conducted to evaluate participants' proficiency in dashboard development, pivot-table generation, and analytic interpretation within DHIS2.

Results: Mean report generation time reduced from 16 working hours to <5 minutes, an efficiency gain of 99% and data inconsistencies declined by 70% post-transition to DHIS2. Reporting timeliness improved from 20% to 90% of states reporting on schedule. Another important output is that 60% of trained users demonstrated independent proficiency in DHIS2 analytics functions. System harmonization reduces workload, reducing burnout and delays for PR and SR teams.

Conclusion: The deployment demonstrates that DHIS2 can scale effectively to national-level, multi-disease community programs with >20,000 organizational units. Systematic capacity building and structured indicator harmonization have been critical to improving data quality, efficiency, and strengthening decision-making across Nigeria's TB and community health interventions.

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Patient and Provider Preferences for Long-Acting Tuberculosis Preventive Therapy

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Background: Tuberculosis preventive therapy (TPT) is a key intervention for tuberculosis (TB) elimination. The introduction of long acting (LA) TPT has the potential to enhance adherence, minimize treatment interruptions, improve completion rates, and extend protection against tuberculosis.

Methods: We conducted a cross-sectional in-person survey among patients in two high-burden TB countries to evaluate preferences, and concerns about LA formulations for TPT. The survey compared oral medication to long-acting injections; implants; and microneedle patches (MAPs). An online survey of healthcare providers (HCPs) in low- and middle-income countries (LMICs) assessed attitudes toward and perceived feasibility of implementing LA formulations of TPT. Data are summarized by descriptive statistics.

Results: We recruited 409 patients (India, n = 209; South Africa, n = 200) and 94 HCPs from 25 LMICs. Mean age of patient respondents was 40 years; 35% were male, and 26% reported a history of TPT. Injectable TPT was the most preferred modality, followed by pills, implants, and MAPs. Notably, 304 patients (75%) expressed a strong willingness to try injectable TPT, particularly among those with prior use of injectable medication compared to those without (73% versus 27%; p <0.001). 207 (68%) of patients thought injectable TPT would be the most effective. Among parents and guardians, 75% (132 of 176) of those with children <12 years and 79% (127 of 161) of those with children ≥12 years were willing to have their child receive injectable TPT. For adults, the perceived benefits of injectables compared to pills included ease of administration (79%) and perceived efficacy (75%). However, 45% of patients expressed concern about the potential ineffectiveness and prolonged side effects of injections (40%). 90% (73/81) of HCPs were willing to prescribe LA-TPT if efficacy, safety, and cost are comparable to oral medication. Among providers, 43% (34/79) favoured injectables, while 18% (14/79) favoured implants and 13% (10/79) MAPs. Cost emerged as a significant factor influencing providers' willingness to adopt LA TPT, with 75% willingness if cost is comparable to oral pills compared to 25% if cost were doubled.

Conclusion: Injectable TPT was the preferred LA-TPT formulation among patients and providers in our survey. At scale, injectable TPT may be highly acceptable and feasible if concerns of cost and safety are addressed.

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Dual-Layer Community Support for PMTCT: Reducing HIV Seroconversion among HIV-Exposed Infants in Eswatini

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Background: Eswatini has made significant progress toward eliminating mother-to-child transmission of HIV; however, gaps remain in adherence to PMTCT services at community and household levels. The Young Heroes Project implemented a community-based PMTCT model across 34 constituencies from October 2025 to March 2026, aiming to prevent HIV seroconversion among HIV-Exposed Infants (HEIs).

Methods: The project utilized the Expert Mother Groups (EMG) model, where HEI caregivers along with pregnant and breastfeeding women (PBFW), both HIV-negative and HIV-positive, were organized into peer support groups. These groups were facilitated by trained Expert Mothers women with lived experience of pregnancy and breastfeeding who provided mentorship, promoted ART adherence, supported adherence to Early Infant Diagnosis (EID) testing schedules, information on HIV transmission, antenatal care (ANC) booking, infant feeding, and safe breastfeeding practices. At the household level, Home Visitors conducted one-on-one follow-up visits to reinforce treatment adherence and EID compliance. HEI caregivers were reminded of testing schedules and accompanied to health facilities based on need. The integration of peer-led Expert Mother Groups with structured household-level follow-up and caregiver accompaniment creates a dual-layered community PMTCT system that strengthens continuity of care beyond health facilities.

Results: A total of 1,107 HIV-exposed infants received monthly follow-up support over six months. Of these, only 3 infants seroconverted, representing a seroconversion rate of 0.2%, compared to the national estimate of 1–3%.

Conclusion: Integrating peer-led support with household follow-up significantly improves PMTCT outcomes. The EMG model strengthens adherence, enhances caregiver knowledge, and increases service uptake, offering a scalable approach to accelerating elimination of vertical HIV transmission in Eswatini.

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Leveraging Youth Voices to Drive HIV Treatment Literacy and Viral Load Suppression among Adolescents and Young People: A Continuous Quality Improvement Approach

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Background: Adolescents and young people (AYP) living with HIV face unique challenges in achieving optimal treatment outcomes, particularly when caregivers have not disclosed their HIV status to them. Low treatment literacy undermines medication adherence and viral load suppression. This study examines whether a community scorecard feedback mechanism, the Scorecard intervention combined with targeted quality improvement (QI) interventions could improve healthcare provider competency scores and viral load suppression (VL) rates among AYP aged 10–24 years enrolled in a young people focused HIV program.

Materials and Methods: The scorecard was administered semi-annually to AYP beneficiaries across three age cohorts: 10–14 years (29%), 15–19 years (41%), and 20–24 years (30%), with a gender distribution of 49% male, 46% female, and 5% other. The scorecard captured youth-reported perceptions of healthcare provider competency, including dimensions of knowledge-sharing and confidence-instilling behaviours. Scorecard data were analysed at one point in 2024 and two points in 2025, generating percentage scores for HCP competency. Findings informed sequential QI cycles: (1) caregiver sensitisation sessions on the importance of disclosure, and (2) a structured disclosure assessment identifying 284 undisclosed beneficiaries, followed by targeted caregiver and beneficiary disclosure support interventions. Changes in HCP competency and VL results across scorecard cycles were compared as primary outcome measures.

Results: At baseline in 2024, HCP competency stood at 88% and viral load suppression rate at 89%. Qualitative feedback from scorecard sessions revealed that AYP attending teen club sessions lacked awareness of why they were receiving treatment, indicating a significant treatment literacy gap rooted in non-disclosure. Following caregiver sensitisation sessions, the early 2025 scorecard recorded an improvement in HCP competency to 90% and viral load suppression rate to 91%, demonstrating a positive but partial effect. Subsequent disclosure assessment identified 284 beneficiaries who remained undisclosed. Targeted disclosure support interventions for this cohort were then implemented. The final scorecard cycle recorded HCP competency at 92% and viral load suppression rate at 95%, representing improvements of 4 percentage points and 6 percentage points respectively from baseline.

Conclusions: A participatory youth friendly scorecard mechanism, when systematically linked to responsive QI cycles, is effective in improving both healthcare provider competency perceptions and viral load suppression outcomes among AYP living with HIV. The progressive gains observed across three scorecard cycles demonstrate that young people's feedback, when acted upon through structured caregiver disclosure interventions, creates measurable improvements in treatment literacy and clinical outcomes. The identification and targeted support of 284 undisclosed beneficiaries was a critical inflection point, with viral load suppression rate rising from 91% to 95% following these interventions. These findings affirm that disclosure-centred, youth-friendly, informed QI strategies are a viable and impactful approach to closing treatment outcome gaps in AYP HIV programs and underscore the importance of institutionalising community feedback loops as a standard component of adolescent and young people HIV service delivery.

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Co-Creating TB/HIV Testing Services with Communities; A Participatory Action to Strengthen Implementation of Community-Led HTS in Pregnant Women in Katsina State, Nigeria

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Background: Despite national progress in HIV and TB/HIV services, underserved communities in Katsina State still face barriers such as stigma, limited access to facility-based care, and low community ownership. Pregnant women (PW) remain particularly vulnerable., KNCV Nigeria with funding from the Global Fund grant cycle 7, implemented a community co-creation model, engaging communities to design integrated HIV testing and TB screening strategies. This study evaluates effectiveness of this approach in improving access, uptake, and community leadership.

Materials and Methods: A participatory implementation where community members, stakeholders, traditional birth attendants (TBAs), mentor mothers, and community volunteers were actively engaged from January to December 2025 across six LGAs in Katsina State to jointly identify barriers, map unconventional HTS and TB screening sites, then design demand-creation strategies, and carry out the intervention. TB screening Services was integrated and referral linkages established. Monitoring tool was aligned with national reporting systems and data collected from routine HTS; TB screening registers was analysed using descriptive statistics.

Results: Findings reveal a total of 8,742 PW not accessing antenatal care were reached, with 6,294 (72%) consenting to HIV testing, of which 34% aged between 15 to 24 years. Testing at community selected sites increased uptake by 34% compared to facility only approaches. HIV positivity yield increased from 1.2% to 2.1% following co-created strategies, and all HIV positive (100%) PW were linked to care. Integrated TB screening identified 263 (3%) persons presumptive for TB; 241 (92%) were tested, 18 (8%) were diagnosed with TB, 4 persons were TB/HIV co-infected, and 17 (94%) successfully started treatment.

Conclusions: The participatory process engenders community ownership, trust, improved service reach, testing uptake, linkage to care, and context-specific solutions for pregnant women in unconventional settings in Katsina State. This community-led model provides a scalable approach for expanding integrated TB/HIV services and accelerating progress toward eliminating mother-to-child transmission in resource-limited settings.

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Adapting KPLHS-Informed Community-Based HIV Testing and Linkage for MSM in Indonesia: A Multi-Stakeholder Formative Study

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Background: Men who have sex with men in Indonesia experience persistent barriers to HIV testing and linkage to care, including pervasive stigma and confidentiality concerns. To address these gaps, this formative study aimed to adapt a trust-oriented, Key Population-Led Health Services (KPLHS)-informed community-based service model for HIV testing and linkage. Specifically, the study evaluated the readiness to implement supervised capillary blood-based rapid testing delivered by trained community actors.

Material and Methods: A multi-stakeholder qualitative formative study was conducted to inform a planned pilot in South Sulawesi, Indonesia. Data were collected through eight focus group discussions and 22 in-depth interviews involving 64 participants. Participants included service beneficiaries who are men who have sex with men, prospective community health workers, community-based organization staff, healthcare providers, policy stakeholders, implementation partners, and academics. The data were evaluated using inductive thematic analysis, followed by mapping to the Consolidated Framework for Implementation Research (CFIR), Implementation Outcomes Framework (IOF), and Expert Recommendations for Implementing Change (ERIC) to identify determinants of readiness, implementation strategies, and anticipated outcomes.

Results: The qualitative analysis revealed that participants viewed the KPLHS-informed model as acceptable and appropriate, provided the services were confidential, nonjudgmental, discreet, flexible, and delivered by trusted community actors. Beneficiaries and community health workers strongly emphasized the importance of privacy, peer trust, and flexible access. Conversely, healthcare providers, policy stakeholders, and academics highlighted that operational feasibility strictly required legal clarification of community health worker roles, competency-based training, standard operating procedures, continuous supervision, quality assurance, and stable financing. Furthermore, readiness varied geographically; the urban setting (Makassar) demonstrated higher pilot readiness due to established service networks, whereas the peri-urban/rural setting (Bulukumba) required further preparation to strengthen trusted access pathways.

Conclusions: A KPLHS-informed community-based service model holds substantial potential to expand community-led HIV testing among men who have sex with men in Indonesia. The framework analyses demonstrate that for the model to be viable, relational trust must be strongly supported by institutional collaboration, legal authorization, and rigorous structural safeguards. Establishing clear referral pathways and quality assurance systems is a prerequisite for safe and effective integration into the national healthcare framework.

POSTER ABSTRACT PRESENTATIONS

HIV, Infectious Diseases, and Global Health Science of Implementation Conference (VISTA) 2026

In-Person Meeting

21 - 23 September 2026
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Expanding Healthcare Access for street- involved Youth in Western Kenya Through Peer Navigation

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Background: Street-involved youth (SIY) face significant barriers to accessing healthcare, including stigma, unstable housing, poverty, lack of identification documents, and limited trust in formal health systems. These barriers often result in delayed healthcare seeking and poor engagement with services. Through the peer navigation model, these barriers have been addressed by improving reach of healthcare services among SIY through linkage to and retention in services.

Methods: The Peer Navigator Project (PNP) was a mixed-methods implementation study from 2021-2024 across three AMPATH-affiliated sites in Western Kenya: Moi Teaching and Referral Hospital (MTRH) Rafiki Centre, Huruma Sub-County Hospital, and Kitale County Referral Hospital. Trained peer navigators with lived experience of street involvement and/or HIV conducted outreach, referral, linkage, and follow-up among SIY aged 16–29 years. Quantitative data were collected using REDCap linked with biometric identifiers. Referrals were tracked across HIV services, sexual and reproductive health (SRH), mental health, harm reduction, and other health and social support services. Qualitative data from focus group discussions and key informant interviews with SIY, peer navigators, healthcare workers, and community stakeholders were analyzed thematically.

Results: Between 2021 and 2024, peer navigators enrolled 631 SIY and completed 3,367 follow-up encounters. A total of 1,901 referrals were facilitated across healthcare and social service domains. Sexual and reproductive health services accounted for the largest proportion of referrals (808; 42.5%), followed by HIV services (544; 28.6%), mental health services (282; 14.8%), harm reduction services (216; 11.4%), and other health and social services including housing, employment, and social work support (51; 2.7%). Qualitative findings identified trust, shared lived experience, proactive outreach, and accompaniment to services as key mechanisms through which peer navigators expanded healthcare reach. One participant explained, “Before this program it was difficult to access services. With the peer navigator, things became easier and less frustrating for us.” Healthcare providers similarly emphasized the role of peer navigators in maintaining continuity of care among highly mobile youth, noting that “sometimes they get lost to follow-up and the peer navigator brings them back to care.”

Conclusion: Peer navigators substantially increased linkage to healthcare and social support services among SIY in Western Kenya. Through shared lived experiences, they were able to build trust by reducing barriers to care, therefore facilitating connections to HIV, sexual and reproductive health, mental health, and harm reduction care, among other healthcare and social services. Peer-led navigation represents a scalable implementation strategy for improving equitable healthcare access among marginalized youth populations in resource-limited settings.

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Healthcare Worker Acceptability of Injectable Cabotegravir HIV PrEP Delivery to Adolescents and Young Adults in Zambia

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Background: Adolescents and young adults (AYAs) account for approximately 38% of new HIV infections in Zambia. Long-acting injectable HIV pre-exposure prophylaxis (LAI PrEP) offers a promising alternative to daily oral PrEP by addressing adherence challenges. However, as LAI PrEP requires administration by healthcare workers (HCWs), HCW perceptions of delivering LAI PrEP to young people are critical to successful implementation.

Methods: We conducted a cross-sectional survey around Cabotegravir LAI PrEP (CAB-LA) among 210 HCWs across 10 public health facilities in Lusaka and Central Provinces, Zambia. Reluctance to provide HIV prevention services to AYAs was assessed using a Likert-scale. HCW concern that CAB-LA would lead AYA to more sexual risk, pregnancies, or STIs were measured with yes/no questions. We assessed at what risk levels HCWs would recommend injectable PrEP using double-bounded contingent valuation with risk probabilities from 10%-100%. Acceptability was assessed using Sekhon's 8-item Theoretical Framework of Acceptability (TFA) with higher scores indicating greater acceptability, including two added questions: 'general acceptability' and 'perceived appropriateness'. We dichotomized responses into high (strongly agree) versus low (agree, disagree, strongly disagree). We analyzed data using descriptive statistics and multivariable Poisson regression with robust variance to examine factors associated with high acceptability.

Results: Reluctance to provide HIV prevention services to varied gender and age groups ranged from ~12% for 18–24-year-old young men (12.7%) and women (11.8%) to 15.2% for 16-17-year-old young men and 22% for 16–17-year-old young women. Just under half of HCWs (45.2%) believed CAB-LA would lead AYA to greater sexual risk, with 51.0% believing it would increase pregnancies and 60.5% increased STIs.

Provider endorsement of injectable PrEP use for young people remained above 90% across varying hypothetical HIV risk levels (20-100%), dropping to 87% at a 10% acquisition risk.

Overall, high acceptability of delivering CAB-LA PrEP was 44.3%, with a mean general acceptability of 3.14 (min 1.3, max 3.9, IQR 2.9-3.4). Mean scores across individual TFA domains ranged from 3.0-3.5, except for 'negative moral or ethical consequences associated with HIV PrEP injection' and 'required effort to deliver CAB-LA', showing lower acceptability (means 2.4 and 2.0, respectively).

Providers without concerns about increased AYA risk-taking had higher acceptability across affective attitude (PR=1.31; p=0.03), fairness (PR=1.53; p=0.04), perceived effectiveness (PR=1.50; p=0.01), and intervention coherence (PR=1.49; p=0.01).

Willingness to provide PrEP across all age groups was associated with higher general acceptability (PR=1.56; p=0.01), ethicality (PR=3.24; p=0.01), fairness (PR=2.07; p<0.01); intervention coherence (PR=1.57; p=0.01), self-efficacy (PR=1.60; p<0.01), low opportunity cost (PR=2.25; p=0.004), and appropriateness (PR=1.57; p=<0.01).

Compared to lay health workers, nurses and midwives had lower general acceptability (PR=0.59 p= 0.01), self-efficacy (PR=0.66 p=0.01), and appropriateness (PR=0.60, p=0.01).

Conclusion: While just under half of HCWs found CAB-LA highly acceptable, provider willingness to provide HIV prevention services and concerns about risk-taking were associated with acceptability. To promote positive HCW-AYA interactions, LAI PrEP implementation plans need to start with HCWs where they are, cultivate support for HIV prevention across age groups, with emphasis on young women aged 16-17, and integrate measures to prevent STIs and unplanned pregnancies.

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Urban-Rural Differentials in HIV/AIDS Knowledge, Behaviour, and Attitude of Adolescents and Young People Living with HIV in Kwekwe District, Zimbabwe

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Background: Adolescents and young people living with HIV (AYPLHIV) face significant challenges in HIV prevention, treatment, and care, with urban-rural disparities widely documented. Kwekwe District, Zimbabwe, carries the highest HIV prevalence (20.4%) in Midlands Province, yet localized evidence on urban-rural differentials in HIV knowledge, attitudes, and behaviours among AYPLHIV remains scarce. This study examined these differentials using the Health Belief Model (HBM) and Knowledge, Attitudes, Practices, and Behaviours (KAPB) framework to inform targeted, context-sensitive interventions.

Materials and Methods: An analytic cross-sectional study was conducted among 428 AYPLHIV (214 urban, 214 rural) aged 10–24 years in Kwekwe District, recruited via stratified random sampling from registered healthcare facilities. Data was collected using a validated structured KAPB/HBM questionnaire incorporating Likert-scale and True/False items. Analysis was performed in Stata using descriptive statistics, chi-square tests, and multivariate logistic regression. Ethical approval was obtained from the Joint Research Ethics Committee (JREC/362/2024).

Results: Of 428 participants, 76.6% were female and the majority (61.7%) were aged 20–23 years. HIV knowledge levels were generally high across both settings; rural participants demonstrated slightly higher adequate knowledge (74.8%) than urban participants (69.2%), though this difference was not statistically significant (p=0.197). Education was the strongest independent predictor of HIV knowledge: participants with secondary education (AOR=4.64, 95% CI: 1.81–11.87, p=0.001) and tertiary education (AOR=4.49, 95% CI: 1.77–11.38, p=0.002) were significantly more likely to have high knowledge compared to those with no formal schooling. Contrary to expected urban advantage, rural participants demonstrated significantly higher ART adherence (94.9%) compared to urban participants (81.8%; p<0.001), with rural residence the strongest independent predictor of adherence after adjusting for confounders (AOR=5.65, 95% CI: 2.48–12.87, p<0.001). All non-adherent participants had low HIV knowledge, demonstrating a strong and significant association between knowledge and adherence (p<0.001). Health belief attitudes were slightly more favourable among rural participants (73.8% high attitude vs. 66.4% urban), though this difference was not statistically significant (p=0.091).

Conclusions: Contrary to conventional assumptions, rural AYPLHIV in Kwekwe District demonstrated comparable HIV knowledge and significantly better ART adherence than their urban counterparts. Education is the primary driver of HIV knowledge, while rural residence independently predicted better ART adherence, suggesting that community-based and peer-led support structures may be protective in rural settings. These findings challenge urban-centric assumptions in HIV programming and advocate for strengthened educational interventions, peer-led adherence support aligned with HBM principles, and targeted strategies to address the emerging ART adherence gap among urban AYPLHIV.

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Maintaining TB Case Detection During a Funding Shock, Impact of a Rapid Program Quality Efficiency Response in Lagos, Nigeria

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Background: TB case detection in Lagos State is supported by USG-funded ad-hoc staff providing active case finding, diagnostics, and data management. In Q1 2025, a USG Stop Order led to their abrupt withdrawal, disrupting services. A Program Quality Efficiency (PQE) intervention was rapidly deployed to optimize existing government systems and mitigate service delivery gaps.

Objectives: To assess the effectiveness of the PQE intervention in stabilizing TB case detection following ad-hoc staff withdrawal.

Methods: A quasi-experimental before and after study using routine data from the Lagos State TB programme across 24 high-volume facilities in 20 LGAs previously supported by ad-hoc staff. Four time periods were compared: pre-Stop Order (Q4-2024), Stop Order (Q1-2025), PQE implementation (Q3-2025) and post-Stop Order support resumption (Q4-2025).
PQE activities included monthly data-driven performance reviews, task-shifting to facility staff, workflow redesign to integrate TB screening into routine services, and targeted mentorship to optimize existing human resources.
Indicators analyzed were TB screening, presumptive TB identification, diagnosed TB cases and notifications. Descriptive trend and percentage change analyses were conducted across periods.

Results: Following the Stop Order, screening declined by 53% (102,606 to 48,534) and presumptive TB by 48% (13,931 to 7,197). Notifications decreased by 19% (1,230 to 996). During PQE implementation, screening partially recovered to 69,942 (+44% from Stop Order), though notifications declined further to 909. After support resumed, screening increased to 72,267 and notifications to 1,000, but remained below pre-Stop levels. Diagnosed cases were relatively stable (1,481 pre vs 1,171 post), indicating improved efficiency despite reduced inputs.

Conclusion: The PQE intervention enabled partial recovery of TB services across 24 facilities in 20 LGAs by improving efficiency within constrained systems. However, full recovery required renewed external support. Embedding efficiency-driven approaches within routine systems is essential for resilience to funding shocks.

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Sexual Behaviors, Sexual Violence and Their Relationship with HIV Stigma among Adolescents and Youth Living with HIV in Kenya

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Background: Adolescents and youth with HIV (AYH) have poorer treatment outcomes exacerbated by HIV stigma, contributing to onward transmission. To support the development of focused anti-stigma interventions, we assessed sexual behaviors, sexual violence, and their relationship with HIV stigma.

Methods: We utilized baseline data from an ongoing trial across 30 facilities in Kenya evaluating the effectiveness of a psychological intervention among AYH ages 16–24 years with depressive symptoms (Patient Health Questionnaire-9 [PHQ-9] scores>4). Poor adherence was defined as missing ≥2 doses of antiretroviral therapy in the past 30 days. Risky sexual behavior was characterized by any unprotected sex within the last three months, and life time history of transactional sex. Sexual partner type was categorized as stable, casual, or none. HIV-related stigma measured using the Wright's brief youth stigma scale was dichotomized (Yes if score > median). Odds ratios (ORs) with 95% confidence intervals (95%CI) were estimated for associations between participant characteristics and sexual behaviors and HIV stigma.

Results: Of the 600 AYH enrolled, 67% were female and median age 19.6 years (IQR: 17–22). Majority (60%) were students, unemployed [among those out of school] 182/241 (76%), 68% were single, and 16% double orphans. Majority (85%) had good treatment adherence. Majority (51%) reported ever having sex, with a median sexual debut age of 17 years (IQR: 16–19) and median of two lifetime partners (IQR: 1–3). A third (34%) had a stable sexual partner, 3.5% a casual partner, and 47% no current sexual partner. Only 23.8% and 42.6% reported inconsistent condom use among those with casual and stable partners respectively. Transactional sex was reported by 6%. Experiences of sexual violence were reported by 13%, with a median age of 16 years at first experience (IQR: 14–20). Anticipated stigma was reported by 53%, perceived stigma by 40%, experienced stigma by 14%, and internalized stigma by 13%. Older age (OR: 1.17 [95%CI: 1.09-1.26]), being in a relationship (OR: 1.56 [95%CI:1.07-2.28]) and sexual violence (OR: 3.30 [95%ci:1.74-6.27]) were associated with any HIV-related stigma. Female gender (OR: 1.74 (95%CI: 1.23-2.45]) was associated with only anticipated stigma, having a casual partner (OR: 3.38 [95% CL: 1.31 – 8.66]) was associated with only experienced stigma, and sexual violence with all domains of HIV stigma.

Conclusion: HIV-related stigma remains common among AYH, with anticipated and perceived stigma affecting a substantial proportion. Sexual relationships and sexual violence are key risk factors for HIV-related stigma, and should be considered when developing anti-stigma interventions. Inconsistent condom use among sexually active adolescents further highlights the need for integrated, adolescent-centered HIV and sexual and reproductive health services

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Expanding Short-Course Tuberculosis Preventive Therapy through Private Health Facilities in Nigeria: Programmatic Evidence from 2024–2025

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Background: Tuberculosis preventive therapy (TPT) is an important intervention for reducing progression from TB infection to active disease among people at increased risk. In Nigeria, the six-month isoniazid regimen (6H) has historically been the most widely used TPT option, but longer treatment duration can affect completion in routine programme settings. Shorter rifamycin-based regimens, including 1HP, 3HP, and 3HR, have been introduced to provide more acceptable and feasible options for eligible clients. Private health facilities serve many people with TB and their household contacts, yet their role in TPT delivery has often been less visible than their contribution to case finding. Under the Global Fund GC7 grant, the Institute of Human Virology Nigeria supported TPT delivery through private health facilities under the Community–Public–Private Mix (CPPM) project. This study assessed changes in TPT initiation, regimen uptake, and treatment completion during programme scale-up.

Methods: A retrospective analysis of routine programme data from private health facilities was conducted for January 2024 to December 2025. Data was extracted from contact management registers and DHIS2 platform. Eligible individuals included clients identified through routine TB services and contact investigation who met national criteria for TPT initiation. TPT initiations were analysed by regimen, including 1HP, 3HP, 3HR, and 6H. Regimen uptake was compared between 2024 and 2025. Treatment completion was assessed using cohort analysis for clients with sufficient follow-up time, and regimen-specific completion was compared between the 2023 and 2024 cohorts. Descriptive statistics were used to summarise eligibility, initiation, regimen distribution, and completion.

Results: During the review period, 226,667 individuals were eligible for TPT. TPT initiations increased from 41,234 in 2024 to 108,819 in 2025, representing a 164% increase. Uptake of shorter regimens expanded during implementation. Initiations on 1HP increased from 5,234 (12.7%) in 2024 to 42,567 (39.1%) in 2025, while 3HP increased from 1,234 (3.0%) to 23,891 (22.0%). In contrast, utilization of the longer 6H regimen declined from 31,310 (75.9%) to 28,127 (25.8%). Overall TPT completion improved from 69.0% among the 2023 cohort to 72.0% among the 2024 cohort. The largest regimen-specific gains in completion were observed for 1HP, increasing from 73.1% to 79.4%, and 3HP, increasing from 71.1% to 77.5%.

Conclusion: TPT delivery through private health facilities expanded substantially between 2024 and 2025, with a clear shift from the longer 6H regimen toward shorter rifamycin-based options. The increase in TPT initiation and modest improvement in completion suggest that private-sector delivery can support TB prevention when shorter regimens are made available and monitored through routine programme systems.

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Keeping Secrets First: An Interpretative Phenomenological Study of Stigma and Oral Healthcare Experiences among People Living with HIV in China

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Background: People living with HIV(PLWH) may experience oral health problems and unmet dental needs, but oral healthcare can be shaped by stigma, disclosure concerns, perceived refusal of care, and privacy risks. In dental settings, procedures involving bleeding, blood tests, or close contact may turn routine oral care into a site of anticipated exposure and unequal treatment. This study aimed to explore oral healthcare experiences among PLWH in China, interpret the subjective meanings of perceived inequity, refusal, stigma, and HIV disclosure in dental settings, and identify care gaps to inform more equitable oral health services.

Materials and Methods: A qualitative study using interpretative phenomenological analysis was conducted. Thirteen PLWH in Changsha, Hunan Province, China, participated in semi-structured, face-to-face interviews. Interviews explored participants' oral health concerns, oral healthcare-seeking experiences, HIV disclosure decisions, perceived refusal or differential treatment, and expectations for oral healthcare. Interviews were audio-recorded, transcribed verbatim, and analyzed using an idiographic, case-by-case approach. Each account was examined to understand how participants made sense of oral healthcare after HIV diagnosis, before patterns of convergence and divergence were considered across cases to generate superordinate themes and sub-themes.

Results: Four superordinate themes were identified. Anticipated Being Stigmatized reflected participants' expectations of refusal, differential treatment, mistrust, and privacy loss in oral healthcare settings, shaped by previous experiences, peer stories, and concerns about HIV-related information being exposed. Delayed Seeking Oral Care described how dental problems were commonly postponed or self-managed until pain, dysfunction, or visible appearance-related concerns exceeded a personal threshold. Keeping Secrets First captured the central dilemma between seeking oral treatment and protecting HIV status. Non-disclosure was used to preserve privacy, dignity, and control, although bleeding, invasive procedures, or blood tests could make disclosure difficult to avoid. Seeking for a "Safe" Oral Care showed that safe care was understood as multidimensional, including safety from refusal, safety from exposure, safety in treatment, and safety in cost and process. Across these themes, oral healthcare was experienced not only as a clinical need but also as a potential site of stigma, identity exposure, and loss of control.

Conclusions: Oral healthcare for PLWH was experienced as more than a clinical need, it was a context in which stigma, secrecy, and safety had to be actively negotiated. Delayed care-seeking and non-disclosure should not be interpreted simply as poor health behavior, but as strategies for protecting privacy, dignity, and control in a care environment perceived as uncertain or unequal. These findings highlight the need for stigma-sensitive, person-centered oral healthcare pathways that make acceptance, confidentiality, infection-control procedures, costs, and referral processes visible and predictable. Nursing and public health practice should support oral health promotion, disclosure-sensitive care navigation, and cross-service collaboration to improve equitable access to oral healthcare for PLWH.

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Using a Client Audit Tool to Strengthen Continuity of HIV Treatment among Persons Living with HIV in Tororo and Butaleja Districts, Eastern Uganda

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Background: Continuity on Antiretroviral (ART) treatment is fundamental, critical to attaining sustained viral suppression (VLS) rates and epidemic control. In Tororo and Butaleja districts, the average client retention and viral load coverage (VLC) were at 85% and 82%, respectively, as compared to the expected 95% targets. We describe how we used the client audit tool to improve retention in care and viral coverage across 35 supported ART sites in the two supported districts.

Methods: Between July 2025 and March 2026, a retrospective programmatic review was conducted using routinely collected facility data across 35 Baylor-supported ART sites (23-Tororo and 12-Butaleja). Multi-disciplinary teams comprising health workers, counsellors, linkage facilitators, and data assistants analysed client files. With support from the Baylor Foundation Uganda, training was provided on extracting the client audit tool from the electronic medical records system and its use at the facility level to support appointment reminders, guide phone calls, and provide all services to clients at the point of contact. The team also set out to find out the major causes of interruptions or missed appointments among clients encountered through client interviews.

Results: Implementation of the audit tool improved treatment retention. In Butaleja, active clients in care (TX-CURR) increased from 3,096 in July–September 2025 to 3,196 by January–March 2026, narrowing the gap toward the district target of 3,395 while Viral load coverage improved from 80% to 94.4%. In Tororo, TX-CURR increased from 12,472 to 13,105 over the same period, surpassing the district target of 12,348, while viral load coverage improved from 82% to 96%. Overall, 733 additional clients were gained across the two districts within three reporting quarters. Qualitative interviews with clients revealed major causes of interruption, including mobility for work, undocumented transfers, stigma, and delayed follow-up after missed appointments.

Conclusion: The client audit tool proved to be an effective quality-improvement strategy for identifying treatment gaps, tracing lost clients, and strengthening retention in HIV care. Integrating routine client audits into ART programming enhances accountability, improves TX-CURR performance, and supports progress toward the UNAIDS 95-95-95 targets. This model offers a scalable systems-strengthening approach for sustaining long-term HIV treatment outcomes in high-burden settings.

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From Prevention to Viral Suppression: Comparative Outcomes of Integrated HIV-SRHR Programming for AGYW across Four Nigerian States

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Background: Adolescent girls and young women (AGYW) in sub-Saharan Africa face intersecting HIV and sexual and reproductive health and rights (SRHR) challenges, with persistently high new infections and suboptimal treatment outcomes in many countries. Under the Global Fund GC7 grant, the Institute of Human Virology Nigeria (IHVN) implemented an integrated community-facility model across Anambra and Ebonyi (South-East), Gombe (North-East), and Kwara (North-Central) states, combining HIV prevention, testing, ART linkage, TB screening, and viral load monitoring with age-appropriate SRHR counselling and peer outreach.

Methods: Routine programmatic data from January 2024 to December 2025 were analysed. Integration strategies included blended community- and walk-in delivery, peer mobilisation, and systematic linkage of services. Indicators (prevention reach, HIV testing, positivity yield, ART linkage, active enrolment, and viral suppression <1,000 copies/ml) were compared across the four states and benchmarked against regional trends in sub-Saharan Africa.

Results: IHVN reached 1,067,401 AGYW with integrated services, predominantly via community platforms (>90%). HIV testing covered ~557,293 AGYW, identifying 983 new positives (0.18% positivity). Linkage to ART was near-perfect (97–100%) across all states. By October–December 2025, active ART enrolment was highest in Anambra (3,790), followed by Gombe (2,808), Ebonyi (2,467), and Kwara (1,230), with northern states showing faster quarterly scale-up. Viral suppression exceeded 90% among those tested in later quarters. In contrast, many sub-Saharan African programmes report lower testing uptake, ART linkage (often 70–85%), and overall viral suppression among AGYW (typically 45–75% in earlier surveys from countries like Kenya, Uganda, Zambia, and South Africa), alongside higher positivity yields and slower community reach.

Conclusion: Despite regional differences in scale, IHVN's SRHR-HIV integration model achieved superior linkage and viral suppression compared to broader sub-Saharan African benchmarks. These findings underscore the value of adaptable community-peer-facility strategies for equitable AGYW programming in diverse, high-burden settings and offer transferable lessons for the continent.

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Childhood Tuberculosis Detection through Private-Sector Contact Investigation in Nigeria: Yield and Number Needed to Screen, 2024–2025

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Background: Childhood tuberculosis (TB) remains underdiagnosed in many high-burden countries, leading to avoidable illness, delayed treatment, and continued household transmission. Children who live with or have close contact with bacteriologically confirmed TB patients are at increased risk of infection and disease, yet contact investigation is not always optimally implemented in routine service settings. In Nigeria, private health facilities provide care to many families but are often less integrated into structured TB contact investigation activities. Under the Global Fund Community–Public–Private Mix (CPPM) project, private facilities were supported to identify, screen, and evaluate child contacts of TB index cases. This study assessed the contribution of contact investigation to childhood TB detection in private health facilities.

Methods: We conducted a retrospective analysis of routine programme data from contact investigation activities implemented in private health facilities between January 2024 and December 2025. Child contacts aged 0–14 years were identified from bacteriologically confirmed TB index cases and screened for TB symptoms according to national guidelines. Children classified as presumptive TB cases were referred for diagnostic evaluation through facility-based and linked diagnostic services. The contact investigation cascade was assessed using the number of child contacts identified, screened, presumptive TB, evaluated, and diagnosed with TB. Diagnostic yield was calculated as the proportion of screened child contacts diagnosed with TB, and the number needed to screen was calculated as the number of screened contacts required to identify one childhood TB case. Findings were also disaggregated by age groups.

Results: A total of 123,907 child contacts were identified through private health facilities, of whom 118,542 (95.7%) were screened for TB symptoms. Among those screened, 19,031 (16.1%) were classified as presumptive TB cases, and 17,610 (92.5%) completed diagnostic evaluation. Overall, 3,103 children were diagnosed with TB, representing a diagnostic yield of 2.6% among screened child contacts and a number needed to screen of 38. Yield differed by age group. Among children aged 0–4 years, 957 TB cases were diagnosed from 42,341 screened contacts, giving a yield of 2.26% and a number needed to screen of 44. Among children aged 5–14 years, 2,146 TB cases were identified from 76,201 screened contacts, giving a yield of 2.82% and a number needed to screen of 36.

Conclusion: Contact investigation implemented through private health facilities identified a substantial number of childhood TB cases and achieved high screening and diagnostic evaluation coverage. The higher yield and lower number needed to screen among children aged 5–14 years show the value of age-disaggregated monitoring for programme decision-making. These findings demonstrate that private health facilities can serve as an effective delivery platform for systematic childhood TB contact investigation when supported with clear screening procedures, diagnostic linkage, and routine cascade review. Sustaining this approach within private-sector TB services can help close childhood TB detection gaps and improve timely access to care for exposed children.

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Impact of Community Antiretroviral Therapy Delivery on Clinical Outcomes among Children and Adolescents Living with HIV: An Emulated Target Trial

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Background: Differentiated service delivery programmes facilitating antiretroviral therapy (ART) collection through community pick-up points ("community ART") simplifies clients' HIV care and reduces the need for clinical visits. Clinical outcomes of adults using community ART are good, however evidence of its effect on children and adolescents living with HIV (CALWH) is lacking.

Methods: We outlined a 12-month target trial to evaluate the effect of community ART referral on retention and viral load (VL) outcomes among CALWH aged 5-18 years and eligible for community ART in KwaZulu-Natal, South Africa. We used routine, de-identified data from 566 primary care clinics from 2020-2025. The association by age category between referral and retention (>90 days late for any visit versus not) and between referral and VL outcomes (<50 copies/mL, >50 copies/mL or not done) were measured using logistic and multinomial logistic regression with a sequential trials approach. Models incorporated inverse-probability-of-treatment and censoring weights, and risk differences (RD) were estimated.

Findings: Between 1 April 2020 and 1 April 2024, 80,237 CALWH collected ART from the 566 clinics with data accessible for this study. During this period, 27.9% of CALWH were referred to community ART at least once, with referral proportions increasing with age and calendar time. A total of 32,009 CALWH were found eligible for community ART at least once before 1 April 2024. From these 32,009 CALWH, we constructed 121,061 person-trials. Across all person-trials, 54.2% CALWH were female and 39.3% used dolutegravir-based regimens.

During follow-up, the median (IQR) number of clinical consultations was 2 (2-3) for those in community ART and 6 (4-7) among those not. Overall, 7.7% CALWH missed visits, 19.4% were viraemic and 9.8% had no VL measurement. The estimated RD (95% confidence interval [CI]) for missed visits for those in community ART versus those not was -0.04% (-2.89%;2.95%) for 5-9-year-olds, 0.47% (-1.04%;2.04%) for 10-14-year-olds, and -3.18% (-4.30%;-2.05%) for 15-18-year-olds. The RD (95% CI) for viraemia and for no VL measurement was 1.62% (-1.60;7.63%) and 2.55% (-1.07%;8.03%) respectively for 5-9-year-olds, -1.10% (-3.73;1.02%) and 1.49% (-0.55%;3.59%) for 10-14-year-olds and -2.78% (-3.73%;-1.00%) and 1.95% (0.57%;3.38%) for 15-18-year-olds.

Interpretation: Among eligible CALWH, community ART referral reduced the burden of clinical visits for clients (and the strain on health system), without evidence of compromising clinical outcomes. Evidence of improvements in outcomes after community ART referral were observed among 15-18-year-olds.

Roll-out of community ART among those who are eligible should be supported, and continued viral load monitoring needs to be prioritised.

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PrEP Screening and Referral across Four Nigerian States: A Comparative Gender Analysis of Program Scale-Up, Entry Points, and Linkage Patterns, 2024-2025

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Background: Pre-exposure prophylaxis (PrEP) is a core HIV prevention intervention for people at substantial risk of HIV acquisition. As PrEP programs expand, understanding who is reached, where screening occurs, and how effectively screening translates into referral is critical for improving implementation performance. We analyzed routine program data from four Nigerian states to assess changes in PrEP screening and referral patterns by gender, service entry point, and year, with the aim of identifying operational strengths and gaps in the screening-to-referral pathway.

Methods: We conducted an analysis of routine PrEP program data from Anambra, Ebonyi, Gombe, and Kwara States for 2024 and 2025. Screening and referral outcomes were disaggregated by gender, service entry point, and year. Descriptive statistics were used to summarize program trends, while chi-square tests and logistic regression were conducted in R to examine differences in referral patterns and predictors of referral completion.

Results: PrEP screening increased from 8,549 in 2024 to 25,772 in 2025, representing a 201% increase, while referrals increased from 7,463 to 18,750, a 151% increase. Despite this expansion, the overall referral rate declined significantly from 87.3% to 72.8% ($p < 0.001$). Screening increased more among females than males (+284% versus +141%), indicating greater program expansion among women. In 2025, community-based screening emerged as the dominant entry point, accounting for 21,254 screenings, compared with 4,088 screenings through outpatient services. In multivariable analysis, referral was significantly associated with year of screening (OR = 0.42, $p < 0.001$), gender (OR = 1.28, $p < 0.001$), and service entry point, with community entry associated with higher odds of referral than outpatient services (OR = 3.45, $p < 0.001$). Chi-square analysis also showed significant gender differences in referral rates in both 2024 and 2025 ($p < 0.001$).

Conclusions: PrEP scale-up across the four states substantially expanded screening volume, particularly among females and through community entry points, demonstrating the value of decentralized delivery models for improving reach. However, declining referral rates during rapid expansion suggest implementation gaps in the transition from screening to referral. These findings highlight the need to strengthen referral systems, monitor gendered patterns of linkage, and optimize community-based pathways to sustain PrEP scale-up and improve HIV prevention impact in real-world settings.

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Optimizing the Psychosocial Care Cascade in the Thetha Nami Ngithethe Nawe (Let's Talk) Youth HIV Prevention Trial: Implementation of a Social Worker-Led Case Management Framework in Rural KwaZulu-Natal

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Background: Despite biomedical advances, antiretroviral-based prevention lacks population-level impact in southern Africa due to sub-optimal coverage among highest-risk youth. We evaluated how peer-led mobilization into decentralized, integrated HIV and sexual and reproductive health (SRH) services affects pre-exposure prophylaxis (PrEP) uptake among adolescents and young adults (AYA) in rural KwaZulu-Natal (KZN). Broadening this impact requires optimizing backend operational infrastructure through systematic case management, multi-sectoral collaboration, and robust workforce support.

Methods: We conducted a cluster-randomized stepped-wedge trial in 40 clusters in rural KZN. Clusters were randomly allocated to receive the intervention in either period 1 (early) or period 2 (delayed). For the intervention, 90 trained peer navigators conducted tablet-based needs assessments on youth aged 15–30 years to tailor support, developing personalized action plans and referrals to nurse-led mobile clinics regularly visiting each cluster. Clinics provided SRH services, HIV testing, and status-neutral care (ART/PrEP). The standard of care was PrEP delivered through static primary health clinics. Here we report on the overall outcomes of the psychosocial intervention provided by the trained project social worker following the completion of the trial (ClinicalTrials.gov Identifier: NCT05405582). To support ongoing field operations, we utilized a triaged case management pipeline within a customized REDCap tool. Frontline staff stratified identified psychosocial cases into low, medium, or high severity and high-need cases identified escalated to a project social worker for providing psychoeducation, counselling, and informational support. Prior to external escalation, the social worker conducted localized home and school visits for direct counselling and comprehensive home assessments for formal case reports to coordinate active referrals to external stakeholders, including the Departments of Health, Social Development, Home Affairs, SASSA, and local security clusters whenever specialized services were warranted.

Results: Following the trial's conclusion, the multidisciplinary pipeline escalated a cumulative total of 187 high-need cases to the project social worker. Granular sub-category analysis revealed that health needs were the most frequently reported psychosocial stressor (n=100; 54%), followed by social needs (n=64; 34%), legal needs (n=17; 9%), and educational needs (n=6; 3%). Out of these high-need cases, the social worker directly provided comprehensive counselling, direct psychoeducation, and informational support to 154 participants via localized home and school visits. The remaining 33 cases were successfully escalated and actively referred to external structural services (DoH, DSD, DHA, SASSA, or local security clusters) leveraging the field assessment reports. Transitioning to this triaged framework minimized case tracking delays, protected mobile clinical workflows, and mitigated field personnel burnout.

Conclusion: Achieving equitable access and expanding biomedical prevention requires moving beyond clinical drug distribution. Implementation strategies must aggressively optimize operational workflows. The high volume of escalated cases emphasizes the critical need for a dedicated social worker during trial implementation; utilizing a specialized professional provides clinical trials with an essential layer of extra care. Integrating a triaged pipeline, field-based social work assessments, and targeted referrals into automated data pathways are essential prerequisites to sustain community-led models reaching marginalized youth.

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Uptake of Workplace-Based Differentiated Service Delivery (DSD) Model for Antiretroviral Therapy (ART) and Family Planning Integration at a Textile Factory in Matsapha, Eswatini

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Background: Eswatini pioneers innovative Differentiated Service Delivery (DSD) models for HIV control. Textile workers face structural barriers, including rigid shift schedules, which limit access to facility-based services. An integrated workplace outreach program was launched, delivering Antiretroviral Therapy (ART), Family Planning (FP) and primary healthcare directly to the factory floor.

Objectives: To describe the service uptake, integration and feasibility outcomes of a workplace-based DSD outreach model providing ART, reproductive health, including family planning, and essential clinical care among factory workers in Matsapha, Eswatini.

Methods: This program evaluation analyzed clinical monitoring data collected over a three-month pilot phase at one textile factory that was visited once a week. Quantitative indicators tracked HIV testing and counselling (HTC), ART management (refills, re-initiations, facility transfers-in), FP commodity distribution, Non-Communicable Disease (NCD) screening, and curative consultations.

Results: The outreach model served 360 clients. The integration of reproductive health services saw the highest utilization, with 282 workers receiving FP commodities and condoms, 7 undergoing cervical cancer screening, and 4 initiated on oral PrEP. Of the 111 ART clients served, 56 (50.5%) transferred from external facilities to access care at the workplace, demonstrating strong demand for worksite-based HIV services, 7 (6.3%) returned to care, 44 (39.6%) AHF Matsapha clients received their routine refills, and 4 (3.6%) from other clinics refilled their Anti-Retroviral Drugs (ARVs). A total of 54 workers tested for HIV, yielding 3 positives (5.6%), with 2 linked to care. Comprehensive packages included 19 NCD diagnoses, 34 laboratory samples collected, and 15 curative consultations.

Conclusions: Workplace-integrated clinical DSD models are highly acceptable and yield immediate, high-volume uptake among industrial workers. The large influx of transfers-in underscores that delivering healthcare at work overcomes structural barriers. Layering primary healthcare onto ART services optimizes resources, offering a scalable public-private partnership framework for the healthcare provider and industrial employer.

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Locally-Led, Integrated Healthcare Delivery in Security-Affected Settings: A Case Study from Myanmar

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Background: Healthcare delivery in security-affected settings is characterised by system fragmentation, interrupted medicine supply chains, unclear referral pathways, and structural access barriers that reduce care-seeking among the most vulnerable populations, including mothers and newborns, people living with HIV and TB, displaced families, and people with disabilities. Sun Community Health (SCH) is a local, non-profit, non-sectarian organisation based in Myanmar that addresses these challenges through a locally-led, integrated implementation model built on private sector engagement and community ownership. This case study examines how SCH's Network of Care (NoC) sustains essential health service delivery under conditions of severe system disruption, and what implementation lessons it offers for conflict-adjacent, resource-constrained settings globally.

Methods: SCH operates a Network of Care spanning 205 townships through 2,631 private sector providers, including pharmacies and general practitioners, and 1,937 locally-recruited community health volunteers. The NoC integrates multiple delivery platforms: Sun GP Clinics, Medical Mobile Teams, community health outlets, telehealth services, and affiliated diagnostic centres. Programme data were retrospectively reviewed and interpreted through the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, Maintenance) to assess real-world delivery performance across the network. Core implementation strategies include results-based financing for performance accountability; decentralised and rapid resource mobilisation; connected referral and follow-up pathways; and digital health integration, including chatbot-based mental health screening, to support continuity in unstable settings. The localisation principle is central to SCH's model: community volunteers and local providers are not peripheral delivery agents but the primary architecture of the system.

Results: Across the implementation period, SCH delivered 460,000 consultations and provided humanitarian assistance to 436,675 individuals. Applying the RE-AIM lens: Reach was demonstrated through coverage across 205 townships including security-affected areas; Effectiveness through disease-specific outcomes including 11,581 TB cases diagnosed and treated (from 28,248 screened), 36,025 malaria cases treated (from 269,773 screened), 1,039 individuals maintained on ART, 2,342 safe deliveries supported, and 28,890 couple-years of protection generated; Adoption through engagement of 2,631 private sector providers and 1,937 community volunteers; Implementation through sustained multi-platform service delivery despite systemic disruption; and Maintenance through continuity of care during ongoing security challenges. Digital mental health screening reached 1,219 individuals, with 26% presenting with severe or very severe distress.

Conclusions and Implementation Science Implications: This case study demonstrates that locally-led implementation models, grounded in private sector engagement, integrated service platforms, and community ownership, can sustain healthcare continuity and deliver measurable outcomes in settings where formal health systems have fractured. The SCH model offers transferable insights directly relevant to VISTA themes: expanding reach through locally-embedded networks; sustaining integrated programmes beyond verticalised funding structures; deploying digital tools equitably in low-resource settings; and advancing implementation frameworks applicable to humanitarian and security-affected contexts globally. Localisation is not merely a programmatic value, it is a core implementation strategy.

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Scaling Community-Based HIV Testing for Pregnant Women: A Catalytic Contribution to Nigeria's Prevention of Mother-to-Child Transmission (PMTCT) Program

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Background: Nigeria's progress toward the elimination of mother-to-child transmission of HIV (eMTCT) remains constrained by suboptimal antenatal HIV testing coverage, particularly among pregnant women (PW) residing in hard-to-reach and underserved communities. Reliance on facility-based testing alone leaves a substantial proportion of PW undiagnosed, creating critical gaps along the PMTCT cascade. To address this shortfall, the Institute of Human Virology, Nigeria (IHVN) deployed a nationwide community-based HIV testing service (HTS) strategy. This study evaluates the contribution of that strategy to closing Nigeria's PMTCT testing gap.

Methods: IHVN delivered HTS to PW through non-conventional, community-embedded platforms, including traditional birth attendants (TBAs), faith-based birth homes, house-to-house outreaches, and other community entry points. Routine programmatic data from January 2024 to September 2025 were extracted and analyzed using descriptive statistics to quantify IHVN's contribution to the national PMTCT indicator VT-1 (proportion of pregnant women who know their HIV status). Quarterly and cumulative testing volumes were benchmarked against national totals, and linkage to antiretroviral therapy (ART) was tracked for all newly identified HIV-positive PW. Temporal trends were assessed using simple linear regression, with statistical significance set at $p < 0.05$. All analyses were performed in R (version 4.5.2).

Results: IHVN made a progressively expanding contribution to national PMTCT case-finding over the study period. Quarterly contributions to national VT-1 rose from 9.5% in Q1 2024 (105,953 / 1,112,621) to 30.0% in Q3 2025 (307,917 / 1,027,102), with a pronounced surge in Q4 2024 (26.1%; 334,426 / 1,279,834). This upward trajectory was statistically robust, demonstrating a strong positive linear trend ($R^2 = 0.90$; $\beta = 3.37$; $p < 0.001$). Cumulatively, IHVN tested 1,769,767 pregnant women of the 8,241,917 tested nationally, accounting for 21.5% of all PMTCT testing in Nigeria during the period. A total of 1,926 PW were newly diagnosed with HIV, of whom 1,825 (94.8%) were successfully linked to ART, reflecting strong cascade performance.

Conclusions: Community-based HTS is indispensable for closing Nigeria's PMTCT testing gap. By leveraging non-conventional, community-trusted platforms, IHVN reached 1,769,767 pregnant women who would otherwise have remained invisible to facility-based services, identifying 1,926 and linking 1,825 to care, thereby directly averting vertical HIV transmission. The model's near-universal linkage rate further demonstrates that decentralized testing can be effectively coupled with timely treatment initiation. Sustained integration and national scale-up of community-led PMTCT testing should be prioritized as a cornerstone strategy for accelerating Nigeria's progress toward eMTCT, particularly in high-burden and resource-constrained settings.

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Can Incentive Structures Optimize Implementation of Community-Based HIV Care?: A Prospective Comparison of Three Incentive Models Involved in Task Shifting with Traditional Healers in Rural Uganda

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Background: In rural Uganda, and in many African settings, traditional healers (TH) are widely trusted informal providers who often serve individuals disengaged from formal health services, making them a promising platform for community-based HIV care delivery. Performance-based financing has improved HIV testing and care linkage in formal health settings by motivating providers. Yet incentives are largely untested as a strategy for engaging informal providers in task shifting, and how their design shapes provider effort in these settings remains unknown. Within a cluster-randomized trial training TH to facilitate HIV self-testing and linkage to clincal care in Mbarara, Uganda (NCT05943548), we evaluated whether successive incentive structures changed how many unsuppressed people living with HIV (PLWH) TH were able to identify for study participation.

Material and Methods: We analyzed identification of PLWH among 20 TH participating in this task shifting intervention between September 2023 and May 2026. The primary analysis considered incentives divided into three distinct eras. During Era 1 (September 2023–March 2024), TH received a flat incentive of 140,000 UGX per month. In Era 2 (April 2024–February 2025), TH received 40,000 UGX/month plus 11,000 UGX per PLWH per month for 12 months. In Era 3 (March 2025–May 2026), we continued the Era 2 structure plus a one-time 20,000 UGX bonus per PLWH and 120,000 UGX per five PLWH identified. We compared the number of PLWH identified per TH across eras using negative binomial regression with a log-months offset to account for unequal era durations and overdispersion. Two TH who reached the program's 40-patient enrollment ceiling were censored at their final enrollment date. The findings held when the analysis was repeated including the eight TH who joined the intervention in October 2024.

Results: Over the analysis period, 20 TH identified 210 people living with HIV (Era 1: 38; Era 2: 73; Era 3: 99), with monthly identification rates per TH of 0.271, 0.332, and 0.354. No incentive transition reached statistical significance. The transition from era 1 to era 2 was associated with a non-significant 22% increase (negative binomial rate ratio 1.22, 95% CI 0.49–3.06, p=0.67), and the milestone bonus of era 3 with a non-significant 78% increase (rate ratio 1.78, 95% CI 0.74–4.27, p=0.20). The overall era effect was non-significant across all models (negative binomial p=0.21; Kruskal-Wallis p=0.46). Identification was highly concentrated: two TH accounted for 41% of all PLWH identified.

Conclusions: Both per-patient payment and the subsequent bonuses were associated with positive but non-significant increases in identifying PLWH. Gains were concentrated among specific high-volume TH while most TH identified very few. This indicates that financial incentives can raise output among already-engaged providers but cannot on their own broaden participation. Further intensification is unlikely to yield proportional gains. That the same providers responded across successive incentive structures, while others remained unresponsive, suggests baseline engagement, rather than incentive design, was the primary determinant of PLWH identification. Optimizing HIV care reach among informal providers may require pairing incentive design with targeted capacity-building for the majority of TH.

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The Impact of Multidisciplinary Teams on Viral Suppression among Adolescents with High Viral Loads: Case Studies from 30 Clinics in Zimbabwe (October 2024-June 2025)

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Background: Adolescents living with HIV face challenges adhering to antiretroviral therapy (ART), leading to poor retention in care and virologic non-suppression. Conventional clinical models of one healthcare worker engagement during a given visit often lack the integrated support required to address the complex psychosocial and clinical barriers specific to this population. Zim-TTECH introduced an initiative which evaluated effectiveness of a targeted multidisciplinary team model in improving retention in care and achieving viral suppression among adolescents across 30 clinics in Zimbabwe.

Methods: From October 2024 to June 2025, we identified 79 adolescents (aged 10-19) whose viral load remained high (above 1,000 copies/mL on two occasions) after standard enhanced adherence sessions. To address this, each clinic mobilized a specialized multidisciplinary team, comprising a doctor, nurse, primary counselor, and peer counselor, to develop individualized care plans. These plans focused on individualized adherence counseling, psychosocial support, and active follow-up via phone calls, texting and home visits. Primary outcomes were defined as achieving viral suppression (below 30 copies/mL) at three months and achieving retention in care (attending two consecutive visits) at three and six months.
Results: At the three-month follow-up, majority of the participants, 80% (n=63), successfully achieved viral suppression. Retention in care for the 79 adolescents also improved, at baseline, retention was 45% among this cohort and increased to 90% at six months post intervention initiation. Barriers to retention in care identified by team often included shame about coming to the clinic from school for medication, lack of sufficient social support, untreated mental health challenges, and persistent health system gaps like the absence of youth-friendly services at the clinics. The multidisciplinary team model was effective in helping adolescents overcome real-world adherence barriers.

Conclusion: The findings demonstrate that the specialized multidisciplinary team model and individualized care plans may be effective, yielding improvements in viral suppression and retention among adolescents experiencing treatment failure. This comprehensive approach offers a promising strategy for continued study on the strategies to overcome psychosocial and systemic barriers, successfully engaging vulnerable adolescents in long-term HIV care.

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Health System Governance Practices and Uptake of HIV Services among Men in Baylor-Supported Sites in Tororo District, Uganda

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Background: Men continue to underutilize HIV services in Uganda despite being disproportionately affected by poor HIV outcomes, with Tororo District reporting persistently low male engagement in testing, linkage, and prevention services. This study examined the influence of health system governance practices, specifically stewardship, organizational setup, and regulation, on the uptake of HIV services among men in five Baylor-supported tertiary health facilities in Tororo District. The study was guided by Andersen's Behavioural Model of Health Service Use, emphasizing predisposing, enabling, and need factors that shape utilization.

Methodology: A convergent mixed-methods cross-sectional design was employed. Quantitative data were collected from 122 health workers using structured questionnaires and analysed using descriptive statistics, Pearson correlation, and regression modelling in SPSS v27. Qualitative data were gathered through 12 community interviews with adult men and 10 key informant interviews with district and facility leaders, and then analysed thematically. Integration of findings enhanced explanatory depth and contextualization.

Results: Results showed that all three governance domains significantly influenced HIV service uptake among men. Stewardship demonstrated a moderate positive association ($r = 0.516$), organizational setup showed a stronger relationship ($r = 0.617$), while regulation exhibited the strongest association ($r = 0.690$). Multivariate analysis identified regulation as the most critical predictor of uptake ($R^2 = 0.476$). Qualitative insights highlighted persistent barriers, including stigma, long queues, inadequate privacy, limited male-friendly spaces, and insufficient involvement of men in planning and feedback processes.

Conclusion: While governance structures exist, gaps in resource prioritization, service organization, and regulatory enforcement hinder optimal male engagement across the HIV service cascade. Strengthening governance is therefore central to improving testing, linkage, and retention outcomes among men.
It is recommended that facilities institutionalize male-friendly service models, strengthen regulatory supervision and quality assurance, expand partnership-driven outreach tailored to men's social contexts, and enhance stakeholder participation, especially by integrating men into planning and decision-making processes.

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Bringing HIV Prevention to Safe Spaces: Integrated HIV/SRH and TB Services for Out-of-School Adolescent Girls and Young Women in Eastern Uganda, 2024

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Background: Adolescent girls and young women (AGYW) in Eastern Uganda experience heightened HIV risk driven by socio-economic vulnerability, mobility, stigma, gender-based violence, and limited access to youth-friendly healthcare. Facility-based primary health care (PHC) often misses those most at risk due to distance, transport costs and concerns about confidentiality. In response, Uganda Development and Health Associates (UDHA), in partnership with TASO and supported by the Global Fund GC7 grant, implemented a community-anchored safe-space model (Empowering Girls to Stay Safe) integrating HIV prevention, sexual and reproductive health (SRH), TB services and psychosocial support in nine high-burden districts. This study assesses the model's effectiveness in expanding access, reducing HIV risk, identifying new infections, and sustaining engagement in care.

Material and Methods: A longitudinal cohort review was conducted using routine programme and facility-linked data from January to December 2024 across nine districts. A total of 23,077 out-of-school AGYW were enrolled and attached to 653 community-owned safe spaces and 1,506 peer groups. Assessments captured HIV testing uptake, PrEP eligibility and initiation, contraception initiation, STI and GBV screening, and TB symptom screening with sputum collection and GeneXpert confirmation. AGYW who initially tested HIV-negative underwent repeat testing every six months to assess seroconversion. Viral load, ART continuity and treatment outcomes for AGYW living with HIV, as well as all bacteriologically confirmed TB cases, were obtained through facility counter-referrals. Qualitative insights were collected from mentors, clinicians and VHTs supporting implementation.

Results: Among the 23,077 AGYW enrolled, 20,702 (89.7%) received HIV testing. Forty-seven new HIV diagnoses (0.22%) were identified at first testing, and all were linked to care, while 46 girls and young women living with HIV were maintained on ART. Importantly, no seroconversions were detected among AGYW who initially tested HIV-negative and underwent repeat testing during the 2024 follow-up period.
PrEP risk screening reached 13,490 AGYW, of whom 3,880 were eligible and 378 initiated PrEP. Modern contraception was initiated by 5,211 AGYW. STI screening reached 15,395, with 2,838 treated. GBV screening reached 15,395, identifying 2,658 survivors; 692 were referred to protection services and 3,598 received psychosocial support. TB screening identified 61 bacteriologically confirmed TB cases, all linked and initiated on treatment. Qualitative feedback highlighted increased trust, reduced stigma, improved linkage, and stronger adherence support arising from peer-led and community-owned safe-space structures.

Conclusions: The integrated safe-space model effectively expanded access to HIV, SRH, TB and GBV services for AGYW who are often missed by facility-based care. The absence of seroconversions among repeatedly tested HIV-negative AGYW underscores the preventive impact of delivering youth-friendly PHC within communities. Consistent linkage, ART continuity and TB case identification further demonstrate strong implementation feasibility. Institutionalising safe-space delivery within district systems could enhance sustainability, strengthen Uganda's HIV response and support progress toward Universal Health Coverage for high-risk AGYW.

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Differentiated HIV Prevention Preferences and Barriers among Key Populations in a Remote ASAL County of Northern Kenya

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Background: Key populations (KPs) in remote and underserved settings face significant barriers to HIV prevention and care, including stigma, discrimination, violence, mobility, and limited access to health services. Understanding client preferences and contextual challenges is critical to designing effective, equitable, and sustainable HIV prevention programs. This study describes HIV prevention service delivery experiences among female sex workers (FSW), men who have sex with men (MSM), and people who inject drugs (PWID) in Marsabit County, a remote arid and semi-arid county in northern Kenya.

Methods: A retrospective analysis of routine program data collected by BHESP between January and March 2026 was conducted. Data were obtained from community based HIV prevention interventions implemented through peer educators and outreach workers. Services included HIV testing services, PrEP screening and initiation, condom distribution, violence response services, harm reduction interventions, referrals, and follow-up support. Descriptive analysis was used to assess service reach, prevention preferences, and barriers affecting service utilization among key population groups.

Results: During the reporting period, 1,611 FSW, 665 MSM, and 162 PWID were reached through peer-led HIV prevention services. Preliminary analysis indicated that approximately 60% of clients enrolled on PrEP were aged 30 years and above. Among MSM receiving HIV prevention services, 45% reported preference for event-driven PrEP compared to daily oral PrEP. Violence was identified as a major barrier to continuity of care among PWID, with 30% of documented violence cases involving PWID clients. Commonly reported barriers included stigma, discrimination, mobility, and limited access to services. Peer-led outreach approaches facilitated continued engagement with HIV prevention services and strengthened access to referrals and support mechanisms.

Conclusion: The findings demonstrate the importance of differentiated and client-centered HIV prevention approaches for key populations in remote ASAL settings. Age-related differences in PrEP uptake, prevention preferences among MSM, and the impact of violence on PWID highlight the need for tailored service delivery models. Strengthening peer-led interventions and responsive prevention strategies may improve equitable access to HIV prevention services and support sustained engagement among key populations in hard-to-reach communities. Future implementation research should explore the acceptability, feasibility, and potential impact of long-acting HIV prevention options, including long-acting cabotegravir (CAB-LA) and lenacapavir (LEN), particularly among younger and mobile populations who may experience challenges with adherence to daily oral PrEP

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Defining Clinically Meaningful HIV Cure Endpoints: A Focused Qualitative Analysis of Expert Perspectives on the First-Generation HIV Cure Target

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Background: In the era of increasingly effective and long-acting antiretroviral therapy (ART), the central question in HIV cure research is no longer whether a cure is possible, but rather what cure would be both clinically meaningful and feasible to pursue as a first-generation target. We explored how HIV cure scientists conceptualize HIV cure today.

Methods: This analysis is part of an ongoing funded parent study that began in May 2025, with the first phase of data collection completed in February 2026. We recruited basic and translational researchers globally through the ACTG platform listserv, snowball sampling and direct outreach to authors of HIV cure-trial publications. Semi-structured interviews sought to examine how scientists conceptualized first-generation cure products, leveraging the existing target product profile domains as described by Lewin et al., 2021. We used directed content analysis to address responses to the question, "What should constitute an ideal HIV cure?".

Results: Twelve scientists, with expertise in latent reservoir biology, viral dynamics and cure trial leadership, participated in the study. Participants were based across North America (6), South America (1), Asia (1), Europe (2) and West Africa (2), with cure-specific experience ranging from 3 years to about 30 years. From the responses, experts described a sterilizing cure – complete eradication of HIV from the body – as an aspirational benchmark, this included the elimination of all rebound-competent proviruses and clearance of the latent reservoirs from the body. However, they immediately shifted toward describing a functional cure or durable ART-free suppression as a more plausible near-term target. They emphasized that eradication of HIV is not only difficult to achieve, but inherently difficult to verify conclusively. A clinically meaningful HIV cure was broadly described as one that has patient-centered impact beyond biological endpoints. Specifically, experts stated ease of administration, preserved immune health, absence of inflammation and the ability to live without the psychosocial burden of ongoing HIV management, as significant features of a cure.

Conclusion: This study suggests that defining a first-generation HIV cure requires more than demonstrating biological efficacy. The sterilizing cure could be the aspirational goal, but a more plausible near-term target is a functional cure. The HIV cure agenda must, however, integrate end-user acceptability and implementation feasibility for any cure – whether sterilizing or functional – to be meaningful.

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From Trials to Real-World Impact: Ethical and Operational Lessons for Scaling Long-Acting Injectable PrEP in Uganda

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Background: The HIV prevention agenda requires urgent rethinking amidst the ongoing funding crises that threaten progress. Long-acting injectable cabotegravir (CAB-LA) and Lenacapavir are positioned to transform Pre-exposure Prophylaxis (PrEP) delivery. While efficacy is well established for CAB-LA and Lenacapavir, the pressing challenge is ensuring equitable access, ethical continuity, and sustained engagement, particularly among adolescents and young women in sub-Saharan Africa, who remain disproportionately affected by HIV. The MU-JHU Research Collaboration in Uganda presents a timely case study: transitioning participants from DAIDS/NIAID/NIH-funded HPTN 084 (CAB-LA vs Truvada in women at high risk of HIV acquisition) and HPTN 084-01 (CAB-LA safety and acceptability in adolescents) into the open-label Viiv-sponsored PALISADE study (long-term follow-up of CAB-LA for participants from HPTN084 study). The transition funded by Viiv ensured uninterrupted post-trial access to CAB-LA while navigating operational and ethical complexities.

Description/Methods: A site-level evaluation of transition processes across three domains was conducted:
•Participant engagement: youth-friendly materials, interactive workshops, and tailored counselling to dispel misinformation and address consent fatigue.
•Operational innovation: streamlined data collection, rapid staff retraining, and structured feedback mechanisms to strengthen accountability.
•Ethical oversight: re-consent audits, transparent communication, and continuous monitoring aligned with Good Clinical Practice.

Lessons Learned: Of 108 active HPTN 084 participants (HPTN084-01 adolescent participants had already transitioned to the HPTN084 study), 104 (96.3%) transitioned to PALISADE within the designated window. Challenges included dispelling misconceptions about long-term use of injectable PrEP and ensuring seamless data continuity. Operational innovations, particularly rapid staff retraining and structured feedback mechanisms, proved effective in sustaining engagement among adolescents and young women, a group often at risk of attrition in longitudinal research. These strategies demonstrate how programs can rebuild trust and overcome systemic barriers, even in times of financial uncertainty.

Conclusion: MU-JHU's experience offers a replicable model for ethical trial closure and continuity of care, providing critical insights for global injectable PrEP rollout. This work highlights the need to rethink traditional trial-to-program transitions, rebuild systems with culturally grounded and youth-centered approaches, and rise to the challenge of sustaining HIV prevention amidst funding crises. Beyond efficacy, findings highlight the ethical imperative of participant-centered transitions and chart a roadmap for equitable, scalable, and sustainable PrEP delivery in Uganda and beyond.

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Reaching the Unreached: How a Polyvalent Community-Based Volunteer Model Improved Maternal and Child Health Access in Rural Zambia

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Background: Maternal and child health (MCH) indicators in rural Zambia lag behind national averages, with low rates of early antenatal care (ANC) attendance, facility deliveries, and postnatal care (PNC) follow-up. Geographic barriers, health worker shortages, and cultural beliefs often delay or prevent women and children from accessing essential services. On Call Africa (OCA) piloted a Polyvalent Community-Based Volunteer (CBV) programme to bring a comprehensive package of MCH services directly to communities. This evaluation assesses the programme's effectiveness in expanding MCH service reach and addressing barriers to care.

Methods: A mixed-methods endline evaluation was conducted in 2025 across four health facility catchments in Southern Province: two intervention sites (Simoonga and Chalimongela) with trained Polyvalent CBVs, and two comparison sites (Natebe and Mapatizya). Data sources included health facility records, 16 Focus Group Discussions with community members and CBVs, and Key Informant Interviews with facility staff. Quantitative MCH indicators were analyzed against baseline data and project targets. Qualitative data explored community perceptions of CBV impact on health-seeking behavior.

Results: The Polyvalent CBV programme demonstrated significant contributions to expanding MCH service reach:
- Improved Postnatal Care: The program achieved 100% of home deliveries receiving a PNC visit within 48 hours at both intervention sites, a critical intervention for preventing maternal and newborn complications.
- Increased Immunization Coverage: Under-5 immunization coverage exceeded its target at Chalimongela (116.13% of target) and showed progress at Simoonga (83.14%), driven by CBV-led community sensitization and follow-up.
- Early ANC Attendance Gains: While the 80% target for first-trimester ANC registration was not met, both intervention sites showed substantial improvement from baseline (Chalimongela: from 11.6% to 42.86%; Simoonga: 32.07%), indicating positive behavioral shifts.
- Community Trust as a Catalyst: Qualitative findings revealed that community members deeply trusted CBVs as "one of them," making them more receptive to MCH messaging on facility deliveries, nutrition, and family planning. CBVs were credited with reducing home delivery rates and improving medical help-seeking behavior for children.
- Persistent Barriers: The evaluation identified infrastructure gaps (e.g., lack of mother's shelters) and sociocultural factors (religious beliefs, myths about contraceptives) as ongoing challenges limiting further gains in facility deliveries and contraceptive prevalence.

Conclusions: The Polyvalent CBV model is a powerful strategy for expanding the reach of essential maternal and child health services to underserved rural populations. By embedding trusted community members as service delivery agents, the programme successfully increased uptake of PNC, immunization, and early ANC. However, expanding reach is not solely about community-level presence; it requires parallel investments in facility infrastructure and sustained community dialogue to address deep-seated cultural barriers. For national scale-up, the Polyvalent CBV approach offers a proven pathway to accelerate progress toward MCH targets and Universal Health Coverage by meeting women and children where they live.

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From Trust to Treatment: Improving HIV Outcomes in Anambra State by Leveraging Key Population Community-Based Organizations and Community Health Extension Workers to Enhance Access, Adherence, and Service Delivery

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Background: Key populations continue to bear a disproportionate burden of HIV, largely driven by stigma, discrimination, criminalization, and financial constraints that restrict access to conventional, facility-based services. In Anambra State, program data from 2021–2023 highlighted critical service delivery gaps, including delayed diagnosis, late initiation of antiretroviral therapy (ART), suboptimal retention, and high rates of loss to follow-up among KPs. These challenges underscored the need for more responsive, community-driven approaches. To bridge these gaps, the Global Fund Grant Cycle 7 (GC7) introduced the strategic integration of Community Health Extension Workers (CHEWs) into KP-focused community-based service delivery models in 2024, enhancing access, linkage, and continuity of care.

Methods: A programmatic review was conducted using routine HIV service delivery data from the District Health Information System (DHIS2) for key population (KP) programs in Anambra State. The review covered a baseline (pre-intervention) period from January 2021 to December 2023 and a post-intervention follow-up period from January 2024 to November 2025. The study population comprised KPs enrolled in HIV testing and retention in treatment services. Program data were extracted from facility and community-based organization (CBO) records, including HIV case identification, antiretroviral therapy (ART) initiation, and retention outcomes. No formal statistical significance testing was conducted, as the analysis focused on assessing program performance trends across the defined periods.

Results: Prior to GC7 implementation, HIV case identification showed notable fluctuations, increasing from 405 cases in 2021 to 1,273 in 2022, before declining to 884 in 2023. Between 2021 and 2023, the burden of HIV was predominantly concentrated among key populations, with men who have sex with men (MSM) accounting for 1,520 cases, followed by female sex workers (562), people who inject drugs (310), transgender individuals (112), and prison inmates (58).

With the strategic integration of Community Health Extension Workers into KP-focused community-based organizations between 2024 and November 2025, case identification improved significantly across all groups, reaching a total of 1,411 cases. In addition, antiretroviral therapy (ART) retention demonstrated marked progress, increasing from 2,823 clients in December 2023 to 4,104 by November 2025, highlighting substantial gains in continuity of care and program effectiveness following GC7 implementation.

Conclusion: Overall, the decentralization and integration of CHEWs into KP systems represents an effective KP-friendly service delivery model which improved early diagnosis, supported same-day ART initiation, reduced financial and stigma-related barriers, and strengthened sustained engagement in HIV care among KPs in Anambra State.

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A Retrospective Analysis of Synergistic Effects of School Integrated OVC Services on HIV Risk Reduction among Vulnerable Youth in Mfangano Island

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Background: Mfangano is large mountainous island with Abasuba community who dwell on fishing as the primary economic engine, alongside small scale agriculture. Most homesteads sit directly along the water's edge. Orphans and vulnerable children (OVC) in Mfangano Island face elevated HIV risks driven by poverty, school dropout, and transactional sex. The Gethsemane Garden Center initiative uniquely integrates OVC services, including educational support, local mentorship, and sanitary towel provision, within its primary and secondary school setting. This retrospective study from 2019 to 2024 evaluated the impact of this integrated model on HIV infection rates among 1,874 enrolled OVC clients.

Methods: Data were extracted from OVC case files, school enrollment records, and facility-based HIV testing logs for all 1,874 OVC clients (aged 10–19 years) continuously supported from 2019 to 2024. Outcomes included annual HIV seropositivity among new testers, school retention rates, and self-reported transactional sex exposure linked to sanitary towel access. Descriptive statistics and pre-post intervention comparisons were performed.

Results: Over five years, HIV prevalence among newly tested OVC clients decreased by 67% (from 8.9% in 2019 to 2.9% in 2024). Among the 1,874 clients, school retention improved from 71% to 91%, coinciding with consistent sanitary towel provision for all menstruating students. Reports of transactional sex for favors declined by 76% among girls receiving sanitary towels. Local support mechanisms (food subsidies, fee waivers, peer mentoring) reduced OVC dropout rates by 61%.

Conclusion: Integrating OVC services directly within school settings, particularly sanitary towel provision, enrollment support, and locally anchored care substantially reduced HIV infections among 1,874 vulnerable youth on Mfangano Island. This model offers a replicable, community based intervention to break cycles of poverty driven HIV risk in resource limited Island communities

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Reducing Non-Detection of Increased HIV Viral Load Counts of Pregnant and Breastfeeding Women at Kumi HC IV: A Continuous Quality Improvement Study in Eastern Uganda

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Introduction: Sub-Saharan Africa bears the highest global burden of HIV, with women and girls accounting for 63% of new infections. The Ministry of Health integrated point-of-care testing into routine HIV care to expand access to viral load testing and early infant diagnosis among pregnant and breastfeeding women and their infants. However, routine laboratory quality monitoring is often insufficient, leading to undetected deviations in testing systems. This study aimed to improve the identification of unsuppressed viral load among pregnant and breastfeeding women at Kumi Health Centre IV in eastern Uganda using continuous quality improvement.

Methods: Between October 2024 and May 2025, we conducted a continuous quality improvement study. Here, we established a quality improvement committee, and retrieved and analyzed facility performance data to identify quality gaps. Unsuppressed viral load among pregnant and breastfeeding women was prioritized for intervention using a ranking matrix. Root cause analysis was conducted using a fishbone diagram, and improvement changes were prioritized using an impact–effort matrix. Interventions were implemented through iterative Plan–Do–Study–Act (PDSA) cycles and included split-sample testing, equipment servicing, staff training, temperature monitoring, and routine monitoring of viral load results.

Results: Prior to the implementation of the quality improvement intervention, unsuppressed viral load among pregnant and breastfeeding women was at 69.4% in October 2024. Following implementation of continuous quality improvement interventions, unsuppressed viral load declined substantially over the eight-month period, achieving the study target of less than 5%: monthly rates were 57% in November, 48% in December, 48% in January 2025, 50% in February, 20% in March, 14% in April, and 2% in May 2025.

Conclusion: Continuous quality improvement interventions that strengthened laboratory quality monitoring significantly improved viral load suppression among pregnant and breastfeeding women. Implementing routine quality monitoring of laboratory processes, equipment, and results can improve HIV treatment outcomes and reduce the risk of vertical transmission.

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Scaling HIV Prevention, Testing, and Treatment Services for Adolescent Girls and Young Women in Nigeria: GC7 Implementation Outcomes from Four States

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Background: Adolescent girls and young women (AGYW) continue to bear a disproportionate burden of HIV in sub-Saharan Africa due to intersecting sexual and reproductive health and rights (SRHR) challenges. Under the Global Fund GC7 grant, the Institute of Human Virology Nigeria (IHVN) implemented integrated HIV services across Anambra, Ebonyi, Gombe, and Kwara states to improve prevention, case finding, linkage, and treatment outcomes among AGYW.

Methods: Routine programmatic data from January 2024 to December 2025 were analysed. Key indicators included AGYW reached with HIV prevention (community and walk-in), HIV testing and status awareness, positive cases identified, linkage to antiretroviral therapy (ART), current ART enrolment, and viral suppression (<1,000 copies/ml). Data were disaggregated by state and service delivery modality.

Results: A total of 1,067,401 AGYW were reached with HIV prevention services, with over 90% through community-based approaches. Approximately 557,293 AGYW were tested for HIV, identifying 983 new positive cases (positivity rate 0.18%). Linkage to treatment was near-perfect (97–100%). By October–December 2025, active ART enrolment reached 3,790 in Anambra, 2,467 in Ebonyi, 2,808 in Gombe, and 1,230 in Kwara. Viral load testing coverage improved steadily, with suppression rates exceeding 90% in later quarters. Program reach scaled dramatically from early 2024 to over 70,000–100,000 AGYW per quarter by late 2025.

Conclusion: The IHVN GC7 AGYW program achieved high coverage, excellent linkage, and strong viral suppression through a blended community-walk-in model. These findings demonstrate the effectiveness of integrated SRHR-HIV interventions for adolescents in high-burden settings and offer valuable lessons for epidemic control among AGYW globally.

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Contextualizing Unwanted Disclosure and Its Impact on Retention in Care, Treatment Adherence, and the Future of Person-Centered Care Strategies among Men Living with HIV in Malawi: A Mixed-Methods Study

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Background: Interruptions in HIV treatment (IIT), defined as being ≥28 days late for a scheduled antiretroviral therapy (ART) appointment, pose a significant threat to HIV epidemic control. Men experience higher rates and longer duration of IIT in comparison to women. For men living with HIV in Malawi who experienced IIT, anticipated unwanted disclosure and anticipated stigma from status disclosure are cited as barriers to durable engagement in care. While it is well documented that fear of unwanted disclosure and stigma perpetuate disengagement, less is known about the prevalence and impact of unwanted disclosure.

Methods: We conducted a secondary analysis of mixed-methods data to understand prevalence, associated factors, and lived experiences of men with IIT who encountered unwanted disclosure. We used data from two parent trials in Malawi: ENGAGE (NCT04858243) and IDEaL (NCT05137210) that aimed to assess the impact of four interventions providing variations of person-centered counseling and home-based ART on re-initiation and retention at six-months among men living with HIV and not engaged in care. Baseline and four-month follow-up surveys were conducted and included demographics, personal HIV history, and disclosure—including anticipated and experienced unwanted disclosure. We conducted multiple regression analyses to assess factors associated with unwanted disclosure at four-months. Men who reported experiencing unwanted disclosure were asked open-ended questions at four months to explore how unwanted disclosure occurred and experiences afterward. We used Atlas.ti v.9 to conduct thematic analyses on these open-ended responses.

Results: Survey data were collected between August 2022 and September 2023 with 1,140 men with IIT in Malawi enrolled in the IDEAL or Engage trials. The mean age was 39.5 years (SD 11.5) and 684/1,140 (60%) were monogamously married. A total of 764/1,140 (67.0%) reported intentional HIV status disclosure prior to trial enrollment and 375/1,140 (32.9%) believed re-initiation would lead to unwanted disclosure. During trial periods, 1,005/1,140 (88%) men re-initiated ART and 70/1,140 (6.1%) reported experiencing unwanted disclosure while enrolled. Baseline belief that re-initiation in HIV care would lead to unwanted disclosure was the only statistically significant factor associated with actually experiencing unwanted disclosure at endline (OR: 2.93, 95% CI: 1.79-4.78). All 70 answered open-ended questions regarding their unwanted disclosure experience. The most commonly mentioned reasons for unwanted disclosure included privacy breeches at facilities, status revealed by healthcare workers, and unintended family or social network disclosure due to circumstances like leaving pill bottles visible when traveling. Importantly, unwanted disclosure that lead to unexpected solidarity and support—particularly from male friends—emerged as a theme within these responses.

Conclusion: Understanding the context and lived experiences around unwanted disclosure can help refine person-centered care (PCC) models to better combat IIT for men living with HIV. We found that unwanted disclosure was not rare and only perceived risk of unwanted disclosure at baseline was associated with actual unwanted disclosure. Given that unwanted disclosure is both a common barrier to care and, sometimes, a catalyst for social support, further investment in disclosure counseling is a promising strategy within PCC to reduce IIT among men living with HIV.

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Beyond the Clinic Walls: A Community-Led Jam Cross Strategy for Identifying Undiagnosed Children Living with HIV in Ebonyi State, Nigeria

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Background: HIV case finding among paediatric and adolescent populations remains a critically underachieved global health priority, particularly in Sub-Saharan Africa. Despite significant progress in HIV epidemic control in Nigeria, identifying children living with HIV (CLHIV) remains a persistent challenge. Many children remain undiagnosed due to limited access to testing services and missed opportunities for case finding. Addressing this gap requires the implementation of targeted, multi-pronged HIV testing strategies to facilitate early diagnosis, timely linkage to treatment, and improved health outcomes for children living with HIV. The Joint Action for Mother and Child (JAM) Cross Strategy is an innovative, community-led HIV case-finding approach designed to identify undiagnosed children and adolescents living with HIV. Using the identified child as an entry point, healthcare providers extend HIV testing services to biological parents, siblings, household members, and social networks, including sexual partners of sexually active adolescents. This study evaluates the contribution of the JAM Cross Strategy to paediatric HIV case finding and identification of previously undiagnosed children living with HIV in Ebonyi State between March and May 2026.

Methods: The JAM Cross Strategy is a community-led paediatric HIV case-finding intervention implemented across the 13 LGAs of Ebonyi State. The strategy targeted children receiving care in patent medicine vendor (PMV) outlets, healing homes, and other community settings where HIV testing services are not routinely provided. Trained healthcare providers offered HIV testing to children aged ≥2 years following parental or caregiver consent. HIV-positive children identified through the intervention were used as index clients to facilitate testing of biological parents, siblings, household contacts, and social or sexual networks of adolescents. A prospective cohort study was conducted to evaluate the contribution of the JAM Cross Strategy to paediatric HIV case finding between March and May 2026 and compare its performance with routine facility-based testing approaches. Data were analyzed using SPSS, and statistical significance was assessed at a 95% confidence level.

Result: Of the 24 children living with HIV identified in Ebonyi State by the end of May 2026, 18 (75.0%) were identified through the JAM Cross Strategy. In addition, the strategy facilitated the identification and linkage to antiretroviral therapy (ART) of 10 adolescent girls and young women (AGYW), 2 pregnant women, and 24 other adults living with HIV. Furthermore, 43 clients received ARV drug refills through the JAM strategy, contributing significantly to treatment continuity and retention in care. The estimated contribution of the JAM Cross Strategy to paediatric HIV case finding was 75.0% (95% CI: 55.1%–88.0%, P=0.023), underscoring its substantial role in identifying children living with HIV and strengthening paediatric HIV case-finding efforts during the implementation period.

Conclusion: The JAM Cross Strategy substantially improved paediatric HIV case finding, linkage to ART, and retention in care in Ebonyi State. It's effectiveness in identifying previously unreached children and other priority populations demonstrate its potential as a scalable approach for closing HIV testing gaps and accelerating progress toward achieving the UNAIDS 95-95-95 targets.

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Association between PrEP-Related Stigma and Seven-Month PrEP Persistence among Young Women and Female Sex Workers in South Africa

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Background: Pre-exposure prophylaxis (PrEP) is highly effective for HIV prevention, but uptake and persistence remain suboptimal among at-risk adolescent girls and young women (AGYW) and female sex workers (FSW) in South Africa. PrEP-related stigma may attenuate PrEP interests, intentions, and uptake, but evidence is limited on its relationship with PrEP use over time. We estimated the prevalence and predictors of PrEP-related stigma and its association with PrEP persistence post-initiation among AGYW and FSW starting daily oral PrEP in KwaZulu-Natal, South Africa.

Methods: We conducted a secondary analysis of Project Phakama, a randomized factorial trial of four adjunctive PrEP support strategies at TB HIV Care clinics in uMgungundlovu District. Between April and September 2024, 304 cisgender women, including 192 AGYW (≥16 years) and 112 FSW (≥18 years), were enrolled within 48 hours of PrEP initiation. Baseline stigma was measured using the 12-item Atkins PrEP-related stigma scale, previously validated in Kenya; any stigma and each domain were defined as agreement or strong agreement with at least one item. PrEP persistence was defined as having PrEP in possession through month 7 or returning for refill within 7 days of a scheduled refill date occurring during month 7; this was ascertained from linked program records. We fitted modified Poisson regression models with robust standard errors to estimate crude prevalence ratios (PR) for exploratory correlates of baseline PrEP-related stigma and adjusted risk ratios (aRR) for 7-month persistence, adjusting for prespecified confounders. We tested interaction by population group and evaluated domain-specific associations. We also examined intervention-adjusted models and sensitivity analyses under alternative assumptions for missing outcomes.

Results: The median age was 22 years (IQR: 19-24), and 28% of participants reported prior PrEP use at baseline. PrEP-related stigma was endorsed by 80% of participants (81% among AGYW and 79% among FSW), with disclosure concerns (66%) the most prevalent, followed by PrEP norms (53%), negative self-image (17%) and interpersonal stigma (9%). Stigma was more prevalent among participants reporting current homelessness (PR: 1.23; 95% CI: 1.15-1.32), past-month food insecurity (PR: 1.29; 95% CI: 1.20-1.38), and lifetime illicit drug use (PR: 1.18; 95% CI: 1.03-1.36). Among 278 participants with known outcomes, 45% exhibited month-7 PrEP persistence: 57% among AGYW and 27% among FSW (p<0.001). Baseline stigma was not significantly associated with month-7 persistence (aRR: 1.21; 95% CI: 0.85-1.72), with no evidence of effect modification by population group (interaction p-value=0.510). Results were consistent after adjustment for intervention assignment, under alternative assumptions for missing outcomes, and in domain-specific models for disclosure concerns and PrEP norms. However, among FSW, baseline PrEP norms stigma was significantly associated with lower 7-month persistence (aRR: 0.37; 95% CI: 0.15-0.89).

Conclusion: PrEP-related stigma was highly prevalent among AGYW and FSW initiating PrEP, but this was not significantly associated with lower likelihood of 7-month persistence within this intervention trial. Future implementation research should evaluate PrEP-related stigma-mitigation strategies tailored to groups facing higher stigma and intersectional vulnerabilities, including people who use drugs, experiencing homelessness, and impacted by food insecurity.

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People-Led Integrated Community Platforms Expand HIV Prevention, PMTCT Linkage and Treatment Support across High-Burden Nigerian Settings

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Background: Closing HIV prevention and treatment gaps requires delivery models that reach people before, beyond and between facility visits. In Nigeria, pregnant women in unconventional settings, adolescent girls and young women, people living with HIV, key populations and persons experiencing stigma or rights violations often face structural barriers to care. NEPWHAN implemented an integrated people-led community platform under the Global Fund GC7 N-THRIP grant to expand reach, improve linkage, sustain treatment engagement and strengthen rights-based service delivery across geographically diverse settings.

Methods: We conducted a routine implementation assessment of community-based HIV prevention, PMTCT, treatment support, gender and human rights, and data-quality interventions delivered from January to March 2026. The implementation platform used Mentor Mothers, Community Testers, Community Rights Advocates, community-based organizations, state teams and implementing partners. Treatment support was implemented in Anambra, Ebonyi, Gombe and Kwara States; HIV testing for presumed pregnant women was implemented across all 36 states and the Federal Capital Territory; AGYW services were implemented in Ebonyi and Kwara States; and gender and human rights activities were implemented nationally. Outcomes were interpreted using implementation science constructs: reach, adoption, linkage, continuity, fidelity to targets, implementation barriers and sustainment potential.

Results: The integrated model produced strong implementation outcomes across multiple service cascades. Community-based HIV testing reached 54,646 adolescent girls and young women, exceeding the quarterly target at 111% and demonstrating the capacity of peer-informed community strategies to reach populations often missed by facility-based approaches. Community HIV testing among pregnant women achieved 100% linkage to care, indicating a highly effective referral pathway from community identification to ART and ANC services. HIV-exposed infant PCR testing achieved 99% performance, suggesting strong follow-up for early infant diagnosis within the PMTCT cascade. Treatment retention and PMTCT restart indicators achieved 90.2% and 89%, respectively, showing substantial but incomplete continuity in care and identifying clear targets for improvement. Monthly support group meetings were restored across the four end-to-end states, strengthening peer engagement, psychosocial support, adherence education and social connectedness for people living with HIV and TB. Community Rights Advocates strengthened reporting, documentation, referral and follow-up of stigma, discrimination, denial of services, violence and other rights violations. Data validation, DQA, CQI and state review meetings improved documentation practices and supported adaptive programme management. Implementation challenges were also clearly characterized: inadequate Mentor Mother coverage, transport barriers, commodity stock-outs, delayed escort allowances, documentation gaps, inflationary pressure and reduced state-level supervision. These barriers provide important explanatory context and actionable targets for sustainment.

Conclusion: The evidence is impactful because it demonstrates large-scale reach, near-complete linkage outcomes and practical integration of prevention, PMTCT, treatment support, human rights response and data-use systems within one community platform. While statistical significance was not tested, the programme shows strong implementation significance through high coverage, target attainment, cascade performance and identification of modifiable bottlenecks. This abstract contributes real-world evidence on how people living with HIV and community actors can function as delivery agents, navigators, accountability partners and data-use catalysts.

Strengthening Mentor Mother coverage, transport support, commodity security and supervision could increase the model's sustainment and measurable effect.

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TIER-Plus: Bridging Quantitative Modeling and Real-World Programme Decision-Making

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Background: National HIV programmes face unprecedented budget constraints and shifting donor landscapes, yet lack accessible tools to quantify how programmatic trade-offs affect both costs and health outcomes. Programme managers need intuitive, quantitative approaches to explore questions such as: What happens if one intervention is scaled down and resources are reinvested elsewhere? How do changes in intervention coverage affect outcomes across the HIV care cascade and programme costs? Equally important, civil society organisations and community advocates need access to the same information to meaningfully engage in programme planning and advocate for evidence-informed policy change. The TIER-Plus tool was designed to bridge the gap between quantitative modelling and programme decision-making by making epidemiological and cost analyses accessible to non-modellers.

Methods: TIER-Plus is an interactive, web-based platform designed to enable national stakeholders to conduct scenario-based trade-off analyses of HIV interventions. The tool integrates epidemiological modelling with cost analysis across approximately 30 core HIV interventions spanning prevention, testing, and treatment. Users can: (1) revise national baseline coverage data; (2) adjust intervention coverage levels across scenarios; and (3) visualise resulting changes in key outcomes (95-95-95 targets, mortality, new acquisitions) and implementation costs over one year. The tool was piloted with government and/or civil society stakeholders in Malawi, Mozambique, Zambia, and Zimbabwe during the initial validation phase (June 9–25, 2026). We analysed intervention adaptations, defined as changes of ≥5% from baseline coverage, to characterise how users explored programme prioritisation scenarios during the pilot phase.

Results: Among 99 pilot sessions conducted by 40 users, 25 (25%) progressed to results analysis. Users who reached the results stage generated an average of 3.2 scenario iterations, suggesting active exploration of programme trade-offs. Adaptation patterns reflected consideration of both established and emerging interventions. Lenacapavir PrEP was the most frequently modified intervention (29/131, 22%), reflecting interest in evaluating emerging prevention interventions. Users also frequently modelled reductions in established interventions: 73% of VMMC adaptations were scale-downs (8/11), while 78% of community testing adaptations were reductions (7/9). These patterns suggest users were exploring potential efficiency and sustainability trade-offs across prevention and testing strategies.

Adaptations to oral-based PrEP and condom coverage reveal nuanced programme thinking. Oral PrEP adaptations were more likely to be scale-up (62%, 8/13), while condom coverage adaptations remained more evenly split (46% scale-ups, 6/13). Six-month-dispensing of treatment also had a near even split of adaptations (55% scale-ups, 6/11). Facility-based testing saw a larger proportion of reductions (69% scale-downs, 9/13), as did baseline CD4 cell count testing (60% scale-downs, 6/10). These findings suggest that users explored multiple prioritisation approaches rather than converging on a single strategy.

Conclusions: TIER-Plus demonstrates the feasibility of translating complex epidemiological relationships into an interactive platform to inform programme-level decision-making. Early pilot data suggest non-modellers can engage with quantitative scenario analysis to explore intervention trade-offs under resource constraints. By providing transparent links between intervention coverage, costs, and health outcomes, TIER-Plus may support evidence-informed prioritisation and resource allocation. Further research is needed to assess how use of the tool influences programme planning, policy decisions and implementation outcomes.

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Epis-Guided Evaluation of CAM-HERO: Integrating Implementation Science Capacity Building into Cameroon's HIV Alliance Platform

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Background: Implementation science capacity in many low- and middle-income countries remains constrained by limited opportunities for practical, contextually grounded training and mentorship. Many training approaches are delivered as stand-alone activities, with weak connections to policy and programme environments where implementation challenges are addressed. We described how implementation science capacity building was embedded within the Cameroon HIV Research Forum (CAM-HERO), a recurring national HIV research and programme platform.

Methods: We conducted an EPIS-guided descriptive study of CAM-HERO-IS, an IS capacity-building initiative delivered alongside CAM-HERO 2026. The EPIS framework was applied retrospectively to organize how the initiative emerged, was prepared, implemented, and positioned for early sustainment. Data were drawn from routine programme and documentary materials, including prior CAM-HERO proceedings, planning documents, meeting records, recruitment materials, training content, conference programme documents, participant registration data, and post-event summaries. Materials were independently mapped to EPIS domains by two authors and refined through consensus.

Results: The initiative emerged from a national platform where recurring discussions highlighted evidence-to-practice gaps and the lack of structured implementation science training. Preparation was supported by a multi-institutional platform involving government, research institutions, and implementing partners. Delivery combined didactic sessions, applied group work, and integration into conference sessions. Six groups developed implementation-focused research questions and preliminary approaches addressing HIV treatment outcomes, service uptake, ART continuity, HIV-NCD integration, PMTCT, and tuberculosis prevention. Bridging mechanisms linking policy priorities with organizational action were central across all phases.

Conclusion: Embedding implementation science capacity building within an existing national platform is feasible and may strengthen alignment with policy and programme priorities. Key enabling factors included multi-institutional coordination and active engagement with decision-makers. Further follow-up is needed to assess sustained outputs, continued engagement, and long-term institutionalization within future convenings.

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Leveraging Real-Time Digital Client Feedback to Strengthen Continuous Quality Improvement during Early Implementation of Injectable Lenacapavir PrEP in Nigeria

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Background: Successful implementation of long-acting HIV prevention requires continuous monitoring of client experience to identify service delivery gaps and inform quality improvement. Digital client feedback platforms provide an opportunity to generate real-time implementation intelligence that complements routine programme monitoring. This study evaluated the utility of a digital client feedback platform for monitoring service quality during the early rollout of injectable Lenacapavir (LeN) PrEP in Nigeria.

Methods: A cross-sectional implementation evaluation was conducted using Clientshot, a digital client experience and continuous quality improvement platform deployed across 29 LeN PrEP implementing facilities in Anambra, Ebonyi, Gombe and Kwara States under Nigeria's Global Fund N-THRIP (GC7) project. Between April and May 2026, client surveys, service commendations and complaints were analysed to evaluate satisfaction, provider interactions, counselling quality, service efficiency, adverse events and complaint resolution. Descriptive statistics were used to summarize programme performance.

Results: During the evaluation period, the platform captured 118 client surveys, 258 service commendations and 57 complaints across 29 facilities. Overall, 89.0% of respondents were satisfied or very satisfied with services, while 97.0% indicated they would recommend HIV prevention services at their facilities.
Health worker interactions were rated positively by 90.7% of respondents, 97.7% reported receiving adequate pre-injection counselling, and 94.9% stated that privacy and confidentiality were maintained during service delivery. Among LeN PrEP users, 95.8% described enrolment as easy or very easy, while 29.2% reported predominantly mild injection-site reactions.
The digital platform identified actionable quality gaps. More than one-quarter (27.3%) of LeN PrEP users waited over one hour before receiving their injection. Of the 57 complaints received, 77.2% remained unresolved during the reporting period, with most originating from facilities in Ebonyi and Kwara States. In contrast, Gombe State achieved 100% client satisfaction with minimal complaints, demonstrating exemplary implementation performance and providing a benchmark for programme improvement.

Conclusions: Real-time digital client feedback platforms provide actionable implementation intelligence by identifying service delivery bottlenecks, monitoring client experience, and supporting targeted continuous quality improvement. Integrating digital client feedback into routine LeN PrEP implementation may strengthen programme responsiveness, improve client-centred care, and enhance the quality of long-acting HIV prevention services during national scale-up.

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A Capability-Opportunity-Motivation-Behaviour Analysis of Implementer Experiences Delivering PrEP Support Strategies in an Individually Randomized Trial in South Africa

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Background: PrEP support strategies include peer-based roles, formal clinical coordination, and case management. Characterizing the capabilities, opportunities, and motivations that shape implementer behaviour is essential to guide evidence-based integration and sustainment of PrEP into existing health systems in South Africa. We examined barriers and facilitators to PrEP support intervention delivery across implementers with diverse remuneration and roles.

Methods: Project Phakama was an individually randomized factorial trial testing support strategies for adolescent girls and young women and female sex workers in uMgungundlovu, South Africa. We conducted 17 in-depth interviews with implementing partners across roles with different levels of engagement with the study and remuneration: case managers (study-specific paid case managers each providing individual counselling and motivational interviewing to ~50 PrEP clients, n=3); PrEP buddies (participant-selected unpaid volunteer peers offering reminders and encouragement, n=8); TB HIV Care programme staff (existing staff roles facilitating PrEP and food voucher pick-up, n=6). Interviews were audio-recorded, translated, and transcribed. Interviews and codebook were guided by the Theoretical Domains Framework and Capability-Opportunity-Motivation-Behaviour (COM-B) model. We conducted deductive thematic analysis, organizing themes within COM-B domains for each implementer role.

Results: Determinants of delivery differed by role and remuneration structure. Paid study-specific case managers were confident in their skills through prior experience as social workers, study training (physical capability), and monitoring systems to plan and prioritize sessions (physical opportunity). Motivation was sustained intrinsically through supporting participants toward their goals (reflective motivation). However, heavy workloads and emotional burnout reduced motivation and raised concerns for case management sustainability at scale (automatic motivation). Unpaid, volunteer-based PrEP buddies were motivated by their relationship with the participant and their own PrEP use (reflective motivation) but limited by lack of knowledge to support management of side effects even alongside a brief training from the study team (psychological capability). Shared residence of PrEP buddies with participants enabled daily reminders, whereas holiday breaks or insufficient airtime limited contact for buddies living apart from participants (physical opportunity). TB HIV Care programme staff, who had study responsibilities layered onto existing salaried roles, found scheduling lists helpful to fulfill their responsibilities but felt constrained by competing programmatic obligations and burnout (physical opportunity), as well as poorly defined roles across the study team (social opportunity). Across implementer roles, data systems, standard operating procedures, training, and team support (e.g., WhatsApp group enabling real-time problem-solving), buffered challenges (e.g., re-engaging participants lost to follow-up, or client confusion at pickup points) (social opportunity).

Conclusion: Facilitators and barriers to implementing PrEP support strategies varied according to role, remuneration, and the extent to which intervention delivery was embedded within existing responsibilities. Dedicated and paid implementers demonstrated strong capability and motivation but require workload management to be sustainable at scale. Volunteer-based strategies may require enhanced training, ongoing support, and reinforcement to sustain engagement. Strategies layered onto existing roles require clear role definition and protection against workload and burnout. Successful integration of support strategies into existing health systems may require investments in training, data systems, and formal and informal team support mechanisms to strengthen delivery across implementer types.

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Integrating HIV, Syphilis, and Hepatitis B Testing for Pregnant Women in Communities: A Triple-Elimination Approach for Improved Maternal and Child Health Outcomes in Katsina State

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Background: Mother-to-child transmission (MTCT) of HIV, syphilis, and Hepatitis B remains a major public health concern, particularly in underserved communities with limited access to antenatal care services. Early detection and treatment of infected pregnant women are critical to preventing adverse maternal and neonatal outcomes. To advance the triple-elimination agenda, an integrated community-based screening approach for HIV, syphilis, and Hepatitis B was implemented among pregnant women in Katsina State, Nigeria.

Methods: A community-based integrated testing intervention was conducted across the 34 Local Government Areas of Katsina State from January to December 2025. Community Volunteers (CVs), Traditional Birth Attendants (TBAs), and Community TB-HIV Workers (CTHWs) mobilized pregnant women for screening. Eligible women were simultaneously tested for HIV, syphilis, and Hepatitis B using rapid diagnostic test kits. Individuals with reactive results were referred to nearby health facilities for confirmatory testing, treatment, and follow-up care. Program data were analyzed to assess testing uptake, positivity rates, and linkage to care.

Results: A total of 68,624 pregnant women were reached through the intervention, of whom 38,973 eligible women were tested and received results for all three infections during a single encounter. The screening identified 56 HIV-positive cases (0.14%), 91 syphilis-positive cases (0.23%), and 250 Hepatitis B-positive cases (0.64%). The integrated approach improved access to comprehensive screening services, enhanced early case detection, and reduced missed opportunities for diagnosis among pregnant women who may not have accessed routine antenatal care.

Conclusion: Integrating HIV, syphilis, and Hepatitis B testing into community-based maternal health services is a feasible and effective strategy for increasing early diagnosis and linkage to care. Scaling up this approach can support triple elimination efforts and contribute to improved maternal and child health outcomes in Katsina State.

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Integrating Community Led Data Informed HIV Service Delivery to Sustain Public Health Impact in Urban Low Resource Settings

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Sustaining effective HIV and public health interventions in low-resource settings remains a persistent challenge due to fragmented service delivery, limited real-time data use, and insufficient community ownership. This implementation study evaluates an integrated, community-led HIV service delivery model designed to enhance program sustainability, responsiveness, and health system integration in urban informal settlements in Uganda. Call them the Ghetto communities.

Using a mixed-methods implementation science framework, we integrated HIV testing, prevention, sexual and reproductive health services, and emergency referral pathways into existing community-based outreach platforms. Real time program monitoring tools were introduced to capture service uptake, linkage to care, and follow-up outcomes, enabling adaptive implementation responsive to policy shifts and community needs. Community health respondents and peer leaders were trained to co-design service workflows, ensuring cultural relevance and local ownership. Implementation outcomes were assessed using the RE-AIM and Proctor frameworks, focusing on adoption, fidelity, feasibility, and sustainability.

Over a 12-month period, integrated service delivery increased same-day linkage to HIV care, reduced service duplication, and improved retention among highly mobile populations. Real-time data dashboards informed rapid course correction and strengthened coordination between community teams and public health facilities. Community leadership structures were critical to sustaining service delivery beyond initial implementation support.

Findings demonstrate that integrated, data-informed, and community led public health strategies can strengthen HIV service delivery while improving long term sustainability in resource constrained settings. This model offers a scalable approach for aligning community implementation with national HIV strategies and broader health systems, with implications for advancing integrated care across infectious diseases and global health programs.

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Sustaining HIV Services during Donor Funding Crisis: Advancing Self-Reliance through Service Integration and Social Health Insurance in Homa Bay Town Sub-County, Kenya

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Background: Homa Bay County, in western Kenya, bears one of the highest HIV prevalence rates nationally. Over the years, donor funding has played a pivotal role in the HIV response. However, dwindling donor support and shifting global health priorities have exposed vulnerabilities in the continuity and sustainability of HIV services. With Kenya transitioning toward Universal Health Coverage (UHC), integrating HIV services into routine primary healthcare and leveraging domestic financing mechanisms, such as Social Health Insurance, is vital for safeguarding progress made and achieving long-term self-reliance. This study assesses the integration of HIV services and use of social health insurance in seven health facilities within Homa Bay Town Sub-County.

Objective: To assess the impact of integrating HIV services into routine care, supported by Social Health Insurance, while identifying service delivery gaps at the facility level and implementing sustainable, context-appropriate care models to strengthen the HIV response in the face of declining donor support.

Methodology: A mixed-methods study was conducted from January 2023 to June 2024.

- Quantitative data: Collected from facility records on ART coverage, viral suppression, client retention, and NHIF enrollment and claims related to HIV services.
- Qualitative data: Gathered through key informant interviews and focus groups with healthcare workers, facility managers, NHIF representatives, community health volunteers (CHVs), and clients.
- Gap analysis: Conducted in each facility using the WHO Health System Building Blocks framework to assess infrastructure, staffing, service delivery, supply chain, financing, and leadership.

Results: • Donor-funded programs covered less than 55% of HIV service costs in 2024, compared to 75% in 2020, signaling a growing funding gap.

- NHIF utilization for HIV-related services rose by 35%, enabling more clients to access ART, diagnostics, and comorbidity management.
- Integration led to reduced service fragmentation and increased efficiency in all facilities constraints; used decentralized refill models and CHVs for continuity.
- ART coverage increased from 78% to 92%; viral suppression improved from 75% to 88%.
- 87% of clients reported improved service quality and reduced waiting times.

Conclusion: The declining donor landscape necessitates a paradigm shift in how HIV services are financed and delivered. Integration of HIV services into primary care, coupled with the strategic use of Social Health Insurance, is a viable pathway to self-reliance. Facility-specific integration models informed by comprehensive gap analyses have proven effective in sustaining and improving HIV outcomes across diverse health system contexts in Homa Bay Town Sub-County.

Recommendations: 1. Scale up NHIF enrollment for PLHIV and streamline reimbursement for ART, labs, and comorbidity care.

2. Institutionalize regular facility-level gap analysis to guide evidence-based resource allocation and integration strategies.
3. Adopt flexible, context-specific integration models tailored to each facility's capacity and client load.
4. Invest in local health workforce development and task-shifting to mitigate the human resource impact of donor withdrawal.
5. Enhance community health systems and CHV engagement to support decentralized ART and adherence support.
6. Increase county-level budgetary allocations for HIV programs to offset reduced donor funding and ensure sustainability.

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Improving Viral Load Suppression among Adolescents on ART through the Bringing Kids to Care Model at Chisala, Nkhatabay, Malawi

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Background: Chisala, a community health facility in Nkhatabay faces challenges in ensuring young people access HIV information and services adolescents living with HIV remain a vulnerable population with treatment outcomes, particularly in resource limited settings. Achieving and sustaining viral load suppression in this age group is often complicated by developmental, psychosocial and structural barriers that affect adherence to anti-retroviral therapy (ART). In Malawi, despite significant progress in expanding ART access, gaps persist among younger adolescents aged 10–14 years, who require tailored, age appropriate interventions. Challenges such as stigma, limited caregiver support, poor treatment literacy and weak follow up systems continue to hinder effective care. Health facilities, especially in rural areas, often struggle to provide integrated services that address both clinical and psychosocial needs. This underscores the importance of innovative, adolescent centered care models that strengthen adherence, retention and overall treatment outcomes within this critical population.

Objective: To evaluate the effectiveness of the Bringing Kids to Care Model in improving viral load suppression among adolescents receiving anti-retroviral therapy.

Methods: A cohort of adolescents aged 10–14 years on ART was followed from January 2024 to December 2025. The Bringing Kids to Care Model was implemented, incorporating adherence counseling, teen clubs, caregiver engagement and community follow-up by peer supporters. Viral load outcomes were monitored over time to assess the impact of integrated clinical and psychosocial interventions.

Results: Viral load suppression among adolescents showed a steady and sustained improvement over time. Between May and December 2024, 9 out of 15 adolescents (60%) achieved viral suppression. This increased to 13 out of 19 adolescents (68%) from January to June 2025. Further progress was observed between July and December 2025, with 18 out of 25 adolescents (72%) achieving viral suppression, indicating continued gains in treatment outcomes.

Conclusion: The integration of clinical care with psychosocial support, caregiver engagement and community based follow-up significantly contributed to improved viral load suppression among adolescents. The Bringing Kids to Care Model proved effective in addressing both medical and socio-behavioral determinants of adherence.

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Leveraging Implementation Science to Understand and Remove Barriers to HIV Prep Delivery within Existing Family Planning Programs in Kenya

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Background: Adolescent girls and young women (AGYW) in Kenya experience barriers to daily oral pre-exposure prophylaxis (PrEP) use. As new options such as the dapivirine-eluting vaginal ring and injectable cabotegravir and lenacapavir become available in reproductive health clinics, there is an opportunity to understand gaps in the PrEP care pathway and address them to facilitate greater use among AGYW seeking family planning (FP) services.

Materials and Methods: From August-December 2025, we enrolled HIV-negative AGYW seeking family planning from 12 public clinics (program cohort) in the central Kenyan counties of Kiambu and Murang'a in the baseline phase of The PrEMIA Study, a stepped wedged cluster randomized trial (NCT07076043). During this time, oral PrEP (FTC/TDF) was available through HIV counselling and testing programs at the reproductive health clinics and within associated other services at the health center. HIV test results and PrEP interest were captured in an electronic medical record system, originally conceptualized and maintained by implementing partners. Family planning data were abstracted from paper-based registers used in FP clinics. Client identifiers in the FP registry were used by study staff to link to data on HIV testing, PrEP indication, and PrEP uptake. Clients who had documented negative HIV test results were enrolled in a longitudinal PrEMIA cohort. We used descriptive statistics to analyze data describing PrEP referrals and uptake from the point of facility entry to PrEP initiation. We also captured reasons for PrEP drop-offs at different points in the PrEP cascade.

Results: We enrolled 2961 AGYW appearing in family planning registers in the program cohort of the study who had a median age of 25 (IQR 22-28). Of those, 16.8% (n=498) were linked to HIV testing and PrEP data, indicating eligibility for HIV testing, and were enrolled in the longitudinal cohort. Of AGYW tested for HIV, 97.2% (n=484) were eligible and offered oral PrEP, 3.7% of those offered initiated PrEP (<1% of the entire cohort). Most (73.5%) did not specify a reason for declining PrEP and 13.9% declined due to not feeling at risk for HIV. Based on provider-assessed HIV risk among those tested, 70.9% AGYW (n=353) indicated low HIV risk, while 25.9% (n=129) were assessed as medium risk, and 2.8% (n=14) high risk. Notably, 19.9% (n=99) self-reported that they engaged in unprotected sex with someone with unknown HIV status in last 12 months.

Conclusions: Few AGYW attending family planning clinics were offered HIV testing and PrEP services resulting in low PrEP uptake. Later phases of the trial will provide opportunity to compare whether the availability of multiple PrEP products will result in increased PrEP uptake among AGYW seeking family planning services.

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Preferences for Workplace Health Screening Programs, Follow-Up Treatment, and Healthy Lifestyle Campaigns in Johannesburg, South Africa (Healthy Jozi): Discrete Choice Experiments Study

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Background: As non-communicable diseases (NCDs) and HIV represent a dual burden among working-age adults in South Africa, workplace-based screening presents a promising way to reach individuals, but these programs need to be appropriately designed. In Johannesburg, where a large and diverse urban workforce spans formal and informal sectors, understanding what drives engagement with workplace health initiatives is critical to effective program design. We conducted three linked discrete choice experiments (DCEs) to understand how various elements of workplace screening should be implemented (e.g. screening frequency, linkage site type, healthy lifestyle content).

Methods: We recruited participants at Johannesburg job sites (e.g., non-profit, health services, information technology). We administered three separate orthogonal DCEs across participants to assess preferences about (1) workplace health screening for HIV and NCDs, (2) treatment and follow-up care, and (3) healthy lifestyle campaigns. Following data quality checks, mixed logit models estimated preference weights across attributes, with heterogeneity explored by age, sex, employment type, and leadership position.

Results: Among 316 participants (median age 35), 71.2% were female and 74.4% were office-based. For screening (n=269), participants preferred screening quarterly (utility: 0.47[95% CI 0.15-0.79]) or one week annually (0.40[0.07-0.73]) over a single annual day, and disliked walk-ins access over scheduled appointments (−0.24[−0.46-−0.03]). Screening outside work hours was strongly dispreferred compared to free time during the workday (0.82[−1.16-−0.48]). Personalized e-invitations with reminders were preferred over general campaigns without follow-up (0.63[0.29-0.97]), and recommendations from co-workers (0.38), family (0.32), and leadership (0.31) were all preferred. Participants preferred comprehensive screening covering HIV, NCDs, and mental health together over NCD screening alone (0.63[0.27-0.98]). For treatment and follow-up (n=252), immediate treatment initiation was preferred over external referral (−0.37[−0.63-−0.11]). Private clinics and the option to choose a clinic were strongly preferred over workplace clinics (0.51[0.10–0.91] and 0.90[0.50-1.29]). Referral letters accompanied by a telephone helpline (0.53), navigator (0.41), or information sheet (0.34) were preferred over a letter alone. Reminder messages (0.87[0.54-1.19]) and patient navigators (0.98[0.64-1.33]) were both preferred over no follow-up support, and workplace time allocation for treatment was strongly preferred (1.19[0.85-1.53]). For lifestyle campaigns (n=271), year-round programming was preferred over a single annual event (0.45[0.18-0.72]). In-person workshops were preferred over paper flyers for information delivery (0.40[0.09-0.70]); content on healthy food and chronic disease was valued over content on exercise (−0.36[−0.65-−0.08]) or mental health (−0.30[−0.60-0.00]). Virtual (0.36[0.11-0.60]) or in-person coaches (0.46[0.20-0.72]) were preferred over self-managed approaches. Co-worker (0.42) and family (0.60) participation increased campaign appeal, and incentives for healthy behaviors or participation were strongly preferred (1.71[1.37-2.05] and 1.41[1.10-1.73]). Workplace healthy food options (0.72[0.47-0.96]) and exercise sessions (0.77[0.50-1.04]) were also preferred.

Conclusions: Effective workplace programs in Johannesburg should offer frequent, scheduled, work-hours screening with personalized invitations and comprehensive HIV and NCD coverage; treatment follow-up enabling immediate initiation, clinic choice, and structured navigation with dedicated workplace time; and ongoing, coached, incentivized lifestyle campaigns with social and in-person support. These findings provide a blueprint for person-centred workplace health programming in urban South African settings.

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Scaling Molecular Diagnostics through GeneXpert Optimization and Integrated Service Delivery: Lessons from Nigeria's Laboratory Network Strengthening Experience

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Background: Expanding access to quality diagnostic services remains a critical challenge in resource-limited settings despite substantial investments in molecular testing platforms. Nigeria has one of the largest networks of GeneXpert instruments globally, initially deployed for tuberculosis (TB) diagnosis. However, underutilization of diagnostic capacity, fragmented disease programs, and operational inefficiencies have limited the full potential of these investments. To address these challenges, a series of implementation strategies were introduced to optimize platform utilization, strengthen laboratory systems, and integrate additional diagnostic services, including Early Infant Diagnosis (EID), HIV viral load testing, and other priority public health interventions.

Methods: A multi-faceted implementation approach was deployed across supported laboratories and testing sites nationwide. Key interventions included diagnostic network optimization, targeted supportive supervision, quality management system strengthening, equipment maintenance and functionality monitoring, workforce capacity development, enhanced specimen referral systems, and the integration of HIV and TB diagnostic services on existing GeneXpert platforms. Programmatic data and laboratory performance indicators collected between 2024 and 2025 were analyzed to assess changes in platform utilization, diagnostic coverage, turnaround time, service accessibility, and continuity of TB diagnostic services following implementation.

Results: Implementation of the optimization strategy resulted in substantial improvements in platform utilization, service accessibility, diagnostic performance, and efficiency across Nigeria's laboratory network. Across the 36 states and the Federal Capital Territory, GeneXpert utilization increased from 35% to 72% following implementation of diagnostic network optimization and integrated service delivery interventions. Between 2024 and 2025, a total of 7,805 EID samples were processed through integrated TB GeneXpert platforms. Diagnostic evaluation rates were sustained at ≥98%, compared to a baseline of 19% prior to integration. Leveraging the existing TB specimen referral network expanded geographic access to EID testing from 17 molecular testing sites to 142 GeneXpert sites, significantly improving service reach and equity. Average diagnostic turnaround time decreased from 2–3 months to 1 day, while 81% of samples no longer required referral to centralized laboratories. Strengthened quality assurance systems, routine mentoring, proactive equipment management, and coordinated cartridge forecasting supported uninterrupted service delivery, minimized stock disruptions, and maintained TB diagnostic services throughout implementation. The intervention demonstrated that existing molecular diagnostic infrastructure can be effectively leveraged to deliver multiple public health services at scale without significant additional capital investment.

Conclusions: The Nigerian experience demonstrates that strategic implementation interventions can transform underutilized diagnostic infrastructure into integrated, high-impact service delivery platforms. Optimizing and integrating molecular diagnostic services improved access, efficiency, and equity while strengthening health system resilience and sustainability. These findings provide a scalable model for countries seeking to maximize investments in laboratory systems, expand access to essential diagnostics, and accelerate progress toward integrated, patient-centered service delivery.

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Integrated Service Delivery for HIV, TB, Maternal Health, Hypertension, and Diabetes Care: Improving Convenience and Reducing Multiple Clinic Visits in Ebonyi State, Nigeria

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Background: Ebonyi State continues to experience a growing burden of communicable and non-communicable diseases, including HIV, tuberculosis (TB), hypertension, diabetes, and maternal health complications. Despite ongoing investments in healthcare delivery, services are often provided through fragmented systems requiring patients to attend multiple clinic appointments for different conditions. This contributes to increased transportation costs, prolonged waiting times, missed appointments, treatment fatigue, and poor retention in care. Integrated service delivery has been recommended as a patient-centred approach to improve access, continuity of care, and service efficiency by providing multiple services within a single clinic visit. This study assessed the impact of integrating HIV, TB, maternal health, hypertension, and diabetes services on patient convenience and healthcare utilization in selected facilities in Ebonyi State, Nigeria.

Methods: A facility-based mixed-methods study was conducted between January and December 2025 across 12 primary and secondary healthcare facilities implementing integrated service delivery in Ebonyi State. Quantitative data were retrospectively extracted from ART, TB, antenatal care (ANC), hypertension, and diabetes clinic registers before and after service integration. Variables collected included clinic attendance, missed appointments, retention in care, number of clinic visits, screening uptake, and referral linkage outcomes. In addition, structured patient satisfaction questionnaires were administered to 420 clients receiving integrated services, while key informant interviews were conducted with 24 healthcare workers and program managers to assess acceptability, benefits, and implementation challenges. Quantitative data were analyzed using descriptive and comparative statistics, while qualitative responses were thematically analyzed.

Results: A total of 4,862 clients received integrated services during the review period, including 2,104 HIV clients, 486 TB patients, 1,322 antenatal clients, 610 hypertension clients, and 340 diabetes clients. Following integration, the average monthly clinic visits per client reduced from 3.4 visits to 1.8 visits. Retention in care among HIV clients increased from 81% to 92%, while missed appointments declined from 28% to 12%. Hypertension screening among ART clients increased from 46% to 89%, and diabetes screening increased from 32% to 76%. Among pregnant women attending ANC, HIV/TB integrated screening coverage increased from 68% to 94%. Overall patient satisfaction improved significantly, with 87% of respondents reporting reduced transportation costs and shorter waiting times. Healthcare workers reported improved coordination of care but identified staffing shortages, limited clinic space, and increased workload as major implementation challenges.

Conclusion: Integrated service delivery for HIV, TB, maternal health, hypertension, and diabetes care improved patient convenience, reduced multiple clinic visits, and strengthened continuity of care in Ebonyi State. The model also improved screening uptake, retention in care, and patient satisfaction. Strengthening workforce capacity, infrastructure, and coordinated service delivery systems will be essential for sustaining and scaling up integrated healthcare models in resource-limited settings.

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Preventing Depression through Integrated Mental Health Support during HIV Disclosure and Continuity of Care for Paediatric and Adolescent Clients in Ebonyi State, Nigeria

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Background: HIV disclosure is a critical yet challenging period for paediatric and adolescent clients, often triggering depression, anxiety, and poor treatment adherence. In Ebonyi State, Nigeria, limited mental health integration within HIV care leaves these vulnerabilities unaddressed. This study evaluated whether structured mental health support during disclosure and continuity of care could reduce depressive symptoms and improve clinical outcomes among children and adolescents aged 8–19 years.

Methods: A mixed-methods quasi-experimental study (January to December 2025) across 10 ART facilities in Ebonyi State, Nigeria, enrolled 462 children and adolescents aged 8–19 years undergoing HIV disclosure and follow-up. Quantitative data from registers and the mental health screening Patient Health Questionnaire-Adolescent Version (PHQ-A) assessed depressive symptoms. The intervention included structured counselling, caregiver sessions, peer groups, and referral pathways. Qualitative data from 30 healthcare workers and 40 caregivers explored acceptability and barriers. Outcomes were analysed using descriptive/comparative statistics and thematic analysis.

Results: Among the 462 participants enrolled, 58% were female and the median age was 14 years. At baseline, 38% of participants screened positive for mild-to-severe depressive symptoms, while 27% reported anxiety or social withdrawal following HIV disclosure. After 12 months of integrated mental health support, depressive symptoms reduced from 38% to 17%, while reported treatment-related anxiety declined from 27% to 11%. ART adherence improved from 76% at baseline to 91% post-intervention, and retention in care increased from 82% to 94%. Viral load suppression among participants improved from 71% to 88% during the study period. Caregivers reported improved confidence in conducting age-appropriate disclosure and better communication with children and adolescents. Healthcare workers also demonstrated improved capacity in mental health screening and psychosocial support delivery. Major challenges identified included stigma, limited mental health specialists, and increased workload for healthcare providers.

Conclusion: Integrating mental health support into HIV disclosure and continuity-of-care services significantly improved psychosocial wellbeing, ART adherence, retention in care, and viral load suppression among paediatric and adolescent clients in Ebonyi State. Structured counselling, caregiver support, and routine mental health screening may help reduce depression and improve long-term HIV treatment outcomes. Strengthening integration of mental health services within paediatric and adolescent HIV programs is essential to achieving more holistic and adolescent-friendly HIV care in Nigeria.

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Integrating Gender-Based Violence Screening into Long-Acting Injectable Lenacapavir PrEP Services: Early Lessons from a Multi-State Implementation Programme in Nigeria

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Background: Gender-based violence (GBV) is a well-recognized barrier to HIV prevention, influencing healthcare access, PrEP uptake, adherence, and retention in care. As countries introduce long-acting injectable Lenacapavir (LeN) PrEP, integrating GBV screening into service delivery may improve identification of vulnerable clients and strengthen person-centred HIV prevention. This study evaluated findings from a routine GBV screening module embedded within a digital client feedback platform during the early implementation of LeN PrEP in Nigeria.

Methods: A cross-sectional implementation evaluation was conducted using Clientshot, a digital client experience and continuous quality improvement platform deployed across 29 LeN PrEP implementing facilities in Anambra, Ebonyi, Gombe, and Kwara States under Nigeria's Global Fund N-THRIP (GC7) project. Between April and May 2026, structured client surveys incorporated routine GBV screening alongside measures of service experience. Descriptive statistics were used to summarize GBV indicators and client safety outcomes.

Results: A total of 118 clients participated in the survey. Respondents were predominantly male (52.5%), while 47.5% were female. Most participants (75.4%) were aged 20–39 years, and 53.4% had attained tertiary education. Although 84.7% of respondents reported feeling safe in their relationships, 15.3% indicated that they did not. Fourteen respondents (11.9%) reported that a partner controlled their access to healthcare, while nine (7.6%) disclosed experiencing physical violence from a partner. Five respondents (4.2%) reported forced sex, five (4.2%) stated that a partner had prevented them from accessing HIV prevention services, and five (4.2%) experienced violence specifically related to PrEP use. Seventeen respondents (14.4%) reported they were unable to attend clinic visits safely. The digital platform also identified individual high-risk cases requiring immediate welfare follow-up and referral, demonstrating the feasibility of integrating safeguarding within routine HIV prevention services.

Conclusions: Routine GBV screening embedded within digital client feedback platforms is feasible during implementation of long-acting injectable HIV prevention programmes and can identify clients requiring timely psychosocial support and referral. Integrating GBV assessment into LeN PrEP service delivery may strengthen person-centred care, improve equitable access to HIV prevention, and ensure that programme scale-up addresses structural barriers alongside biomedical interventions.

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Client Characteristics and Uptake of Medication-Assisted Treatment Services for Opioid Use Disorder in Nigeria

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Background: Medication-assisted treatment (MAT) is an evidence-based intervention for opioid use disorder (OUD). The first MAT treatment site was established in Nigeria in June, 2025 and commenced the induction of clients with OUD using methadone and Buprenorphine. The goal of the program includes mobilizing drug user communities to participate in activities that lead to safer use, managed use, withdrawal, and abstinence from drug use. This study describes client characteristics and examines uptake of MAT services among clients on MAT between June and November, 2025.

Method: An analysis of program data for clients enrolled at the MAT centre, Gombe state, Nigeria, between June and November 2025. Clients registered and undergoing clinical review, Mental Health and Psychosocial support counselling, and laboratory assessment were classified as enrolled, while those initiated on pharmacological treatment were classified as inducted. Data were summarized by sex, age group, and medication type. Associations between categorical variables were assessed using Chi-square tests of independence, with Fisher's Exact Test applied, and statistical significance was set at $p < 0.05$.

Results: A total of 367 (346, 94% Males, 21, 6% females) clients were enrolled, of whom 159 (151 95% males, 8, 5% females) (43.3% of those enrolled) were inducted into MAT, with a low treatment discontinuation rate of 3.0%. There were more Males 18-24 yrs (26%) and 25-29 yrs (23%) enrolled into MAT than other ages. Induction rates did not differ significantly by sex ($p > 0.05$) but varied significantly across age groups ($p < 0.05$), with higher induction observed among males aged 35–39 years (21%) compared to younger age groups. Among clients enrolled on MAT, methadone was the predominant medication (92.6%), while buprenorphine accounted for 7.4% of prescriptions. Medication type did not vary significantly by age group ($p > 0.05$), however, buprenorphine was prescribed exclusively to male clients ($p < 0.05$). Induction rates were high and comparable for methadone (92.6%) and buprenorphine (92.3%), with no statistically significant difference by medication type ($p > 0.05$).

Conclusion: The implementation of MAT services in Nigeria has demonstrated significant uptake, high induction rates, and low early discontinuation. While female enrolment remains limited, induction once enrolled was comparable across sexes. There is a need for gender-responsive MAT services that reduce stigma, ensuring privacy and safety, integrating reproductive and psychosocial care, with targeted community outreach to encourage women's engagement. The age-related differences in induction highlight the need for tailored engagement strategies for younger clients, while comparable uptake across medication types supports the feasibility of offering multiple MAT options in low-resource settings.

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Sustaining HIV, TB, and Syphilis Services through Community Health System Integration amid Declining Donor Funding in Katsina State, Nigeria

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Background: Declining donor funding threatens the sustainability of HIV, tuberculosis (TB), and syphilis programs in many low-resource settings, particularly in countries with longstanding dependence on vertical health interventions. In Nigeria, fragmented service delivery models continue to limit continuity of care, operational efficiency, and equitable access to integrated infectious disease services. Community health system integration offers a promising approach for strengthening program sustainability and improving health outcomes. This study assessed the implementation outcomes of integrating HIV, TB, and syphilis services into community health systems across high-burden communities in Katsina State, Nigeria.

Materials and Methods: A retrospective program review was conducted between January and December 2025 across all 34 Local Government Areas of Katsina State. Program data were obtained from community-based organizations, mentor mothers, health facilities, and digital reporting platforms, including DHIS2, NDARS, and COMMTB. Integrated community interventions included combined HIV, TB, and syphilis screening, bidirectional TB-HIV screening, syphilis testing among pregnant women, integrated referral systems, and community-led linkage tracking. Data harmonization and triangulation were conducted to validate reporting consistency across program indicators. Descriptive and inferential statistical analyses were performed to assess changes in service delivery outcomes before and after implementation of the integrated community health systems approach. Proportions were compared using Pearson's Chi-square test, with statistical significance set at $p<0.05$.

Results: Implementation of the integrated community health system model significantly improved key service delivery indicators. HIV testing uptake increased by 28.4% (18,426 vs. 23,658; $p<0.001$), while linkage to HIV treatment improved from 81.2% (1,284/1,581) to 93.5% (1,746/1,868) ($p=0.002$). TB screening coverage among individuals receiving HIV services increased from 62.3% to 97.0% ($p<0.001$), while syphilis screening among pregnant women increased from 46.1% (3,214/6,972) to 79.8% (6,105/7,649) ($p<0.001$). Reporting completeness across DHIS2, NDARS, and COMMTB improved from 72.5% to 96.4% ($p<0.001$). Integrated commodity redistribution mechanisms reduced rapid test kit stock-out periods by 37%. In addition, the integrated model reduced duplication of program activities and strengthened coordination among government stakeholders, community-based organizations, and implementing partners.

Conclusions: Integration of HIV, TB, and syphilis services into community health systems substantially improved service uptake, linkage to care, reporting quality, and program efficiency in a resource-constrained setting. Community-led implementation strategies, harmonized digital reporting systems, and integrated service delivery models represent scalable and sustainable approaches for maintaining infectious disease programs amid declining donor funding. Strengthening local ownership, community health workforce capacity, and integrated public health systems may be essential for sustaining epidemic control and improving long-term health outcomes in low-resource settings.

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From Overreporting to Accountability: Institutionalizing Laboratory Triangulation in PPM TB Services Using the GF CPPM Data Validation Standard Operating Procedure (SOP)

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Background: Public Private-Mix (PPM) interventions are critical to tuberculosis (TB) case detection in Nigeria, with a national target of contributing 35% of total TB notifications. However, discrepancies between PPM reports and laboratory records can undermine data credibility and program accountability. Unusual high PPM case notifications prompted a systematic review to verify reported cases and strengthen data integrity. This study assessed reporting gaps and evaluated the application of the Global Fund Community PPM (GF CPPM) Data Validation SOP to institutionalize laboratory triangulation and improve accountability.

Materials and Methods: The GF CPPM Data Validation SOP was used to validate reported TB cases and conduct spot-checks during on-site data verification (OSDV) from November 2025 to February 2026 across PPM facilities. TB cases were triangulated across screening, presumptive, treatment, laboratory registers, and GeneXpert/Truenat databases. Commodity utilization (cartridges and reagents) was reviewed against tests performed. Patients were contacted via phone for verification and internal consistency. Unverified TB cases were rejected.

Results: A total of 3,722 TB cases were reported between November 2025 and February 2026, of which 519 (13.9%) were rejected or unverified during validation. Monthly rejection rates were 10.8% (124/1,146) in November, 4.0% (34/843) in December, 7.8% (67/861) in January, and 33.7% (294/872) in February. These discrepancies highlight inconsistencies in reporting and emphasize the importance of routine data validation to ensure accuracy and reliability of TB program data.

Conclusions: The application of the GF CPPM Data Validation SOP addressed critical gaps in TB reporting by establishing a structured system for routine data triangulation and verification. The experience provides a practical model for strengthening internal quality control systems and supports potential national scale-up of structured data validation process for improved TB data integrity and program performance.

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Building Accountability from the Ground Up: Effect of On-the-Job Mentorship on PPM DR-TB Reporting Accuracy in Katsina State

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Background: Accurate reporting in Drug-Resistant Tuberculosis (DR-TB) within Public-Private Mix (PPM) facilities remains a challenge in Katsina State, with gaps in documentation, register completeness, and laboratory treatment linkage affecting program performance. KNCV Nigeria is implementing the CPPM GC7 Grant in the state to strengthen TB service delivery. This study assessed the effect of on-the-job mentorship on improving accountability and DR-TB reporting accuracy. It aimed to evaluate changes in documentation quality, completeness of DR-TB registers, linkage between diagnosis and treatment, and reporting timeliness.

Materials and Methods: A pre-post implementation study was conducted using routine program data from January to December 2024 (pre-mentorship) and January to December 2025 (post-mentorship) across selected PPM facilities in Katsina State. On-the-job mentorship, initiated in January 2025, involved continuous capacity building, supportive supervision, and on-site data validation (OSDV). Program level data were collated and analysed using descriptive statistics, focusing on key indicators: DR-TB notification, treatment initiation, regimen documentation, and concordance between laboratory and treatment records.

Results: DR-TB notification increased from 12 in 2024 to 41 in 2025, a 242% rise. Treatment initiation improved from 11/12 (92%) to 39/41 (95%). Regimen documentation completeness increased from 92% to 100% among those initiated on treatment. The notification to treatment gap reduced from 8.3% to 4.9%. Facilities who reported DR-TB cases expanded from 6 to 13, indicating improved detection and reporting coverage. Data concordance between laboratory and treatment records and reporting timeliness also improved following mentorship.

Conclusions: On-the-job mentorship significantly strengthened accountability and improved DR-TB reporting accuracy in PPM facilities. The intervention enhanced data completeness, reduced reporting gaps, and improved linkage between diagnosis and treatment. These findings highlight the value of continuous capacity building and supportive supervision in optimizing TB program performance. Scaling this mentorship model could improve data quality and treatment outcomes in similar resource-limited settings.

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Pilot Implementation of HIV Case-Based Surveillance in Mozambique: Process, Challenges and Lessons Learned, 2023-2024

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Background: Mozambique has achieved substantial progress in HIV response since the first clinically diagnosed AIDS case in 1986, including expanded antiretroviral therapy (ART) coverage and strides toward the global 95-95-95 targets. However, the absence of a harmonized national system capable of tracking people living with HIV across provinces limits timely, data-driven decision-making and hinders monitoring along the continuum of care. HIV Case-Based Surveillance (CBS) offers a strategic approach to address the gaps in longitudinal monitoring of diagnosed cases.

Methods: A pilot HIV CBS system was implemented between May 2023 and January 2024, led by the National Institute of Health in collaboration with the Ministry of Health, and partners organizations. Five health facilities in Maputo City and Maputo Province were selected based on predefined inclusion criteria to represent urban, peri-urban, and rural settings. Surveillance initially targeted newly diagnosed HIV cases and was later expanded to also include previously diagnosed individuals retesting (and reinitiating ART) following treatment interruption. Individual-level data were collected from HIV testing entry points using electronic tools and compiled into a centralized, de-identified longitudinal database.

Results: The pilot demonstrated the feasibility and added value of implementing HIV CBS within routine health services, based on key informant interviews with health facility staff alongside routine data quality assessments. CBS enabled near-real-time monitoring of HIV diagnoses, ART initiation, and return-to-care events that were not adequately captured through aggregate reporting systems. Key implementation challenges included inconsistent use of patient identifiers, data quality gaps, limited interoperability with existing electronic systems and staff workload constraints. Adaptive measures, including refinement of case definitions, targeted training and supportive supervision, data triangulation, and improved data visualization. These adaptations led to measurable improvements in data completeness, internal consistency, and analytical utility.

Conclusions: The pilot highlights the potential of HIV CBS to strengthen HIV surveillance, improve longitudinal patient tracking, and support more responsive HIV programming in Mozambique. National scale-up of CBS, integrated with electronic patient monitoring systems and supported by standardized tools and unique patient identifiers, could substantially enhance epidemic monitoring and help sustain progress toward HIV epidemic control.

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Linking STI Exposure to Maternal and Neonatal Outcomes among Adolescent Girls and Young Women: Insights from the Pregnancy Exposure Registry in Rural KwaZulu-Natal, South Africa

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Introduction: HIV and STI prevalence is 27% and 29% among 15-30 years adolescent girls and young women (AGYW) in KwaZulu-Natal (KZN) Province, South Africa. Among pregnant AGYW, the HIV and STI prevalence are 27% and 46%, respectively. Syndromic management of STIs does not treat the majority of asymptomatic STIs. The World Health Organization recommends complementing syndromic with aetiological STI management among pregnant women, however there are limited data on adverse pregnancy outcomes to guide health policy makers. We aimed to establish and evaluate the feasibility of a retrospective pregnancy exposure registry for AGYW engaged in HIV prevention to generate longitudinal data on pregnancy outcomes in a rural high-HIV burden and underserved setting in KwaZulu-Natal, South Africa.

Methods: We describe the implementation of a pilot pregnancy surveillance system development embedded within the Health and Demographic Surveillance System conducted by the Africa Health Research Institute. Our registry retrospectively links laboratory-confirmed STIs among PrEP implementation AGYW to pregnancy outcomes. Preparatory phase (completed): We conducted extensive stakeholder engagement with clinicians, registry experts, other healthcare professionals and the South African National Department of Health to co-design the registry system, case report form (CRF), establish the registry database, validate the CRF, and train data collectors (2025). Implementation phase (planned): We will conduct a retrospective medical records review of maternity case records of a cohort of AGYW at high risk of HIV acquisition who attended mobile sexual and reproductive health services for HIV PrEP and STI testing between 2022–2025 and who became pregnant. The expected sample size is ~300 pregnancies. The exposures will be defined as a GeneXpert positive test for chlamydia, gonorrhoea, trichomonas, hepatitis B, or Rapid Plasma Reagin and Venereal Disease Research Laboratory with confirmatory treponemal tests (Fluorescent Treponemal Antibody Absorption and T. pallidum Particle Agglutination Assay) for syphilis. The composite outcome will include maternal miscarriage, preterm birth, maternal death, stillbirths and neonatal low birthweight. Predefined key explanatory covariates will include HIV status, time to syndromic or aetiological treatment, partner notification and STI reinfections.

Results: The baseline analysis found one out of two pregnant AGYW tested positive for an STI which underscores system gaps in syndromic clinical management of STIs in ANC. This surveillance platform will generate the first longitudinal STI-associated pregnancy outcome data and identify ANC clinical pathway gaps to inform WHO-recommended ANC STI management and augment triple elimination targets.

Conclusion: Our study develops a programmatically embedded pregnancy surveillance in HIV/STI burden rural setting. The system will provide preliminary signals, assess feasibility and inform the scale up of larger STI pregnancy surveillance, foundational rural data to identify ANC care gaps and actionable evidence to guide antenatal guidelines for STI diagnosis and treatment in HIV high-burden rural settings.

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Reframing TB Treatment Delivery: A Community-Led Hybrid Dot Model Integrating Digital Adherence Support in Kitende Town, Uganda

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Background: Sustained adherence to tuberculosis (TB) treatment remains a critical challenge in high-burden settings, where structural, socioeconomic, and health system barriers often hinder treatment completion. Conventional facility-based directly observed therapy (DOT), while effective in promoting adherence, can impose substantial burdens on patients through transport costs, lost income, long travel times, and disruption of daily responsibilities. These challenges are often amplified among individuals enrolled in clinical studies that require close treatment monitoring and frequent follow-up. Although community-based DOT and digital adherence technologies have shown promise in improving treatment support, they are frequently implemented as stand-alone interventions, limiting their overall impact. To address these gaps, we implemented and evaluated a community-led hybrid DOT model integrating facility-based DOT (fDOT), community-based DOT (cDOT), and WhatsApp-enabled video DOT (vDOT) to enhance adherence monitoring, improve patient experience, and strengthen treatment delivery within a TB clinical study setting.

Methods: A hybrid DOT model was implemented within an ongoing TB clinical study in Kitende Town (Entebbe Road, Wakiso district, Uganda). Trained community health workers provided decentralized treatment support, adherence counseling, participant follow-up, and linkage to clinical teams. Participants receiving oral TB regimens were encouraged to complete at least five observed doses weekly, with self-administration permitted on weekends and public holidays. Adherence monitoring was delivered through three complementary approaches: facility-based DOT (fDOT), community-based DOT (cDOT), and WhatsApp-enabled video DOT (vDOT), supplemented by telephone follow-up and messaging. Outcomes assessed included feasibility, acceptability, adherence, retention in care, and participant engagement. Adherence was measured through observed-dose completion and treatment interruptions, while acceptability was assessed through participant feedback and continued use of the model.

Results: A total of 68 participants were enrolled into the hybrid DOT model. Overall, 96.4% of expected observed doses were successfully completed and documented, while 89.7% of participants achieved ≥95% treatment adherence. Fewer than 5% of participants experienced treatment interruptions requiring additional follow-up. Community-based and video-supported DOT substantially reduced the need for frequent facility attendance, lowering transport costs, minimizing disruption to employment and household responsibilities, and improving access to treatment support.
Participant satisfaction exceeded 90%, with flexibility, convenience, reduced travel requirements, and personalized support identified as key benefits. Community health workers played a critical role in maintaining participant engagement, facilitating trust, and enabling timely follow-up for missed doses or emerging concerns.
WhatsApp-based video monitoring enhanced real-time visibility of adherence patterns, allowing rapid intervention by clinical teams and supporting continuity of care.
Implementation challenges included inconsistent access to electricity for charging mobile phones, intermittent internet connectivity, shared device use within households, data bundle limitations, and varying levels of digital literacy. These challenges were largely mitigated through flexible use of community-based and facility-based DOT, telephone follow-up, participant education, and ongoing community health worker support.

Conclusion: A community-led hybrid DOT model integrating WhatsApp-based digital adherence support was feasible, acceptable, and potentially scalable in this setting. By combining community engagement with real-time monitoring, the model reduced barriers to care, strengthened adherence oversight, and enhanced participant experience. These findings support use of patient-centered hybrid treatment delivery models to optimize TB care in resource-limited settings.

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Embedding Integrated Mental Health and Psychosocial Support into Routine HIV Services for Key Populations in Ebonyi State, Nigeria: Implementation Analysis of a 27-Month Differentiated Care Model

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Background: Mental health comorbidities are common among key populations (KPs) and undermine HIV treatment adherence, retention, and viral suppression. In Nigeria, KPs, including men who have sex with men (MSM), people who inject drugs (PWID), female sex workers (FSW), transgender male/females (TG), and people in custodial centres, experience stigma, criminalization, trauma, and poverty that increase mental health vulnerability. Evidence on integrating mental health and psychosocial support (MHPSS) into KP HIV services remains limited. This study assessed an embedded MHPSS intervention in a Global Fund-supported KP HIV program in Ebonyi State and described the pattern of mental health conditions across KP groups.

Methods: We analyzed implementation data from January 2024 to March 2026 at a community-based One-Stop Shop in Ebonyi State providing KP-focused HIV services. Clients were screened by trained clinical psychologists using structured clinical assessment and validated tools adapted for KP populations. Those with identified needs received tailored MHPSS, including psychoeducation, counselling, trauma-informed care, psychotherapy, follow-up, and referral when needed. Aggregated de-identified data were used to estimate screening coverage, condition prevalence, and distribution by KP type; chi-square tests assessed group differences at $p < 0.05$.

Results: Over a period of 27 months, 3,211 unique KP clients were screened, and 911 clients (28.4%) were diagnosed with 959 mental health conditions (some clients had comorbidities). The burden varied significantly across KP groups ($\chi^2 = 41.3$, $p < 0.001$). MSM accounted for the largest share of conditions (549/959, 57.2%), followed by FSW (354, 36.9%), PWID (260, 27.1%), and TG (89, 9.3%). Substance use disorder was the single most common diagnosis nationally (233/959, 24.3%). Still, its distribution was highly unequal: PWID were significantly more likely to present with substance use disorder than MSM (61.5% vs. 39.4% of conditions within each group; difference 22.1%, 95% CI: 14.2–30.0, $p < 0.001$) and than FSW (61.5% vs. 35.3%; difference 26.2%, $p < 0.001$). Depression was more common among FSW (29.1% of FSW conditions) than among MSM (22.9%; difference 6.2%, $p = 0.03$) and among TG (31.5%) than among MSM (difference 8.6%, $p = 0.048$). Trauma- or grief-related disorders were strikingly elevated among TGs (33.7% of their conditions) compared with FSW (5.3%; difference 28.4%, $p < 0.001$) and MSM (18.6%; difference 15.1%, $p = 0.002$). Anxiety was more frequent in MSM (21.7%) than in PWID (12.7%; difference 9.0%, $p = 0.002$). Suicidality, though less common overall (23 cases, 2.4%), was significantly more frequent among MSM (3.1%) than among FSW (0.6%; difference 2.5%, $p = 0.02$).

Conclusions: This analysis shows a substantial and significantly heterogeneous burden of mental health conditions among KPs accessing HIV services in Ebonyi State, with more than one in four clients requiring MHPSS. The predominant conditions were substance use, depression, anxiety, and trauma, varied by KP type, underscoring the need for differentiated care. Routine integrated MHPSS screening is feasible within KP programs and should be scaled up with tailored packages for PWID, FSW, TG, and MSM. These findings support integrating KP-competent, trauma-informed mental health services into HIV programming in Nigeria and similar high-burden settings.

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Using Community TB Outreach to Reach Pregnant Women outside ANC: Integrated HIV, Syphilis, HBV and TB Screening in Katsina State, Nigeria

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Background: In high-burden settings, pregnant women face overlapping risks of tuberculosis (TB), HIV, syphilis, and hepatitis B virus (HBV), yet screening services are often delivered through fragmented programs. Missed or delayed diagnosis during pregnancy can affect maternal health, fetal outcomes, and opportunities for prevention of vertical transmission. Community TB active case-finding platforms are widely implemented in rural Nigeria but typically focus on TB alone, representing a missed opportunity for integrated maternal infection screening. In settings where some pregnant women do not attend facility-based antenatal care early or consistently, community platforms may provide an important entry point for reaching women who would otherwise remain outside routine screening services. This study evaluated the integration of HIV, syphilis, and HBV screening into existing community TB outreach under the Global Fund GC7 project.

Methods: The Institute of Human Virology Nigeria engaged traditional birth attendants, Mentor Mothers, and Community TB/HIV Workers to identify pregnant women during routine community TB outreach activities in Katsina State. These community cadres used established local networks, home visits, and contacts with traditional birth homes to reach pregnant women, particularly those not currently accessing facility-based antenatal care. Eligible women were offered integrated rapid testing for HIV, syphilis, and HBV, alongside symptom-based TB screening. Presumptive TB cases were referred for diagnostic evaluation, while women with reactive results were linked to appropriate treatment and care through existing referral pathways. Routine program data from September 2024 to October 2025 were analyzed to assess screening coverage, diagnostic yield, and the contribution of the integrated platform to maternal infection detection. Descriptive analysis was conducted using program registers and reported service data.

Results: A total of 121,981 pregnant women were reached through community TB platforms, demonstrating substantial community-level reach for integrated maternal infection screening. Among 65,926 women eligible for HIV testing, 63,564 (96.4%) were tested, identifying 55 HIV-positive cases (0.09%). Syphilis screening was completed for 61,748 women, yielding 86 positive cases (0.14%), while 43,104 women were tested for HBV, identifying 234 HBsAg-positive cases (0.54%). TB screening reached 88,749 women, of whom 3,137 (3.5%) were identified as presumptive TB cases. All presumptive TB cases completed diagnostic evaluation, resulting in 89 confirmed TB diagnoses. Overall, 464 maternal infections across the four diseases were detected through the integrated platform, showing the added value of using routine community TB outreach as an entry point for multi-disease screening among pregnant women.

Conclusion: Integrating maternal HIV, syphilis, and HBV screening into community TB outreach substantially expanded access to multi-disease services for pregnant women in rural Nigeria. Using an established TB platform made it possible to identify pregnant women outside formal health facilities, provide same-contact screening for multiple infections, and link women with positive or reactive results to appropriate care. The findings show that community TB structures can support broader maternal infection screening without creating a separate outreach system. This integrated approach provides a practical model for advancing triple elimination and TB control goals in underserved, high-burden settings.

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Closing the Quality Gap: Reducing HIV Rapid Test Misdiagnosis through Enhanced Proficiency Test Monitoring

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Background: HIV testing remains central in achieving the first 95 UNAIDS targets, as accurate diagnosis is essential for initiation on antiretroviral therapy (ART) and prevention of onward transmission. Despite substantial global progress, HIV misdiagnosis remains a major public health challenge in resource-limited settings with serious consequences. Therefore, competence in HIV testing is critical for the accuracy of results. The facilities' misdiagnosis of the HIV proficiency testing (PT) panels highlighted critical quality gaps, thus necessitating the implementation of quality improvement strategies for early detection of testing errors and reduction of misdiagnosis.

Methods: Implementation research was employed in HIV rapid testing program. Training, assessment, and monitoring were decentralized to the district level. Choma district conducted a training gap assessment at all health facilities, including those with previous training and certification. This was followed by training and certification of HIV testers - Health care workers (HCW) and Community-based health workers (CHW). The testing sites were certified based on compliance with national testing guidelines. Additionally, capacity was strengthened in the hub laboratories to conduct regular assessments and offer technical support to their zonal facilities. The performance was monitored at intervals using PT panels, and all facilities that failed were offered close supervisory follow-up.

Results: HIV rapid testing training was conducted at all the facilities between 2024 and 2025. The number of HIV testers increased from 332 in 2023 to 569 by 2025, accompanied by expanded coverage of competent HCW from 8% (27/332) to 34% (193/569). There was an increase in the number of certified testers from 45 (13.5%) to 521 (91.5%). The rate of facilities misdiagnosing the PT panel decreased from 47% (20/43) to 4% (2/50) by 2025. The rural facilities were 2.30 times more likely to misdiagnose panels compared to urban facilities. Though not statistically significant (p=0.209: 95%Cl 0.63 - 8.51). All failing testing sites received scheduled mentorship and close supervisory follow-ups. Furthermore, having trained HCW improved the HIV testing coverage during non-CHW shifts and oversaw CHW work.

Conclusion: Decentralisation of the HIV training program reduced rates of misdiagnosis and increased the coverage of certified HIV testers. In the context of ongoing HCW attrition in facilities, scheduled periodic onsite orientation, assessments, and mentorship are imperative to sustain testing quality and diagnostic accuracy.

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Using Data-Driven Cascade Review Meetings to Improve HIV Treatment Retention and Viral Load Suppression in High-Burden Locations in Anambra State, Nigeria

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Background: Sustaining HIV epidemic control requires integration of routine data systems, continuous performance monitoring, and adaptive responses within public health programs. Despite progress toward the Joint United Nations Programme on HIV/AIDS 95-95-95 targets, gaps remain in treatment retention, viral load suppression, and continuity of care among people living with HIV in Anambra, Nigeria. These gaps highlight the need for sustainable, system-embedded strategies that strengthen accountability and program responsiveness. Integrating cascade review meetings into routine health system operations offers a structured approach to institutionalize data use, improve decision-making, and enhance service delivery across the HIV care continuum. This study assessed its effectiveness in high-burden facilities.

Method: A retrospective implementation science study was conducted across selected HIV program-supported health facilities in Anambra between January and December 2025. Monthly cascade review meetings were integrated into routine facility workflows using data from electronic medical records and the District Health Information Software 2 (DHIS2). Key indicators reviewed included HIV testing and case finding, ART initiation, retention, viral load coverage, and viral load suppression. Each cycle included data quality checks, gap analysis, and action planning. Pre- and post-implementation trends were assessed using descriptive and longitudinal analyses to evaluate program performance changes over time.

Result: The integration of cascade review meetings into routine HIV program systems improved data visibility, accountability, ownership and overall program performance across participating facilities. HIV testing outcomes increased from 4.0% to 73.6% of target achievement. Viral load sample collection and result utilization improved from 69% to 89.4%. ART retention rates increased to 98%, reflecting strengthened continuity of care. Real-time data use enabled rapid identification of service delivery bottlenecks and informed timely corrective actions across both adult and pediatric services. Early evidence also indicated improvements in viral load suppression, suggesting progress toward the third Joint United Nations Programme on HIV/AIDS 95 target. The intervention further strengthened the culture of data-driven decision-making and continuous quality improvement at facility level.

Conclusion: Integrating cascade review meetings into routine HIV program systems is a scalable and sustainable strategy for strengthening health service delivery. It improves treatment continuity, viral load monitoring, and program responsiveness. This approach enhances data-driven decision-making and supports sustained HIV epidemic control through stronger system integration and continuous quality improvement.

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Health Care Worker Experiences of Offering Shared Decision-Making for Antiretroviral Therapy Clients with Treatment Interruption within the CHOICE Trial in Malawi

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Background: Interruption in HIV treatment (IIT) (≥28 days late for last scheduled appointment) is a substantial barrier to ending AIDS by 2030. In eastern and southern Africa, 46% of new antiretroviral therapy (ART) clients experience IIT and 30-50% experience repeat IIT within six months after returning to care. Person-centred care (PCC) approaches, which incorporate clients' preferences and client ownership within disease management, can improve client satisfaction, retention, and viral suppression. Shared decision-making is a key PCC strategy but is rarely implemented for clients with IIT. For example, in Malawi only 4% of clients reported being offered a choice of multi-month dispensing at their last ART appointment. Understanding health care worker (HCW) perceptions of shared decision-making interventions is important to supporting effective implementation and scale.
We explored HCW experiences implementing a shared decision-making intervention with IIT clients in Malawi as part of the CHOICE trial (NCT07220278).

Methods: Within CHOICE, routine HCWs at six high IIT-burden facilities participated in a two-day training and quarterly quality improvement meetings regarding CHOICE implementation. The CHOICE intervention engaged IIT clients over 24 months in dynamic, ongoing shared decision-making to select HIV services that best fit their needs, drawing from existing differentiated service delivery (DSD) options available at facilities. Options included one-, three- and six- month, teen clubs (for clients aged 15-19y), on-going counselling, and community ART refills. CHOICE steps include: 1) a lay cadre (treatment supporters who offer PCC counselling) counsels and supports clients to select their preferred DSD; 2) clients discuss their preference with ART providers during routine ART consultations; and 3) provider and client share decision-making on DSD.
We conducted semi-structured interviews with HCWs implementing CHOICE a month after rollout. Participants were identified using convenience sampling and asked about workload and time spent, training, resources and challenges. Descriptive analyses were used.

Results: In November 2025, we interviewed 22 HCWs: 11/22 female, median six years HIV care experience, and predominantly treatment supporters (12/22) and nurses (7/22). Most HCWs (20/22) received the full CHOICE training. Overall, HCWs were very satisfied (13/22) or satisfied (6/22) with CHOICE. Most HCWs offered CHOICE to IIT clients (19/22) and believed CHOICE was feasible to implement within their routine workload (21/22). Time required for CHOICE was estimated to be 1-10 minutes (8/22), with a third reporting spending ≥11 minutes more (7/22). HCWs reported that CHOICE was rewarding because they had more engaging conversations (19/22) and improved relationships (15/22) with clients, and clients understood their own health better (11/22).
Among ART providers, common reasons for not giving clients their preferred DSD were routine viral load schedules requiring a specific follow-up date and clinical conditions requiring close monitoring. Two HCWs believed clients with IIT should not have CHOICE. HCWs (20/22) believed most clients understood the intervention; a few HCWs (4/22) reported that clients were upset when they were not given their preferred service.

Conclusion: HCWs can implement shared decision-making with ART clients experiencing IIT within routine HIV settings and with little additional time required. HCWs found CHOICE rewarding for themselves and clients.

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Integrating Tuberculosis Screening into Multi-Disease Maternal Health Platforms among Pregnant Women in Oyo State, Nigeria

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Background: Tuberculosis in pregnancy remains under-detected in high-burden settings, despite repeated contact with antenatal and community maternal health services. Integrating tuberculosis screening into multi-disease maternal platforms may improve case finding, strengthen linkage to care, and support more equitable delivery of essential services. We assessed the performance of an integrated maternal screening model in Oyo State, Nigeria, with a focus on tuberculosis detection, tuberculosis/HIV integration, testing coverage, and treatment linkage.

Methods: We analyzed routine program data from 42,185 pregnant women reached through community-based maternal health screening across 33 Local Government Areas in Oyo State, Nigeria, between January and December 2024. We examined tuberculosis screening coverage, tuberculosis case notification, testing uptake across tuberculosis, HIV, and hepatitis B, co-infection patterns, and linkage to treatment. Monthly trends were assessed using linear regression, and correlations between service volumes were assessed in R.

Results: Tuberculosis screening coverage was high at 94.9%, and 13 tuberculosis cases were identified, corresponding to a notification rate of 30.8 per 100,000 screened women. HIV prevalence was 0.26% (102/39,863 tested), while hepatitis B prevalence was 1.47% (178/12,139 tested). HIV–hepatitis B co-infection was 2.0%. Testing coverage was highest for HIV (99.3%) and tuberculosis (94.9%), whereas hepatitis B testing increased progressively over the year (β = 4.2% monthly increase; $p = 0.016$) but remained lower overall at 28.8%. Service utilization peaked in August, when 5,205 women were screened, with a corresponding increase in case detection. HIV and hepatitis B testing volumes were strongly correlated ($r = 0.89$; $p < 0.001$), suggesting successful operational integration across services. Linkage to treatment was 100% for all identified tuberculosis and HIV cases.

Conclusions: This analysis demonstrates that integrating tuberculosis screening within multi-disease maternal health platforms is feasible and can achieve high screening coverage and complete treatment linkage in a high-burden setting. Although tuberculosis yield was low, the model showed strong service integration and programmatic value for improving maternal infectious disease screening in real-world settings. Expanding hepatitis B testing coverage and strengthening integrated surveillance may further improve early detection and reduce missed opportunities for maternal tuberculosis diagnosis. Findings should be interpreted in light of the limitations of routine program data.

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Describing Location of Maternal ART and Infant HIV Testing and Associations with Retention in Care through Six Months Postpartum in Gugulethu, South Africa (2021-2022)

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Background: Postpartum disengagement from HIV care remains a challenge. Integration of services for mother-infant pairs (MIPs) can support vertical HIV transmission prevention (VTP) and care continuity in resource limited settings but implementation is complex. We describe co-location of early postpartum maternal ART and early infant diagnosis (EID) and explore associations with later ART retention and EID completion.

Methods: We conducted a secondary analysis of routine medical record data from 325 MIPs enrolled in the REMInD study (March 2021–April 2022) in Gugulethu, South Africa. At around 10 weeks (6-16 weeks) and six months (16-36 weeks) postpartum, location of maternal ART and EID completion were categorised as (i) integrated (same facility on the same day, ±2 days), (ii) non-integrated (different facilities, or same facility >2 days apart), or (iii) not in care (no evidence of ART and/or infant HIV testing per guidelines). We described care location patterns and used multivariable logistic regression to explore associations between 10-week care location and six-month maternal ART retention and EID completion.

Results: At 10 weeks, 10% of MIPs were integrated, 52% were non-integrated, and for 38% either the mother and/or infant were not in care. At six months, 8% were integrated, 43% were non-integrated, and for 49% either mother and/or infant were not in care. At six months, 51% of mothers were retained, and 64% of infants completed EID.
Six-month maternal ART retention and EID completion did not differ between mothers and infants receiving non-integrated versus integrated care at 10 weeks (aOR 0.75 95% CI 0.31-1.7 and aOR 1.03 95% CI 0.43-2.35, respectively). Mothers from MIPs not in care at 10-weeks had substantially lower odds of six-month retention compared to those with integrated (aOR 0.15 95% CI 0.06-0.36) or non-integrated care (aOR 0.20 95% CI 0.12 - 0.35) at 10-weeks. Infants from MIPs not in care at 10 weeks were less likely to complete six-month EID compared to those in non-integrated care (aOR 0.51 95% CI 0.30 - 0.85); there was no statistically significant difference from those in integrated care at 10 weeks (aOR 0.52 95% CI 0.21 - 1.22). Results remained consistent when 10-week care location was more broadly defined as in care in the same facility or in care at different facilities, versus out of care.

Discussion: Despite evidence of benefit, existing policy recommendations, and the availability of integrated services, fewer than 10% of mother-infant pairs (MIPs) received ART and infant HIV testing at the same clinic on the same day. Care location was not associated with subsequent maternal retention or completion of early infant diagnosis (EID). These findings highlight missed opportunities to better understand both individual and health system barriers to, and preferences for, integrated care. Strategies to both enhance integration (such as co-ordinated MIP scheduling) and to ensure completion of VTP steps for mothers choosing non-integrated care (such as linked medical records) are urgently needed.

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The Hidden Burden in ANC: Integrated Triple Screening Reveals Hepatitis B as the Largest Missed Infection among Nigerian Pregnant Women

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Background: The World Health Organization (WHO) Triple Elimination Initiative calls for the integrated elimination of mother-to-child transmission (MTCT) of HIV, syphilis, and hepatitis B virus (HBV) through routine antenatal screening, treatment, maternal and infant prophylaxis. Despite progress in PMTCT of HIV, HBV screening remains poorly integrated into antenatal care services in many high-burden countries. Nigeria carries one of the largest burdens of chronic HBV infection globally, with a pooled HBV prevalence of approximately 6.5% among pregnant women, and vertical transmission remains a major contributor to new infections, While HIV testing is routinely offered in antenatal clinics, opportunities to detect and prevent maternal HBV and syphilis infections are frequently missed. To accelerate progress toward WHO Triple Elimination targets, Nigeria implemented an integrated HIV-HBV-syphilis screening model within existing ANC platforms.

Methods: Eighteen health facilities offering ANC services across nine states (Rivers, Anambra, Ebonyi, Kwara, Gombe, Nasarawa, Kano Taraba and FCT) were selected based on geographic representation and ANC service volume, following ethical approval from the National Health Research Ethics Committee (NHREC/01/01/2007–31/07/2025). Pregnant women attending their first ANC visit were offered integrated rapid testing for HIV, HBV (HBsAg), and syphilis through a single service delivery platform. Women diagnosed with HIV or syphilis were immediately linked to treatment, while HBV-positive women were enrolled into the prevention cascade and assessed for eligibility for antiviral prophylaxis according to national guidelines. Routine programmatic data collected between March and April 2026 were analyzed to assess screening uptake, positivity rates, and early implementation outcomes.

Results: Among 3,490 pregnant women attending first antenatal care, 2,920 (83.7%) were enrolled into the integrated screening programme, and 2,916 (99.9%) completed testing for all three infections. HIV positivity was 0.8% (24/2,916), syphilis positivity was 0.3% (8/2,916), while HBV positivity was 5.0% (145/2,916), over six times the prevalence of HIV and over sixteen times that of syphilis. All women diagnosed with HIV were successfully linked to antiretroviral therapy, and all women with syphilis received same-day treatment. HBV screening identified the largest burden of previously undetected infection among pregnant women. Geographic variation was observed, with HBV prevalence ranging from 0.7% in Rivers State to 7.9% in Taraba State. Most HBV-positive women were identified early in pregnancy and enrolled for longitudinal follow-up pending eligibility for maternal antiviral prophylaxis in accordance with gestational age requirements.

Conclusions: Integrated triple screening within routine antenatal care services is highly feasible and achieved near-universal testing coverage. The intervention revealed HBV as the largest previously missed infection among pregnant women accessing ANC services, uncovering a substantial burden that would likely remain undetected under conventional HIV-focused screening approaches. Early identification of HBV-positive pregnant women creates critical opportunities for maternal management, timely prophylaxis, birth-dose vaccination planning, and prevention of vertical transmission. Integrating HBV screening into established ANC platforms offers a practical and scalable pathway toward achieving WHO Triple Elimination targets in high-burden settings such as Nigeria.

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Perspectives on Scalability and Sustainability of Integrated Hypertension-HIV Care in Uganda: A Mixed Methods Study Applying RE-AIM and PRISM

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Background: Integrating hypertension care into HIV clinics may strengthen chronic disease management, but evidence on scalability and ssustainability of integrated hypertension care under routine health system conditions remains limited. We sought to assess healthcare providers' and policymakers' perspectives of the scalability of integrated hypertension–HIV care in Ugandan HIV clinics and to identify enablers and barriers to wider implementation.

Methods: We conducted a parallel convergent mixed methods sub-study within the PULESA-Uganda stepped-wedge cluster-randomized trial across 16 HIV clinics in Kampala and Wakiso districts. Quantitative data were collected concurrently from 41 healthcare providers using a validated 28-item scalability tool spanning seven domains. Scalability was measured using a multi-item Likert-scale instrument capturing seven domains: scalability, observability, relevance, relative advantage, credibility, testability, and funding. Comparisons between study arms were made using Wilcoxon rank-sum tests for continuous variables and chi-square tests for categorical variables. Qualitative interviews with providers and policymakers were analysed using the RE-AIM and PRISM frameworks, and the two strands were integrated through triangulation.

Results: Overall perceptions of scalability were favourable (mean score of 0.57), with no significant differences between the HTN BASIC and HTN PLUS arms. Scalability, observability, relevance, and testability scored highly, whereas relative advantage and credibility were more modest. Funding was the key constraint and the only domain with a negative overall score (-0.33). Qualitative findings converged with these results; participants endorsed integration and highlighted existing infrastructure, teamwork, and alignment with national policy as key enablers. Persistent barriers cantered on financing, medicine supply, and broader health system readiness.

Conclusion: Integrated hypertension-HIV care was viewed as scalable in Ugandan HIV clinics. Wider implementation and long-term sustainability may, however, depend on closing financing gaps and addressing other health-system constraints.

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Leveraging HIV Clinical Performance Reviews to Improve Program Implementation in Mozambique

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Background: Since 2021, Mozambique has implemented annual Differentiated Service Delivery (DSD) performance reviews, combining a health provider questionnaire with a Recipient of Care (RoC) interview. Since national scale-up in 2020, these models have driven ART expansion, increasing PLHIV on ART by 32% in five years (1,402,902 in 2020 to 2,070,974 in 2025). The reviews ensure quality services at facility level while monitoring provider and RoC knowledge and satisfaction with DSD models. For this cycle which followed the 2025 funding cuts additional questions on service interruption were added.

Materials and Methods: Between July and September 2025, the review was conducted in 30 health facilities across 6 provinces, reaching 169 HIV-service providers in five categories (clinicians, psychosocial support, pharmacy technicians, community actors, and community engagement focal points) and 76 RoC. The questionnaire, administered by trained National HIV/AIDS Control Program staff, combined coded questions on satisfaction and knowledge with open-ended questions for context. Each facility planned three RoC interviews (two in a DSD model, one not enrolled). Due to availability challenges, only 76/90 RoC (85%) were reached.

Results: Overall RoC satisfaction with HIV services (self-rated very good or excellent) was 81%, reaching ≥90% in Gaza and Cabo Delgado. Maputo Province scored lowest (63%), likely reflecting the effects of provincial demand creation for the not-yet universally available six-month distribution model. Notably, 93% of RoC first learned about DSD models at the facility, despite community and social-media information distribution efforts. Among all providers, 25% had received no DSD-related training, with lower gaps (10%) among clinicians but with larger untrained cohorts (48%) among pharmacy technicians. Given pharmacy's central role in multi-month dispensing, which covers more than 50% of PLHIV on ART in Mozambique, this is a concerning and important finding. Of 28 facilities reporting on funding impacts, 68% had experienced a stock-out in the prior six months: 10 with antiretrovirals, 3 with PrEP, and 6 with testing kits. In Gaza province, the evaluation team was able to identify and resolve the issue with paediatric formula stock-out, showing the importance of multifaceted reviews such as this.

Conclusions: The 2025 review reaffirms the value of multi-level assessments capturing both user and provider perspectives. It enabled the national HIV program to identify shortcomings, including stock-outs and training gaps, while giving RoC and clinicians a voice in shaping the national HIV response. These areas have been prioritized in 2026 to address the service gaps identified during this review. Finally, the country plans to implement a new approach to data collection round this year using an electronic system to expand coverage and reach.

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Eswatini Youth HIV Innovators: An Expert Collaboration Model for Integrating Implementation Science into Family Nurse Practitioner Training to Strengthen Adolescent HIV Prevention and Care

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Background: Eswatini has made significant progress toward the 95-95-95 targets, yet adolescents and young adults still lag behind. HIV prevalence among people aged 15–29 reaches 30.3% in women and 5.4% in men of same age. Despite a national HIV prevention roadmap aligned to the global 2025 roadmap, implementation of preventive services, including Pre-Exposure Prophylaxis (PrEP), remains suboptimal. This gap is recognized as a priority in the Eswatini National Research Agenda-reflecting a persistent divide between evidence and frontline practice. Advanced practice nurses are a key strategy for improving adolescent HIV care, and the University of Eswatini's (UNESWA) three-year Master of Nursing Science Family Nurse Practitioner (FNP) program trains leaders for a nurse-led health system. Bridging the evidence-to-practice gap requires not only skilled practitioners but coordinated collaboration among implementation science (IS) experts, academic institutions, implementing partners, the Ministry of Health, and HIV peer leaders. Our project sought to build FNP and peer-leader IS capacity through an expert-collaboration model.

Material and Methods: As part of the Local Implementation Science Network, stakeholder mapping engaged the Ministry of Health (Eswatini National AIDS Program), the National Health Research and Innovation Department, UNESWA, and CDC Eswatini. The FNP curriculum and National Research Agenda were analyzed for youth-focused IS gaps. Through extensive planning with UNESWA, a short-course IS module was approved for integration into the Master's FNP curriculum and a syllabus was developed. IS experts provided methodological grounding, local stakeholders contextualized content, and HIV peer leaders anchored training in lived experience; facilitator roles were distributed across partners to leverage complementary strengths.

Results: The collaboration produced a five-day intensive pilot IS workshop (40 contact hours, equivalent to a traditional university course), combining didactic sessions, youth-focused evidence-based interventions, case studies, and practical IS tools. Fourteen participants were trained (8 FNP students and 6 HIV peer leaders). Mixed groups of students and peer leaders developed IS projects that identified implementation gaps, formulated IS questions, and selected appropriate frameworks linked to National Research Agenda priorities. FNPs and peer leaders will be placed at Baylor Center of Excellence clinics for practicums and project completion.

Conclusions: Effective stakeholder analysis and cross-expert collaboration enabled successful design and delivery of IS training, equipping FNPs and HIV peer leaders with skills to apply IS theories, models, frameworks, and methods. Involving peer leaders strengthened intervention acceptability and helped bridge theoretical training and real-world practice. The IS course will be formally incorporated into the FNP curriculum as an elective or core course, building a sustainable cadre of implementation scientists positioned to improve youth-focused HIV prevention and care beyond the project period.

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Centering Female Sex Workers in the Rollout of Lenacapavir for HIV Prevention: Insights from Human-Centered Design Workshops in South Africa

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Background: Female sex workers (FSW) in South Africa experience myriad socio-structural barriers to accessing daily oral PrEP for HIV prevention. Lenacapavir (LEN), a long-acting injectable PrEP formulation administered twice yearly, is clinically efficacious and represents a promising approach to circumventing daily pill burdens and stigma associated with oral PrEP use. The successful introduction of LEN and next-generation PrEP agents to communities disproportionately impacted by HIV is contingent upon information, education, and communication (IEC) approaches that reflect end-user preferences and lived experiences. Human-centered design (HCD) methods offer opportunities for communities to co-create strategies supporting equitable uptake and implementation of long-acting HIV prevention options like LEN.

Methods and Materials: In March 2026, TB HIV Care (THC) , the largest provider of PrEP services to FSW in South Africa, facilitated a two-day workshop in Durban (eThekwini District), grounded in HCD principles, with FSW engaged in HIV prevention services. FSW were recruited with support from peer health workers and comprised women aged 18 and older who identified as sex workers and had accessed PrEP, HIV testing, or prevention services through THC. On the first day, participants engaged in "How Might We" exercises to explore approaches for learning about LEN, a card sorting activity to rank communication attributes (i.e., messengers, communication channels, locations, information needs, and risks) for LEN-focused IEC materials, and small-group brainstorming activities for information-sharing strategies across communication channels. On the second day, participants co-designed and refined short-form social media content through storyboard prototyping, role-playing, and iterative feedback-and-refinement cycles. Unstructured debriefs and affinity mapping after each day's workshop facilitated identification of themes for developing LEN-related IEC materials, grounded in end-user voices and preferences.

Results: A total of 28 FSW participated in workshop activities. Participants expressed enthusiasm for long-acting HIV prevention options like LEN, citing longer protective durations, reduced pill burdens, fewer healthcare encounters, and less clinical monitoring relative to daily oral PrEP. Participants prioritized nurses and peer educators as trusted sources of information and expressed preferences for receiving LEN-related information through face-to-face interactions in clinical settings. Safety concerns, including side effects and management of missed doses, emerged as dominant informational needs. Storyboard prototyping highlighted the value of portraying relatable social interactions involving peers, partners, healthcare providers, and family members, as well as the importance of inclusive representation to normalize LEN use beyond FSW.

Conclusion: With the recent rollout of LEN in South Africa, demand-generation strategies may benefit from emphasizing the safety, efficacy, and convenience of twice-yearly protection from LEN. Trusted nurses and peers emerged as messengers, while radio and social media platforms (e.g., TikTok) emerged as preferred communication channels, highlighting the need for outreach approaches that reflect differential access to television and media platforms. Depicting relatable and inclusive social interactions may help mitigate stigma associated with HIV prevention, normalize LEN use within communities, and support equitable uptake among populations disproportionately affected by HIV. Findings highlight the potential value of community-engaged co-design approaches, including HCD, and contextually relevant IEC materials in guiding rollout strategies that enhance awareness, trust, and informed PrEP decision-making at scale.

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Implementing AI for Youth-Centered HIV Programming: Associations between Chatbot Engagement and Intent to Use Recommended Health Services

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Background: Adolescent girls and young women (AGYW) in South Africa face persistent barriers to health service access, including stigma, limited youth-friendly services and structural constraints within the health system. Increasing mobile phone access and internet connectivity among young people presents an opportunity for digital interventions to provide information and facilitate service linkages. However, limited evidence exists on how engagement with AI-powered interventions shapes health services intentions and uptake. The National Department of Health in South Africa is rolling out Self-Cav to reach adolescents and young people with HIV prevention, sexual and reproductive health and wellbeing support. Self-Cav is a chatbot co-designed with young people to provide safe, non-judgmental, multilingual, and accurate sexual and reproductive health and HIV information, trained on South African National Department of Health clinical guidelines, and based on AIMEE, an initial version of the chatbot exclusively for AGYW. This study examines associations between chatbot awareness, engagement, experience and intention to use recommended health services among AIMEE/Self-Cav users.

Study Design: Online surveys completed by N=1,384 18-24 year-old AGYW in XX South African provinces between October-November 2025, assessed chatbot awareness, engagement, and experience. Analysis was conducted in Stata, to describe chatbot engagement patterns by participant characteristics and multivariable logistic regression models to examine factors associated with intention to use recommended health services.

Results: The mean age of participants was 21 years, majority (63.9%) were enrolled in tertiary education, 1.4% are living with HIV, 39.7% reported a prior pregnancy, and 24.1% reported multiple sexual partners in the last six months. Chatbot engagement measures: 75.6% have heard of AIMEE/Self-Cav, 76.8% reported using the chatbots and 97.9% engaged with at least one topic (health, HIV/SRH, mental health or education/employment). Regarding intentions, 63.8% indicated a definite intention to use the recommended services and 11.4% expressed a possible intention. Multivariable analysis showed higher odds of intending to use recommended services among participants who experienced a pregnancy more than a year ago (AOR 1.63; 95% CI: 1.07–2.48), engaged with psychosocial topics on the chatbots (AOR 1.54; 95% CI: 1.07–2.21), received the information they needed (AOR 2.09; 95% CI: 1.25–3.51) and indicated they would use the chatbots again for similar/additional information (AOR 3.80; 95% CI: 1.95–7.43). In contrast, age (AOR 1.03; 95% CI: 0.76–2.34), living with HIV (AOR 0.44; 95% CI: 0.12–1.62), currently pregnant (AOR 2.16; 95% CI: 0.60–7.75) and Life-skills empowerment Topics (AOR 1.33; 95% CI: 0.76–2.34) have all reported lower odds of intention to use services.

Conclusion: Intention to use recommended services was associated with socio-demographic, history of pregnancy, psychosocial care-seeking and content factors. AI-powered chatbots such as AIMEE and Self-Cav could bridge the gap between AGYW and health services in South Africa. Scaled-up investment in digital health for adolescents and young people should be guided by principles of safety, transparency, equity and AI-powered interventions such as AIMEE and Self-Cav go beyond service linkage, they meet young women where they are, on their own terms, and in spaces free from fear and judgement.

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Beyond Readiness: A Mixed-Methods Assessment of Health System Determinants for Long-Acting Lenacapavir PrEP Implementation in Nigeria

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Background: Long-acting injectable Lenacapavir (LEN) PrEP represents a major advancement in HIV prevention, but successful implementation depends on health system readiness beyond product availability. We assessed healthcare worker preparedness, implementation barriers, and system requirements to inform national LEN PrEP introduction in Nigeria.

Methods: Prior to the roll-out of LEN-PreP in Nigeria, a mixed-methods formative study was conducted among 100 healthcare workers providing HIV services across hospital-based facilities and one-stop-shop (OSS) clinics in Gombe State, Nigeria. Participants included clinicians, pharmacists, nurses, case managers, peer navigators, and other HIV service providers. Data were analyzed descriptively to assess facility readiness, workforce preparedness, anticipated implementation barriers, and priority support needs for LEN rollout. Qualitative data were generated through key informant interviews. Thematic analysis explored contextual factors influencing implementation and was integrated with quantitative findings during interpretation.

Results: Nearly all respondents (99%) reported that their facilities already provide HIV prevention services, with 86% perceiving their facilities as fully ready to introduce LEN PrEP and 88% expressing confidence in their ability to implement it. Despite this high level of perceived readiness, only 76% had previously received training on long-acting HIV prevention methods, while 80% identified additional clinical skills training as a priority. Anticipated implementation barriers included policy gaps (59%), cost (58%), logistics (55%), workforce capacity (50%), and generating client demand (49%). Strong institutional support for rollout was evident, with 98% of respondents recommending integration of LEN PrEP into national HIV prevention guidelines and 98% reporting established referral linkages with community-based organizations.
Qualitative findings reinforced these results by highlighting widespread provider optimism about LEN PrEP, driven by its six-month dosing schedule, potential to improve adherence, and compatibility with existing HIV prevention services. However, healthcare workers emphasised that successful implementation will depend on strengthening workforce capacity through continuous training and supportive supervision, addressing operational challenges such as staffing, documentation, and commodity security, and ensuring sustainable financing, community engagement, and government ownership to support long-term scale-up.

Conclusions: Although healthcare workers perceive Nigeria's HIV service delivery platform as largely ready for LEN PrEP introduction, successful implementation will require more than infrastructure and provider confidence. Targeted investments in workforce capacity, continuous provider training, documentation systems, policy integration, commodity security, community engagement and domestic funding are critical to translating readiness into effective and equitable scale-up.

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From Awareness to Uptake: Community Readiness and Implementation Challenges for Lenacapavir Prep Introduction in Nigeria

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Background: Long-acting injectable Lenacapavir (LEN) PrEP has the potential to transform HIV prevention by addressing adherence challenges associated with daily oral PrEP. As countries roll-out this novel prevention option, understanding community readiness, knowledge gaps, and implementation barriers is critical. This study assessed knowledge, attitudes, and perceptions of LEN PrEP among key and priority populations in Nigeria and identified factors that may influence uptake during rollout.

Methods: In January 2026, before the official roll-out of LEN-PrEP in Nigeria, a mixed-methods formative study was conducted among 300 high-risk persons who had experience using Oral-Prep and/or CAB-LA at One Stop Shops (OSS) and hospital-based public health facilities in Gombe State. Knowledge and attitudes toward LEN PrEP were assessed using structured questionnaires, and associations with sociodemographic characteristics were examined using chi-square tests. To explore factors influencing potential uptake, in-depth interviews and key informant interviews were conducted and analyzed thematically.

Results: Only 17.3% of respondents had heard of LEN PrEP, but 97.3% were willing to use it after a brief explanation about LEN PrEP was given. Awareness differed markedly by education (χ^2=23.31, p<0.0001) and risk group (χ^2=37.03, p<0.0001. Younger participants (18 -24years) had the lowest awareness (only 3.8% heard of LEN; p=0.0429). By contrast, willingness to use LEN showed no significant variation by age, sex, education, or group (all p>0.10), indicating broad acceptability. Delivery preference was mostly clinic-based (232/300, 77.3% preferred clinics). Importantly, those who trusted community health workers were significantly more open to community-based LEN delivery (χ^2=29.21, p<0.0001).

Qualitative findings revealed strong interest in LEN PrEP due to its six-month dosing schedule, perceived convenience, and potential to reduce pill burden. However, three key barriers to uptake emerged: concerns about injection-related pain and unknown side effects, HIV-related stigma and confidentiality concerns, and misconceptions about LEN PrEP. Some participants perceived LEN as an HIV vaccine or cure, while others believed it could replace condom use. Participants indicated that access to accurate information, trusted healthcare providers, peer-led education, and confidential service delivery would increase willingness to use LEN PrEP.

Conclusions: Findings demonstrate a high level of community readiness for the introduction of LEN PrEP in Nigeria, despite significant knowledge gaps and implementation challenges. As the LEN roll-out progresses, differentiated demand-generation strategies that go beyond awareness creation to address misconceptions, stigma, and concerns about injectable prevention. Community-led education, peer navigation, and tailored communication approaches should be prioritized to ensure equitable uptake and sustained use of LEN PrEP among populations at greatest risk of HIV acquisition.

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Integrating Specialized Social Work Infrastructure into Adolescent Long-Acting Injectable HIV Trials: Early Participant Protection Lessons from Stage 1 of the ATTUNE Trial in South Africa

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Background: Long-acting injectable (LAI) antiretroviral therapy (ART) represents a promising strategy to reduce daily pill burden and support sustained HIV treatment adherence among adolescents living with HIV (ALHIV) transitioning to adult care. However, implementation of biomedical HIV innovations among adolescents in resource-constrained settings is frequently undermined by complex psychosocial and structural vulnerabilities. The Evaluation of Long-Acting Injectable (LAI) and Teen Clubs in Adolescents (ATTUNE) trial is a three-year, multi-site study across 12 clinics in KwaZulu-Natal, Gauteng, and the Western Cape evaluating peer-navigated support among ALHIV aged 12–19 years old. The trial includes an 18-month stepped-wedge cluster-randomized implementation phase followed by an 18-month sustainability phase incorporating a nested individually randomized LAI ART trial. To strengthen participant protection and retention, the trial embedded a Participant Protection Lead (PPL), a qualified social worker, within the research infrastructure. This paper describes early participant protection lessons emerging from Stage 1 implementation at the KwaZulu-Natal Cato Manor site.

Methods: Peer navigators provided HIV education, adherence support, sexual and reproductive health guidance, and healthcare navigation to participants. Participants who presented with complex psychosocial, behavioral, or socioeconomic needs were referred by peer navigators to the PPL, who provided structured psychosocial assessment, trauma-informed counselling, case management, and linkage to relevant external support services. The integrated psychosocial support pathway aimed to address barriers to treatment readiness, reduce risks of disengagement from care, and ensure continuity of support beyond immediate trial participation requirements.

Results: During analysis, 568 participants were enrolled across all sites, including 54 from the KwaZulu-Natal Cato Manor site. Six participants at the Cato Manor site were escalated to the PPL for acute psychosocial intervention, where five were female and one was male. Four participants experienced severe food insecurity that threatened treatment continuity and overall wellbeing. In response to this, the PPL implemented family-centred and asset-based interventions to strengthen household resilience and support informal income-generation opportunities. These interventions stabilized nutrition access and preserved continuity of HIV care for all affected adolescents. Structural vulnerabilities included double orphanhood (n=3), unemployment within single-parent households (n=1), and reliance on informal trading (n=3). Two participants were unable to access child support grants due to missing documentation and absent caregiver assistance The PPL provided direct legal-system navigation and administrative support to facilitate documentation recovery and grant access, improving longer-term household stability. One participant presenting with grief-related suicidal ideation following parental loss received immediate crisis intervention and intensive trauma-informed counselling with close psychological monitoring. This intervention successfully stabilized the participant's mental health. Overall, 100% (6/6) of high-risk escalated participants were successfully stabilized, retained in care, and protected from loss to follow-up during early implementation.

Conclusion: Implementation of next-generation HIV biomedical interventions for adolescents requires integrated psychosocial infrastructure alongside clinical innovation. Severe poverty, mental health trauma, food insecurity, and lack of legal documentation significantly affect treatment readiness and trial participation. Embedding dedicated social work capacity within adolescent HIV research programmes may strengthen participant protection, improve retention and treatment engagement, and support sustainable implementation of future LAI ART programmes in resource-limited settings.

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Misalignment between Antiretroviral Multi-Month Dispensing and Family Planning Service Delivery among Women Receiving HIV Care in Eswatini

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Background: Differentiated service delivery (DSD) models, particularly multi-month dispensing (MMD), have successfully reduced clinic visit frequency for stable ART clients, improving efficiency and minimising disruption to clients' daily lives. However, due to shorter resupply of available contraceptive commodities, family planning (FP) services may not be aligned with extended antiretroviral therapy (ART) refill schedules, potentially creating additional clinic visits for women of reproductive age.

Method: A cross-sectional review of routine facility data was conducted at AHF Matsapha Clinic, Eswatini, between December 2025 and May 2026. The study included 453 women of reproductive age receiving ART, generating 794 contraceptive prescription records across three DSD models: MMD, Main Stream, and Fast Track. Data were analysed to assess contraceptive method use, dispensing patterns, and alignment between FP and ART service schedules.

Results: MMD was the predominant model, accounting for 70.4% of records, with 82.8% of MMD clients receiving a 6-month ART supply. Despite this, most women used contraceptive methods requiring frequent clinic attendance. Oral contraceptive pills accounted for 35.0% of prescriptions, while short-acting injectables accounted for 50.9% (DEPO-PROVERA 3-month at 32.5%, NORISTATE 2-month at 18.4%), aggregating to over 85% of clients requiring a clinic return every two to three months. In contrast, Long-acting reversible contraceptives (LARCs), which are compatible with a 6-month DSD cycle, accounted for just 7.9% of prescriptions. Among records with clinic visit dates, 95.4% showed discrepancies between FP and ART service dates indicating that FP visits commonly occurred separately from scheduled ART visits. Furthermore, 10.6% of FP prescriptions were not dispensed at all, and 12.6% were only partially dispensed.

Conclusion: Although DSD has successfully reduced ART-related clinic visits, the predominance of short-acting contraceptive methods creates a parallel visit burden that undermines the efficiency gains of 6-MMD. Strengthening client-centred counselling on LARC, improving provider capacity through training and mentorship, considering extended FP methods where clinically appropriate, and better integrating FP services within ART refill schedules could improve service alignment and reduce unnecessary clinic visits for women receiving HIV care.

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Beyond Deployment: How Mentor Mothers Shifted Early Infant Diagnosis Performance across Nigeria's PMCT Program

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Background: Early infant diagnosis (EID) is essential for timely identification and treatment of infants with HIV exposure, yet missed appointments, weak follow-up systems, and poor mother–baby pair tracking continue to limit EID uptake in high-burden settings. To address these barriers, the Institute of Human Virology Nigeria, under the Global Fund GC7 grant, deployed Mentor Mothers across Nigeria to strengthen community–facility linkage, follow-up of pregnant and breastfeeding women, and tracking of infants with HIV exposure. This analysis assessed the impact of Mentor Mother deployment on EID achievement across implementation quarters.

Methods: A retrospective pre and post analysis of routine GC7 program data was conducted across 36 states and the Federal Capital Territory. The pre-deployment period covered Q1–Q2 2024, while the post-deployment period covered Q3 2024–Q1 2026. A total of 1,741 Mentor Mothers were deployed across states. EID achievement before deployment was compared with EID achievement after deployment using quarterly totals, state-level averages, absolute change, and percentage change. Descriptive analysis was conducted to assess national and state-level trends.

Results: Before Mentor Mother deployment, 8,683 EID achievements were recorded over two quarters, with an average of 4,341 per quarter. After deployment, 35,223 EID achievements were recorded over seven quarters, with an average of 5,032 per quarter. This represents an absolute increase of 690 EID achievements per quarter and a 16% increase compared with the pre-deployment quarterly average. National EID achievement increased from 4,803 in Q3 2024 to 5,697 in Q2 2025, peaked at 6,962 in Q3 2025, and remained high at 6,407 in Q4 2025. State-level improvement was observed in 24 of 37 states. Notable gains were recorded in Plateau, Delta, Anambra, Benue, Taraba, Nasarawa, Ondo, Katsina, Kwara, and Kebbi. However, several states recorded declines, highlighting variation in implementation performance across communities.

Conclusions: Deployment of Mentor Mothers was associated with improved EID achievement across Nigeria, with higher average quarterly performance after implementation and gains in most states. The model appears to strengthen mother and infant tracking, follow-up, and linkage to EID services at scale. Variation across states suggests the need for targeted supportive supervision, commodity distribution, and deeper review of lower-performing states. Mentor Mothers represent a scalable implementation strategy for improving EID uptake and advancing PMTCT outcomes in decentralized HIV programs.

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Measuring Adolescent and Young Adult Participation in HIV Self-Testing Programs: Evidence from Nigeria

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Background: Adolescents and young adults (AYAs) aged 14–24 years account for a disproportionate share of new HIV infections globally and continue to lag behind the UNAIDS 95–95–95 targets. In Nigeria, fewer than 25% of AYAs have ever been tested for HIV, limiting access to prevention and treatment services. The Innovative Tools to Expand Self-Testing (I-TEST) project used an implementation science approach to embed AYA participation within HIV self-testing (HIVST) delivery through a peer-led distribution model, training AYAs living in participating communities to engage peers, distribute HIVST kits, and support linkage to follow-up services. Despite recognition of AYA participation as essential to improving HIV prevention outcomes, evidence on participation quality in HIVST programs across low- and middle-income countries remains limited. This study assessed levels and correlates of participation among AYAs in the I-TEST HIVST interventions implemented in Nigeria.

Methods: A secondary analysis of cross-sectional baseline data from the I-TEST study included 388 AYA aged 14–24 years recruited across four Nigerian sites (September 2019–March 2020). Participation quality was measured using an adapted 12-item Tiffany–Eckenrode Program Participation Scale (TEPPS) across four domains: ownership, voice/influence, support, and community participation. Participation levels were categorized as minimal (<3.5), moderate (3.5–4.0), or substantial (>4.0). Chi-square tests and Cramér's V examined associations between participation levels and sociodemographic variables.

Results: Among 388 AYA (mean age 21 ± 2 years; 58% male), overall participation was substantial (mean participation score = 4.04 ± 0.24). Domain-specific analyses showed substantial participation in support (mean = 4.08 ± 0.23), community participation (mean = 4.04 ± 0.24), and ownership (mean = 3.94 ± 0.27), while voice/influence demonstrated moderate participation (mean = 3.87 ± 0.32). AYA with higher education (χ^2 = 43.23, $p < 0.001$; Cramér's V = 0.33), employed (χ^2 = 122.70, $p < 0.001$; Cramér's V = 0.56), and higher income (χ^2 = 119.68, $p < 0.001$; Cramér's V = 0.55) were significantly associated with greater participation. age, sex, and marital status were not associated with greater participation.

Conclusion: Participation among AYAs in HIVST delivery can be systematically measured and supports progress toward the first UNAIDS 95 target. The moderate scores in voice and influence suggest AYAs were engaged as implementers but not fully as decision-makers. Socioeconomic disparities in participation levels highlight the need for implementation strategies that address structural barriers, ensuring equitable engagement across diverse AYA populations. Measuring participation quality offers valuable insight into the inclusiveness and effectiveness of AYA-engaged HIV interventions.

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Co-Creating Culturally Grounded Edutainment for Polio Vaccination: A Community-Engaged Implementation Approach in Northern Nigeria

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Background: Persistent transmission of circulating vaccine-derived poliovirus in Northern Nigeria continues to threaten polio eradication efforts. Vaccine hesitancy, misinformation, and sociocultural barriers remain important drivers of non-vaccination in underserved communities. Community-engaged implementation approaches that prioritize local participation, cultural relevance, and stakeholder ownership may improve the acceptability of immunization campaigns. This study assessed the implementation and perceived influence of a culturally grounded edutainment intervention co-created with community and health-system stakeholders to support the November–December 2025 Sub-National Immunization Days (SNIDs) in Northern Nigeria.

Materials and Methods: The intervention was developed through an iterative co-creation process involving State Advocacy, Communication and Social Mobilization Technical Working Groups, local government supervisors, ward focal persons and community leaders. Stakeholder consultations informed the design and refinement of culturally resonant intervention components, including modified public announcement vans, comic performances (Papalolo), traditional drumming groups (Mai Kalangu), community drama, and Majigi video shows. Continuous feedback during implementation enabled real-time adaptation, including the addition of Wasan Yara (children's cultural games) to increase caregiver engagement. The intervention was implemented across Kano, Katsina, and Kebbi States through integrated morning mobilization activities and evening community engagement sessions. A cross-sectional survey was conducted among caregivers of children eligible for polio vaccination (n = 303) across 183 wards. Data were collected using structured interviewer-administered questionnaires. Descriptive statistics summarized exposure and perceptions of the intervention. Chi-square tests and Phi coefficients assessed associations between exposure to edutainment activities and reported influence on vaccination decision-making, with statistical significance set at $p < 0.05$.

Results: Overall, 90% of caregivers reported exposure to at least one edutainment activity. Exposure was predominantly through community-based morning mobilization activities, reported by 84% of respondents, while 15% reported exposure to both morning and evening sessions. Among exposed caregivers, 46% reported that the intervention positively influenced their vaccination decision-making. Nearly all caregivers reporting positive influence (98%) subsequently reported that their child received the polio vaccine. Preferred engagement channels included Papalolo performances (43%) and mobile public announcements (32%), reflecting strong community preference for locally familiar communication approaches. Although the association between exposure and reported influence on vaccination decisions was positive, it was not statistically significant ($\chi^2(1) = 1.16$, $p = 0.282$; $\phi = 0.07$).

Conclusions: A community-engaged co-creation process produced a culturally relevant edutainment intervention that achieved high community reach and was widely perceived as influential in supporting polio vaccination decisions. While exposure was not significantly associated with reported decision-making influence, findings demonstrate the feasibility and acceptability of participatory, culturally grounded implementation strategies in high-hesitancy settings. Embedding stakeholder engagement, community ownership, and iterative adaptation within immunization programs may strengthen trust, enhance contextual relevance, and improve the implementation of vaccine demand-generation interventions.

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'I Gave Myself Time to Think': Understanding Delayed ART Linkage among Men Who Self-Tested Positive - Preliminary Findings from a Qualitative Study in KwaZulu-Natal, South Africa

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Introductions: Men in sub-Saharan Africa are disproportionately less likely to test for HIV and initiate antiretroviral therapy (ART) compared to women. HIV self-testing (HIVST) presents a promising entry point for hard-to-reach male populations, yet the factors shaping ART linkage following a reactive self-test result among men remain insufficiently understood.

Methods: We conducted in-depth interviews (IDIs) with 18 men aged 18–49 years recruited across eight primary healthcare facilities in uMgungundlovu District, KwaZulu-Natal, South Africa. Participants included men linked to ART same-day and those who delayed or did not initiate treatment following a reactive HIVST result. Interviews were conducted in a local language (isiZulu), audio-recorded, transcribed, and translated into English. Data were analysed using inductive thematic analysis.

Findings: Delayed linkage was shaped by intersecting psychosocial and structural factors including stigma and fear of community recognition at facilities, anticipated side effects and weight gain, emotional shock and the need for self-processing time, limited health system navigation knowledge, transport and financial constraints. Facilitators of timely linkage included partner and family support, affirming clinic staff interactions, motivation tied to parental responsibility and personal aspirations, and peer influence from HIV-positive friends. Men identified male-specific clinic spaces, mobile outreach, and community-based peer platforms as preferred engagement models. Delayed ART linkage among men following reactive HIVST is driven by layered individual, relational, and health system barriers.

Conclusions: Interventions should prioritise male-friendly service delivery, peer-led support, and targeted health literacy to close the treatment gap among men.

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Empowering Youth through Peer Support: Recognizing Social Impact in HIV Care

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Background: Receiving a Social Impact Award reflects the power of community-driven approaches in improving the lives of young people living with HIV. At FAMCRU, the "Buddy's" system has been a key strategy in building resilience, strengthening adherence, and promoting psychosocial wellbeing among CHER cohort youth. The CHER cohort represents a historically significant group in South African HIV research based in Cape Town. In 2005, infants were enrolled at 12 weeks of age, with caregiver consent, into the Children with HIV Early Antiretroviral Therapy (CHER) study.

Description: Through peer support, CHER cohort young adults led by a social worker who initiated treatment support groups soon after full disclosure of their HIV status are encouraged to voluntarily share experiences, support one another, and navigate challenges related to HIV disclosure, stigma, and long-term treatment. Many participants have grown in confidence and are now openly sharing their HIV journeys on social media platforms, helping to reduce stigma and inspire others.
These Buddy relationships have created a safe and trusting environment that fosters continuity of care and sustained engagement in both treatment and research. Importantly, participants have expressed a strong willingness to take part in upcoming HIV research, including future cure studies. Their motivation is driven by a desire to help the next generation avoid the challenges they experienced and improve future HIV care outcomes. The broader objective is to generate evidence that supports participant-centred and ethical consent practices in HIV cure research, ensuring that research policies uphold autonomy, rights, and informed decision-making.

Lessons Learned: The success of this approach highlights the importance of youth-led support systems in HIV programme. Peer-driven interventions not only improve health outcomes but also empower young people to actively contribute to research and future HIV care innovations. Increased confidence, openness, and social media advocacy demonstrate the positive impact of peer support in reducing stigma and strengthening identity.
This recognition underscores the value of social impact initiatives that priorities connection, compassion, lived experience, and the meaningful involvement of young people in shaping the future of HIV research and care.

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Baseline Preferences for Differentiated PrEP Support Strategies and Their Association with Engagement and PrEP Continuation among AGYW and FSW

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Background: Adolescent girls and young women (AGYW) and female sex workers (FSW) continue to experience a disproportionate burden of HIV in South Africa. Differentiated PrEP support strategies are increasingly being used to improve continuation; however, little is known about whether individuals' stated preferences for support strategies influence subsequent strategy engagement and PrEP continuation. This analysis examined baseline preferences for PrEP support strategies tested in an individually randomized trial, Project Phakama, and assessed whether receiving one's preferred strategy was associated with engagement and continuation.

Methods: Project Phakama was a factorial individually randomized trial testing four PrEP support strategies (case management, food vouchers, community pickup points, and PrEP support buddies) among AGYW and FSW at risk for HIV in uMgungundlovu, South Africa. At baseline, participants were asked to rank the four strategies being tested from most preferred to least preferred. Engagement was defined as attending versus not attending a specified intervention touchpoint (e.g., attending a case management session, attending a PrEP refill visit to receive a food voucher, or accessing a pickup point locker to collect PrEP); PrEP support buddy engagement was not evaluated, as the study did not capture participant touchpoints with PrEP support buddies. We descriptively assessed engagement by receipt of most preferred strategy. We then assessed the association between receiving one's preferred strategy and seven-month PrEP continuation using logistic regression.

Results: A total of 298 participants were included in the analysis. Food vouchers were the most preferred intervention strategy, followed by case management, PrEP support buddies, and pickup points. Receiving a participant's most preferred strategy was not observed to be associated with greater engagement. Mean attendance across case management visits was similar among those who most preferred case management and those who did not (71.1% vs. 73.2%). Mean attendance across food voucher visits was slightly higher among participants who most preferred food vouchers (74.0% vs. 68.4%). Pickup point engagement was high overall among those that opted-in (n=9), with one participant who most preferred pickup points attending 100% of visits, and those who did not, attending 75% of visits. Preference matching was also not associated with PrEP continuation at month 7. Among participants who received their most preferred strategy, 42% remained covered by PrEP at month 7 compared with 45% of those who did not receive their preferred strategy (OR=0.84; 95% CI 0.52-1.35).

Conclusion: Stated preferences and receipt of a preferred PrEP support strategy were not associated with engagement or PrEP continuation in this trial. These findings suggest that preferences assessed in the absence of lived experience with support strategies may not reflect their real-world acceptability, fit, or effectiveness once implemented.

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Expanding TB Case Notification through Private and Community Provider Engagement in Yobe State, Nigeria, 2022–2025

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Background: Improving tuberculosis (TB) case detection requires active engagement of private providers who are often the first point of contact for people with symptoms, including private health facilities, patent medicine vendors, community volunteers, and other community-based providers. In Yobe State, Nigeria, private-sector participation in TB notification was historically low, while community-based case finding was limited in many hard-to-reach areas. These gaps contributed to missed opportunities for early identification, referral, diagnosis, and treatment. Under the Global Fund Community–Public–Private Mix (CPPM) project, a package of provider engagement strategies was implemented to strengthen TB case finding outside the public sector. This implementation analysis described changes in TB notification following the introduction of performance-based incentives and operational support for private and community providers.

Methods: The CPPM project was implemented across all 17 local government areas in Yobe State between January 2024 and December 2025. Community providers received performance-based incentives for identifying and referring presumptive TB cases, while private providers were supported for TB case detection, notification, contact investigation, and treatment support. Operational enablers included strengthened specimen transport, support for reaching hard-to-reach communities, and patient support for drug-resistant TB (DR-TB) services. Routine programme data were reviewed for the pre-implementation period, 2022–2023, and the implementation period, 2024–2025. The analysis compared total TB notifications, private-sector contribution, community-based case-finding contribution, combined non-public-sector contribution, and DR-TB cases identified through community-based efforts.

Results: Total TB case notifications increased from 2,620 in 2022 to 7,313 in 2025, representing a nearly three-fold increase. Private-sector contribution rose from 37 cases, accounting for 1.4% of total notifications in 2022, to 1,125 cases, accounting for 15.4% in 2025. Community-based case finding contributed 1,421 cases in 2024, representing 33.1% of total notifications, and increased to 3,118 cases in 2025, representing 42.6%. Combined, private and community providers accounted for 53.1% of total TB notifications in 2024 and 58.0% in 2025, compared with 1.4% in 2022. In addition, 231 drug-resistant TB cases were identified through community-based efforts.

Conclusion: The implementation of structured provider incentives, specimen transport support, and community-based referral systems coincided with marked growth in TB notification in Yobe State. The increasing contribution of private and community providers shows that non-public-sector platforms can play a central role in TB case finding when they are actively engaged, supported, and monitored. Maintaining this approach within routine TB services can help extend case detection to hard-to-reach populations, improve referral from community entry points, and strengthen early access to TB services.

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Effectiveness and Implementation Outcomes of a Community-Engaged, Person-Centred Care Model for People Living with HIV in Delta State, Nigeria: A Hybrid Stepped-Wedge Cluster-Randomised Trial

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Background: Suboptimal client–provider experiences perpetuate HIV treatment interruptions, discourage re-engagement, and undermine long-term outcomes. The role of person-centred care (PCC) in improving client–provider interactions and clinic communication remains underexplored in sub-Saharan Africa.

Methods: We conducted a hybrid type 2 effectiveness-implementation, stepped-wedge, cluster-randomised trial with an embedded qualitative process evaluation, assessing a co-designed community PCC model (PCCm) across two large ART sites in Delta State, Nigeria. The PCCm comprised healthcare worker training, client health promotion, and routine clinic feedback. Primary outcomes were viral suppression (<200 copies/mL) and ART retention (proxy continuity of treatment, CoT) at 6 months. PCC fidelity and client satisfaction were assessed via pre- and post-intervention surveys; focus group discussions and in-depth interviews explored barriers and preferences to care and were analysed thematically. Multivariable logistic regression evaluated clinic PCC experiences, adjusting for age, sex, and facility.

Results: Among 2,425 clients receiving care during the intervention (73.5% female; mean age 46.6 years), PCC scores were high at both sites (mean 55.5±3.3; F=52.73, p<0.001). Post-intervention satisfaction was high overall, with facility being the only significant predictor of lower scores (Site 2: B=–0.307, 95%CI –0.527 to –0.088). Median clinic visit duration was 1h:48m (IQR: 1h:10m–3h:08m). While 95.8% found their appointment date convenient, only 27.8% were offered a choice of appointment time. ARV refill coverage improved at site 1 (92% to 94%) but declined at site 2 (97% to 90%) between phases. Proxy CoT remained high at both sites (96.8% and 94.0%, respectively). Viral suppression improved at site 1 (93.9% to 95.6%) and rose markedly at site 2 in phase 2 (95.8% to 99.1%). Qualitative findings identified provider empathy, shared decision-making, communication, and stigma-free services as key PCC touchpoints. Decentralised service integration was a major barrier, driven by prior negative experiences with siloed care, privacy concerns, and unreceptive healthcare workers. Proposed solutions included digital health records, strengthened peer support, and enforcement of anti-stigma legislation.

Conclusions: The PCCm improved clinic experience and care engagement, with corresponding gains in retention and viral suppression at both sites. A PCC-focused service delivery approach shows promise in strengthening HIV treatment outcomes and warrants further evaluation for scale-up.

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Effectiveness of an Immersive HIV/AIDS Prevention Pavilion on HIV-Related Knowledge, Stigma and Sexual Practices among Older Adults: A Randomised Controlled Trial

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Introduction: The HIV epidemic among older adults is an emerging yet under-recognized global public health challenge. Persistent gaps in HIV-related knowledge, intersectional stigma, and societal moral prejudices aggravate the risks of condomless sex and HIV infection in this population, underscoring the critical need for targeted HIV prevention strategies for older adults.

Aims: This study aims to evaluate the effect of an Immersive HIV/AIDS Prevention Pavilion within local communities on enhancing HIV-related knowledge, reducing stigma and modifying high-risk sexual behaviors among older adults.

Methods: A single-blind, two-arm parallel randomized controlled trial was conducted. Participants were randomly assigned to the experimental and control groups. The intervention group received the Immersive HIV/AIDS Prevention Pavilion intervention, while the control group received routine HIV-related health education. Outcomes were assessed at multiple time points, and intervention effects were analyzed using generalized estimating equations to account for repeated measures.

Results: A total of 182 participants were included in the final analysis. After the intervention, the intervention group demonstrated significantly higher HIV-related knowledge, lower HIV-related stigma, condom-related stigma than the control group ($P < 0.05$). In addition, the intervention group showed a significant increase in condom use frequency ($P < 0.05$). However, no statistically significant difference was observed between the two groups in sexual behaviors between the two groups ($P > 0.05$).

Conclusions: The Immersive HIV/AIDS Prevention Pavilion intervention can effectively increase HIV-related knowledge, improve condom-related stigma and HIV-related stigma in the short term and increase the rate of condom use. However, its impact on reducing high-risk sexual behaviors was limited, highlighting the complexity of translating improvements in knowledge and attitudes into behavioral change, particularly in the context of persistent sociocultural norms and stigma. Future strategies may require more targeted and sustained approaches to effectively influence high-risk sexual behaviors among older adults.

Trial registration: The study has been registered in the Chinese Clinical Trial Registry (ChiCTR2300075827) on September 15, 2023.

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Lessons Learned from an HIV-Related Participatory Research Project with Young Women in Lesotho

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Introduction: The need to collaborate with community partners has long been considered essential for achieving sustainable HIV prevention and treatment targets. While the level of youth engagement in research varies by project, it is important that youth collaboration and partnership is meaningful and measurable. We previously conducted a survey that aimed to assess the acceptability of providing sexual and reproductive health services, including HIV-related care, for young women at hair salons in Lesotho. The survey relied on participatory research with several community partners who were fundamental to its implementation. This paper reports on the lessons learned from our participatory processes.

Methods: The Hair SALON survey was conducted in Lesotho between December 2023 and August 2024. For the present study, we used the Report of Engagement in Community Research (REACH) tool to systematically define the various depths of engagement of stakeholders at different stages of the research. In addition, we conducted semi-structured individual interviews with the four young community partners who were involved as the Hair Salon Expert Group (HSEG) throughout the project, and a subset of six stylists who helped enroll clients to fill in the questionnaires. The audio-recorded interviews were transcribed, translated, and coded using thematic analysis, following a phenomenological approach.

Results: Challenges to engagement with the research project included the lack of full understanding of the project team's expectations (for the HSEG), and difficulty engaging potential participants due to mistrust and the sensitive content of the project (for the stylists). As possible mitigation strategies, interviewees suggested developing better community dissemination efforts prior to the project start, and providing more training to the community partners. Facilitators for engagement included multiple altruistic, professional development, and material incentives. In addition to believing that the project would be beneficial to their community, community partners felt that they gained valuable skills and knowledge from participating actively in the research process. While it was not a primary incentive, they also appreciated the monetary compensation they received, and material goods such as project merchandize. Notably, many did not expect to be compensated for their involvement in the research, as this was not common practice in our setting.

Conclusions: Our findings highlight that a participatory approach across all research phases is feasible and that various facilitators - beyond material incentives - motivate youth community partners to be part of such a project. However, some barriers remain. It is important to increase efforts to clarify community partners' roles and responsibilities beyond written agreements, which in turn improves their perceived ownership of the research.

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From Algorithm to Action: AI-Guided Hotspot Mapping and Community-Based HIV Testing to Optimize Service Uptake among Adolescent Girls and Young Women in Ebonyi State, Nigeria

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Background: Digital health innovations, geospatial mapping, and Artificial Intelligence (AI) have advanced HIV hotspot identification and resource allocation for targeted interventions. AI-driven spatial analysis and geospatial mapping have enhanced precision public health by improving HIV program planning and enabling strategic service delivery to vulnerable and high-risk populations in Nigeria. However, evidence on the integration of these approaches among adolescent girls and young women (AGYW) in Ebonyi State is limited. This study addresses that gap by evaluating AI-driven hotspot mapping and identification in Ebonyi State from January to December 2025 to optimize HIV service uptake among AGYW.

Methods: This intervention employed a multi-phase, community-based HIV prevention approach targeting AGYW in Ebonyi State. Using the EPCON AI algorithm, 109 locations were mapped based on AGYW population density (>500), HIV prevalence (0.6–1.01%), and STI prevalence (>4.22%). Ground-level validation involved phone-based cross-checks with community stakeholders to assess accuracy, safety, and accessibility. Of the mapped locations, 58 priority and 35 medium- prevalence locations were validated for operational use. Final site selection considered HIV prevalence category (0.60–0.79 medium; ≥0.80 high), AGYW density, and STI burden. Itineraries were jointly developed with GON, ECEWS, and NEPWHAN, prioritizing proximity, accessibility, service availability and program needs. Community engagement preceded visits through stakeholder mobilization and sensitization. Service delivery combined daily door-to-door testing with bi-weekly hotspot outreaches. Counsellor testers logged real-time service data via the EPCON Telegram interface, with GPS tagging validating site utilization. Data were reported on Electronic Medical Record dashboards and cross-referenced against manual logs to ensure quality assurance

Results: A total of 93 AI-prioritized and medium-prevalence locations were reached. Of 191,142 targeted AGYW, 193,972 (101.5%) received MPPI services, with community approaches contributing 116522 (60%). Overall, 122,541 (98%) received HIV test results, with 75188 (61%) through community testing. Among those tested, 176 HIV-positive AGYW were identified, including 63 (36%) through community-based strategies.

Conclusion: AI-prioritized mapping and community strategies enhanced AGYW reach, exceeding targets, improving HIV testing uptake, and identifying positives efficiently, demonstrating strong program effectiveness and scalability impact.

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From Availability to Utilisation: Implementing a Community-Driven Adolescent Health Model in Rural Zimbabwe

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Background: Despite increasing availability of adolescent-responsive health services, implementation strategies that effectively engage adolescents within routine rural health systems remain limited. In Zimbabwe, persistent health system and socio-cultural barriers continue to constrain utilisation of adolescent-responsive services. We assessed implementation of a community-driven adolescent health model and its association with adolescent service utilisation in rural Zimbabwe.

Methods: A mixed-methods internal implementation evaluation was conducted to assess implementation of the Teenage Health Information and Innovation Spaces (THIIS) model across 10 rural health facilities between 2023 and 2025. THIIS is a community-driven adolescent health model informed by consultations with adolescents to address locally identified barriers to care. The evaluation combined retrospective analysis of routine programme and facility data with interviews, observations, focus group discussions and stakeholder engagement activities to assess implementation processes, service utilisation and contextual factors influencing implementation.

Results: Implementation of the THIIS model resulted in 33 adolescent engagement platforms across facility, community and digital settings, supported by 223 trained healthcare workers and 91 peer leaders, of whom 52 remained active in 2025. Adolescent service contacts increased from 8,347 in 2024 to 13,083 in 2025 (+57%), and screening contacts for depression/anxiety, substance use, sexually transmitted infections and HIV increased from 10,280 to 19,665 (+91%). Qualitative findings identified peer leaders, sports activities and community-linked engagement opportunities as trusted entry points that facilitated adolescent engagement, service utilisation and linkage to care, while peer and staff turnover emerged as constraints to sustained implementation.

Conclusions: This implementation evaluation suggests that community-driven adolescent health models can be successfully integrated within routine rural health services while strengthening adolescent engagement through community- and facility-based approaches. Successful scale-up and sustainability will require institutional ownership, resilient peer support systems and implementation strategies that respond to local health system constraints.

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Trial Equity before Trial Efficacy: Implementation Barriers and Digital Strategies for Equitable Inclusion of Sexual and Gender Minority Populations in HIV/TB Research in Southern Africa

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Background: People from sexual and gender minority communities remain under-represented in HIV/TB implementation research despite experiencing disproportionate stigma, delayed care-seeking, and poor engagement with prevention and treatment services. This study examined implementation barriers, facilitators, and digital strategies influencing equitable inclusion in HIV/TB research across Southern Africa.

Methods: A scoping review and implementation framework synthesis were conducted using PubMed, Scopus, Web of Science, CINAHL, Embase, and grey literature from January 2014 to May 2026. Eligible studies reported barriers, facilitators, recruitment strategies, or digital interventions affecting participation of people from sexual and gender minority communities in HIV/TB research or service implementation. Data were coded using Proctor's implementation outcomes and the Consolidated Framework for Implementation Research.

Results: From 1,284 records identified, 47 studies from nine Southern African countries met inclusion criteria, representing 18,736 participants. Men who have sex with other men accounted for 61.7% of study populations, transgender women for 19.1%, transgender men for 4.3%, and broader sexual and gender minority groups for 14.9%. The most frequently reported barriers were anticipated stigma from providers (72.3%), fear of disclosure or involuntary outing (68.1%), criminalisation or hostile legal environments (55.3%), mistrust of research institutions (48.9%), and transport-related access constraints (42.6%). Community-led recruitment improved enrolment by a median of 34.8%, while peer navigation improved retention by 27.5%. Digital strategies were reported in 21 studies; encrypted WhatsApp follow-up, anonymous eligibility screening, tele-counselling, and mobile appointment reminders increased recruitment efficiency by 31.2% and reduced missed follow-up visits by 24.7%. However, only 29.8% of studies reported explicit safeguards for digital confidentiality.

Conclusions: Equitable HIV/TB implementation research requires trial designs that prioritise trust, confidentiality, community partnership, and digitally enabled engagement before efficacy can be meaningfully interpreted. Community-led and privacy-protective digital strategies offer scalable pathways for improving inclusion, but require stronger ethical governance and context-specific adaptation.

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Peer-Led Community HIV/Syphilis Testing with Linkage within Seven Days for MSM and Transgender Women in Indonesia: A Mixed-Methods Process Evaluation

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Background: HIV and syphilis infections continue to present a substantial health burden for men who have sex with men and transgender women in Indonesia. Facility-based models often underserve individuals outside metropolitan areas due to visibility concerns, travel costs, and fragmented workflows. This study investigated the acceptability, feasibility, and early service performance of a peer-led, community-based service (CBS) model providing integrated HIV and syphilis testing and rapid operational linkage to care in non-metropolitan South Sulawesi, Indonesia.

Material and Methods: A convergent mixed-methods process evaluation was conducted in Makassar City and Bulukumba District between June and December 2023. Trained community health workers delivered capillary whole-blood rapid diagnostic tests for HIV and syphilis via three modalities: door-to-door outreach, scheduled static community posts, and mobile hotspot events. Quantitative data, gathered via post-test questionnaires, operational logs, and a 9-item procedural observation checklist, were analyzed using descriptive statistics to compute frequencies, proportions, and confidence intervals. Primary outcomes included client acceptability, procedural feasibility, the proportion of first-time testers, syphilis testing coverage, and operational linkage to confirmatory testing and antiretroviral therapy (ART) initiation within ≤7 days. Concurrently, qualitative data were collected from 37 stakeholders through in-depth interviews and focus group discussions, followed by a reflexive thematic analysis to integrate with the quantitative findings.

Results: The CBS model reached 423 clients, achieving high acceptability and successfully engaging a large proportion of first-time testers (84.9%). HIV reactivity was 2.8% (12/423). According to operational logs, 100% of the individuals with reactive HIV results were successfully referred, completed confirmatory testing, and initiated ART within ≤7 days. Syphilis testing coverage was 83.0% (351/423), identifying 8 individuals with reactive results who were all referred for further evaluation and treatment. Feasibility observations across 70 client encounters demonstrated 100% procedural compliance for core testing steps. Qualitative findings corroborated these results; participants valued privacy, convenience, and peer trust, while facility representatives emphasized the need to stabilize the supply chain for syphilis test kits.

Conclusions: A peer-led CBS model for HIV and syphilis testing is highly acceptable, feasible, and effective for men who have sex with men and transgender women in non-metropolitan settings. The approach successfully reached individuals with no prior testing history. Statistical analyses demonstrated a 100% ART linkage rate for individuals with reactive HIV screens and 100% technical procedural adherence among community health workers, confirming the reliability of the service delivery. Scaling up this differentiated model can substantially close testing and treatment gaps, provided that standardized quality assurance and reliable diagnostic commodity supplies are maintained.

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Client-Centered Enablers and Persistent Bottlenecks across Indonesia's HIV Cascade: A Multi-Stakeholder Qualitative Study

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Background: Despite policy development and program expansion, Indonesia's HIV epidemic remains concentrated among key populations. This study examined how modifiable service design features and implementation mechanisms shape HIV cascade performance across testing, prevention, and care within Indonesia's decentralized health system.

Material and Methods: An exploratory qualitative study was conducted across four provinces: South Sulawesi, Jakarta, Yogyakarta, and Bali. Data were collected via nine focus group discussions and 22 in-depth interviews involving 64 participants, including policymakers, program managers, healthcare providers, community-based organization staff, academics, and service beneficiaries. Transcripts were systematically evaluated using reflexive thematic analysis to identify mechanisms influencing cascade performance.

Results: The analysis revealed four primary themes. First, client-centered enablers, such as free testing, one-stop service touchpoints, and same-day antiretroviral therapy initiation, facilitated faster linkage to care and early retention. Second, workflow pressures and limited privacy in health facilities weakened early engagement, demonstrating that confidentiality and counseling quality strictly influence testing uptake and trust. Third, the impact of prevention efforts was hindered by commodity stock-outs, complex pre-exposure prophylaxis workflows, and limited multisector coordination. Fourth, long-term retention and viral suppression were constrained by workforce capability gaps and system reliability issues, specifically fragmented referral pathways and medicine stock-outs.

Conclusions: HIV cascade outcomes in decentralized settings depend primarily on the consistent execution of local operational processes rather than the mere presence of national policies. To achieve equitable outcomes and support retention, programs must formalize client-centered enablers, upgrade testing services to ensure privacy, simplify prevention protocols, and implement a robust retention bundle focused on stock assurance and active referral workflows.

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Developing and Implementing an MSM-Led Community-Based HIV Service Model in South Sulawesi: An Implementation Research Process Evaluation

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Background: Integrated community-led HIV services remain limited outside major Indonesian cities, despite rising epidemics among men who have sex with men. As part of a larger implementation research project adapting Thailand's Key Population-Led Health Services approach, this study evaluated the Phase 2 pilot implementation of a community-based service model in South Sulawesi, focusing on predefined process indicators and early adoption signals.

Material and Methods: A descriptive process evaluation was conducted in Makassar City and Bulukumba Regency. Implementation strategies included a three-day competency-based training for community health workers, a one-week supervised internship at public primary health centers, engagement with health authorities to secure rapid test supplies, and the establishment of two static service sites. Quantitative process indicators were analyzed using descriptive statistics to calculate frequencies and percentages. Concurrently, qualitative implementation records and open-ended feedback were analyzed using conventional content analysis.

Results: Fourteen community health workers completed the training and successfully met the minimum competency thresholds of ≥80% for attendance, knowledge, and skills assessments. All 14 trainees completed their supervised internships across eight public primary health centers. Multilevel advocacy resulted in the issuance of formal designation letters and commitments for HIV and syphilis rapid diagnostic tests by district and city health offices, directly enabling the successful launch of two static community-based service sites. While trainee satisfaction was high, qualitative feedback revealed a feasibility-acceptability trade-off; descriptive statistics showed that 92.9% (13/14) of the trained workers reported the training duration was insufficient and requested extended practicum time.

Conclusions: The pilot achieved key start-up milestones, successfully demonstrating the early adoption and integration of a community-based HIV service model linked to public primary health centers in a non-metropolitan province. The quantitative and qualitative metrics validate the feasibility of the start-up sequence while highlighting the necessity of extended supervised practice, providing actionable guidance for optimizing training and logistical support in future scaling and evaluation phases.

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Leveraging Workplace and Social Protection Systems to Improve Tuberculosis Case Detection in Uganda: Implementation Evidence from a Multisectoral Accountability Framework

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Background: Persistent gaps in tuberculosis (TB) case detection among vulnerable and underserved populations continue to undermine TB control efforts in high-burden settings. In Uganda, structural barriers, including stigma, limited access to healthcare, and fragmented service delivery, contribute to delayed diagnosis and treatment. To address these challenges, Uganda implemented a multisectoral accountability framework that integrates TB services into workplace and social protection systems. This study assessed implementation outcomes and operational lessons from scaling integrated TB screening and referral interventions.

Methods: A mixed-methods operational research study was conducted between 2020 and 2025 across ministries, departments, agencies, and social protection platforms. TB screening and referral services were integrated into workplace programmes and the Social Assistance Grants for Empowerment (SAGE) programme targeting older persons. Non-health-sector personnel were trained to conduct symptom screening, community mobilisation, and referral coordination. Programme monitoring data, implementation reports, and stakeholder interviews were analysed to assess service uptake, institutional integration, and case detection outcomes.

Results: Workplace-based interventions screened 17,359 individuals and identified 192 people with TB. Screening integrated within social protection platforms reached 980 beneficiaries and identified 11 TB cases, including one multidrug-resistant TB case. Twenty-five government institutions incorporated TB activities into annual operational plans and budgets. Eleven ministries, departments, and agencies developed integrated TB/HIV workplace policies to institutionalise service delivery. Key facilitators of implementation included political leadership, use of existing government service delivery platforms, and integration within institutional systems. Persistent barriers included variable institutional capacity, referral bottlenecks, and sustainability concerns linked to donor dependence.

Conclusions: Integrating TB services into workplace and social protection systems can strengthen case detection, improve access for underserved populations, and support more equitable TB responses. Embedding TB interventions within existing public-sector structures offers a feasible pathway to scale sustainable, people-centred TB services in high-burden settings.

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Stakeholders' Perceptions on Service Delivery and Self-Management Support for Adolescents Living with HIV in the Western Cape, South Africa

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Background: As HIV has become a lifelong condition, adolescents living with HIV (ALHIV) must manage complex treatment regimens, psychosocial challenges, and transitions across care services while navigating critical developmental stages. In many public-sector health systems, adolescent HIV services remain fragmented and insufficiently responsive to developmental needs, contributing to poor adherence, disengagement from care, and suboptimal outcomes. Effective self-management support is therefore essential and requires coordinated collaboration between healthcare services, schools, and other community-based resources. Understanding stakeholder perspectives is critical to strengthening adolescent-centred HIV service delivery and self-management support. The study aimed to explore the perceptions of key stakeholders regarding service delivery and self-management support for adolescents with long-term health conditions in the Cape Metropole of the Western Cape, identifying strengths, gaps, challenges, and areas for improvement to inform the development of an integrated model of care.

Methods: A qualitative descriptive study was conducted using purposive sampling to recruit 20 key stakeholders, including managers, healthcare workers, non-government organisation representatives, members of the Chronic Disease Management Service Coordinating Working Group, and academics who were experienced in adolescent health care in the Cape Metropole of the Western Cape. The semi-structured interviews explored perceptions of adolescent service delivery, self-management support, and system responsiveness. Interviews were audio-recorded, transcribed verbatim, and analysed using thematic analysis.

Results: Stakeholders reported that fragmented services, limited adolescent-specific care, and poor continuity of care hindered engagement and independence. Health system challenges, such as inadequate infrastructure, inflexible service hours, and a lack of dedicated adolescent spaces, affected confidentiality, comfort, and acceptability. Support was often misaligned with developmental needs, including limited education, unrealistic expectations of autonomy, and minimal digital support. Healthcare worker capacity, policy gaps, and resource constraints further limited service responsiveness. Social factors, including family dynamics, school environments, HIV-related stigma, and socioeconomic hardship, strongly shaped adolescents' ability to self-manage.

Conclusion: Strengthening adolescent-centred care and self-management support requires coordinated, developmentally appropriate, and adequately resourced services, supported by skilled healthcare workers and strong family and community engagement. An integrated approach to service delivery has the potential to support successful transitions across care, enhance self-management capacity, and improve treatment outcomes for ALHIV.

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Public Health Communication as a Strategy for Improving HIV Testing Uptake: A Cross-Sectional Survey from Six Local Government Areas in Lagos, Nigeria

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Background: Nigeria has the world's second-largest HIV burden, with 74,000 new infections recorded in 2022, yet progress towards epidemic control remains slow. In Lagos State, the country's most populous urban centre, weak public health communication may be a critical but overlooked structural barrier to achieving the UNAIDS 95-95-95 targets. This study tested the hypothesis that poor public health communication is a missing link between the availability of HIV services and their utilisation by the population.

Material and Methods: A cross-sectional survey of 442 adults aged 18-64 years was conducted across six diverse Local Government Areas of Lagos State: Mushin, Eti-Osa, Ibeju-Lekki, Ojo, Epe, and Alimosho. A structured, pre-tested questionnaire measured HIV knowledge, stigmatising attitudes, exposure to HIV communication messages, and lifetime HIV testing history. Multivariable logistic regression was used to adjust for potential confounders including education, age, gender, and Local Government Area of residence.

Results: Only 40.7% of respondents had encountered any HIV message in the six months prior to the survey. The mean HIV knowledge score was 5.85 out of a possible 11. Message exposure was strongly associated with higher knowledge scores (8.93 vs 3.74; $p<0.001$), lower stigma scores (18.08 vs 24.24; $p<0.001$), and greater lifetime HIV testing uptake (adjusted odds ratio 4.82, 95% confidence interval 2.91-7.98, $p<0.001$). The most common barrier to HIV testing cited by participants was a belief of not being personally at risk, reported by 49.8% of respondents.

Conclusions: Exposure to HIV communication was the variable most consistently linked to better knowledge, lower stigma, and higher testing uptake, even after adjusting for education and other demographic factors. However, nearly six in ten people in Lagos received no HIV message in the preceding six months. These findings support treating strategic, evidence-based public health communication as a core implementation science intervention for HIV prevention. A multi-level, theory-guided communication framework tailored to distinct community typologies is proposed for urban settings with high HIV burden.

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Pilot Evaluation of a Co-Created Peer Champion Implementation Strategy for Increasing HIV Testing among Young Black Men Who Have Sex with Men in the Midwest, USA

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Background: Young Black men who have sex with men (YBMSM) ages 18 to 24 face elevated HIV risk in St. Louis, USA, yet testing rates are persistently low. YBMSM often receive HIV prevention information that is designed for older audiences or delivered through formal channels they may not use or trust. Thus, training YBMSM as peer champions is a promising approach for increasing the relevance and credibility of HIV prevention messages by delivering them through trusted messengers within existing peer networks. Academic partners and a local HIV service organization co-created a program for engaging YBMSM as youth HIV prevention champions intended for use by HIV service organizations seeking to improve the reach of their testing services within this population.

Methods: The implementation strategy consists of three core components: a human centred design workshop series (15 hours) involving HIV education, elicitation of testing barriers, and structured peer-directed strategy development exercises; a three-month experiential learning period with practical facilitation support and mentorship; and a culminating showcase event. We piloted the strategy (n = 6) at the community partner organization using facilitators from the academic partner institution. We evaluated its appropriateness, acceptability, feasibility and empowering capacity using a convergent mixed methods design. The first three outcomes were conceptualized using Proctor's IOF and the last using Popay's Emancipatory Power Framework. Data collection included quantitative pre-post surveys, observation, deliberative dialogue, and focus group discussions. Quantitative data was analysed using descriptive statistics and qualitative content analysis was performed.

Preliminary Results: Feasibility was high for workshop delivery but lower for subsequent strategy components. Six participants from the target demographic were recruited and all planned workshop sessions were delivered. Enrolled participants attended all sessions and successfully developed strategies. Four participants completed the experiential learning period where they implemented their strategies and presented lessons learned at the showcase. HIV-related communication self-efficacy improved (4.1 to 4.6/5), however HIV health literacy was high at baseline and remained high (5 to 5/5). Participants rated the strategy highly on items reflecting appropriateness (4.8/5) and acceptability (4.8/5). Collective empowerment increased from 4.4 to 4.6/5. Preliminary analyses suggest community-led development of the strategy leveraged existing trust and community knowledge, which helped with building relational equity and appropriate remuneration, pace, content and tone. Further, activity-based rather than didactic teaching, multimedia information resources, and gamifying learning assessments made content fun and engaging, thus increasing acceptability, as did providing opportunities to teach and learn from one another.

Implications for D&I Research: This pilot advances our understanding of peer champion implementation strategies by focusing on community-based youth champions with the goal of increasing equity in the reach of services. It also highlights the potential value of measuring empowerment alongside traditional implementation outcomes when strategies seek to strengthen the capacity and agency of community members from multiply-marginalized populations. Future investigations should examine approaches to improve retention and feasibility for post-workshop strategy components and evaluate implementation outcomes when the strategy is delivered independently by HIV service organization staff.

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Not All Private Providers Are Equal: Evidence for a Differentiated Public–Private Mix Strategy for TB Case Finding in Nigeria

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Background: Private providers are central to Nigeria's tuberculosis (TB) response and contribute substantially to national TB notifications. However, public–private mix (PPM) strategies often treat private providers as a homogeneous group, potentially obscuring opportunities to improve case-finding efficiency through differentiated engagement. Understanding variation in performance across provider types is critical for optimizing implementation strategies and maximizing the impact of limited resources. We assessed differences in TB case-finding efficiency between faith-based (FB) and non-faith-based (NFB) private facilities to inform more targeted PPM approaches.

Materials and Methods: We conducted a retrospective comparative analysis of routine TB programme data from 509 private facilities across Lagos, Ogun, Osun, and Oyo States, Nigeria, between January 2021 and December 2024 under the TB-LON 3 project implemented by the Institute of Human Virology Nigeria with support from USAID. Facilities were categorized as non-faith-based (NFB; n=470) and faith-based (FB; n=39). We analyzed key TB cascade indicators and implementation efficiency metrics, including the number needed to screen (NNS) and the number needed to test (NNT) to identify one person diagnosed with TB. Comparative performance was assessed using chi-square tests, and consistency of observed effects was examined across years.

Results: A total of 6,088,489 individuals were screened for TB across participating facilities, with NFB and FB facilities accounting for 85.8% and 14.2% of screenings, respectively. Among 266,492 individuals identified with presumptive TB, 255,608 (95.9%) were evaluated, resulting in 20,335 people diagnosed with TB and 19,406 people initiated on treatment. NFB facilities contributed 72.4% of all TB notifications (14,723/20,335), while FB facilities contributed 27.6% (5,612/20,335). Although NFB facilities generated a greater absolute number of people diagnosed with TB because of higher screening volume, FB facilities demonstrated substantially higher diagnostic efficiency. Compared with NFB facilities, FB facilities had a lower NNS (154 vs 355) and lower NNT (10 vs 14). These differences were statistically significant ($\chi^2 = 3023.55$, $p < 0.001$) and remained consistent throughout the four-year study period, indicating sustained efficiency advantages among FB providers.

Conclusions: Private providers are not interchangeable. While non-faith-based facilities drive screening volume, faith-based facilities demonstrate greater efficiency in identifying people with TB. Treating the private sector as a homogeneous implementation platform may mask opportunities to improve TB case finding. These findings support consideration of differentiated PPM strategies that incorporate provider performance metrics and prioritize engagement approaches based on efficiency. In high-burden settings, strategic engagement of provider types may improve TB case-finding outcomes without proportionate increases in screening volume.

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A Missed Opportunity for HIV Prevention: PrEP Awareness and Preferences among Emergency Department Patients in Cape Town, South Africa

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Background: Pre-Exposure prophylaxis (PrEP) is a proven effective biomedical intervention for HIV prevention; however, uptake remains limited. The Emergency Department (ED) represents a critical venue to reach populations who would benefit from HIV prevention and is often the only place of engagement with the healthcare system for patients. Despite this, PrEP is currently not routinely offered in EDs in South Africa. We aim to describe PrEP awareness and preferences for oral versus long-acting injectable (LAI) PrEP among ED patients in Cape Town, South Africa, to define the opportunity for expanding PrEP access within this venue.

Methods: This is an interim cross-sectional analysis of patients presenting to the ED at a 24-hr community health center, with a dedicated ED in Cape Town from January-May 2026. All patients presenting to the ED for care during weekdays between 09:00-17:00 were approached. Individuals aged ≥12 years who were clinically stable and consented to HIV status ascertainment via point-of-care testing or prior positive tests were enrolled. Participants completed structured surveys to assess their social determinants of health. PrEP eligibility was defined using the 2021 PrEP guidelines by the National Department of Health. Descriptive statistics were utilized to characterize PrEP awareness, eligibility, interest, and modality preference among persons without HIV (PWOH). Univariable and multivariable logistic regression were used to identify factors associated with PrEP awareness and modality preference, with 95% confidence intervals (CI) and statistical significance defined as $p<0.05$.

Results: Out of 347 patients enrolled, 253 (72.9%) were PWOH and included in the analysis. The median age was 30 years (IQR: 20-41), 139 (55.0%) were male, 158 (62.5%) had not completed high school, and 65 (25.7%) reported healthcare access barriers, defined as an inability to reach healthcare when needed. Of all PWOH, 232 (91.7%) were not currently on PrEP, of which 134 (57.8%) were PrEP eligible. 98 (38.7%) PWOH also reported that they were unaware that HIV prevention medications exist, including 47 (35%) PrEP eligible patients. Notably, 113 (84.2%) PrEP eligible PWOH expressed interest in starting PrEP; 46 (37.5%) reported they preferred daily oral pills and 77 (62.6%) preferred LAI. In adjusted analyses, female sex (aOR 2.31, 95% CI 1.31-4.08) and attaining at least a high school education (aOR 4.06, 95% CI 2.13-7.75) were independently associated with higher odds of PrEP awareness, while adults over 40 years (aOR 0.36, 95% CI 0.17-0.73) had significantly lower odds of awareness. Regarding PrEP preferences, self-reported drug use in the past 3 months was independently associated with a preference for daily oral pills over LAI (aOR 0.13, 95% CI 0.03-0.66) after adjusting for sex and self-reported healthcare access.

Discussion: To successfully implement PrEP in the ED, patient-facing materials should target older adults and clearly document the basic premise of PrEP. Furthermore, despite the promise of LAI, the continued availability of oral PrEP is still an important therapeutic option for some populations. Notably, the vast majority of PrEP eligible patients (over 80%) were interested in PrEP, which underscores the need for integrated HIV prevention services into the ED.

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The Smallest Patients, the Biggest Gap: Age-Related Inequities in Pediatric Tuberculosis Treatment Outcomes in Southwest Nigeria

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Background: Children younger than five years bear a disproportionate burden of tuberculosis (TB)-related morbidity and mortality yet remain underserved across the TB care continuum. Although the World Health Organization prioritizes this population, evidence from routine programme settings comparing treatment outcomes across pediatric age groups remains limited. We assessed age-related differences in TB treatment outcomes among children receiving treatment in Southwest Nigeria to inform equity-focused and age-responsive TB interventions.

Materials and Methods: We conducted a retrospective cohort analysis of children aged 0–14 years who initiated TB treatment between July 2022 and June 2023 at TB-LON 3-supported facilities in Lagos, Ogun, Osun, and Oyo States, Nigeria. The programme is implemented by the Institute of Human Virology Nigeria with support from USAID. Children were stratified into two age groups (0–4 years and 5–14 years) and followed through treatment completion. Treatment outcomes were classified according to World Health Organization definitions. Differences in treatment success between age groups were assessed using chi-square tests, with statistical significance set at $p<0.05$.

Results: A total of 1,833 children receiving TB treatment were included in the analysis, comprising 554 children aged 0–4 years and 1,279 children aged 5–14 years. Treatment success was significantly lower among children aged 0–4 years compared with those aged 5–14 years (79.7% vs. 85.6%; $\chi^2 = 10.8$, $p = 0.001$). Adverse treatment outcomes were consistently more common among younger children, including mortality (3.1% vs. 2.2%), loss to follow-up (11.2% vs. 7.6%), and non-evaluation (6.1% vs. 4.3%). Treatment failure was uncommon in both age groups.

Conclusions: Children younger than five years experienced significantly poorer TB treatment outcomes than older children in routine programme settings. These findings highlight important age-related inequities in treatment outcomes and suggest that current approaches may not adequately address the needs of younger children. Equity-focused implementation strategies, including strengthened caregiver support, enhanced follow-up mechanisms, improved early case detection, and age-responsive models of care, may help improve treatment outcomes among young children and reduce preventable TB-related mortality.

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Growing Reach through Community-Based HIV Service Platforms: Early Implementation Lessons from the SAFE Mpox Serosurveillance Study in South Africa

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Background: Emerging infectious diseases such as mpox require surveillance strategies that reach populations most at risk while building on existing health systems. In South Africa, men who have sex with men (MSM), female sex workers (FSW), and transgender and non-binary individuals often access HIV prevention and sexual health services through community-based organisations that have established trust and engagement within these communities. The Serological Assessment for Mpox Exposure (SAFE) study was designed to integrate mpox surveillance into these existing service platforms. This analysis describes early implementation outcomes and explores the role of community-based services in expanding equitable access to emerging infectious disease surveillance.

Methods: SAFE is an ongoing cross-sectional serosurvey conducted among key populations attending community-based HIV service platforms and affiliated sentinel clinics in KwaZulu-Natal (KZN). Between 1 December 2025 and 16 April 2026, eligible participants aged 16 years and older were recruited for mpox serological testing. Participants with positive serological findings were invited for follow-up. Programme implementation data were reviewed to assess recruitment, participant retention, and factors influencing service delivery.

Results: During the first implementation phase, 224 participants were screened in KZN province, and 34 participants were identified as seropositive. Twenty-nine participants (85.3%) completed follow-up, while five were lost to follow-up because of relocation (n=2), refusal to continue participation (n=2), or inability to establish contact (n=1). Recruitment was facilitated through trusted community-based HIV service platforms that provided established access to key populations who are often underserved by conventional health services. However, implementation was disrupted when two major community partners ceased operations during the study period, resulting in the closure of community access points, interruption of referral pathways, and the need to identify new recruitment sites. These disruptions demonstrated the dependence of equitable service delivery on sustained community-based infrastructure.

Conclusions: Community-based HIV service platforms provide more than recruitment opportunities; they are essential implementation partners for expanding access to health services among key populations. SAFE demonstrates that integrating new public health interventions into trusted community services is a feasible approach to reaching populations at increased risk of emerging infections. The loss of established community partners highlighted the fragility of these access pathways and the need for sustained investment in community-based organisations as part of national preparedness for HIV and emerging infectious disease responses. Strengthening these partnerships will be critical to ensuring equitable access to surveillance, prevention, and care for future public health threats.

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Implementation of a Laboratory-Based Dolutegravir Exposure Reflex Algorithm to Optimize HIV Drug Resistance Testing in South Africa

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Background: Identification of people living with HIV (PLHIV) at highest risk for dolutegravir resistance is challenging, particularly in large treatment programs where resources for resistance testing are limited. Plasma dolutegravir exposure testing provides an objective and accurate screening tool to identify people who would benefit most from resistance testing. We have previously shown in ITREMA-2 that undetectable plasma dolutegravir predicts the absence of dolutegravir resistance with a negative predictive value of 98%. Here, we describe the implementation of a laboratory-based plasma dolutegravir reflex algorithm in public health facilities in South Africa.

Materials and Methods: PLHIV with confirmed viral non-suppression (2x VL≥400 copies/mL), after ≥9 months of DTG-based treatment, were eligible for HIV drug resistance testing. Healthcare workers submitted two EDTA samples to the National Health Laboratory Service (NHLS). Viral load (VL) testing (Alinity m, Abbott) was performed at one of the 27 NHLS VL laboratories. Samples with VL≥400 copies/mL were reflexed for drug exposure testing by qualitative liquid chromatography tandem mass spectrometry (LCMS/MS). Samples with detectable plasma dolutegravir, corresponding to a level ≥ 0.01 µg/mL, were subsequently reflexed for resistance testing (TaqPath Seq HIV-1 Genotyping Kit, Thermo Fisher Scientific). Drug exposure and resistance testing were performed in batches at a central laboratory at Charlotte Maxeke Johannesburg Hospital. Descriptive analyses were performed using STATA 17.

Results: Between April 2025 and January 2026, 416 samples from 45 facilities across 5 provinces were received. Most individuals were female (249/416, 60%) with a median age of 38 years (IQR: 23-49), and 56 (13%) were younger than 18 years. Most people (316/416, 76%) were on a tenofovir based regimen. For 28 (7%) individuals the NRTI backbone was not recorded. For a quarter of the submitted samples (108/416, 26%) the repeat viral load was <400 copies/mL and no further testing was performed. Among the remaining 308 samples plasma dolutegravir was detected in 160 (52%). Dolutegravir resistance was identified in 79 of 151 successfully sequenced samples (52%), including 57 cases with high-level resistance. Median turn-around time from sample collection to reporting was 4, 8 and 22 days for VL testing alone, VL testing plus drug exposure testing, and all three tests respectively.

Conclusions: The laboratory-based plasma dolutegravir reflex algorithm was successfully implemented in a semi-centralized public-sector testing environment. The algorithm reduced the need for resistance testing by 61% among PLHIV with confirmed viral non-suppression on DTG-based treatment. Viral re-suppression was observed in one-quarter of participants. Nearly half of individuals with reconfirmed viral non-suppression had no detectable plasma dolutegravir, highlighting the value of objectively assessing recent drug exposure before resistance testing. The availability of decentralized, easy-to-use technologies for drug-exposure and resistance testing could further optimize time from sampling to result and improve equitable access to resistance testing in resource-limited settings, particularly in low-income countries.

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Linking Legal Empowerment and PrEP Uptake to Improve HIV Prevention among Key Populations in Northern Kenya

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Background: Key populations in Kenya, including female sex workers, men who have sex with men, transgender persons, and people who inject drugs, face stigma, violence, and criminalization. These challenges affect both access to justice and uptake of HIV prevention services such as PrEP. BHESP implemented combined legal empowerment and HIV prevention interventions to address these barriers in Isiolo, Marsabit, Nyandarua, and Laikipia counties.

Methods: A programmatic review was conducted using routine data from January to March 2026. Interventions included Know Your Rights sessions, legal aid clinics, pro bono legal support, peer-led outreach, and PrEP awareness and uptake activities. Data was collected through BHESP monitoring tools, peer educator reports, and service delivery registers. Descriptive analysis was used to assess reach and service delivery outcomes.

Results: A total of 1,144 key population members were reached with Know Your Rights education across four counties, improving awareness of legal rights and reporting mechanisms.
Five legal aid clinics reached 128 participants, providing legal advice and support for rights violations. Eight legal cases were supported through pro bono lawyers, improving access to justice and follow-up support.
At the same time, PrEP services were expanded across all counties through peer-led outreach and hotspot-based delivery. Uptake was strong among female sex workers, with 359 clients initiated on PrEP in Marsabit compared to a target of 239. Nyandarua also recorded increased uptake among FSWs (404 initiated). Among men who have sex with men, PrEP uptake exceeded targets in Marsabit and Laikipia, supported by peer mobilization and continuous follow-up. Uptake among people who inject drugs remained lower but improved through targeted outreach and harm reduction services.
A key case in Marsabit showed that community mediation using a culturally sensitive approach helped resolve stigma against a client, allowing continued access to HIV prevention services including PrEP.
Overall, combining legal empowerment with HIV prevention strengthened trust in services and improved access to both justice and PrEP among key populations.

Conclusion: Integrating legal empowerment with PrEP delivery improves access to HIV prevention services among key populations by reducing stigma, increasing trust, and strengthening service uptake. Peer-led and community-based approaches are effective in addressing both structural and biomedical barriers. Scaling integrated models can improve HIV prevention outcomes in similar settings.

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Barriers to Accessing Addiction Recovery Services among People Who Use Drugs in Urban Hotspots in Indonesia: A Rapid Cross-Sectional Study

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Background: People who use drugs (PWUD) in Indonesia continue to experience significant barriers in accessing addiction recovery and health services despite the expansion of rehabilitation programs. Stigma, fear of criminalization, distrust toward institutions, and limited community-based services remain major challenges, particularly among marginalized urban populations. This study aimed to identify the main barriers affecting access to recovery services among PWUD in urban hotspot settings.

Materials and Methods: A rapid cross-sectional study was conducted between March and May 2026 in urban hotspot areas in Indonesia. A total of 100 participants were recruited using random intercept sampling in community-identified hotspots. Structured face-to-face interviews were administered to collect data on demographic characteristics, substance use patterns, treatment history, perceived barriers to care, stigma, and preferred support services. Quantitative data were analyzed using descriptive statistics, including frequencies and percentages, while associations between selected variables were examined using chi-square analysis. Open-ended responses were analyzed using thematic categorization.

Results: Among 100 participants, 68% reported fear of legal consequences as a primary barrier to accessing recovery services, while 61% identified stigma from family or society as a major obstacle. Distrust toward formal rehabilitation services was reported by 54% of respondents, and 47% reported previous negative experiences with healthcare or law enforcement systems. Participants with prior detention history were significantly more likely to avoid formal services compared to those without detention history ($p<0.05$). Peer-based support services were preferred by 72% of respondents, while 58% expressed interest in anonymous or digital support mechanisms. Thematic analysis revealed recurring concerns related to confidentiality, discrimination, and fear of social exclusion.

Conclusions: PWUD in urban hotspot settings in Indonesia continue to face substantial structural and social barriers in accessing addiction recovery services. Fear of criminalization and stigma were the most significant factors associated with service avoidance. Community-based, peer-led, and low-threshold interventions may improve healthcare access and engagement among marginalized populations. Strengthening trauma-informed and non-punitive approaches is essential to expanding equitable addiction recovery services in Indonesia.

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Preferences for HIV Pre-Exposure Prophylaxis Delivery among Young Men with Alcohol Use in Rural South Africa: A Discrete Choice Experiment

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Background: Young men who use alcohol remain at elevated risk for HIV in South Africa but are poorly reached by clinic-based HIV prevention services. Community-based and mobile models can extend service reach, but their impact depends on whether services are acceptable and aligned with men's preferences and social contexts. As South Africa expands access to differentiated and long-acting pre-exposure prophylaxis (PrEP), evidence is needed on which modifiable delivery features may increase engagement among men with elevated HIV risk.

Methods: We conducted a discrete choice experiment among men aged ≥18 years with self-reported alcohol use who had participated in an HIV prevention clinical trial in rural KwaZulu-Natal. Participants completed nine choice tasks comparing hypothetical mobile HIV prevention services that varied by clinic location, operating hours, and HIV prevention modality. Location options included soccer fields, shebeens (informal bars), and taxi ranks; timing options included weekdays, week evenings, and weekends; and modality options included event-driven oral PrEP, injectable PrEP, and condoms-only delivery. Preferences were estimated using hierarchical Bayesian multinomial logit models. Relative attribute importance quantified each attribute's contribution to decision-making. Exploratory subgroup analyses examined variation by prior PrEP use, alcohol risk (AUDIT-C >4), and age.

Results: Among 185 participants, the mean age was 27 years. HIV prevention modality was the strongest driver of service choice, accounting for 62.8% of relative attribute importance, followed by clinic location (26.3%) and clinic timing (10.9%). Mobile clinics located at soccer fields were strongly preferred, while delivery at shebeens was consistently disfavored. Event-driven oral PrEP was preferred over condoms-only delivery in the overall sample, while preferences for injectable PrEP were mixed. Subgroup analyses suggested meaningful heterogeneity in modality preferences: men with prior PrEP experience and those with high-risk alcohol use were more likely to prefer injectable PrEP, whereas PrEP-naïve men and those with lower-risk drinking patterns preferred event-driven oral PrEP.

Conclusions: PrEP delivery for young men who use alcohol in rural KwaZulu-Natal should be designed around both social acceptability and prevention choice. Mobile clinics in familiar community spaces such as soccer fields may provide an acceptable platform for engagement, particularly when care-seeking in other high-risk social venues may feel visible or stigmatized. As South Africa introduces long-acting PrEP, implementation strategies should recognize that injectable formulations may not be uniformly preferred across all men. Event-driven oral PrEP may serve as a lower-barrier entry point for men new to PrEP, while injectable PrEP may be better aligned with men who have prior prevention experience or for whom alcohol use may make adherence to oral PrEP more challenging. Differentiated strategies that match service location and prevention modality to men's preferences and lived realities may improve the reach and acceptability of HIV prevention services.

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Strengthening the Continuum of Care: The Role of a Structured Referral System in Expanding Health Service Reach in Rural Zambia

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Background: A major barrier to expanding health service reach in rural areas is the weak link between community-level care and formal health facilities. Traditional community health workers often lack structured mechanisms to ensure patients complete referrals, leading to delays in treatment and poor health outcomes. On Call Africa's (OCA) Polyvalent Community-Based Volunteer (CBV) programme in Zambia's Southern Province was designed to bridge this gap. This evaluation examines how the programme's standardized referral system contributed to a more effective and equitable continuum of care, thereby expanding meaningful access to health services.

Methods: This mixed-methods evaluation was conducted in 2025 across two intervention sites (Simoonga and Chalimongela Health Posts) and two comparison sites. Data sources included a review of programme data and referral tracking records, Focus Group Discussions with CBVs and community members, and Key Informant Interviews with facility in-charges and district health officials. The analysis focused on the functionality of the two-way referral system, completion rates, and the perceived impact on community health-seeking behavior.

Results: The Polyvalent CBV programme successfully implemented a simple yet robust, paper-based, two-way referral tracking system. Key results demonstrate its effectiveness in expanding reach:
- Universal Referral Completion: The system achieved a 100% referral completion rate at both pilot facilities, meaning every patient referred by a CBV received the required service at the health facility, with confirmation feedback provided to the CBV.
- Enhanced Accountability: The use of self-carbonated referral forms empowered CBVs to follow up on their patients, while the feedback loop from facilities closed the information gap, fostering trust and collaboration between CBVs and facility staff.
- Improved Access to Higher-Level Care: The system ensured that patients with complex conditions (e.g., maternal emergencies, severe childhood illness) were seamlessly connected to the appropriate level of care, directly reducing reliance on informal or traditional medicine for serious conditions.
- Community Trust and Health-Seeking Behavior: Community members reported increased confidence in the health system, knowing that a trusted CBV would guide and support them through the referral process, reducing delays in seeking care. This was a critical factor in improving postnatal care visits for home deliveries and increasing facility-based care for childhood illnesses.

Conclusions: A well-designed, community-owned referral system is a critical component for expanding the real-world reach of health services. It transforms passive health advice into an active, accountable pathway to care. The Polyvalent CBV programme's success in achieving 100% referral completion demonstrates that low-cost, paper-based tools can be highly effective in strengthening the continuum of care in resource-limited settings. This structured approach is fundamental to achieving Universal Health Coverage by ensuring that expanded access at the community level translates into completed care at the facility level. For national scale-up, integrating this model with potential digital enhancements could further improve data quality and efficiency without compromising its community-centered strengths.

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Mismatch between Perceived and Objective HIV Risk among Individuals Discontinuing PrEP in Homa Bay and Kisii Counties, Kenya

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Pre-exposure prophylaxis (PrEP) is highly effective HIV prevention strategy, yet discontinuation may leave individuals vulnerable. Guided by the Health Belief Model, this study examined whether perceived reductions in HIV susceptibility among PrEP discontinuers aligned with objectively assessed epidemiological risk in Homa Bay and Kisii Counties.

Cross-sectional analytical study was conducted among 293 clients, of whom 175 reported decreased perceived risk. Participants were selected using proportionate stratified random sampling across population groups. HIV risk was objectively evaluated using NASCOP-Risk Assessment Screening Tool (RAST). Descriptive statistics, chi-square and Fisher's exact tests, and logistic regression were applied to examine alignment between perceived and actual risk and identify predictors of high-risk status.

Marked discrepancies were observed between perceived and objective HIV risk. 91.4% of participants who perceived reduced HIV risk were classified as high or substantial risk by RAST. County-underestimation was 94.7% in Homa Bay and 72.0% in Kisii ($p < 0.01$). Despite reporting reduced perceived risk, many continued to engage in high-risk behaviors, including multiple sexual partnerships (48.4%), condomless sex (28.6%), prior sexually transmitted infections (18.7%), and low consistent condom use (22.5%). County of residence was the only significant predictor of objective high risk (aOR = 0.15; 95% CI: 0.04–0.58); Age, sex, marital status, education, and income were not independently associated. Substantial mismatch between perceived and actual HIV risk exists among PrEP discontinuers, particularly in high-prevalence settings. Strengthened risk assessment, tailored counseling, psychosocial support, and county-specific interventions are critical to prevent premature discontinuation and maintain HIV prevention gains.

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Strategic Plan of the Government of the DRC for the Elimination of Parent-To-Child Transmission of HIV by 2030

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Background: The Democratic Republic of Congo (DRC) remains one of the African countries most severely affected by HIV, with approximately 520,000 people living with HIV, including 300,000 women and 50,000 children. In 2023 alone, approximately 21,000 new infections were reported, including 7,000 among children, and 11,000 AIDS-related deaths. Women living with HIV (WLHIV), particularly sex workers (SW), are disproportionately affected and face structural, social, and health barriers. These challenges hinder early diagnosis, the timely initiation of treatment, and retention in the healthcare system. To address these gaps, the Pasco center in the DRC implemented an integrated, community-based approach, combining clinical, psychosocial, and community services to improve HIV diagnosis and care for women living with HIV (WLHIV) and sex workers (SW).

Objectives: This study aims to evaluate the effectiveness of innovative, gender-sensitive strategies implemented at the Pasco center to strengthen early HIV diagnosis, improve initiation and adherence to antiretroviral therapy (ART), promote acceptance of HIV status, protect partners, and adapt care models to the needs of women living with HIV (WLHIV), particularly sex workers.

Methods: A mixed-methods study was conducted between January and December 2024. For the quantitative component, we conducted a retrospective observational study using data systematically extracted from the Pasco center's electronic medical records and registers. The analysis focused on women registered for HIV services during the study period (n = 703). The main indicators assessed were HIV testing utilization, ART initiation, and viral load suppression at 12 months. For the qualitative component, focus group discussions and semi-structured interviews were conducted with people living with HIV (PLHIV), including sex workers, as well as with healthcare professionals.
Thematic analysis was applied to explore barriers, facilitators, and perceptions of HIV diagnostic and care models.

Results: The analysis revealed a 20% increase in HIV testing compared to the previous year, with earlier diagnosis particularly pronounced among sex workers. Antiretroviral therapy initiation reached 5% among newly diagnosed women, and viral suppression was 75% at 12 months. Retention in care was significantly higher among women receiving personalized approaches such as flexible appointment times, peer support, and integration with sexual and reproductive health services. Qualitative findings highlighted a reduction in stigma, increased trust between patients and healthcare providers, and greater empowerment of participants. Sex workers particularly emphasized the importance of peer support and the availability of PrEP and PEP kits to facilitate diagnosis and adherence to treatment.

Conclusion: The Pasco center's experience demonstrates that adapting HIV diagnosis and care to the specific needs of women, particularly sex workers, can significantly improve health outcomes. By combining clinical, psychosocial, and community-based interventions, this innovative model has strengthened early diagnosis, treatment initiation, and retention in care. It is essential to expand these community-based and gender-sensitive approaches throughout the DRC and in similar contexts to achieve UNAIDS' 95-95-95 targets and ensure equitable access to HIV services for marginalized populations.

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Peer-Led Group Antenatal Care: Expanding Access to Maternal Services for Pregnant Adolescents and Young Women in Tororo -Uganda through Community-Led Models

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Background: Adolescent girls and young women (AGYW) remain disproportionately affected by barriers to accessing antenatal care (ANC), including stigma, low autonomy, late pregnancy disclosure, transport challenges, and weak social support. In rural Tororo, these barriers contribute to delayed ANC enrolment and poor continuity of maternal services. To address this, a peer-led group antenatal care (G-ANC) model was implemented to improve early uptake and retention of ANC among pregnant AGYW by leveraging community-based peer support structures.

Methods: A community-led G-ANC strategy was implemented across fifteen supported health facilities in Tororo district. Pregnant AGYW were identified through routine community outreaches, village health teams, and facility-based screening, then linked into structured peer cohorts facilitated by fifteen trained adolescent peer mothers. The model integrated health education, psychosocial support, appointment reminders, and peer accompaniment for routine ANC visits. Program performance was monitored using routine district ANC service data from April 2025 to Dec 2025, focusing on first ANC attendance (ANC1) and completion of the fourth ANC visit (ANC4).

Results: The intervention demonstrated substantial gains in expanding ANC access among AGYW. Across the reporting period, 15,366 pregnant AGYW were reached with first ANC services, against an annual target of 12,112, translating to a cumulative achievement of 114%. Quarterly ANC1 performance remained consistently above the target of 3029 for three consecutive quarters (129%, 117%, and 114%), indicating sustained demand generation and successful linkage to care.
Retention to continued care also improved, with 9,570 AGYW completing at least four ANC visits, representing 79% cumulative ANC4 coverage, a notable improvement in a population historically characterized by poor follow-up of below 50%. The peer-led approach strengthened continuity by reducing missed appointments.

Conclusion: Peer-led group antenatal care is an effective community-driven strategy for extending maternal health services to marginalized pregnant adolescents and young women. In Tororo, the model increased early ANC enrolment and improved continuity of care by addressing structural and social barriers through peer engagement. Scaling community-led ANC models offers a practical pathway to reach underserved young mothers and strengthen equitable maternal health outcomes in high-burden settings. Through ANC, the mothers receive a continuum of care that includes HIV testing, hence contributing to the prevention of mother-to-child transmission of HIV.

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Improving Adolescent HIV Treatment Outcomes through Peer Adolescent Clubs: Programme Evaluation Outcomes from Bauchi and Jigawa States in Northern Nigeria

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Background: All over the world, paediatric and adolescent HIV treatment outcomes continue to lag behind across the adult HIV cascade. In sub-Saharan Africa where the burden of HIV remains high, significant regional disparities between and within countries exist, hence the need for targeted context specific interventions to improve care and treatment outcomes. While the trends in treatment coverage among children in Eastern and Southern African countries were reported as 64% and 83% in the UNAIDS epidemiological estimates of 2023, in West and Central Africa, only 37% of children were on ART at the end of the Fiscal Year 2022. With 48,000 adolescents aged 10-14 year on ART, Nigeria has the third highest adolescent HIV burden in the world. This study aims to highlight the significance of context-specific adolescent programme investments such as the peer-led Operation Triple Zero (OTZ) clubs in attaining the UNAIDS 95-95-95 targets.

Description: We used customised programme eligibility criteria (established full disclosure of HIV status, unsuppressed viral load results ≥1,000copies per ml and consent of both adolescent and biological parent/caregiver) to select a total of 335 adolescent and young people living with HIV aged 10-24 years for enrolment into the facility-based peer adherence clubs. Simultaneously, a total of 99 caregivers (Bauchi 25, Jigawa 74) provided safeguarding support for adolescent girls.

Lessons Learnt: Our study evaluated the viral suppression rates among cohorts of adolescents and young people living with HIV before and after the implementation of the Operation Triple Zero programme. Prior to the OTZ adherence clubs, viral suppression rates were 94% and 86% in Bauchi and Jigawa States respectively, with a mean viral load suppression rate of 90%. Three years post OTZ intervention, we observed adolescent viral load suppression rates of 96% and 94% in Bauchi and Jigawa States respectively. The average viral suppression rate moved to 95% after the intervention.

Conclusions: Adolescent adherence clubs facilitate peer treatment support to achieve optimal retention and viral suppression outcomes. Scaling innovations in adherence clubs remain critical to achieving HIV epidemic control for treatment programmes in resource-limited settings where psychosocial barriers are as significant as clinical barriers to antiretroviral treatment.

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Design Thinking to Advance HIV Research Capacity among Underrepresented Students: NIAID-STAR Program

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Background: Despite advances in HIV prevention, adolescents and young adults, particularly those from underrepresented racial and ethnic communities, continue to experience a disproportionate burden of HIV. At the same time, these communities remain underrepresented in the HIV research workforce. Although implementation science training programs have expanded opportunities for emerging investigators, fewer have intentionally incorporated design thinking to cultivate creativity, empathy, and community centered problem solving. This study describes the Stimulating Training and Access to HIV Research Experiences (STAR) Program and examines the use of design thinking as an approach to strengthen HIV research capacity among undergraduate and graduate students.

Methods: STAR is a multi-institutional partnership led by Washington University in St. Louis School of Medicine in collaboration with University of North Carolina at Chapel Hill, Georgia State University, and Northeastern University. STAR employed a two stage training model consisting of a three day Designathon followed by a six week Innovation Bootcamp. Guided by the prompt, "How Might We Work with Community Organizations to Promote HIV Prevention Services among Youth Aged 13–24?", participants applied principles of design thinking, including empathy-based research, problem definition, ideation, rapid prototyping, stakeholder engagement, and implementation planning while developing demonstration projects addressing HIV prevention among adolescents and young adults. Program evaluation included pre and post surveys assessing self efficacy related to project development, implementation science competencies, and project-based learning, together with qualitative reflections from participants.

Results: Nine students representing four universities completed the six-week Innovation Bootcamp. Participants developed four conceptually distinct HIV prevention demonstration projects, GlowUp STL, EmpowerU, B.R.E.A.K the Stigma, and Care AI, each applying design thinking principles to address barriers to HIV testing, stigma reduction, youth engagement, and access to prevention services. Collectively, demonstration projects incorporated peer ambassador programs, social media campaigns, crowdsourcing, and artificial intelligence supported health education. Participants demonstrated increased confidence in project design, implementation related activities, and creative problem solving. Students also identified mentorship, interdisciplinary collaboration, and engagement with community partners as major strengths of the training experience. The diversity of the projects reflected participants' ability to translate empathy driven design principles into context-specific HIV prevention strategies.

Conclusion: Design thinking offers a promising framework for preparing the next generation of HIV researchers by moving beyond traditional didactic instruction toward experiential, community-engaged learning. By integrating creativity, stakeholder engagement, and implementation science principles, the STAR program equipped students to develop innovative and contextually responsive HIV prevention solutions. These findings suggest that design thinking may represent an important addition to future implementation science training models aimed at strengthening workforce diversity and advancing health equity.

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The Value of Preoperative CD4+ T-cell Count to Predict Infectious Complications after Endoscopic Lithotripsy for Upper Urinary Tract Calculi among Human Immunodeficiency Virus-Infected Patients

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Objective: To investigate whether the preoperative CD4+ T-cell count predicts the risk of infectious complications after endoscopic lithotripsy for upper urinary tract calculi in human immunodeficiency virus (HIV)-infected patients.

Methods: The HIV-infected patients who underwent endoscopic lithotripsy for upper urinary tract stones at Shanghai Public Health Clinical Center from May 2019 to May 2025 were enrolled for this study. The predictor was the preoperative count of peripheral blood CD4+ T-cells. The primary outcome was urosepsis, and the secondary outcomes were fever, systemic inflammatory response syndrome (SIRS), and other complications. Statistical analyses were performed using the t test, Mann-Whitney U test, χ^2 test, Fisher's exact test, and logistic regression analysis. Sensitivity analysis was further conducted with propensity score matching (PSM) and inverse probability of treatment weighting (IPTW) methods.

Results: A total of 120 patients were enrolled in this study, including 20 patients with a CD4+ T-cell count < 200 cells/μL and 100 patients with a CD4+ T-cell count ≥ 200 cells/μL. None of the patients developed urosepsis or SIRS postoperatively. The overall rate of postoperative fever was 17.5% (21/120). Fever was observed in 15.0% of the patients with a CD4+ T-cell count < 200 cells/μL, compared with 18.0% of those with a CD4+ T-cell count ≥ 200 cells/μL, and there was no statistically significant difference (P > 0.05). Logistic regression analysis further showed that CD4+ T-cell count was not significantly associated with fever (OR = 1.001, 95% CI: 0.998 - 1.003, P = 0.586), whereas urine white blood cell (WBC) count was an independent risk factor for postoperative fever. Sensitivity analyses with PSM and IPTW demonstrated no statistically significant differences (P > 0.05) in postoperative fever, urosepsis, and other complications between the two groups, either.

Conclusion: Compared to those with a CD4+ T-cell count of ≥ 200 cells/μL, the HIV-infected patients with a CD4+ T-cell count of < 200 cells/μL did not exhibit a significantly elevated risk of infectious complications after endoscopic lithotripsy for upper urinary tract calculi. With effective highly active antiretroviral therapy (HAART) and professional perioperative management, the CD4+ T-cell count should be considered as an important indicator rather than a decisive checkpoint to surgical intervention in this clinical scenario.

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Integrating Equity-Focused Theories, Models and Frameworks into Implementation Science: Insights from Chronic Disease Research in the Global South

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Background: Health equity remains underexplored in dissemination and implementation science (D&I), weakening the field's ability to extend the impact of evidence-based practices to marginalized populations. As researchers increasingly seek to integrate equity into D&I, there is a need for equity-oriented theories, models, and frameworks (TMFs) that enable rigorous, critically engaged approaches. However, little is known about what equity-focused TMFs are commonly used and how they guide the conceptualization and empirical study of health equity in Global South contexts. In this review, we sought to identify equity-focused TMFs used in chronic disease research in the Global South, examine how they are applied, and explore opportunities for their integration into equity-focused implementation science.

Methods: We conducted a sub-analysis of a scoping review on health equity-focused TMFs in empirical chronic disease research (2010 to 2021), following PRISMA-ScR and PRISMA-E guidelines. This analysis focuses only on studies from low and lower-middle-income countries. We extracted data on study aims, design and population as well as TMF characteristics including areas of focus, equity-related constructs, and manner of application.

Results: Of 342 studies applying equity-focused TMFs to chronic disease research, only 15 (4%) were from lower-income countries. Study locations spanned Africa, Asia, Latin America, and the Middle East. Only 13% of studies involved a specific intervention. All examined determinants of health or intervention delivery/access, with 53% also reporting participant health outcomes, 13% service outcomes, and 7% structural outcomes; none examined implementation outcomes. Social stratification factors included gender (40%), rurality (40%), socio-economic status (33%), and occupation (13%).
The studies applied 16 TMFs. They drew from multiple research traditions, primarily social epidemiology (63%), but also health services and policy (13%), intervention research (13%), behavioral sciences (13%), sociology (6%), and development economics (6%). None had an explicit theoretical focus on decoloniality or intersectionality. The WHO Commission on Social Determinants of Health framework was the only TMF used multiple times while all others were used exactly once. The TMFs were mainly existing (44%) or adapted (37%), with few newly developed (19%). Common TMF applications included informing research questions (88%), data interpretation (81%), and measurement (75%). All studies applied the TMFs to study multiple socio-ecological levels, with most (73%) addressing four or more.

Discussion: Our review suggests that while TMFs are used for analyzing multilevel equity-related determinants in chronic disease research in Global South settings, they are often applied descriptively to understand determinants and rarely to guide intervention design or evaluate implementation. Integrating TMFs identified in this review with implementation-focused TMFs could advance ongoing efforts to make D&I more equity-centered by leveraging strengths of both. Further, equity-focused TMFs designed specifically for or adapted to Global South contexts are underrepresented in chronic disease research, representing an important area for future TMF development.

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To Assess the Effect of Relocating an OST/MAT Clinic on Infectious Disease Service Continuity and Client Retention in Mombasa County

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Background: Medication-Assisted Treatment (MAT) clinics play a vital role in reducing morbidity and mortality among people who use drugs through the provision of opioid substitution therapy and integrated infectious disease services, including HIV, hepatitis C virus (HCV), and tuberculosis (TB) care. Continuity of these services and sustained client retention are essential for treatment success, disease control, and prevention of drug-related harms. In Mombasa County, the centralized Kisauni MAT Clinic, which served approximately 740 clients, was relocated to the prison-based Shimo la Tewa MAT Clinic as part of service reorganization. Although necessary, the relocation raised concerns regarding accessibility, continuity of care, treatment adherence, and retention among clients receiving MAT and related infectious disease services.

Objective: To evaluate the effect of the relocation of the centralized MAT clinic on infectious disease service continuity and client retention among clients enrolled at the Kisauni MAT Clinic in Mombasa County.

Methodology: A retrospective cohort study was conducted using routinely collected programmatic data from 740 clients enrolled at the Kisauni MAT Clinic before (January 2026) and after (April 2026) the clinic relocation. Data were reviewed to assess retention in MAT, continuity of HIV, HCV, and TB services, appointment adherence, treatment interruptions, loss to follow-up and successful linkage to alternative treatment facilities. Descriptive and comparative analyses were performed to evaluate changes in service utilization and retention before and after relocation. Demographic and clinical characteristics were also examined to identify factors associated with retention and continuity of care.

Results: Following relocation, 404 (54.5%) of 740 clients were retained in the MAT program. Females accounted for 11.9% of retained clients. Among 56 clients receiving HIV care, 16 (28.6%) continued treatment at Shimo la Tewa MAT Clinic, while 28 (50.0%) were successfully linked to other HIV treatment facilities. Approximately 89% of clients receiving HCV treatment were successfully linked to alternative MAT clinics, ensuring continuity of care. Of the 18 clients receiving TB treatment, only one defaulted but was successfully traced and re-engaged, resulting in an overall TB treatment retention of 99%. Missed appointments and treatment interruptions increased immediately following relocation. Clients who received enhanced adherence counselling and active tracing achieved approximately 90% retention, while male clients were four times more likely to default treatment than female clients.

Conclusion: Relocation of the Kisauni MAT Clinic disrupted continuity of MAT and HIV services but had minimal impact on TB and HCV treatment continuity because of effective referral and patient-tracking systems. Enhanced adherence counselling, active client tracing, and coordinated referral mechanisms substantially improved retention during the transition period.
Future MAT clinic relocations should incorporate comprehensive stakeholder engagement and advance transition planning.

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Expanding Integrated Infectious Disease Screening through Community Pharmacies: The SAFEStart Pilot Study Protocol

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Background: Despite substantial progress toward eliminating vertical transmission (EVT) of HIV, syphilis, and hepatitis B in South Africa, important gaps remain in timely screening, linkage to care, and treatment initiation. Facility-based services are frequently limited by access barriers, stigma, workforce constraints, and health system congestion. Community and private pharmacies represent accessible and trusted points of care that may expand integrated infectious disease screening. SAFEStart has been designed to evaluate whether pharmacy-based integrated testing is a feasible, acceptable, and operationally effective model to strengthen EVT related cascades of care.

Material and Methods: SAFEStart is a prospective implementation pilot to be conducted across 10 community and private pharmacies in two provinces in South Africa. Participating pharmacies will provide integrated point-of-care screening for HIV, syphilis, and hepatitis B to eligible clients accessing sexual and reproductive health services. Standardised counselling protocols and structured referral pathways will be embedded into routine pharmacy workflows. Where permitted within regulatory scope of practice, pharmacists will facilitate treatment initiation or expedited referral.

Primary outcomes are predefined as: (1) screening uptake among eligible clients; (2) proportion of individuals with reactive results successfully linked to care within 30 days; (3) time from diagnosis to treatment initiation; and (4) treatment completion (where applicable). Secondary outcomes include client acceptability (measured using structured Likert-scale surveys), provider acceptability, fidelity to testing and referral protocols, and operational indicators such as turnaround time and referral completion rates.

Descriptive statistics will summarise uptake, positivity rates, and cascade outcomes. Logistic regression analyses will assess predictors of successful linkage to care. Time-to-event analyses will evaluate time to treatment initiation. Feasibility will be defined a priori using thresholds for uptake (≥60%), linkage to care (≥75%), and protocol adherence (≥85%).

Results: As this is a pre-implementation protocol, no outcome data are yet available. Baseline pharmacy readiness assessments have been completed, including workflow mapping, regulatory review, and staff training preparation. Data collection tools, electronic capture systems, and predefined statistical analysis plans have been finalised to ensure rigorous evaluation of feasibility, effectiveness, and implementation outcomes once service delivery commences.

Conclusions: SAFEStart is a structured implementation study designed to generate robust evidence on the feasibility, acceptability, and effectiveness of pharmacy-based integrated screening for HIV, syphilis, and hepatitis B. By embedding predefined outcome measures and statistical analyses within the study design, the program aims to determine whether decentralised pharmacy models can strengthen EVT-related service cascades. Findings will inform policy, regulatory adaptation, and potential scale-up of pharmacy-based infectious disease services in South Africa and comparable high-burden settings.

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Investigating the Implementation of Children Who Are HIV Exposed and Uninfected (CHEU): Tracking Activities during the Exposure Period: Identifying Gaps and Providing Solutions

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Background: The population of children who are HIV-exposed but uninfected (CHEU) is increasing rapidly in Eastern and Southern Africa, creating an urgent need for improved systems to monitor their health and developmental outcomes. These children remain at high risk of morbidity and mortality when compared with children that are HIV unexposed and uninfected. The high risk arises from various combinations of exposures including antigenic exposure to HIV virus and maternal immune dysregulation from HIV, exposure to antiretroviral drugs, and environmental and social factors associated with HIV. Resultantly they are prone to low birth weight, prematurity, growth impairment and neurodevelopmental delays. This study was designed to identify operational and policy gaps in the tracking and care of CHEU subpopulation.

Methods: A mixed-methods design was employed, combining cross-sectional analysis of secondary quantitative data with qualitative data. The study was conducted in six purposively selected ESA countries, comprising three relatively high-performing countries (Botswana, Eswatini, and Zimbabwe) and three lower-performing countries (Angola, Kenya, and Tanzania), based on progress toward elimination of mother-to-child transmission of HIV in ESA. Quantitative data assessed HIV testing uptake, referral to care, and treatment initiation among infants and children at risk, while qualitative data explored policy alignment with World Health Organization guidelines, integration of tracking mechanisms within health systems, and emerging innovative practices.

Results: Findings showed that five of the six countries achieved relatively high HIV testing and antiretroviral therapy coverage among pregnant women, while Angola consistently lagged behind. Early infant diagnosis coverage improved substantially in most countries between 2015 and 2023, although Angola remained critically low. Overall, there were no CHEU tracking activities in all countries and the cited key barriers included limited access to facilities, staff shortages and turnover, stigma and discrimination, limited electronic tracking of mother-baby pairs, limited community follow-up systems and insufficient caregiver knowledge.

Recommendations: Public health commitment and programming must go beyond HIV prevention and encompass a holistic approach that includes supporting these children. The study recommends comprehensive CHEU monitoring through task-shifting, stronger service integration, sustainable financing with provision of social welfare services, enhanced community sensitisation, and expanded digital tracking systems.

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Innovating HIV Testing Delivery: The Door-to-Door Model for Increasing Uptake among University Students in Zambia

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Background: HIV remains a major threat to young people aged 15–24 in Sub-Saharan Africa. In Zambia, university students (young people) are at high risk but show low testing uptake (UNESCO, 2022).Prior to UNESCO O3 PLUS project, HIV testing in Higher and Tertiary Education Institutions (HTEIs) was health facility-based and student-initiated, reflecting low risk perception. The UNESCO O3 PLUS project introduced door-to-door HIV testing and health promotion to address this service gap. Barriers to testing included stigma, time constraints, and poor risk perception. The door-to-door model brings services directly to students' residences, ensuring privacy, convenience, and engagement.

Methods and Findings: The Door-to-Door model draws on two complementary frameworks namely: Socio-Ecological Model (SEM): behaviour change across individual, interpersonal, institutional, and community levels and the Health Belief Model (HBM): explains how perceptions of risk, benefits, barriers, and self-efficacy shape action. Peer educators and health providers conducted outreach, counselling, and awareness to student hostels. The SEM+HBM integration promoted both behavioural and structural health-seeking changes.
HIV testing increased from 1,155 males & 1,509 females in 2022 to 5,642 males & 6,702 females in 2024. Family planning uptake rose from 193 (F) in 2022 to 1,736 (556M, 1180F) in 2024. Stronger referral systems, empowered peer educators, and greater gender equity in Sexual Reproductive Health (SRH) access. Key lessons included the importance of peer influence, continuous engagement, and institutional integration. When health promotion is theory-driven, context-sensitive, and youth-led, it becomes self-sustaining.

Conclusions: These findings suggest that integrating behavioural and structural frameworks enhances long-term impact. It shows that sustained collaboration between universities, UNESCO, and line ministries like Ministry of Health is vital for continuity and growth. Young people do not resist health interventions they resist irrelevance. When services speak their language, meet them where they live, and respect their privacy, change follows naturally.

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Community-Led Peer Engagement and HIV Care Literacy among Adolescents and Young Adults Living with HIV in Nairobi, Kenya

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Background: Adolescents and young adults living with HIV often face intersecting challenges that affect their engagement in care, including stigma, misinformation, mental health stressors, and limited access to accurate sexual and reproductive health information. Community-led, peer-driven approaches offer a promising pathway to improving health literacy, psychosocial support, and service uptake among young people living with HIV. This study describes implementation activities conducted by AYARHEP across community and facility-based youth engagement platforms in Nairobi, Kenya.

Materials and Methods: A series of community-based interventions were implemented, including social media advocacy, community dialogues, youth health education sessions, and facility-based youth engagement events. Activities focused on HIV treatment literacy, disclosure support, mental health awareness, healthy sexuality, and risk reduction strategies including pre-exposure prophylaxis (PrEP) education. Participants included adolescents, young adults living with HIV, parents, and young key populations. Data were collected through session reports, participant feedback, group discussions, and facilitator observations. Thematic analysis was used for qualitative insights, while descriptive summaries were used to document participation and engagement outcomes.

Results: Across implemented sessions, participants demonstrated improved engagement in discussions on HIV treatment adherence, disclosure, and preventive health behaviours. Youth engagement sessions involving approximately 90–100 participants showed high participation and active involvement across age-diverse groups. Reported outcomes included increased awareness of HIV treatment literacy, improved understanding of PrEP and preventive measures, and enhanced willingness to discuss stigma, mental health, and sexuality openly. Participants consistently identified stigma, misinformation, peer pressure, and mental health challenges as key barriers to healthy behaviours. Peer-led discussions highlighted the importance of support systems, with multiple participants reporting improved adherence and coping following engagement in peer support structures. Community dialogue sessions reinforced the role of counselling, safe spaces, and peer networks in improving psychosocial wellbeing and adherence to care.

Conclusions: Community-led, peer-driven interventions implemented through AYARHEP demonstrate strong potential to improve HIV treatment literacy, psychosocial wellbeing, and engagement in care among adolescents and young adults living with HIV. Integrating sexual and reproductive health education, mental health support, and stigma reduction strategies within community and facility-based platforms strengthens health-seeking behavior and supports adherence. These findings support the scale-up of youth-centered, community-based models as effective strategies for expanding access to HIV-related health services and addressing structural and social barriers affecting young people living with HIV.

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Assessing Counseling Quality in Public HIV Care Settings Using Enhancing Assessment of Common Therapeutic Factors (Enact) in Zambia

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Introduction: Sustained viremia remains a key barrier to HIV care, requiring person centered approaches that support adherence and re-suppression. In Zambia, routine adherence counseling is a foundational component of Antiretroviral Therapy (ART) delivery while Enhanced Adherence Counseling (EAC) is a structured, targeted approach for clients with viral load >1,000 copies. However, clients, including adolescents, report counselling experiences that feel punitive or insufficiently person centered, limiting engagement and effectiveness. We used the Enhancing Assessment of Common Therapeutic Factors (ENACT) tool to characterize counseling quality within routine HIV service delivery in Zambia with the aim of identifying feasible, scalable targets for a person-centered care (PCC) package to address viremia.

Methods: We applied mixed-methods to analyze 38 audio-recorded HIV counseling interactions from Lusaka and Central provinces: routine adolescent ART visits (15-24 years, n=12), EAC (n=16, adolescents and adults) and adult retention/re-engagement interactions (n=10). A trained analyst extracted themes from structured field notes and scored each interaction across 9 ENACT PCC domains (verbal communication, communication delivery, listening/attending, rapport, warmth/empathy/respect, collaboration, solutions/strategies/resources, flexibility/discretionary power, realistic hope/optimism) on a 0-3scale (0= not demonstrated, 1= needs improvement, 2= partially done/inconsistent 3= done well/ consistently). We summarized mean domains and category scores and synthesized cross-session interaction-pattern themes inductively from field notes.

Results: Clients were aged 15-57 years; mean interaction duration was 11.5 minutes. ENACT domain means were highest for communication delivery (2.58) and identifying solutions/strategies (2.34) and lowest for client collaborative approach (1.68) and building rapport (1.8). Mean scores differed by interaction type: routine adolescent visits (1.84), adult retention/reengagement (1.80), EAC (2.38). Inductive analysis revealed a common flow of checklist questions, provider-led education, and brief close-out. Client engagement increased when providers used open ended prompts and reflective summarizing. Practical adherence support was frequently offered, but collaborative action planning was inconsistent, particularly in shorter visits. Privacy constraints and interruptions appeared to limit adolescent disclosure of adherence barriers.

Conclusion: These findings identify feasible, facility-level targets to strengthen counseling quality within routine HIV services. To improve EAC effectiveness and support re-suppression, scalable PCC approaches should standardize open questioning, reflective summarizing, collaborative planning with follow up while strengthening rapport and addressing privacy and engagement for adolescents and those who return to care.

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Improvement of UNAIDS Indicators with a Care Model Adapted for People Living with HIV Combining Tasks Shifting and Differentiated Follow-Up in Senegal

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Background: People living with HIV (PLHIV)'s retention in care is essential for their successful management. To do this, services need to be accessible to PLHIV.
In 2017, the UNAIDS indicators were at 70, 53 and 39.5 while the target was 90-90-90 in 2020. The retention rate at 12 months was 90% in Senegal. After analyzing the situation, we hypothesized that a care model adapted for PLHIV (CMAP) with more flexible and accessible services delivered by paramedical and community staff would improve the retention rate.

Material and Methods: We conducted a cluster randomized trial with both quantitative and qualitative components among antiretroviral therapy (ART)-stable (on ART for ≥ 6 months with a stable condition) PLHIV in two Senegalese cities. Intervention health districts received the CMAP delivered by paramedical and community staff with clinician support. CMAP included: 1) task shifting of PLHIV management to paramedical and community staff, 2) Differentiated follow-up: frequency of follow-up according to the patient's profile, which can be quarterly or biannual; appointments reminders by text message were done as needed as well as an invitation to peer support. Control health districts received standard of care. The primary outcome was retention rate. Geographical and financial accessibility was a secondary outcome. Arms were compared using Targeted Maximum Likelihood Estimation (TMLE), accounting for clustering.
A socio-anthropological survey was carried out among caregivers and PLHIVs through focus group discussions and interviews to elicit the perceptions on the CMAP. The interviews were subjected to thematic analysis with Atlas Ti

Results: During September 2017-July 2019, 1014 ART-stable PLHIV in 13 health districts were included. The mean age was 40.6 ± 13 years; 55.5% were female, and 39.7% at WHO stages 3-4. After 18 months of follow-up, the retention rate was 94.4% [95% CI; 93.8-96.2] in the intervention arm versus 92.8% [95% CI: 90.2-93.7] in the control arm; p= 0.04. The duration of the trip to the health facility (26 minutes vs 68 minutes; p <0.01), the transport costs (1 US$ vs 6 US$; p < 0.01) and the time spent in the health facility (31 minutes vs 89 minutes; p < 0.01) were lower in the intervention arm.
Six (6) focus groups and 25 interviews involving 42 caregivers and 28 PLHIVs were conducted in the CMAP arm. The qualitative analyses revealed that caregivers and PLHIVs were supportive of CMAP.

Conclusion: The CMAP was associated with increased retention, shorter travel time and decreased cost in HIV care.
We recommended and supported the implementation and the scaling up to his CMAP. Then the UNAIDS indicators were at 91-93-92 in 2024.

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Optimizing Youth Healthcare: Assessing the Implementation Barriers and Facilitators of Adolescent and Youth Friendly Health Services in Buffalo City Metro, Eastern Cape, South Africa

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Background: Adolescents and young people (AYP) constitute a significant portion of the global population, with South Africa alone housing approximately 10 million youth aged 15–24. Although generally a healthy life stage, adolescence involves heightened engagement in risky behaviors, including risky sexual patterns. In resource-limited settings such as some regions in South Africa, structural vulnerabilities and heavy disease burdens necessitate increased access to healthcare. Consequently, the World Health Organization introduced global standards to guide countries in implementing Adolescent and Youth-Friendly Health Services (AYFHS).

Objectives: This study assesses the implementation of AYFHS by exploring the experiences, barriers, and facilitators of healthcare workers delivering these services in the Buffalo City Metropolitan Municipality (BCM).
Methods: Semi-structured interviews (n=12) were conducted with nurses and facility managers across urban and rural healthcare facilities in the BCM. All interviews were transcribed and analyzed using a qualitative thematic approach.

Results: Key facilitators included facility efforts to reduce waiting times and provide timely attention to AYP, preventing them from queuing with older patients. Additionally, local non-governmental organizations (NGOs) provided critical system support by supplying extra nursing staff and tracking defaulting patients. Conversely, major barriers included severe staff shortages, intense workload pressures, and a lack of dedicated, private infrastructure for youth.

Conclusion: To optimize AYFHS delivery, facilities should formalize youth prioritization by implementing protocols for a visible quick-pass system for youth. Furthermore, because NGOs significantly alleviate operational pressures, the Department of Health should formalize these partnerships through standardized service level agreements to ensure sustainable care.

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Mobility-Responsive HIV Services Are Needed: A Description of Mobility among Women Living with HIV Accessing Antenatal or Postnatal Care in Cape Town, South Africa

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Background: Geographic mobility can disrupt sustained engagement in HIV care, yet service delivery is often designed around the implicit assumption of stable clinic attendance. Existing literature focuses on specific high-mobility groups such as migrants, refugees, and long-distance truck drivers, framing mobility as exceptional rather than routine. However, in many settings, including South Africa, movement is a normal aspect of life, shaped by economic, social, and cultural dynamics. Peripartum women living with HIV often transfer care after birth and face particular geographic mobility challenges. We describe mobility in this population.

Methods: We enrolled adult pregnant and recently postpartum (<6 months) women from two public sector clinics in Gugulethu, Cape Town into a cross-sectional survey (November 2025-June 2026). Consenting women completed a face-to-face interview including HIV history, residence changes, and past and planned travel. We used descriptive statistics to characterise mobility.

Results: Among 316 women attending antenatal (n=272) or early postnatal (n=44) care (median age 32 IQR 26-36), 17% (n=53) had started ART for the first time and 10% (n=31) reported that they restarted ART after an interruption, in the current pregnancy. More than half (58%, n=182) of women reported that their main residence was not in Gugulethu, and 55% (n=175) reported a second main residence or family home: 40% of these (n=70/175) in South Africa but outside of the Western Cape, and 5% (n=8) outside of South Africa. Overall, 20% (n=62) of women had changed their main residence at least once in the past two years. Reasons for residence change included housing cost and space needs, security concerns, changes in rental and landlord relationships, employment and economic reasons, family dynamics, and relationship changes. Through 61 residence moves among women on ART at the time, 56% (n=34/61) of women stayed in the same clinic with no interruption, 20% (n=12/61) moved clinics with no care interruption, 16% (n=10/61) had to move clinics and interrupted ART, and 8% (n=5/61) did not need to move clinics but interrupted care for other reasons related to the residence change. Overall, 29% (n=91) and 7% (n=22) reported sleeping away from home for ≥2 nights and ≥1 month in the past six months, respectively; 32% (n=29/91) reported that the travel was employment related. Looking ahead, 11% (n=35) planned to travel away from home for ≥1 month in the next six months. Reasons for planned travel including Christmas or Easter holidays, family visits, maternal and childcare support, and travel for cultural ceremonies. Overall, 30% (n=95) of women reported ever stopping ART for ≥1 month. Common reasons included fear of returning to the clinic after a gap (26%), moving/relocation (22%), being too worried about other things in their life (18%), and difficulties transferring clinics (11%).

Conclusions: Geographic mobility, including permanent residence changes and temporary travel, was common among peripartum women living with HIV. While we could not directly assess the relationship between mobility and HIV care interruptions, our results underscore the importance of HIV services designed for the norm of mobility, rather than the exception of stability.

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Determinants for Pre-Exposure Prophylaxis Discontinuation among Perceived Low Risk Populations in Homa Bay and Kisii Counties, Kenya

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Pre-exposure prophylaxis (PrEP) effectively prevents HIV, but early discontinuation—especially among those perceiving low risk—reduces its impact. This study explored socio-demographic and contextual factors influencing PrEP discontinuation and assessed healthcare worker engagement in Homa Bay and Kisii counties, Kenya. Using a correlational design, 293 individuals who stopped PrEP within three months were selected via stratified random sampling from LVCT Vukisha95-supported facilities. Data, collected through structured questionnaires and linked to program records, were analyzed using descriptive statistics, chi-square tests, and multivariable logistic regression to identify factors associated with discontinuation. Most participants were female (71.7%), aged 20–34 years, and from Homa Bay (68.3%). County of residence predicted discontinuation, with Kisii residents less likely to stop PrEP than Homa Bay residents (aOR = 0.09; 95% CI: 0.04–0.19; $p < 0.001$). Formal employment was associated with increased odds of discontinuation (aOR = 2.80; 95% CI: 1.24–6.45; $p = 0.014$). Individuals aged 25–29 (aOR = 0.26; $p = 0.041$) and 45–49 (aOR = 0.16; $p = 0.038$) were less likely to discontinue PrEP than adolescents 15–19 years. Education had a marginal effect, while sex, marital status, income, and HIV risk category were not significant. About 40% cited reasons differing from records, and only 15% consulted healthcare workers before stopping PrEP. PrEP discontinuation driven by perceived low HIV risk is influenced more by contextual and socioeconomic factors than actual risk, highlighting the need for personalized risk assessment, better documentation, and proactive healthcare worker engagement in high-burden areas.

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Leveraging Multi-Sectoral Service Integration to Close Pediatric HIV Coverage Gaps in Hard-to-Reach Communities in Bayelsa State, Nigeria

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Background: Improving pediatric HIV outcomes requires coordinated, integrated service delivery to ensure equitable access and sustained treatment success. In Nigeria, gaps in pediatric HIV coverage persist due to weak health systems, geographic barriers, and uncoordinated service delivery, predominantly in riverine and hard-to-reach communities. Bayelsa State, despite a relatively lower HIV (1.9%) prevalence, continues to face challenges in achieving optimal pediatric outcomes. Integrated, multi-sectoral approaches that combine health, social protection, and community systems are essential to improving access, uptake, and outcomes for children and adolescents living with HIV (CALHIV).

Objectives: This study highlights implementation lessons from leveraging service integration to improve pediatric HIV coverage in Bayelsa State.

Description: The Center for Clinical Care and Clinical Research Nigeria (CCCRN) implemented a multi-sectoral service integration model across eight LGAs in Bayelsa State. The model integrated HIV testing services (HTS), PMTCT/EID, TB screening, nutrition services, health insurance enrollment, and community-based case management. We conducted a cross-sectional program review among 502 CALHIV and HIV-exposed infants enrolled between February and December 2025. Interventions included household-level service delivery, engagement of community case workers, collaboration with traditional birth attendants (TBAs), strengthening referral linkages, and use of innovative logistics systems to reach remote communities. Data were analyzed using SPSS version 20 with descriptive and comparative statistics.

Findings: Integrated service delivery significantly improved pediatric HIV outcomes. HIV case identification increased by 68% in targeted communities, while ART linkage reached 100% among newly diagnosed children. Retention in care improved from 74% to 95%, and viral suppression increased from 70% to 91% among those on treatment. Screening for TB among CALHIV increased by 72%, and identification of malnutrition (MAM/SAM) improved, with over 100% of affected children linked to care. Health insurance enrollment reduced financial barriers, with over 90% of households reporting improved access to services. Community-based interventions enhanced adherence and reduced missed appointments by 65%.

Conclusion/Recommendation: Multi-sectoral service integration is an effective strategy for closing pediatric HIV coverage gaps in hard-to-reach settings. Scaling this model can strengthen health systems, improve equity, and accelerate progress toward epidemic control among CALHIV in similar contexts.

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Proven Interventions that Achieved Viral Suppression among Children and Adolescents Living with HIV in Conflict-Prone Communities of Niger State, North-Central Nigeria

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Background: Achieving and sustaining viral suppression among children and adolescents living with HIV (CALHIV) remains a critical public health priority, particularly in conflict-prone settings where insecurity and population displacement can compromise treatment continuity. Ten of twenty-four Local Government Areas (LGA) in Niger State have experienced recurrent security challenges that threaten access to HIV services. Despite these constraints, targeted, differentiated service-delivery interventions were implemented to maintain treatment adherence and continuity of care. This study assessed viral suppression among CALHIV receiving antiretroviral therapy in conflict-prone communities of Niger State.

Methods: The Center for Clinical Care and Clinical Research Nigeria (CCCRN) conducted a retrospective analysis of routine program data among 286 CALHIV receiving ART across seven conflict-prone LGAs of Niger State between October 2025 and April 2026. Viral load monitoring records were extracted and analyzed to assess suppression trends over time. Viral suppression was defined as a viral load of <1,000 copies/mL, consistent with national and global HIV treatment guidelines. Descriptive statistics were used to summarize suppression outcomes across the study period.

Results: The total viral suppression rate during the study period was 90%, demonstrating sustained treatment success despite insecurity. Viral suppression across the seven LGAs ranged from 88.9% to 94.1%. Rijau and Muya maintained 100% viral suppression throughout the review period, while Shiroro consistently achieved rates above 95%. Wushishi maintained stable performance, with suppression ranging from 82% to 94%. Magama demonstrated notable improvement, increasing from 82% in October 2025 to 93% in April 2026. Although Kontagora recorded a decline from 85% to 75%, the majority of CALHIV remained virally suppressed.

Conclusion: High levels of viral suppression can be achieved and sustained among CALHIV living in conflict-prone communities when resilient, child-centered HIV service delivery models are effectively implemented. These findings provide important evidence that differentiated care strategies can mitigate the effects of insecurity and support optimal treatment outcomes among CALHIV in fragile settings.

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Outcomes of Children Transitioned from (pDTG + pABC/3TC) Regimen to Paediatric Fixed-Dose Combination (ABC/3TC/DTG) (pALD) Treatment at Five Tertiary Public ART Clinics in Malawi

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Background: In July 2026, the Malawi national HIV program rolled out use of paediatric Abacavir/Lamivudine/Dolutegravir (ABC/3TC/DTG (60/30/5) mg) single tablet among children living with HIV (CLHIV), following recommendation by the World Health Organization (WHO). We assessed ART retention and viral load suppression rates among children transitioned from pDTG + pABC/3TC to the new fixed-dose combination (FDC) dispersible tablet of paediatric ABC/3TC/DTG 60/30/5 mg (pALD) at five tertiary public ART clinics in Malawi.

Methods: We conducted a cohort analysis among CLHIV transitioned from pABC/3TC 120/60 mg + pDTG 10 mg to new single FDC-dispersible tablet (ABC/3TC/DTG (60/30/5) mg) or pALD at five tertiary ART clinics in Malawi. Children on paediatric abacavir/lamivudine +pDTG (120/60+10) mg with weight band between 6kg to 24.9 kg were transitioned into pALD regimen using the phase approach starting with weight band of 6kg-19.9kg thereafter children with weight band of 20kg to 24.9kg. Descriptive analysis using proportions were used to evaluate outcomes (retention and VL suppression rates) after pALD treatment.

Results: The analysis used 554 ART children, with median age 5years (IQR=4), and median duration in pALD treatment was 6months (IQR=3). The results showed 282 (51%) females and 272 (49%) males. The disaggregation of children transitioned onto pALD treatment by facility were 26(5%) from Lighthouse, 58 (10%) Rainbow, 63(11%) Tisungane, 191(35%)-Umodzi Family Centre and 216(39%)-Martin Preuss Centre. The age distribution at regimen transitioning comprised 245(44%), 301(54%) and 8(2%) with age-groups (0-4) years, (5-9) years and (10-14) years respectively. A total of 327 (59%) had been on pALD treatment for (0-6) months and 227(41%) for (7-10) months. The Weight distribution at last visit were 39(7%) for weight bands (6.0-9.9) kg, 109(20%) with weight range (10.0 -13.9) kg, 239(43%) paediatrics weighing (14.0-19.9) kg and 167 (30%) children weighted (20.0-24.9) kg. Retention rate after 6 months post intervention was 92% (95%CI: 89%-94%). The viral load (VL) suppression rate after 6 months pALD treatment was 80% (95%CI: 76%-83%).

Conclusion: The new FDC dispersible tablet (ABC/3TC/DTG (60/30/5) mg) had demonstrated to have better clinical outcomes (VL suppression rate) among CLHIV provided clients are adherent to clinical appointments. We recommend enrolling all children in pALD to sustain good clinical outcomes.

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HIV Testing and Positivity Patterns among Pregnant Women in Nigeria: Age-Stratified Program Trends from 36 States and the Federal Capital Territory, 2024-2025

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Background: Prevention of mother-to-child transmission (PMTCT) services are central to eliminating new HIV infections among children and improving maternal HIV outcomes. As PMTCT programs expand, age-disaggregated analysis is critical for identifying populations with persistent gaps in testing, positivity, and linkage to treatment. We analyzed routine PMTCT data from all 36 states and the Federal Capital Territory (FCT) in Nigeria to assess age-specific patterns in antenatal HIV testing, HIV positivity, and antiretroviral therapy (ART) linkage between 2024 and 2025.

Methods: We conducted an analysis of routine PMTCT program data from Nigeria's 36 states and the FCT for 2024 and 2025. Data were disaggregated by age group, from 10–14 years through 50 years and older. Key indicators included antenatal care attendance, HIV testing coverage, HIV positivity, and ART linkage among pregnant women diagnosed with HIV. Descriptive statistics were used to summarize trends, while chi-square tests and age-based trend analyses were performed in R to assess differences across age groups and years.

Results: Total antenatal care attendance increased from 442,959 in 2024 to 1,088,266 in 2025, representing a 145.7% increase. HIV testing coverage improved from 94.8% to 97.9% ($p < 0.001$). The number of pregnant women diagnosed with HIV increased from 983 in 2024 to 2,342 in 2025, reflecting expanded program reach, while the overall positivity rate declined slightly from 0.23% to 0.22% ($p = 0.032$). The 25–29-year age group consistently recorded the highest positivity rates, with 0.30% in 2024 and 0.26% in 2025, and accounted for 34.2% and 33.0% of all positive cases, respectively. Adolescents aged 10–19 years contributed 3.4% of positive cases in 2024 and 5.2% in 2025, with positivity increasing from 0.09% to 0.12%. ART linkage improved significantly from 73.1% to 86.4% ($p < 0.001$), although younger age groups continued to experience comparatively lower linkage than older women. Trend analysis demonstrated significant age-associated patterns in both HIV positivity ($p < 0.001$) and ART linkage ($p = 0.008$).

Conclusions: Nigeria's PMTCT program achieved substantial scale-up between 2024 and 2025, with improved HIV testing coverage and stronger ART linkage among pregnant women. However, increasing positivity among adolescents and persistent linkage gaps among younger women highlight the need for more age-responsive PMTCT strategies. These findings demonstrate the value of age-disaggregated routine data for identifying inequities in program performance and informing targeted interventions to strengthen maternal HIV case finding and treatment linkage at national scale.

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STI Diagnosis as a Missed Implementation Opportunity to Address Retraumatization and Its Effects on Internalized HIV Stigma and Depressive Symptoms among Women Living with HIV: A Conceptual Framework

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Background: Depressive symptoms are common among women living with HIV (WLWH). Internalized HIV stigma is one predictor of increased depressive symptoms. Although coinfection with HIV and another non-HIV sexually transmitted infection (STI) is common, a mechanism to understand how STIs impact internalized HIV stigma and depressive symptoms remains undeveloped. We hypothesize that a new STI may catalyze feelings of retraumatization (a process whereby previous trauma shapes one's reaction to a new trauma). This process may increase internalized HIV stigma and depressive symptoms and signals a missed implementation opportunity at point of care. Identifying this mechanism is a critical first step toward designing implementable, contextually appropriate interventions at the point of STI diagnosis.

Methods: We propose a conceptual framework to depict the relationships between an initial HIV diagnosis (previous trauma), a new STI (new trauma), internalized HIV stigma, and depressive symptoms. Other upstream variables include demographic and structural factors (e.g., structural barriers and healthcare inequities), anticipated HIV stigma, and enacted HIV stigma. This conceptual framework was informed by a literature review mapping empirical evidence, existing stigma frameworks mechanisms from Turan and Earnshaw and Chaudoir, and the HEIF framework.

Results: Our framework highlights two key time points, a woman's initial HIV diagnosis and a new STI diagnosis. We depict how an initial HIV diagnosis leads to different types of HIV stigma and a trauma response, both of which lead to increased depressive symptoms. Following a new STI event, women experience traumatization which may lead to increased internalized HIV stigma and depressive symptoms, mediated by their individualized coping response. Interventions at STI testing or diagnosis that include implementation strategies such as bolstered provider communication practices, sensitivity and stigma awareness trainings, tools for raising patient awareness, embedded mental health screening, or clinic-level workflows for stigma-sensitive STI disclosure and clear pathways to care and treatment may be instrumental in mitigating retraumatization.

Discussion: Our framework hypothesizes that a new STI leads to a retraumatization response and a subsequent coping response among WLWH. Depending on a woman's coping response, she may then experience an increase in depressive symptoms, partially mediated by an increase in internalized HIV stigma. This framework highlights a key mental health or clinic-based intervention timepoint for WLWH. Increased mental health support at diagnosis of a new STI may dampen an STI's effects on internalized HIV stigma and depressive symptoms. Future work is needed to explore these mechanisms and inform intervention design to test our hypotheses via a hybrid effectiveness implementation design.

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The Silent Epidemic: Economic Abuse among PLHIV and AGYW and Its Consequences for HIV Service Access in Ebonyi State, Nigeria

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Background: Gender-based violence (GBV) is widely recognized as a driver of HIV vulnerability and poor treatment outcomes. It's a well-established structural barrier that hampers efforts in HIV prevention, treatment, and care. While physical and sexual violence receive considerable programmatic attention, economic abuse remains an underreported and inadequately addressed form of violence, particularly among people living with HIV (PLHIV) and adolescent girls and young women (AGYW). Economic abuse encompasses financial control, resource deprivation, employment sabotage, and denial of access to economic opportunity. This constitutes a form of coercive control that directly impairs an individual's capacity to access, initiate, and adhere to HIV services by taking away their financial independence, ability to move freely, and the power to make decisions that are essential for health seeking. For people living with HIV (PLHIV) and adolescent girls and young women (AGYW), who already face heightened vulnerability due to structural inequalities, economic abuse acts as a significant risk factor. This study examined the burden and distribution of economic abuse among PLHIV and AGYW in Ebonyi State, Nigeria, and explored its implications for HIV prevention, care, and treatment outcomes.

Methods: A retrospective cohort analysis of GBV/IPV case management data from Network of People Living With HIV/AIDS in Nigeria (NEPWHAN) was conducted for all active and closed cases reported in Ebonyi State between January and December 2025. Cases were categorized by population group and GBV typology. Descriptive analyses were performed to determine the distribution and prevalence of GBV types across affected populations.

Results: During the study period, there were 1,363 reported cases of gender-based violence (GBV). People living with HIV (PLHIV) made up the largest share of these cases, totalling 719, which constitute 52.8%. This is followed by adolescent girls and young women (AGYW), with 310 cases, representing 22.7%. Together, these two groups accounted for more than three-quarters (75.5%) of all GBV incidents reported. Economic abuse stood out as the most prevalent type of violence, with 737 cases (54.1%), surpassing all other forms of GBV combined. This type of abuse was particularly concentrated among PLHIV and AGYW, underscoring the complex interplay of HIV status, gender inequality, and economic vulnerability. Emotional abuse was the second most frequently reported form, with 211 cases (15.5%), while physical violence accounted for 199 cases (14.6%). Sexual violence made up only 5.1% of the reported cases, challenging the common belief that physical and sexual violence are the main forms of GBV affecting those with HIV.

Conclusion: Economic abuse represents a silent epidemic among PLHIV and AGYW and may be a critical yet overlooked determinant of HIV vulnerability, treatment interruption, and poor psychosocial outcomes. HIV and GBV programmes should move beyond traditional violence-response models to incorporate economic empowerment, social protection, livelihood support, and financial inclusion interventions. Addressing socio-economic abuse as a structural driver of vulnerability has the potential to improve HIV outcomes, enhance resilience, and strengthen the overall wellbeing of affected populations.

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Biennial Viral Load Monitoring for Stable Adults: A Policy-Responsive Analysis of National Programme Data from Zimbabwe

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Background: Zimbabwe has achieved the UNAIDS 95-95-95 targets, a hard-won milestone that the programme is committed to protecting. With over 1.3 million adults on antiretroviral therapy and the majority on dolutegravir-based regimens (96%) since 2021, HIV viral load suppression rates have improved substantially (from 85% to 96%). Current guidelines mandate annual viral load (VL) testing for all stable, suppressed adults. As Zimbabwe looks to transition to a Minimum Service Package under severe resource constraints, a critical policy question has emerged: can testing frequency be safely reduced for stable recipients of care (RoC), redirecting effort to those who are failing? This analysis was designed as a policy-responsive investigation using real-time national programme data to answer that question before a decision is made, not after.

Methods: We analysed 2.07 million VL records from Zimbabwe's Laboratory Information Management System (LIMS), covering October 2023 to December 2025. Suppression was classified as either Target Not Detected (TND), Low level viremia (LLV: 1–999 copies/mL), or Unsuppressed (≥1,000 copies/mL). Multi-year cohorts were constructed from confirmed testing histories. A natural biennial experiment cohort identified clients with confirmed TND status at baseline and documented two-year follow-up. Kaplan-Meier survival analysis examined unsuppression risk over 24 months. Turnaround time was assessed by province and year. Findings were cross-validated against facility-level patient records.

Results: Of 2.07 million VL tests, 96.2% (57.6% TND and 38.6% LLV) were suppressed. Among 121,470 RoC with confirmed multi-year follow-up, only 0.64% who had TND at baseline became unsuppressed over 24 months. Of every 100 stable RoC, 99 remained suppressed for two full years. The biennial cohort showed only a 0.8 percentage point increase in unsuppression between 12 and 24 months, with 95% suppression at 24 months. Among LLV clients, 68.1% resuppressed and only 9.5% progressed to virological failure. A critical implementation gap was identified: 826 clients who met EAC eligibility criteria received no documented counselling across their entire treatment history. Median VL cascade turnaround time improved 44.7% between 2021 and 2024, though provincial variation was substantial.

Conclusions: This analysis demonstrates how real-time national programme data can drive policy-responsive implementation science, answering the question Zimbabwe's programme needed answering. The 0.64% unsuppression rate over 24 months provides strong evidence that biennial testing is safe for stable, TND-confirmed adults. Adopting this schedule could potentially redirect USD 6.4 million annually, not as a cost-saving measure, but to concentrate effort on the clients who are failing. EAC is the suppression tool: the 826 clients who needed it and received nothing represent a programme gap that must close alongside any policy change. The goal is not how many tests should be run, but how many failing clients can be identified early and how many suppressed clients stay suppressed. Findings are under review by Zimbabwe's technical working groups for integration into ZNASP V and the GC8 Global Fund framework.

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How Much Retention Can Emergency Department Based HIV Studies Expect? Retention Patterns and Behavioral Design Opportunities for HIV Prevention Research

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Introduction: Emergency departments (EDs) are attractive settings for HIV prevention and linkage-to-care because they reach underserved populations with unmet HIV prevention and treatment needs. Although ED-based research is essential to ensure inclusion of populations often underrepresented in clinical trials, recruitment and retention can be challenging. ED encounters are unplanned, occur without an established therapeutic relationship, and frequently involve patients facing social and structural vulnerabilities. Understanding screening failures and participant attrition is therefore critical for designing feasible studies and accurately estimating enrollment targets. In this study we observed telephonic follow-up retention patterns among participants enrolled in an ED-based HIV prevention study and examined participant characteristics associated with successful follow-up.

Methods: We conducted an interim descriptive analysis of participants enrolled in an ED-based HIV research study where patients who presented to an ED were offered universal testing for HIV and those who tested negative were referred for HIV Pre-Exposure Prophylaxis (PrEP). Participants were included if they completed informed consent and had follow-up information. Follow-up was conducted according to the study standard operating procedures, including up to three telephone contact attempts. Successful follow-up was defined as contact achieved through one of three attempted follow-up calls. We described the proportion of participants who were successfully contacted, number of attempts required to establish contact, and participant characteristics by follow-up status. Characteristics examined included demographic factors, HIV status, PrEP eligibility, alcohol use, and social vulnerability indicators. Differences between participants reached and not reached were assessed using descriptive statistics and Chi-square tests.

Results: Among 347 enrolled participants, 333 had available follow-up information. Of these, 232 (69.7%) were successfully contacted and 101 (30.3%) were not reached after three call attempts. Among participants successfully contacted, nearly half were reached after the first attempt (164, 49.3%), while 53 (15.9%) required two attempts and 116 (34.8%) required three attempts. Participants who were reached versus not reached had similar demographic profiles. Mean age was 34 years among participants reached compared with 36 years among those not reached. Follow-up status did not differ by sex (p=0.32), HIV status (p=0.25), PrEP eligibility (p=0.73), alcohol risk screening (p=0.61), health access (p=0.80), or housing type (p=0.51), or food insecurity (OR 1.24, 95% CI: 0.74-2.08). Among participants with HIV status available, 66 of the 232 that were reached (29%) were living with HIV or newly diagnosed compared with 21 (21%) that were not reached (p=0.25). Similarly, PrEP eligibility was comparable between those reached (40/79 participants, 54%) and not reached (88/162 participants, 52%).

Conclusions: Approximately one-third of enrolled ED participants could not be reached despite three structured follow-up calls. However, attrition was not disproportionately observed among socially vulnerable participants or those with greater HIV prevention needs. Rather, loss to follow-up was broadly distributed across participant groups, underscoring the ED's ability to reach diverse populations often underrepresented in clinical research. Findings suggest that future ED-based HIV prevention programs should move beyond telephonic follow-up and incorporate behavioral strategies, including low-burden, patient-centered strategies to support ongoing engagement after discharge.

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From Screening to Support: Integrating Mental Health into Routine HIV Care at Two AHF Clinics in Eswatini

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Background: Mental health disorders, particularly depression and anxiety, are highly prevalent among people living with HIV (PLHIV), with more than 50% experiencing a mental health condition during their lifetime. These conditions are associated with poor antiretroviral therapy (ART) adherence, treatment interruption, reduced viral suppression, and diminished quality of life. In high HIV-burden, resource-limited settings such as Eswatini, mental health services are often fragmented or unavailable within routine HIV care, limiting opportunities for early identification and management of psychosocial challenges that negatively affect HIV outcomes. Integrating mental health services into routine HIV care represents an important health systems strengthening strategy to improve patient engagement and treatment outcomes. However, there is limited evidence on how such integration can be operationalized within HIV service delivery platforms in Eswatini. We describe the integration of mental health screening and management into routine HIV care at two AIDS Healthcare Foundation (AHF) clinics in Eswatini and assess its influence on patient engagement and clinical outcomes.

Methods: Between May 2024 and October 2025, PLHIV attending routine HIV care visits at two AHF clinics (Matsapha and Manzini) were screened for common mental health conditions using standardized tools, including a summarized Patient Health Questionnaire-9 (PHQ-9). Clients with mild-to-moderate conditions received on-site management through counselling, psychotherapy, enhanced adherence support, lifestyle modification guidance, and basic pharmacological treatment. Clients with severe or complex conditions were referred to specialized outpatient or inpatient mental health services. Program data were extracted from routine mental health registers and HIV clinic records, including diagnoses, interventions provided, referrals, and documented HIV-related and psychosocial outcomes.

Results: A total of 116 PLHIV were diagnosed with and managed for mental health conditions during the implementation period. Of these, 77 (66.4%) were women, while depressive disorders accounted for most diagnoses (55.2%). More than two-thirds of clients were managed on-site, reducing the need for external referrals and improving access to mental health support. Routine program documentation demonstrated improved ART adherence among 47 of 51 (92.2%) clients whose adherence challenges were linked to mental health conditions. Additional outcomes included improved viral load suppression, re-engagement in HIV care among clients who had defaulted treatment, improved clinic attendance, enhanced psychosocial functioning, return to employment among some clients, reduced substance use, and increased acceptance of HIV status. These findings suggest that integrating mental health services into HIV care can address important barriers to treatment retention and long-term treatment success.

Conclusion: Integration of mental health screening and management into routine HIV care at two AHF clinics in Eswatini was feasible and associated with improved patient engagement, ART adherence, retention in care, and psychosocial well-being. Early identification and management of mental health conditions enabled a more holistic and patient-centered approach to HIV care while reducing dependence on limited specialist services. This implementation experience demonstrates the value of integrated HIV and mental health service delivery models and supports the scale-up of mental health interventions within HIV programs in Eswatini and similar resource-limited settings. Targeted interventions for women may be particularly important given their higher burden of diagnosed mental health conditions.

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Too Far to Reach: Geographic Accessibility and Gaps in PrEP Implementation for Indigenous Gay and Bisexual Men in Guatemala

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Background: Guatemala has a concentrated HIV epidemic among gay and bisexual men (GBM) that is shaped by entrenched social and structural inequities disproportionately affecting Indigenous populations. Indigenous GBM experience intersectional stigma related to sexual orientation and Indigenous identity, alongside political exclusion and geographic marginalization. In implementation science, access to care is often conceptualized through the 6 dimensions of access: availability, accessibility, affordability, acceptability, accommodation and awareness. While all six dimensions are critical for HIV prevention, accessibility, measured in distance and travel time to services, remains a fundamental prerequisite for engagement. In Guatemala, at the time of data collection, daily oral PrEP was offered at only four clinics nationally, three of which are located in Guatemala City, reflecting a structural concentration of resources that may limit equitable reach. As national PrEP scale-up advances, understanding geographic accessibility as a driver of PrEP uptake among Indigenous GBM is essential.

Material and Methods: Between June 2023 and March 2024, we administered a cross-sectional survey with Indigenous GBM (n=395) assessing PrEP cascade outcomes. Municipality-level participant data, PrEP clinic locations, and national census data were mapped using ArcGIS. Distance (km) and travel time (minutes) from each municipality to the nearest clinic were estimated using Waze with standardized parameters. Logistic regression models in R, adjusted for age and education, examined associations between geographic accessibility and PrEP awareness, intent, use, current use, and adherence (<2 missed doses in past 7 days).

Results: Nationally, Guatemalans reside a mean of 116.8 km (range= 0.9-556.9) and 156.9 minutes (range = 6-597) away from the nearest PrEP clinic. Among Indigenous GBM in our sample, mean distance was 52.9 km (range=0.938-352.0) and mean travel time was 79.3 minutes (range=6-445) from the nearest clinic. PrEP awareness was relatively high (73%, n=288), yet only 33% had ever used PrEP (n=130) and 27% were current users (n=106). Among non-users, 26% (n=102) expressed intention to use PrEP, and adherence among users was low (20%,n=77). Greater distance and longer travel time were significantly associated with lower odds of ever using PrEP (aOR per km: 0.993, 95%CI: 0.989, 0.997, p-value<0.001; aOR per minute: 0.995, 95%CI: 0.991, 0.998, p-value<0.001). Accessibility was not associated with PrEP awareness, intent, or adherence.

Conclusions: Despite relatively high PrEP awareness, geographic inaccessibility substantially constrains PrEP uptake among Indigenous GBM in Guatemala, highlighting accessibility as a key bottleneck within the broader 6 dimensions of access framework. The concentration of services in urban centers creates structural barriers that interact with inequities in affordability, acceptability, and accommodation, limiting effective engagement across the PrEP cascade. These findings underscore that improving awareness alone is insufficient without addressing spatial inequities. Expanding decentralized and community-based PrEP delivery, including Indigenous-led and culturally adapted models, could reduce travel burdens and improve accessibility while enhancing acceptability and accommodation. Integrating geographic redistribution strategies with interventions targeting all six dimensions of access will be critical for equitable PrEP scale-up, particularly in preparation for long-acting injectable PrEP, to ensure that innovation does not exacerbate existing disparities.

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Integrating HIV and Non-Communicable Disease Services in Primary Healthcare: Implementation Outcomes and Novel Metrics from Nigeria

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The dual burden of HIV and non-communicable diseases (NCDs) poses a growing challenge to health systems in sub-Saharan Africa. While HIV programs have achieved substantial progress, service delivery remains largely vertical, limiting comprehensive, patient-centered care. This study evaluates the integration of HIV and NCD services within primary healthcare settings and introduces novel metrics to assess implementation performance.

A mixed-methods implementation study was conducted in selected primary health centers in Lagos, Nigeria. HIV services were integrated with routine screening and management of hypertension and diabetes. Data were collected over six months on service uptake, clinical outcomes, and patient experiences. Quantitative data were analyzed descriptively, and qualitative feedback was obtained from healthcare providers and patients.

Integration increased NCD screening coverage among people living with HIV from 32% to 78%, with 21% of patients newly diagnosed with hypertension or diabetes. Retention in care improved by 15%, and patient-reported satisfaction increased due to reduced clinic visits and streamlined service delivery.

To strengthen evaluation of integrated care, we propose novel metrics including co-management coverage, an integrated service utilization index, and time-to-initiation of NCD treatment among HIV patients. These indicators provide a more comprehensive assessment of system performance beyond disease-specific measures.

Integrated HIV–NCD service delivery is feasible and effective in primary healthcare settings. Scaling such models will require policy alignment, workforce capacity strengthening, and investment in integrated health information systems.

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From Viral Suppression to Healthy Ageing: Implementation Priorities for Nurse-Led Multimorbidity Care among People Living with HIV in China

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Background: As antiretroviral therapy has improved survival, HIV care in China is shifting from acute infection management to long-term chronic disease care. This transition is particularly important for older people living with HIV, who may experience late diagnosis, metabolic risk, non-communicable diseases, polypharmacy, stigma, and fragmented care across infectious disease, primary care, and specialty services. Implementation strategies are needed to support nurse-led, person-centred models that address both HIV outcomes and healthy ageing.

Methods: We conducted a rapid evidence synthesis of national surveillance reports and peer-reviewed studies on ageing, metabolic risk, comorbidity, and care needs among people living with HIV in China. Evidence was mapped to an implementation-oriented nursing framework covering risk identification, integrated assessment, self-management support, referral coordination, and long-term follow-up.

Results: National surveillance data show a marked ageing trend in China's HIV epidemic. By the end of 2023, China had reported nearly 1.3 million people living with HIV, while newly reported HIV/AIDS cases among adults aged 50 years or older increased from 11,751 in 2010 to 51,856 in 2022. Published clinical evidence further indicates that people living with HIV in China face an emerging burden of metabolic and non-AIDS-related comorbidities. In Shenzhen, a study of 12,135 treatment-naïve people living with HIV preparing to initiate antiretroviral therapy reported that overweight increased from 11.4% to 17.3% and obesity increased from 2.0% to 4.2% between 2014 and 2020. Overweight and obesity were associated with hyperglycaemia, dyslipidaemia, and abnormal liver function indicators. In eastern China, cohort evidence showed a higher prevalence of multimorbidity among people with HIV than among people without HIV. These findings suggest that current HIV services require stronger mechanisms for routine metabolic screening, lifestyle counselling, medication review, symptom monitoring, and linkage to non-HIV chronic disease care.

Conclusions: China's HIV care system is entering a healthy-ageing implementation phase. Nurse-led multimorbidity care could bridge infectious disease clinics, community health services, and chronic disease management by integrating routine screening, risk stratification, self-management education, stigma-sensitive communication, and coordinated referral. Future implementation research should evaluate feasibility, fidelity, acceptability, workload impact, and sustainability of integrated HIV–chronic disease nursing models in diverse Chinese settings.

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Tenofovir Disoproxil Fumarate/Lamivudine/Dolutegravir (TLD) Uptake and Maternal HIV Viral Suppression and Vertical Transmission Outcomes in Pregnant Women Living with HIV in Johannesburg, South Africa, July 2021-May 2026

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Background: Tenofovir disoproxil fumarate/lamivudine/dolutegravir (TLD) antiretroviral therapy (ART), which rapidly suppresses HIV viral load (VL), has been recommended in pregnant women living with HIV (PWLHIV) in South Africa (SA) since June 2021. Sustained maternal viral suppression improves maternal health and prevents vertical HIV transmission. SA's Vertical Transmission Prevention guideline (August 2023) included maternal VL testing at delivery. We describe VL suppression at delivery in PWLHIV receiving ART, identifying potential risk factors for non-suppression.

Material and Methods: The study included pregnant women with delivery outcomes between July 2021 and May 2026 who had accessed antenatal care (ANC) and were enrolled in the UBOMI BUHLE Pregnancy Exposure Registry at four sites in Johannesburg, SA. Data from maternity records, clinic-based registers and laboratory reports were captured into a secure REDCap database, including maternal delivery VL (within 45 days pre- or 10 days post-delivery). HIV VL suppression and non-suppression at delivery were defined as VL<50 and VL≥50 copies/ml, respectively. Logistic regression evaluated how ART regimen, timing of ART initiation, maternal age and number of ANC visits were associated with VL non-suppression at delivery.

Results: Among 14,117 deliveries, 3,406 (24.1%) were to PWLHIV. Majority of PLWHIV were on TLD at any time during pregnancy (3,281/3,406: 96.3%, 95% Confidence interval (CI): 95.6-96.9). Among the 3,281 PWLHIV taking TLD, 2,036 (62.1%) were receiving TLD at the first ANC visit, 919 (28.0%) were initiated during pregnancy at a median of 22 (IQR 17-28) weeks gestational age, 227 (6.9%) changed to TLD during pregnancy at a median of 25 (IQR 16-30) weeks gestational age and 99 (3.0%) had an unknown TLD start date. Only 2,065 (60.6%) PWLHIV had a delivery VL recorded, of which 1,616 (78.3%) were suppressed. Of the 449 (21.7%) with non-suppressed VL, 252 (56.1%) had VL levels >1,000 copies/ml, 93 (20.7%) had VL 50-99 copies/ml, 46 (10.2%) had VL 100-199 copies/ml, and 58 (12.9%) had 200-999 copies/ml at delivery.
Of the 2,065 PWLHIV with a delivery VL recorded, 1,997 (96.7%) were on TLD and 49 (2.4%) were on efavirenz-based ART and 19 (1.9%) had an unknown regimen. Non-suppression was associated with ART initiation in the second trimester (adjusted odds ratio (aOR) 1.9, 95% CI 1.4-2.5) or third trimester (aOR 5.8, 95% CI 4.0-8.4) compared to pre-pregnancy initiation; and having <4 ANC visits compared to those having ≥4 ANC visits (aOR=2.1, 95% CI 1.7-2.6). Vertical HIV transmission occurred in 15/3364 (0.5%) livebirths, with 14 PWLHIV on TLD and 1 (virally suppressed at delivery) on efavirenz-based ART. Of the 14 PWLHIV on TLD, 1 had a VL between 200-499 copies/ml, 3 had a VL ≥1000 copies/ml, and 10 had no VL result at delivery.

Conclusions: Despite widespread use of TLD in SA, two fifths of women included in this analysis had no delivery VL done. Among women with a delivery VL result, around a fifth were not virally suppressed at delivery. Fewer ANC visits (<4) and late ART initiation during pregnancy were associated with maternal VL non-suppression at delivery. The association with ANC attendance may partly reflect later presentation to care.

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Integrating Hepatitis B Services into Kenya's Evolving HIV and STI Response: Implementation Opportunities in Etiologic STI Management

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Background: Kenya is shifting from syndromic to etiologic management of sexually transmitted infections (STIs) through revision of national STI guidelines led by NASCOP. This shift aims to improve diagnosis, reduce inappropriate antibiotic use, support antimicrobial stewardship and strengthen surveillance of STI trends and resistance patterns. However, hepatitis B virus (HBV) services remain weakly integrated into HIV, STI and antenatal care platforms, despite shared transmission routes and service entry points with HIV and syphilis.

Objective: This abstract examines opportunities and service delivery gaps for integrating HBV screening, vaccination, referral and care into Kenya's HIV, STI, antenatal care, Primary Health Care (PHC) and Universal Health Coverage (UHC) platforms.

Methods: We conducted a desk-based policy and implementation gap analysis using national epidemiological data, the 2025 Kenya AIDS Response Progress Report, population-based studies, and Kenya's Triple Elimination Framework 2022–2027. The analysis reviewed HBV burden, policy readiness, service delivery arrangements, diagnostic and commodity gaps and entry points for integration within Primary Health Care (PHC) and Universal Health Coverage (UHC) systems.

Results: Chronic HBV affects an estimated 3.0–4.4% of adults in Kenya, with approximately 1.5 million people living with the infection. Prevalence is higher in certain regions and among key populations. Although Kenya has made progress in preventing mother-to-child transmission of HIV and syphilis, HBV has received less programmatic attention, especially for timely hepatitis B birth dose (HepB-BD) coverage. The analysis found a policy window for HBV integration, supported by integrated guidance, etiologic STI management, and wider PHC and UHC reforms. Key gaps include limited diagnostics, inconsistent vaccine and test-kit availability, weak HBV data capture, limited provider preparation, and incomplete ANC/PHC workflow integration.

Conclusion: HBV integration should move from policy alignment to everyday service delivery. This requires bundled ANC and PHC packages, reliable commodities, trained providers, stronger laboratory and data systems, referral tools, and community-led demand creation. These measures would make HBV prevention and care more visible, accessible, and accountable within Kenya's infectious disease response as well as advancing the WHO Triple Elimination agenda.

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When Scale Up Outruns Linkage: National Trends and Referral Gaps in Community HIV Testing among Pregnant Women in Nigeria (NDARS), 2024–Mar 2026

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Background: Community HIV testing among pregnant women can expand prevention of vertical transmission, but impact depends on timely referral and linkage to HIV treatment services for those who test positive. Using Nigeria's National Data Reporting System (NDARS), we assessed national trends in testing yield and referral performance and quantified referral gaps across 2024, 2025, and Jan–Mar 2026.

Methods: We conducted a secondary analysis of state-level aggregated NDARS community testing data for pregnant women across Nigeria. Indicators included number tested and receiving results, number testing HIV positive, positivity rate, number referred to hub facilities, referral coverage among those testing positive (referred/positive), and referral gaps (positive minus referred). Differences across periods were assessed using chi-square tests and pairwise two-proportion tests.

Results: From 2024–Mar 2026, 1,632,492 pregnant women were tested; 5,476 tested HIV positive (0.34%). Only 3,027 positives were referred (55.3%), leaving a cumulative referral gap of 2,449. Testing volume increased from 444,105 (2024) to 1,117,031 (2025) with similar positivity (0.223% vs 0.210%). In Jan–Mar 2026, positivity rose to 2.99% (2,135/71,356) while referral coverage fell to 12.6% (270/2,135), producing a referral gap of 1,865 in that quarter alone. Positivity and referral coverage differed significantly across periods (both $p<0.001$).

Conclusions: NDARS highlights a major accountability gap in referral performance, most pronounced in early 2026, risking missed opportunities for timely antiretroviral therapy and prevention of vertical transmission. Programs should investigate drivers of the period shift (including data quality and workflow changes), implement routine reconciliation of positives to referrals, and verify treatment initiation beyond referral using near-real-time linkage indicators and feedback loops to sustain equitable PMTCT outcomes as community testing expands.

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Integrated Maternal Infection Screening as a Learning System: HIV, TB, HBV, and Syphilis Cascade Performance among Pregnant Women Reached through Community Platforms in Oyo State, Nigeria (2024)

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Background: Integrated screening for maternal infections can strengthen health systems by increasing testing coverage, accelerating linkage to treatment, and enabling routine monitoring for adaptive improvement. We assessed the epidemiologic profile and program performance of an integrated community-based screening approach for HIV, tuberculosis (TB), hepatitis B virus (HBV), and syphilis among pregnant women in Oyo State, Nigeria.

Methods: We analyzed routine program data from 42,185 pregnant women identified through community-based screening from January–December 2024. We estimated disease-specific positivity or case notification rates, testing coverage among eligible women, linkage to treatment, and monthly trends.

Results: Mean monthly identification was 3,515 women. HIV positivity was 0.26% (102/39,863 tested), HBV positivity 1.47% (178/12,139), syphilis positivity 0.005% (2/38,622), and TB case notification 30.8 per 100,000 (13/42,185). Testing coverage was highest for HIV (99.3%) and TB (94.9%), followed by syphilis (91.6%); HBV testing coverage was low (28.8%) but increased over time (β=4.2 percentage points per month; p=0.016). Peak service utilization occurred in August (5,205 women), which also recorded the highest monthly HIV (16) and HBV (81) detections. HIV and HBV testing volumes were strongly correlated (r=0.89; p<0.001), consistent with integrated delivery. All women identified with HIV were linked to antiretroviral therapy; all TB cases initiated treatment; and both syphilis cases were managed, yielding 100% treatment completion for identified cases. HIV–HBV co-infection was 2.0%.

Conclusions: Integrated community screening achieved high HIV/TB testing and excellent linkage for identified cases, demonstrating the feasibility of a learning system approach. Persistently low HBV testing coverage remained the key implementation gap; strengthening commodities, standardized workflow prompts, and routine performance feedback could improve equitable access to the full screening package.

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Population Health Impacts of Integrating HIV and Hypertension Care across Epidemic Contexts in Sub-Saharan Africa

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Background: As countries transition from vertical HIV programmes to integrated models of chronic care, hypertension has become a leading comorbidity among people with HIV (PWH) and a major cause of morbidity in the wider population. Though integrated service delivery has shown promise in improving both blood pressure control while maintaining HIV viral suppression, there is potential for uneven implementation of integrated care at scale, with variable impact on HIV viral suppression. Quantifying inadvertent trade-offs between these outcomes can provide essential guidance for health system prioritisation during scale-up of integrated care.

Methods: Using outputs from an individual-based model extended to include hypertension and cardiovascular disease (HIV Synthesis), we quantified relationships between viral suppression, hypertension control, and disability-adjusted life years (DALYs) across nine archetypal settings in sub-Saharan Africa (HIV prevalence 5–20%; hypertension prevalence 20–30%). We estimated marginal effects of 1-percentage-point changes in each outcome on total combined DALYs over 10-year and 50-year horizons.

Results: At equivalent 20% disease prevalence, each percentage-point increase in hypertension control averted 319 (95% UI 32-605) average annual DALYs over 10 years versus 1,746 (95% UI 1,286-2,206) DALYs per percentage-point increase in viral suppression- a five-fold difference amplifying to ten-fold over 50 years. In 20% HIV-prevalence settings, improving hypertension control from 7% to 30% would avert 0.3-0.9% of average annual DALYs over 10 years, but a 4% absolute decline in viral suppression would eliminate these gains when hypertension prevalence is ≤20% (10-year) or <25% (50-year).

Conclusions: Integrating hypertension management into HIV and primary care systems can improve population health but requires implementation strategies that can maintain high levels of HIV viral suppression to realise net health benefits from service expansion. Integrated service delivery models that reduce patient burden, streamline follow-up, and reinforce adherence across conditions, such as full integration or service co-location, hold greatest promise for achieving joint health gains.

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Health System Fragility and Continuity of HIV Service Delivery in Five Sub-Saharan African Countries: A Comparative Implementation Analysis

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Background: Despite substantial progress in HIV prevention and treatment, many countries in sub-Saharan Africa continue to face persistent challenges in achieving equitable and sustainable HIV service delivery. Health system weaknesses can undermine progress toward HIV epidemic control, particularly in resource-constrained and fragile settings. This study synthesised evidence on health system barriers affecting HIV service delivery across five sub-Saharan African countries—Central African Republic, Comoros, Guinea, Madagascar, and Burkina Faso—to identify recurring implementation challenges and inform integrated health system strengthening strategies.

Methods: A scoping review was conducted following Joanna Briggs Institute methodology and reported according to PRISMA-ScR guidelines. Peer-reviewed studies, programme evaluations, policy documents, surveillance reports, and other grey literature published between January 2018 and December 2025 were systematically identified through searches of PubMed, Embase, Scopus, Web of Science, and institutional databases. Evidence was mapped using the World Health Organization Health Systems Building Blocks Framework and synthesised thematically to identify cross-country patterns affecting HIV prevention, testing, treatment, and monitoring services.

Results: Fifty-four studies and programme reports met the inclusion criteria. Recurring barriers were identified across all health system domains. Common challenges included low HIV testing coverage in rural and underserved populations, delayed diagnosis and treatment initiation, weak laboratory and viral load monitoring systems, recurrent supply chain disruptions affecting diagnostics and antiretroviral medicines, shortages of trained health workers, fragmented health information systems, and persistent HIV-related stigma. Across countries, these barriers rarely occurred in isolation. Weak governance, financing constraints, workforce limitations, diagnostic gaps, and inadequate information systems frequently interacted to disrupt continuity of care and reduce programme effectiveness. Diagnostic and laboratory system weaknesses emerged as a particularly consistent bottleneck affecting treatment monitoring and service quality across all five countries.

Conclusions: HIV service delivery gaps across diverse sub-Saharan African settings reflect interconnected health system weaknesses rather than isolated programme failures. Sustainable progress toward HIV epidemic control will require integrated investments in diagnostics, workforce capacity, supply chain resilience, digital health infrastructure, governance, and community-based service delivery. Embedding HIV programmes within broader health system strengthening efforts may improve service continuity, resilience, and long-term sustainability in resource-constrained settings.

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Investigating the Implementation of Children Who Are HIV-Exposed but Uninfected (CHEU): Tracking Activities During the Exposure Period, Identifying Gaps and Providing Solutions in Eastern and Southern Africa

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Background: The population of Children who are HIV-Exposed and Uninfected (CHEU) is rapidly increasing in Eastern and Southern Africa (ESA) due to expanded access to antiretroviral therapy (ART) and significant reductions in mother-to-child transmission (MTCT) of HIV. Despite remaining HIV-negative, CHEU face heightened risks of morbidity, mortality, growth impairment, and developmental delays. While countries have made considerable progress in preventing vertical HIV transmission, gaps remain in tracking HIV-exposed infants and ensuring timely testing, follow-up, referral, and treatment during the breastfeeding and postnatal periods. This study assessed the implementation of CHEU monitoring systems, identified barriers to effective follow-up, and documented innovative practices to strengthen programming across the ESA region.

Methods: A mixed-methods study design was employed, combining secondary quantitative data analysis, literature review, and qualitative key informant interviews. The study was conducted in six ESA countries purposively selected based on their performance towards elimination of mother-to-child transmission (eMTCT): Botswana, Eswatini, and Zimbabwe (high-performing), and Angola, Kenya, and Tanzania (lower-performing). Quantitative data from UNAIDS estimates and Global AIDS Monitoring reports (2015–2023) were analysed to assess HIV testing uptake among pregnant women and HIV-exposed infants, ART coverage, and MTCT trends. Qualitative data were collected through interviews with HIV programme managers, laboratory personnel, strategic information specialists, and civil society representatives to assess implementation of national HIV testing guidelines, barriers to service uptake, and promising practices.

Results: Five of the six countries maintained relatively high HIV testing and ART coverage among pregnant women, with Tanzania, Eswatini, and Zimbabwe consistently recording coverage above 80%. Early Infant Diagnosis (EID) improved substantially across most countries, with HIV testing among exposed infants increasing from 51% to 84% in Zimbabwe, 45% to 86% in Botswana, 50% to 82% in Kenya, and 48% to 71% in Tanzania between 2015 and 2023. However, coverage remained low in Angola and declined in Eswatini. ART coverage among children living with HIV also improved significantly, particularly in Eswatini, Kenya, Tanzania, and Zimbabwe. All six countries had national HIV testing guidelines aligned with World Health Organization recommendations, including use of nucleic acid amplification tests and point-of-care testing. Nevertheless, none had specific guidelines or service packages targeting CHEU. Key barriers included limited access to health facilities, inadequate staffing, shortages of testing commodities, weak sample transportation systems, stigma and discrimination, caregiver knowledge gaps, and fragmented tracking systems. Promising practices included integration of paediatric HIV services within maternal and child health platforms, use of electronic mother–baby tracking systems, point-of-care EID technologies, and community-based follow-up mechanisms.

Conclusion: Although significant progress has been made in reducing paediatric HIV infections and strengthening infant HIV testing services, CHEU remains inadequately addressed within existing HIV programming. The absence of dedicated CHEU policies and comprehensive care packages limits opportunities to monitor health outcomes beyond HIV status. Strengthening integrated tracking systems, expanding digital health solutions, scaling up point-of-care testing, and developing comprehensive CHEU-focused service packages are essential to ensure that HIV-exposed children not only remain HIV-free but also survive and thrive.

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Beyond the Evidence: Why U=U Remains Unevenly Implemented Despite Widespread Scientific Acceptance

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Background: Undetectable = Untransmittable (U=U), the principle supported by scientific evidence that people living with HIV who maintain an undetectable viral load cannot transmit the virus through sex, offers significant potential for HIV prevention, supporting adherence, and reducing stigma. Although globally endorsed, U=U messaging has not yet been widely adopted in clinical and community settings in South Africa, which hosts the world's largest antiretroviral treatment program. Our research aimed to identify the various barriers and facilitators at multiple levels that influence U=U implementation within South Africa's HIV response.

Methods: We conducted semi-structured qualitative interviews with HIV stakeholders, including policymakers, healthcare providers, program implementers, researchers, and advocates, selected through purposive and snowball sampling. The interview guides, based on the revised Consolidated Framework for Implementation Research (CFIR), focused on experiences with U=U communication, health system readiness, community perceptions, and implementation feasibility. Interviews were conducted virtually, audio-recorded, transcribed verbatim, and analyzed using a hybrid deductive–inductive thematic approach. The CFIR framework served as the primary structure for analysis, while cross-cutting themes emerged through iterative review of coded data across stakeholder groups and settings. Sensemaking Theory and Diffusion of Innovations Theory were used as complementary interpretive lenses to understand how barriers and facilitators to implementation affected the adoption and normalization of U=U.

Results: From July to November 2025, we interviewed 30 stakeholders from diverse sectors involved in the HIV response, primarily in South Africa. Participants included community advocates, program implementers, healthcare providers, researchers, policymakers, and health system managers. Although most stakeholders acknowledged the scientific evidence supporting U=U, implementation varied because the evidence was interpreted and applied differently across settings and groups. Six key themes emerged: (1) U=U was scientifically credible but communicatively fragile; (2) it provided psychosocial, relational, and dignity benefits beyond HIV prevention; (3) its role in HIV prevention was still debated; (4) sustained implementation relied on system integration, leadership, and frontline capacity; (5) communication was often affected by mistrust, moral judgment, and gatekeeping; and (6) normalization was occurring but unevenly and incompletely. These findings indicate that barriers are not due to doubts about the science but stem from differing interpretations, communication issues, competing prevention models, structural challenges, and persistent stigma. The CFIR framework identified where implementation factors operate, Sensemaking Theory explained differing interpretations of the evidence, and Diffusion of Innovations Theory described incomplete adoption despite broad support.

Conclusions: Although stakeholders broadly accepted the science of U=U, implementation remained uneven because the evidence was interpreted, communicated, and operationalized differently across contexts. The U=U implementation gap in South Africa is therefore not primarily scientific but interpretive, communicative, and structural. Closing this gap will require more than disseminating evidence. It will require addressing the sensemaking processes through which stakeholders understand and communicate U=U, strengthening communication confidence, aligning prevention paradigms, protecting counseling infrastructure, and supporting implementation champions. Without these efforts, the benefits of U=U will remain unevenly distributed, accessible to some patients

and withheld from others, based not on science but on whom their provider trusts, which system they are in, and where they live.

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Potential Implementation Strategies for Integrating Novel PrEP Products into family Planning Clinics for Adolescent Girls and Young Women (AGYW) in Central Kenya: A Qualitative Study

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Background: Integrating novel pre-exposure prophylaxis (PrEP) products including injectable cabotegravir (CAB) and dapivirine vaginal ring (DVR) into family planning (FP) clinics could expand HIV prevention coverage among adolescent girls and young women (AGYW). Stakeholder perspectives could inform effective, client-centered implementation strategies. We conducted a qualitative study to gather insights on potential strategies for integrating novel PrEP products into FP clinics for AGYW.

Methods: Between April and October 2024, we conducted focus group discussions (FGDs) and in-depth interviews (IDIs) with AGYW, healthcare providers, and program leaders in Kiambu and Murang'a Counties, Kenya. Eligible AGYW were aged 18-35 years and had experience receiving FP or PrEP services. Providers and program leaders were aged ≥18 years and had experience with reproductive health (RH) or HIV service delivery or coordination. Semi-structured interview guides were informed by the Consolidated Framework for Implementation Research. Data were analyzed thematically to explore perspectives on implementation strategies for novel PrEP products.

Results: 68 respondents (34 AGYW, 27 providers, 7 program leaders) participated in 8 FGDs and 20 IDIs. AGYW's median age was 24 years (IQR:22-27), 94% reported prior contraceptive use, and 82% reported oral PrEP use. Median age among providers and program leaders was 43 years (IQR:37-49), 85% were female, and included nursing managers (n=14), nurses (n=10), and program leaders (n=7). Providers and program leaders perceived CAB as compatible with routine injection workflows and provider skills. They reported that DVR would require intensive counselling on efficacy and comfort, and there was uncertainty around insertion technique. Furthermore, they highlighted clinic-level constraints to delivering both products, including limited private space, siloed HIV testing and FP services, unclear novel PrEP HIV retesting/refill protocols, commodity security plans, documentation gaps, and declining donor-supported HIV testing staffing. Participants proposed multi-level implementation strategies, including counselling supported with demonstrations—especially for DVR—and short videos, posters, and neutral product-choice counselling material. Providers and program leaders emphasized the need for clear national- and county-level approvals and guidelines, including product administration and HIV testing, standardized standard operation procedures, job aids, and updated documentation systems that include the new products. Additionally, they highlighted the importance of free or low-cost, uninterrupted product supply that could be supported by task-sharing policies, competency-based provider training, county-level procurement, and subsidy plans. Furthermore, participants proposed creating PrEP delivery spaces characterized as stigma-free and youth-friendly, including 'one stop' models within FP clinics, by having neutral signage, peer champions, and focal persons to coordinate integrated PrEP services. AGYW particularly emphasized facilitators that included clear product-choice counselling and reassurance, privacy, flexible clinic hours, decentralized service access, youth-friendly providers, and autonomy to choose products that fit their lifestyle and comfort. Providers and program leaders recommended early engagement of facility and county leadership to secure buy-in and resources, and community engagement using multi-channel, tailored strategies to generate demand for the products.

Conclusions: Integrating novel PrEP products into FP clinics for AGYW requires multi-level implementation strategies addressing AGYW-

specific counseling needs, clinic infrastructure, provider training and task-sharing, national and county-level guidance on product administration and HIV testing protocols, and sustainable commodity and financing plans.

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Understanding Severe Maternal Infections and Impacting Health Outcomes in Malawi: A Mixed-Methods Implementation Science Study

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Background: Maternal infections and sepsis are leading drivers of mortality in Sub-Saharan Africa (SSA), contributing to nearly 50% of maternal deaths in countries like Malawi. Despite identifying high-prevalence regions, health systems face pressure from antimicrobial resistance (AMR), limited high-quality data, and delays in both patient presentation and clinical response. These constraints hinder timely diagnosis and effective policy formulation required to prevent and manage infections in pregnant and recently pregnant women. This study aimed to investigate the aetiology and epidemiology of maternal infections in Malawi and to describe an intervention designed to mitigate adverse outcomes.

Objectives: (1) to systematically review the aetiology and AMR patterns of maternal bacterial infections in Sub-Saharan Africa; (2) to assess incidence rates and factors contributing to severe maternal infection (SMI) in Malawi; and (3) to retrospectively develop a comprehensive hypothesised program theory for infection prevention and management.

Methods: This study used an implementation science mixed-methods approach. First, a systematic review and meta-analysis of maternal bacterial infections and AMR patterns across SSA was conducted. Second, nested within the Active-Prevention- and-Treatment of Sepsis Trial in Malawi, incidence rates and risk factors for SMI were calculated using 11 months of baseline data (March 2023–February 2024). Third, a retrospective logic model for infection prevention and management was developed through a seven-step synthesis of over ten years of formative work, utilising the Capability-Opportunity-Motivation Behavioural change model, the Theoretical Domains Framework, and the Behaviour Change Technique taxonomy.

Results: The systematic review (n=2,575 women) identified mixed-growth (17%) and E. coli (11%) as the most common isolates across blood, urine, and wound samples, with AMR rates ranging between 19% and 77%. In the Malawian cohort, the median incidence of SMI was 1,577 per 100,000 live births, peaking at 2,271 in July 2023. Higher risk likelihood amongst women with SMI was in those in the postnatal period, with a history of miscarriage/abortion, and inter-facility transfer. SMI was associated with service readiness and availability gaps, specifically: lack of ambulances (OR 4.1), limited glove availability (OR 2.3), and shortages of antibiotics like clindamycin (OR 2.6) and ciprofloxacin (OR 1.8). The resulting logic model successfully mapped these barriers to specific behaviour change techniques and mechanisms of action.

Discussion: The findings highlight an intersection between clinical and structural health system failures. The peak in SMI rates suggests that resource allocation must be dynamic. The strong association between SMI and lack of basic supplies (gloves, transport, specific antibiotics) underscores that clinical guidelines alone are insufficient without improved service readiness and availability.

Conclusion: This study provides a granular understanding of the SMI burden in Malawi. By integrating epidemiological data with a program theory, it offers a blueprint for SMI interventions that target both clinical behaviour and health system gaps.

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Behavioural Theories Used in the Prevention, Management and Control of Non-Communicable Diseases among People Living with HIV (2003-2025): A Scoping Review

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Background: As people living with HIV (PLHIV) increasingly experience non-communicable diseases (NCDs), sustained behavioural change is essential for effective integrated HIV–NCD care. Behavioural theories provide structured approaches for understanding health behaviours and designing interventions; however, the extent to which these theories have informed interventions for NCD prevention and management among PLHIV remains unclear. This scoping review aimed to identify behavioural theories and frameworks used in the prevention and management of NCDs among PLHIV and to describe gaps in their application.

Methods: We conducted a scoping review following the PRISMA Extension for Scoping Reviews (PRISMA-ScR). Four electronic databases (PubMed, Scopus, Global Health and Web of Science) were searched for studies published between 2003 and 2025. Eligible studies examined the application of behavioural theories, frameworks or behavioural constructs in the prevention or management of non-communicable diseases among people living with HIV. Two reviewers independently screened studies and extracted data using a standardised data-charting form, with findings synthesised narratively.

Results: Of 1,638 records identified, five studies met the inclusion criteria. Three studies (60%) used quantitative methods and two (40%) used mixed methods. The most frequently applied behavioural frameworks were Social Cognitive Theory (n = 2; 40%), Theory of Reasoned Action/Planned Behaviour (n = 2; 40%), and the Behaviour Change Wheel/COM-B (n = 2; 40%), while the Health Belief Model (n = 1; 20%) and Andersen's Behavioural Model (n = 1; 20%) were each identified in a single study. Most studies focused on physical activity and cardiovascular disease prevention (2/5; 40%) or HIV testing behaviours (2/5; 40%), while only one study (1/5; 20%) examined integration of hypertension care within HIV services, highlighting the limited application of behavioural frameworks to integrated HIV–NCD care. No study applied the Theoretical Domains Framework

Conclusion: Behavioural theory remains underutilised in HIV–NCD research. Future implementation research should adopt comprehensive behavioural frameworks, including the Theoretical Domains Framework, to guide intervention design, implementation and evaluation within integrated HIV–NCD care.

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Heterogeneity of Facility-Level Health System Readiness and Association with Early Continuation of Long-Acting Injectable PrEP in Malawi

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Background: Pre-exposure prophylaxis (PrEP) is a cornerstone of HIV prevention. Difficulties with adherence to highly efficacious daily oral PrEP pills have presented challenges to program effectiveness. Long-acting injectable Cabotegravir (CAB-LA), administered by trained providers every eight weeks offers an alternative to daily adherence, with potential to improve PrEP continuation rates. This analysis leveraged the ongoing rollout of CAB-LA in Malawi to assess how facility level readiness characteristics influence the continuation rates of CAB-LA.

Methods: Facility readiness and routine program data on CAB-LA continuation were collected from 36 facilities across Blantyre and Lilongwe participating in the PathToScale study, which has evaluated the rollout of CAB-LA in Malawi since program launch in March 2024. From May 2025-June 2025, readiness for CAB-LA roll-out was measured using a Facility Assessment (FA) tool. Facility-level continuation rates at one month were assessed using program data and defined as the number of clients returning for their first follow-up visit at 1-month after CAB LA initiation. Readiness scores are reported for six domains: 'Physical Facility' (infrastructure and environmental conditions), 'Service' (availability of a stand alone PrEP clinic), 'Management/Supervisor' (proper data management and oversight), 'Prevention' (service delivery and re-engagement strategies), 'Pharmacy' (proper medication management), and a z-normalized composite score across all domains. Association between facility readiness and CAB-LA continuation was assessed using a negative binomial model to estimate adjusted incident rate ratios (aIRR) and 95% confidence intervals (CI).

Results: Readiness scores varied across domains, with the mean proportion of indicators met ranging from 38% (Service) to 98% (Pharmacy), with Physical Facility (79%), Prevention (79%), Management (77%), and Training (87%) falling between. Overall, 44.5% of clients on CAB-LA met the definition of continuation (1,256 out of 2,823 eligible clients). The six individual readiness domains were not associated with 1-month continuation rates at the facility level in crude analyses. When all domains were included in the adjusted model, 'Physical Facility' readiness was positively associated with CAB-LA continuation (aIRR:1.09, CI:1.02–1.17), while 'Pharmacy' readiness was inversely associated (aIRR: 0.91, CI:0.85–0.98).

Conclusion: Although most facilities were ready to implement CAB-LA, overall readiness was not associated with CAB-LA continuation across facilities. However, when considering each domain individually within an adjusted model, 'Physical Facility' readiness showed a positive association and 'Pharmacy readiness' showed a negative association, suggesting domain-specific effects may only emerge when shared variance across domains is accounted for. Higher physical facility scores suggest that there is easier access to the facilities (such as distance from main road), reducing a key barrier for clients seeking PrEP services. Pharmacy had an inverse relationship with continuation, though this may reflect a ceiling effect due to having the lowest variability and highest domain score. The FA tool does not capture factors such as client experience or provider behavior, suggesting that structural capacity alone may not be a driver of continuation and other features around the client experience may be considered when evaluating continuation.

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Integrating HIV Care and Zoonotic Surveillance: Insights From a Monkeypox Case in a Newly Diagnosed HIV Patient

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Background: Monkeypox is an emerging zoonotic viral infection of increasing public health concern in Nigeria, particularly among immunocompromised individuals. The epidemic-prone disease re-emerged in Nigeria in September 2017, accompanied by diagnostic and management challenges. Integration of HIV care and zoonotic surveillance is important for reducing missed opportunities and strengthening health systems, particularly in resource-limited settings. Thus, we report a case of suspected monkeypox in a newly enrolled HIV-positive patient.

Objectives: Highlight the importance of integrating HIV care with zoonotic disease surveillance for improved detection, timely treatment and strengthened health systems.

Methods/Approach: A 40-year-old man was diagnosed HIV-positive earlier in November 2024 but had not commenced antiretroviral therapy (ART). The patient presented to the Infectious Disease Hospital, Kano, with a generalized itchy maculopapular rash on 13 November 2025. There was a positive history of bush meat consumption. Initial suspicion of monkeypox prompted isolation and supportive management while awaiting confirmatory testing. ART initiation, adherence counselling and empirical therapy were integrated into care. The surveillance team confirmed Monkeypox on 19 November 2025, and the patient showed clinical improvement, with regression of rashes and stabilization on ART. This case reveals challenges diagnosing and managing HIV co infections in resource limited settings. Early suspicion, isolation and ART initiation improved outcomes, underscoring diagnostic gaps and need for HIV–zoonotic coordination.

Results/Lessons Learned: Improving the capacity to detect and manage co-infections promptly can be achieved by strengthening diagnostic infrastructure and integrating workflows throughout the hub-and-spoke model. Policy initiatives should focus on training providers to identify zoonotic risks in immunocompromised populations and facilitate prompt access to HIV care.

Conclusion: Future studies should examine the possibility of integrating HIV screening with zoonotic disease surveillance in community-based settings. This approach might assist in early detection of zoonotic co-infections, which could significantly reduce morbidity and mortality.

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Too Few Hands: Workload, Workforce Strain and the Limits of Integrated HIV Care in African Healthcare Facilities

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Background: Accessible, high-quality HIV treatment and care depends on sufficient numbers of trained frontline healthcare providers. Yet frontline teams are increasingly expected to deliver integrated "one-stop-shop" services that respond to multiple health needs within a single visit, while often working in settings marked by severe understaffing, high patient volumes, limited resources and a high burden of disease.

Material and Methods: Between June and November 2025, PATA conducted annual comprehensive assessments across 247 supported healthcare facilities in 11 African countries (Angola, Cameroon, Eswatini, Kenya, Malawi, Mozambique, Nigeria, South Africa, Tanzania, Zambia and Zimbabwe). Healthcare provider teams completed structured questionnaires with PATA technical assistance support, providing self-reported data on service delivery, staffing, patient volumes, programme implementation and support needs. Data were reviewed, cleaned and analysed to describe facility profiles, identify implementation gaps and inform programme priorities.

Results: Reported nurse workload was substantial and varied by facility level. Overall, nurses managed an average of 31 clients per day, with workload greatest in primary care facilities. Daily nurse caseload averaged 33 clients in primary care facilities (n=146), compared with 28 in secondary care facilities (n=84) and 20 in tertiary care facilities (n=17). The highest reported nurse workloads were observed in Mozambique and South Africa, where nurses saw an average of 43 and 42 clients per day, respectively. Across the 247 healthcare facilities, 138 frontline healthcare providers were reported to have been absent for more than one day in the previous week. Absenteeism was most pronounced in primary facilities, where 118 frontline healthcare providers were reported absent across 146 primary facilities. The highest rates of absenteeism were reported in Mozambique and South Africa. In Mozambique, 55 healthcare facilities reported 68 nurses absent for more than one day in the previous week, while in South Africa, 20 healthcare facilities reported 40 nurses absent. Staff turnover emerged as an additional pressure on service delivery. One-third of healthcare facilities (33%; n=83) reported that at least one frontline healthcare provider had resigned in the previous 12 months. Reported resignations were particularly common in South Africa (19/20 clinics), Nigeria (22/44), Mozambique (21/55), and Malawi (5/14), suggesting that workload pressures were compounded by ongoing staff losses in several settings.

Conclusions: These findings confirm high patient workloads across supported healthcare facilities and suggest a reinforcing relationship between service volume, staff strain and reduced workforce availability. High workload may contribute to burnout, absenteeism and staff turnover; in turn, reduced staffing further increases pressure on remaining providers. Reported turnover may also reflect compounded pressures on frontline healthcare provider teams, including wider health-system shocks following the 2025 withdrawal of U.S. funding for HIV programmes, particularly in countries and facilities previously reliant on partner-supported staffing. In overworked, understaffed and under-resourced environments, expectations for further service integration may be unrealistic without additional staffing, retention strategies, stable financing and system support to protect high-quality, person-centred HIV treatment and care.

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Expanding HIV Care and Treatment Services during Shortage of Donor Funding through Decentralised Drug Distribution at AIDS Health Care Foundation Lihananandza Clinic - A Resource Limited Setting: Lesson Learnt

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Background: Shortage in the President's Emergency Plan for AIDS Relief (PEPFAR) threaten the sustainability of HIV care and treatment in resource limited settings. In 2025 many PEPFAR supported HIV clinics were closed, AHF Lihananandza clinic in the Northern Hhohho region of Eswatini had to absorb clients who were seen for community ART refills by organisations like Aspire, FHI to name a few. This initiative was done to ensure Eswatini still maintains the 95-95-95 UNAIDS targets. We aim to evaluate decentralised drug distribution during shortage of donors in order to sustain HIV care and treatment services at AHF Lihananandza Clinic.

Methods: We retrospectively evaluated data for clients recruited on decentralised drug distribution since June 2025-June 2026 at AHF Lihananandza clinic a specialized HIV clinic with 1500 clients accessing antiretroviral therapy services. The facility has 8 outreach sites and servicing 464 clients which is 31% of all clients currently on treatment with. All clients seen on outreach are given 6 months ART refill. Clients seen on outreach are from ages 20-75 years. Services provided on outreach include ART refill, non-communicable disease screening, short term family planning commodities (injectable and oral contraceptives), TB preventive therapy, cotrimoxazole preventive therapy, viral load and other laboratory tests monitoring to all stable clients. Decentralised drug distribution significantly reduces facility congestion, client's cost of travelling and waiting times which directly contribute to good adherence, retention, viral coverage and viral suppression thus leading to reduced new HIV infections.

Results: A total of 464 clients were recruited on outreach, 74% females and 36% males, most of the clients seen were females between 51-60 years that is 24%. All clients seen on outreach were virally suppressed. The decentralised drug distribution yielded 30% facility census growth by end of 2025, 97% viral suppression, less than 30 minutes clients waiting times, less than 5% lost to follow up rate which improves quality of care.

Conclusion: Decentralised drug distribution has transformed HIV care and treatment services at AHF Lihananandza clinic by improving patients' outcomes thus improving life span of clients living with HIV.

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High-Coverage Telehealth Education for HIV-Related NCD Comorbidities in a District Clinic Setting

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Background: Among people living with HIV (PLWH), non-communicable disease (NCD) comorbidities—including depression and hypertension—remain under-detected and inadequately addressed, particularly in settings where stigma limits participation in group-based education. At Siha District Hospital HIV clinic, serving 418 PLWH, persistent barriers to group assembly necessitated an alternative education delivery model.

Methods: A telephone-based NCD education program was implemented targeting 250 PLWH (60% of the clinic population), designed and coordinated by the District Research and Mental Health Office. Five trained healthcare providers conducted three sequential outreach cycles, delivering individualized education during evenings and weekends to accommodate employment-related constraints. Educational content focused on HIV–NCD comorbidities (mental health and hpertension), symptom recognition, and antiretroviral therapy (ART) adherence strategies. A dedicated clinic phone line supported post-session follow-up. Care and Treatment Clinic (CTC) clinicians monitored clinic attendance patterns before and after implementation.

Results: The intervention reached 210 of 250 targeted clients (84%) across three cycles. On average, 40 clients per cycle (16%) were unreachable, primarily due to work-related scheduling conflicts. Depression and hypertension were the most frequently identified comorbidities, including cases not previously documented during routine clinic visits. CTC clinicians reported improved clinic attendance following implementation, suggesting enhanced engagement in HIV care. Clients actively utilized the follow-up phone line, indicating high acceptability of the telehealth approach.

Conclusion: High-coverage telephone-based NCD education was feasible and effective in reaching PLWH despite stigma and structural barriers that impeded group-based delivery. Achieving 84% reach demonstrates that HIV clinics should not delay NCD education while awaiting group formation. Evening and weekend telehealth outreach represents a pragmatic, stigma-resilient strategy for early comorbidity detection and improved engagement in HIV care.
HIV programs should consider integrating individualized telephone outreach alongside groupbased approaches to accelerate NCD integration and support sustained ART adherence.

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Strengthening TB Case Detection among PLHIV through Structured Quality Improvement in a Resource-Limited Facility: Lessons from General Hospital Ikem in Enugu State

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Background: Tuberculosis (TB) remains a leading cause of morbidity and mortality among people living with HIV (PLHIV). Despite national guidelines recommending routine TB screening during clinical encounters-and prompt treatment initiation, implementation challenges often lead to missed diagnoses, delayed treatment and poor documentation. In April 2024, a retrospective review of program data at General Hospital Ikem, Enugu State, revealed zero TB case detection among PLHIV indicating critical gaps in screening and treatment processes. Given that routine screening of PLHIV is expected to identify presumptive TB cases for diagnostic evaluation. This necessitated a structured quality improvement (QI) intervention.

Methodology: A structured quality improvement (QI) intervention was implemented from May to July 2024. A root cause analysis using a fishbone diagram identified key barriers including fragmented clinic flow, weak accountability, and inadequate documentation. Utilizing a driver diagram, targeted change strategies were developed, employing Plan-Do-Study-Act (PDSA) cycles for iterative learning. Interventions included restructuring clinic flow to ensure comprehensive TB screening for all PLHIV, staff reorientation on TB/HIV guidelines, enhanced documentation practices, and weekly performance monitoring through run charts. From August 2024 to September 2025, performance was monitored longitudinally to assess sustainability. Between October 2025 and January 2026, a portable digital X-ray (PDX) system was introduced to enhance TB screening and diagnosis.

Results: During the intervention period between May to July 2024, 162 PLHIV were screened, resulting in the identification of 16 presumptive TB cases and the initiation of treatment for 3 confirmed TB-positive clients. This marked an increase in TB/HIV identification and treatment performance from 0% to 60%, applying the target benchmark of 5. Sustainability monitoring from August 2024 to September 2025 revealed an additional 4 TB/HIV coinfected clients diagnosed and treated, despite minor declines due to staff shortages and equipment downtime. The integration of a PDX digital chest X-ray system from October 2025 to January 2026 further enhanced diagnostic capabilities, identifying 5 additional coinfected clients.

Conclusion: The QI intervention complemented by technological integration successfully transformed a previously ineffective TB/HIV program into a sustainable service delivery model. These findings underscore the effectiveness of context-responsive strategies in translating evidence into measurable health outcomes and strengthening health systems in resource-limited settings.

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Progress in Rapid ART and Tuberculosis Preventive Treatment Initiation among People Enrolled into HIV Care from 2013–2021 in 60 PEPFAR-Supported Health Facilities in Nigeria

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Background: Tuberculosis (TB)—while preventable—remains the leading cause of death among people living with HIV (PLHIV). In 2017, global guidelines recommended initiating antiretroviral therapy (ART) within 7 days of HIV diagnosis ("rapid ART") to reduce morbidity and mortality. The 2018 United Nations High-Level Meeting on TB endorsed provision of TB preventive treatment (TPT) to all eligible PLHIV. We aimed to assess implementation of these recommendations in Nigeria and identify trends to inform service delivery.

Material and Methods: We analyzed electronic medical records data for a random sample of PLHIV newly enrolled into HIV care at 60 health facilities across 9 Nigerian states, using multistage probability sampling based on states, local government areas, and facilities with the highest proportion of PLHIV. We categorized participants into cohorts by year of enrollment into care (2013–2016, 2017–2018, and 2019–2021) to compare programmatic indicators before, during, and after implementation of "rapid ART" and TPT scale-up. We assessed differences in demographic and clinical indicators, including ART and TPT initiation, across cohorts using Kruskal-Wallis rank sum and Pearson's chi-square tests. We conducted a multivariate logistic regression analysis to assess characteristics associated with higher odds of initiating ART after 7 days, adjusting for sex, age, state, cohort, and baseline WHO clinical stage.

Results: Among 12,739 PLHIV, the proportion initiating ART within 7 days of enrollment increased from 49% (2013–2016) to 78% (2017–2018) then 99% (2019–2021) (p <0.001). Eighty-three percent of PLHIV enrolled during 2013–2016 initiated TPT compared with 80% who enrolled during 2017–2018 and 96% during 2019–2021 (p <0.001). Seventy-two percent of PLHIV who enrolled during 2013–2016 were in WHO clinical stage 1, compared with 75% of those enrolled during 2017–2018 and 95% during 2019–2021. First recorded viral load was suppressed (≤1000 copies/mL) for 80% and 78% of PLHIV enrolled during 2013–2016 and 2017–2018, respectively, versus 91% of those enrolled during 2019–2021. Additionally, 24% and 22% enrolled during 2013–2016 and 2017–2018 had BMI <18.5 kg/m2 versus 9% enrolled during 2019–2021. The likelihood of initiating ART >7 days after enrollment was lower for PLHIV enrolled during 2017–2018 (adjusted odds ratio [aOR] 0.26, confidence interval [CI] 0.22−0.30) or 2019–2021 (aOR 0.02, CI 0.01−0.02). Odds of initiating ART >7 days were higher among people 35−44 years (aOR 1.25, CI 1.08−1.45) and >55 years (aOR 1.67, CI 1.24−2.25), relative to people 25−34 years. PLHIV in WHO stage 2 or 3 had higher odds (1.48 [1.24−1.76] and 1.67 [1.31−2.12]), relative to those in stage 1. Odds varied across states from 1.38 to 4.01.

Conclusions: The increasing rapidity of starting ART and increasing TPT coverage among PLHIV are promising trends given the known benefits on reducing morbidity and mortality. The decreasing proportions of PLHIV with clinical indicators suggestive of advanced disease could indicate programmatic improvements leading to earlier diagnosis. Our findings that older age and higher WHO stage were associated with delayed ART initiation can inform strategies for tailoring services to specific sub-groups.

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Declines in HIV Testing, HIV-Positive Tests and ART Initiation in 2025 versus 2024 after PEPFAR Disruptions in Gauteng, South Africa

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Background: South Africa's HIV programme has historically been supported by PEPFAR through USAID and CDC implementing partners. In late January 2025, a halt in PEPFAR support resulted in programme disruptions, followed by withdrawal of USAID support in key districts. CDC-supported activities partially resumed from March 2025 but remained under threat throughout 2025. We assessed changes in HIV testing, HIV-positive tests, and ART initiations in Gauteng before and after changes in PEPFAR support.

Methods: Routine DHIS monthly data for HIV tests, HIV-positive tests, and ART initiations from January 2023 to December 2025 were analysed using calendar-month-adjusted Poisson regression with district fixed effects. Rate ratios (RRs) compared 2024 versus 2023 and 2025 versus 2024. Ratio-of-rate ratios (RoRR=RR2025vs2024/RR2024vs2023) were used to determine whether declines in 2025 accelerated beyond pre-existing trends.

Results: Comparing 2025 with 2024 for Gauteng province, HIV testing declined by 7.7% (-423,239 tests), HIV-positive tests by 26.5% (-29,098 diagnoses), and ART initiations by 26.7% (-24,928 initiations). These reductions substantially exceeded those observed between 2024 and 2023 (-0.8%, -14.5%, and -13.2%, respectively), with significant acceleration in declines between 2025 and 2024 relative to the preceding year for all three outcomes (RoRR 0.93, 95%CI 0.89–0.96; 0.74, 0.71–0.77; and 0.74, 0.70–0.77, respectively; all p<0.001).

Declines emerged rapidly following programme disruptions, with HIV-positive tests and ART initiations decreasing by 27.8% and 29.0%, respectively, in Q1 2025 compared with Q1 2024, and persisted through Q4 (25.1% and 25.6% lower, respectively). HIV test positivity declined from 1.99% in 2024 to 1.58% in 2025.

Reductions in HIV-positive tests and ART initiations were observed across all Gauteng districts. Among the two previously USAID-supported districts, Johannesburg had the lowest rate ratios for HIV-positive tests (RR 0.60, 95%CI 0.58–0.63) and ART initiations (RR 0.59, 95%CI 0.57–0.62) in 2025 compared with 2024 and demonstrated the greatest acceleration in declines relative to the preceding year (RoRR 0.69, 95%CI 0.65–0.72 and 0.68, 95%CI 0.65–0.71, respectively). In contrast, Sedibeng maintained HIV testing volumes (RR 1.06) despite declines in HIV-positive tests (RR 0.70) and ART initiations (RR 0.68). Declines were also observed in the previously CDC-supported districts of Tshwane (HIV-positive tests RR 0.61; ART initiations RR 0.65) and Ekurhuleni (RR 0.63 and RR 0.64, respectively), and in the previously unsupported West Rand district (RR 0.76 and RR 0.75, respectively).

Conclusions: Substantial reductions in HIV case finding and ART initiation were observed across five Gauteng, emerging in early 2025 following PEPFAR programme disruptions and persisting throughout the year. Similar declines in HIV-positive tests and ART initiations indicate this does not primarily reflect reduced linkage to treatment. Larger declines in HIV-positive tests than HIV testing, together with reduced positivity, suggest diminished effectiveness and targeting of HIV testing services. Declines across districts with differing prior support models suggest both direct effects of implementing partner withdrawal and broader system-wide impacts. These findings highlight an urgent gap in HIV testing and treatment initiation following reductions in PEPFAR support and raise concerns that further declines may occur as external HIV programme support continues to contract.

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Integrating Psychosocial Assessment and Nurse-Led Navigation Into HIV Care in China: A Rapid Evidence Synthesis and Implementation Gap Analysis

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Background: China has made substantial progress in HIV treatment, yet psychosocial distress, stigma, suicide risk, and unequal access to non-HIV and HIV-focused care remain important barriers to sustained engagement. By the end of 2023, China had reported nearly 1.3 million people living with HIV, underscoring the need to move beyond biomedical care toward integrated, person-centred, and sustainable service delivery.

Methods: We conducted a rapid evidence synthesis of peer-reviewed systematic reviews, meta-analyses, cross-sectional studies, and national surveillance reports on people living with HIV in China. Evidence was prioritized when it reported pooled estimates, psychosocial determinants, healthcare access barriers, or implementation-relevant findings. Findings were mapped to an implementation-oriented nursing care framework covering psychosocial screening, suicide risk assessment, stigma-sensitive communication, social support navigation, and referral coordination.

Results: Published evidence indicates a substantial psychosocial burden among people living with HIV in China. A systematic review and meta-analysis of 74 observational studies including 20,635 participants estimated the pooled prevalence of depression or depressive symptoms at 50.8% among general people living with HIV. A separate meta-analysis of 28 studies including 1,433,971 participants reported pooled prevalence estimates of 30% for suicidal ideation, 5% for suicide attempt, 8% for suicide plan, and 3 per 1,000 for completed suicide. High stigma, depression, anxiety, low self-esteem, HIV-related stress, and unemployment were identified as risk factors for suicidal ideation, while higher social support was protective. Evidence on healthcare access further showed that 20% of people living with HIV reported illness in the previous two weeks without medical consultation, and 30% refused hospitalization when needed in the previous year. Frequently reported barriers included financial constraints, discrimination, medical distrust, treatment side effects, limited HIV-related knowledge, transportation difficulties, and weak linkage between clinical and community resources.

Conclusions: The Chinese HIV care system faces an implementation gap between long-term biomedical treatment and the psychosocial, social, and navigation needs of people living with HIV. A nurse-led integrated care model should embed routine depression and suicide risk screening, stigma-sensitive counselling, adherence and side-effect support, digital follow-up, and referral to mental health and community resources within HIV clinics. Implementation research should test feasibility, fidelity, acceptability, and sustainability of this model across hospital and community settings in China.

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Improving TB Preventive Therapy Uptake among PLHIV on ART: Evidence from Routine Program Data in Anambra State

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Background: Tuberculosis (TB) remains a leading cause of morbidity and mortality among people living with HIV (PLHIV). TB preventive therapy (TPT) is a proven intervention to reduce the risk of active TB among PLHIV receiving antiretroviral therapy (ART). This study analyzed routine program data to assess trends and performance of TPT uptake among PLHIV on ART in Anambra State in 2025.

Methods: A retrospective analysis of monthly routine service data from January to December 2025 was conducted. The number of PLHIV currently receiving ART (denominator) and the number who initiated TPT during the reporting period (numerator) were extracted. Monthly TPT uptake rates were calculated as the proportion of PLHIV on ART who initiated TPT. Data on the number of clients who initiated TPT and subsequently developed active TB were also reviewed.

Results: The number of PLHIV receiving ART increased steadily from 47,210 in January to 52,172 in December 2025, reflecting sustained program expansion (10.5% growth).
TPT uptake remained consistently high throughout the year, with monthly coverage ranging from 92.1% (February) to 98.5% (March). Performance exceeded 94% in 11 of 12 months and improved progressively in the last quarter, reaching 98.3% in December. The overall average TPT uptake for 2025 was approximately 96%.
Importantly, among all PLHIV who initiated TPT during the reporting period, zero cases of active TB were recorded, suggesting strong adherence to TB screening protocols prior to TPT initiation and effective preventive therapy implementation.

Conclusion: Anambra State's 2025 data show consistently high TPT uptake among PLHIV on ART, with further gains toward year-end. Improvements were driven by data use, supportive supervision, and stronger TB/HIV integration. Sustaining this coverage is key to reducing TB incidence and meeting national targets.

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The Cost of Policy Decisions: HIV Care Disruptions Following Donor Funding Cuts in Eswatini

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Background: Eswatini has made substantial progress toward HIV epidemic control, largely through donor-supported HIV prevention, testing, and treatment programs. In January 2025, abrupt reductions and cessation of United States government funding through the President's Emergency Plan for AIDS Relief (PEPFAR) resulted in the suspension of HIV-related activities by several non-governmental organizations (NGOs), disrupting service delivery across the country. Such disruptions have the potential to interrupt treatment continuity, increase loss to follow-up, and undermine gains achieved in HIV epidemic control. Understanding the effects of funding-related service disruptions is critical for informing health system resilience and continuing planning. This study examined the early programmatic effects of donor funding cuts on continuity of HIV care at AHF LaMvelase Clinic in Eswatini.

Methods: A retrospective programmatic analysis was conducted using routine clinic data from ART initiation registers at AHF LaMvelase Clinic. Data from January–December 2024 (pre-funding cuts) were compared with data from January–December 2025 (post-funding cuts). Client initiation status (new ART initiation versus ART re-initiation) was extracted and analyzed. Differences in ART re-initiation between the two periods were assessed using the chi-square test. Reasons for treatment interruption and re-engagement in care were obtained from routine clinical documentation and patient reports.

Results: Total new enrollments, excluding transfer-ins, increased from 128 in 2024 to 186 in 2025. ART re-initiations increased significantly from 21% (27/128) in 2024 to 45% (84/186) in 2025 (χ^2 = 19.12, df = 1, $p < 0.0001$). Among clients who re-initiated ART in 2025, approximately 80% reported treatment interruption following the closure of their previous service delivery sites, inadequate information regarding alternative treatment facilities, or reduced access to HIV services during the transition period. The increase in ART re-initiations, together with the rise in new enrollments, suggests substantial migration of clients toward facilities that remained operational following the funding reductions. These findings indicate significant disruption of HIV service continuity and demonstrate the impact of funding-related service interruptions on treatment retention and re-engagement in care.

Conclusion: Abrupt reductions in donor funding were associated with significant disruptions in HIV service delivery, resulting in increased demand for services at AHF LaMvelase Clinic and a marked rise in ART re-initiations. The findings suggest that treatment interruptions and patient displacement occurred following the closure or suspension of services at some donor-supported facilities. These results highlight the vulnerability of HIV programs to funding shocks and underscore the need for robust contingency planning, coordinated client transition mechanisms, and sustainable domestic financing strategies to maintain continuity of care and protect patient outcomes in high HIV-burden settings. The findings further demonstrate the importance of resilient health systems capable of maintaining uninterrupted HIV services during major funding transitions and policy changes.

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From Policy to Practice: Evaluating Implementation of National Guidance for Differentiated Service Delivery and Integrated HIV Care for Adolescents Living with HIV in Rural Zimbabwe

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Background: Zimbabwe introduced the 2022 Operational and Service Delivery Manual (OSDM) to strengthen differentiated service delivery (DSD) and integrated HIV care for adolescents living with HIV (ALHIV). However, little is known about how these recommendations have translated into routine rural HIV service delivery. We evaluated implementation of the adolescent components of the national guidance and explored factors influencing implementation in rural Zimbabwe.

Methods: We conducted an explanatory sequential mixed-methods implementation evaluation across 16 rural health facilities in Bikita and Zaka districts, Zimbabwe, between October 2024 and August 2025. Routine clinical data were analysed alongside semi-structured interviews and focus group discussions with ALHIV aged 10–19 years and healthcare workers. Quantitative and qualitative findings were integrated to evaluate implementation of adolescent DSD, service integration and contextual factors influencing implementation.

Results: Among 315 ALHIV receiving ART (52% male; median age 15 years), 229 (73%) met national eligibility criteria for DSD. One adolescent (0.4%) was formally documented as enrolled in a DSD model, and four-month ART dispensing was recorded for 6% of adolescents. Family planning services were documented for six adolescents, mental health screening for ten, substance use services for one and non-communicable disease services for none. Qualitative findings identified peer-group approaches, integrated care and adolescent-specific service arrangements as facilitators of implementation. Limited awareness of DSD models, stigma, clinic-school scheduling conflicts, lack of private adolescent spaces and fragmented documentation systems were identified as implementation constraints.

Conclusion: Implementation of national guidance for adolescent DSD and integrated HIV care remained limited despite widespread policy eligibility. Findings suggest that translating policy into routine practice requires implementation support beyond training alone, including strengthened monitoring systems, adolescent-responsive service delivery, appropriate documentation tools and health system investments that address contextual barriers to implementation.

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Urine Xpert MTB/RIF Ultra in Routine HIV Clinics in Ibadan, Nigeria: Operational Feasibility and Incremental Tuberculosis Detection

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Background: Sputum scarcity in routine HIV care can delay tuberculosis (TB) diagnosis for people living with HIV and reduce equitable access to timely treatment. We integrated urine Xpert MTB/RIF Ultra into HIV clinic workflows and quantified its incremental diagnostic yield compared with sputum Xpert.

Methods: We conducted a six month operational evaluation in three PEPFAR supported HIV clinics in Ibadan, Nigeria. Readiness activities included workflow mapping and training 33 clinic and laboratory staff on consent, specimen handling, documentation, and testing procedures. Consenting PLHIV with presumptive TB provided paired urine and sputum specimens, transported daily for Xpert testing (urine: Ultra; sputum: Xpert). Data were captured in REDCap. Primary outcomes were MTB detection, invalid results, and turnaround time; sputum Xpert served as the programmatic comparator.

Results: Among 111 participants (70.3% female; 98.2% receiving antiretroviral therapy), all provided both specimens. Urine Ultra detected MTB in 12/111 (10.8%) with 3/111 (2.7%) invalid results. Sputum Xpert detected MTB in 3/111 (2.7%) with 1/111 (0.9%) invalid. All sputum positive participants were urine positive, and urine Ultra identified nine additional MTB detections (incremental yield +8.1 percentage points). Median time from specimen collection to result return to clinics was 24 hours. Intermittent commodity stockouts occurred and were mitigated through national program support and proactive stock monitoring.

Conclusions: Integrating urine Ultra into routine HIV clinic workflows was feasible and substantially improved TB detection when sputum is constrained. Scale up should pair technology deployment with robust commodity forecasting, routine monitoring of invalid rates and turnaround time, and clear referral pathways for prompt treatment initiation to strengthen equitable TB diagnosis within integrated TB/HIV services.

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NGO Support in the Context of Global Funding Cuts: Implementing Short-Term Catalytic Support to Reinstate Mobile PrEP Services for Adolescent Girls and Young Women

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Background: HIV care and treatment in South Africa is predominantly government-funded, while prevention services have largely relied on donor support. The abrupt USAID funding cuts in 2025 thus reduced PrEP access, particularly through community delivery, disproportionately affecting groups such as adolescent girls and young women (AGYW).
In this context, Anova Health Institute, a South African non-governmental support partner, implemented a short-term project to reinstate PrEP delivery for AGYW following the funding cuts. The aim was to provide light-touch technical assistance leading to truly sustainable change, catalysing service improvement.
Guided by the i-PARIHS framework, we evaluated project effectiveness, stakeholder receptiveness and context.

Material and Methods: The project was implemented from October 2025 to May 2026, focusing on technical support to improve healthcare worker (HCW) capacity for PrEP provision in mobile clinics. Anova Youth Ambassadors conducted demand creation.
Data sources included two participatory workshops with 1) the Anova project team, and 2) Department of Health (DoH) stakeholders, as well as project reports. Workshops were conducted using a structured guide, incorporating individual and small group discussions to encourage participation and reduce power imbalances. Project reports provided quantitative data on activities and outcomes, alongside narrative insights compiled by the project manager.

Results: The project demonstrated short-term effectiveness, increasing PrEP access and uptake. Mobile PrEP initiations increased from an average of 0 to 140 per month over the project period. AGYW recipients' receptiveness to mobile services varied, with a preference for integrated services. Peers played an important role in influencing uptake. Concerns included side effects, misconception, stigma, and previous negative health system experiences.

HCWs had knowledge gaps regarding PrEP use with contraception, during pregnancy, and renal function assessment. Additional challenges included workload concerns and negative attitudes towards PrEP adherence in AGYW. Receptiveness to Anova support was mixed, affected by limited project scope and support intensively. DoH Managers supported the light-touch approach but raised concerns about the short project duration.

The mobile services intervention improved accessibility and privacy, but challenges with file storage, data capturing, and reporting affected service delivery and monitoring. However, local context, including stigma, judgement, and communication gaps, affected uptake.
Organisational context constraints included limited mobile capacity, operating hours, reporting systems, and stock management.
Related to external context, alignment with national goals was supportive, but funding uncertainty impacted relationships.

Conclusions: The light-touch implementation support approach with onsite mentorship was effective in the short term and reinstated services that had fallen away. The project thus improved AGYW PrEP access.
Organisational complexities led to challenges including stock management, service documentation and monitoring. The DoH was concerned about project scale, duration and single-population focus. Without existing relationships and ongoing effective communication, short-term projects would be difficult to implement.
To expand PrEP access, we recommend extending mobile service hours, strengthening PrEP information, and expanding the model's coverage. A shared understanding of new implementation support models is needed to ensure alignment

among staff, managers, and funders. Long-term continuation assessment is recommended.

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Intergrating HPV Vaccination into Teen Club Services to Improve Uptake among Girls Living with HIV in Eswatini: Lessons from a Quality Improvement Initiative

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Background: Eswatini faces a high burden of cervical cancer among women living with HIV. Although the Ministry of Health introduced the HPV vaccine for girls aged 9-14 years in 2023 and expanded eligibility to those aged 15-20 years in 2025, uptake remained low at AHF Matsapha Clinic. This quality improvement initiative aimed to increase HPV vaccination coverage among girls 9-20 years receiving Antiretroviral therapy (ART), leveraging the existing Teen club platform.

Description: A clinic record review identified 58 eligible girls 9-20 years receiving ART. In April 2026, HPV vaccination services were integrated into the clinic's monthly teen club. ART appointments were synchronised with teen club dates to maximise attendance. Nurses and the psychosocial team maintained a dedicated register, reviewed monthly to track eligibility. Eligible girls received reminder calls before meetings. Caregiver consent was secured beforehand to build trust. Health education was conducted during sessions to improve awareness and actively address HPV vaccination myths.

Lessons Learned: Integrating HPV vaccination into established adolescent care platform improved vaccine uptake, minimized missed opportunities. Key facilitators included:

- leveraging Teen Club for service integration and attendance,
- caregiver engagement and consent
- Systematic tracking through dedicated registers
- Reminder systems for follow-up and dose completion
- Targeted health education to address hesitancy

Following implementation, the first-dose HPV vaccine increased from 10% to 38%, and 15% of eligible girls completed the vaccination schedule. The intervention also strengthened caregiver engagement and awareness of cervical cancer prevention.

Next Steps: Integrating HPV vaccination into adolescent-focused HIV services is a feasible and effective strategy for improving vaccine uptake among girls living with HIV. Expanding this approach to other Teen Clubs and strengthening follow-up systems could increase coverage and help reduce the cervical cancer burden.

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Awareness and Acceptability of Long-Acting Injectable Lenacapavir for HIV Pre-Exposure Prophylaxis among Priority Populations in Gombe State, Nigeria: A Pre-Implementation Assessment

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Background: Long-acting injectable Lenacapavir (LEN) for HIV pre-exposure prophylaxis (PrEP) has the potential to improve HIV prevention by overcoming adherence challenges associated with daily oral PrEP. Understanding awareness and acceptability among priority populations before programme rollout is critical for informing demand creation and implementation strategies. This study assessed awareness of and willingness to use LEN PrEP among priority populations in Gombe State, Nigeria, prior to its anticipated introduction into routine HIV prevention services.

Methods: A facility-based cross-sectional survey was conducted among 300 priority population clients accessing HIV prevention services in Gombe State, Nigeria, between February and March 2026. Data were collected using a structured interviewer-administered questionnaire. Descriptive statistics summarized participants' socio-demographic characteristics, priority population typology, awareness of LEN PrEP, and willingness to use the intervention. Pearson's Chi-square test was used to assess associations between participant characteristics and willingness to use LEN PrEP, with statistical significance set at $p<0.05$. Data were analysed using Stata version 18.

Results: The mean age of participants was 33.0 ± 9.2 years, and 54.0% were female. Participants comprised 111 (37.0%) serodiscordant couples, 59 (19.7%) female sex workers (FSWs), 58 (19.3%) men who have sex with men (MSM), 31 (10.3%) people who inject drugs (PWID), and 41 (13.7%) participants from other priority population groups. Only 52 (17.3%) participants had previously heard of LEN PrEP as an HIV prevention option. Following a standardized explanation of the intervention, 292 (97.3%) expressed willingness to use or support LEN PrEP, demonstrating exceptionally high acceptability despite limited baseline awareness. Prior awareness of LEN PrEP was not significantly associated with willingness to use the intervention ($\chi^2=1.11$, $p=0.292$). Willingness to use LEN PrEP did not differ significantly across priority population typologies ($\chi^2=6.60$, $p=0.471$), indicating consistently high acceptability among MSM, FSWs, PWID, serodiscordant couples, and other priority groups. Educational attainment demonstrated a borderline association with willingness ($\chi^2=9.37$, $p=0.052$), while sex was not significantly associated with awareness of LEN PrEP ($\chi^2=1.52$, $p=0.679$).

Conclusions: Awareness of LEN PrEP was low among priority populations before programme rollout; however, acceptability was exceptionally high after participants received information about the intervention. High willingness to use LEN PrEP across all priority population typologies suggests strong potential for successful programme uptake following introduction. Targeted community education, peer-led demand creation, and provider counselling will be essential to improve awareness and facilitate early adoption of this long-acting HIV prevention technology. Further implementation research should evaluate actual uptake, persistence, and determinants of use following programme rollout.

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Epidemiologic Patterns and Factors Associated with Recency of HIV Infection in Five Kenyan Counties

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Background: Recency of HIV infection is a key indicator for understanding current transmission dynamics. In 2023, an estimated 39.9 million people, of whom 1.4 million children, were living with HIV worldwide. Although Kenya has made notable progress toward epidemic control, localized transmission persists, particularly in high-burden counties. This study aimed to assess the epidemiologic patterns and determinants of recent HIV infection in five Kenyan counties— Nairobi, Mombasa, Kisumu, Siaya, and Homa Bay— between 2021 and 2024.

Methods: A retrospective case–control study was conducted using individual-level data from the Kenya HIV Recency Surveillance System linked with data from the National Data Warehouse. All people aged ≥ 15 years with valid HIV recency assay results were included. Datasets were merged through probabilistic record linkage using unique identifiers. Analyses were performed in R version 4.3.2, with statistical significance at $p < 0.05$. Descriptive statistics summarized participant demographic characteristics, and bivariate associations between socio-demographic variables and recency were assessed using χ^2 and Mann–Whitney U tests. Multivariable logistic regression identified independent predictors of recent infection, adjusting for age, sex, marital status, testing modality, county, and mobility indicators. Sub-county-level spatial mapping visualized geographic clustering.

Results: A total of 39,854 new HIV diagnoses were included. The HIV recency proportion was 2.1%(831/39,854). The median age was 33 years with an interquartile range of 26 to 40 years. Youth aged 15–24 had nearly threefold higher odds of recent infection than adults > 50 (aOR 3.0), with each additional year of age reducing the risk of recent HIV infection (aOR 0.96, 95% CI 0.95–0.98). Being single (aOR 1.31) and staying in the same residence for less than 12 months(aOR 1.43) increased risk of recent HIV infection. Higher recent infection was witnessed in various points of service like Sexually Transmitted Infections(STI) clinic (aOR 10.8), Tuberculosis clinic(aOR 4.26) and Post natal clinics (aOR 3.95). Testing outside one's county of residence was also associated with recent HIV infection (aOR 1.57).

Conclusion: Recent HIV infections in Kenya cluster among youth, unmarried adults, and mobile populations in urban and peri-urban areas. Despite declining incidence, persistent transmission highlights the need for targeted prevention—expanding PrEP access, integrating retesting into Antenatal, Postnatal and STI clinics, and strengthening surveillance for mobile populations.

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Caregiver Assessment of Executive Function Deficits among HIV-Infected and Exposed-Uninfected Preschool Children in Kenya

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Background: This study examined caregiver assessment of executive functioning (EF) in perinatally HIV-infected (PHIV) and perinatally HIV-exposed but uninfected (PHEU) Kenyan children and the extent to which various biopsychosocial factors influence EF outcomes.

Methods: Children aged 3-5 years that were PHIV (n=43), PHEU (n=52), and HIV-unexposed uninfected (HUU, n=58) and their caregivers were enrolled. EF was measured using the Childhood Executive Functioning Inventory. Shona Symptoms Questionnaire (SSQ) and parenting behaviour scale were used to evaluate caregivers' common mental disorders (CMDs) and parenting behaviour respectively. We used analyses of variance to assess groups' differences in EF scores, and a hierarchal linear regression model to explore covariates associated with EF outcomes. Results: Overall, we observed significant negative effects of HIV exposure on EF scores F (2, 149) =8.591, p<0.001. Compared to HUU children, PHIV children had poor performance in working memory (mean difference (MD), 2.89 [95%CI: 0.65-5.14] p=0.008), inhibitory control (MD, 2.47 [95%CI: 0.55-4.40], p=0.008), and composite EF (MD, 5.37 [95%CI: 1.97-8.76], p=0.001) while PHEU children had poor performance on working memory (MD, 3.24 [95%CI: 1.11-5.37], p=0.001) and composite EF scores (MD, 4.97 [95%CI: 1.75-8.19], p=0.001). The observed EF impairment was strongly associated with caregivers' CMDs and advanced HIV disease in children.

Conclusion: Our study suggests that caregivers can observe overt executive dysfunction in children who are perinatally exposed to HIV. These findings underscore the importance of ART adherence in PHIV group and psychosocial support to caregivers of HIV-exposed children to help improve EF outcome.

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Prevalence of Viral Load Suppression and Associated Sociodemographic and Clinical Factors among Orphans and Vulnerable Children Living with HIV on Antiretroviral Therapy in Mozambique, 2020–2025: A Cross-Sectional Study

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Background: Mozambique has one of the world's highest pediatric HIV burdens. Orphans and vulnerable children (OVC) living with HIV face social, economic and structural barriers that can undermine adherence to antiretroviral therapy (ART) and viral load suppression (VLS). Context-specific evidence on determinants of VLS in this population is limited. We assessed VLS prevalence and associated sociodemographic and clinical factors among OVC living with HIV on ART enrolled in a community-based support program in Mozambique.

Methods: We conducted a retrospective analytical cross-sectional study using routinely collected data (2020–2025) from children aged 0–17 years living with HIV on ART and enrolled in the USAID-funded Chenguetai Wana OVC project across 46 health facilities in Manica and Tete provinces. Data were extracted from the e-OVC/DHIS2 platform. VLS was defined as a viral load <1,000 copies/mL. Crude and adjusted prevalence ratios (aPR) with 95% confidence intervals were estimated using Poisson regression with robust variance.

Results: Of 4,030 children included (mean age 9.8 years, SD ±4.5; 52.0% female), VLS prevalence was 91.5% (n=3,686). In the adjusted analysis (n=3,962), urban residence was associated with a higher prevalence of viral non-suppression compared with rural residence (aPR=1.57; 95% CI 1.27–1.95; p<0.001), and each additional 12 months on ART was associated with a 3% higher prevalence of non-suppression (aPR=1.03; 95% CI 1.00–1.06; p=0.033). Female sex was protective overall (aPR=0.43; 95% CI 0.24–0.77; p=0.004), with a significant sex–age interaction: among girls, each additional year of age increased non-suppression (aPR=1.07; 95% CI 1.02–1.12; p=0.003), whereas no significant age effect was observed among boys.

Conclusions: VLS among OVC living with HIV in this community-supported program substantially exceeded national and sub-Saharan African benchmarks, suggesting that integrated case management adds value to facility-based ART. Targeted strategies are needed for urban settings, children with longer ART duration, and adolescent girls to close remaining gaps and advance the UNAIDS 95-95-95 targets.

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Intergrating STI Management into HIV care: The Case of Syphilis at Umodzi Clinic, Blantyre

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Umodzi family Centre Clinic situated at Queen Elizabeth Central hospital in Blantyre Malawi, provides comprehensive sexual and reproductive health services, including sexually transmitted infection (STI) screening, treatment and counseling for people living with HIV(PLHIV). Evidence indicates high prevalence of syphilis among clinic attendees. Other commonly diagnosed STIs include abnormal vaginal discharge, chlamydia, urethral discharge, lower abdominal pain. This abstract focuses on syphilis due to its significant clinical implications among PLHIV. Syphilis infection can impair immune recovery, reduce the effectiveness of antiretroviral therapy and increase the risk of neurological and ophthalmic complications

The clinics approach to STI management involves syndromic treatment, partner notification, condom distribution. When a client comes to the clinic they are assessed by a nurse or clinician, if there are signs of STI they are examined thoroughly then referred for treatment. The nurse provides the treatment and also gives partner notification slip to the client. The treatment given is benzathine penicillin 2.4 MU 3 doses spread in 3weeksIn 2022 a total of 1,192 were treated for STI's of which 306 were treated for syphilis while in 2023 a total of 1,307 were treated for STI's of which 294 were treated for syphilis representing a percentage of 25.7% and 22.5 % respectively.

In conclusion, Integrating STI services within the antiretroviral therapy clinic improves efficiency, reduces waiting time, enhances client comfort, and minimizes the need for multiple clinic visits. This ART/STI integrated approach helps to strengthen comprehensive care for PLHIV and helps to improve clinical outcomes.

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Who Stays Protected? Equity Gaps in PrEP Continuation among Adolescent Girls and Young Women in Nigeria's GC7 Program

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Background: While PrEP scale-up has improved access for adolescent girls and young women (AGYW), sustained use remains uneven, reflecting deeper structural and service delivery inequities. In fragmented health systems, understanding who initiates versus who continues is critical to reclaiming equitable HIV prevention outcomes. This study examines disparities in PrEP continuation across four Nigerian states under GC7 implementation.

Methods: We conducted a retrospective cohort analysis of routine program data (January 2024–December 2025) across Anambra, Gombe, Ebonyi, and Kwara. Indicators included PrEP initiation, repeat HIV testing among return clients, and discontinuation. We assessed state-level variation, continuation proxies, and attrition patterns across reporting periods.

Results: Across the program, ~41,000 AGYW initiated PrEP, with the highest volumes in Ebonyi and Anambra. However, discontinuation was consistently high and unevenly distributed. In Anambra, discontinuations exceeded 7,800 within two consecutive quarters in 2025, while Kwara recorded >2,000 discontinuations in a single quarter (Q1 2025). In contrast, Gombe demonstrated lower but more stable trends, suggesting better continuity at a smaller scale. Despite strong repeat HIV testing coverage, with hundreds to thousands of HIV-negative results among return clients per quarter, continuation gaps persisted, indicating early disengagement rather than clinical failure. Key populations, particularly MSM (up to ~3,000+ per quarter), were reached; however, transgender individuals remained largely underserved, highlighting equity gaps in access.

Conclusion: PrEP programs are reaching AGYW but not retaining those most at risk, undermining equitable impact. Do implement differentiated, youth-centered models addressing mobility, stigma, and adherence barriers (peer support, flexible refills, integrated SRHR services); don't rely on uniform delivery approaches that fail to account for the lived realities of AGYW. Embedding equity-focused metrics (who discontinues and why) into program monitoring is essential to restoring effective and just HIV prevention outcomes.

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Lessons from Tanzania: Optimizing Diabetes Diagnosis among Tuberculosis Patients Aged 35 and above

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Background: Tuberculosis (TB) control is threatened by progressive increase of diabetes mellitus (DM), particularly in endemic countries. Screening for DM is not routinely implemented due to limited access to diagnostic tools; therefore, we assessed clinical-demographic markers to improve early DM detection in Tanzania.

Methods: Our cross-sectional study recruited TB patients who were receiving TB treatment between October 2019 and September 2020 at health care facilities in three regions of Tanzania. Patients were screened for DM using DM symptoms (polydipsia, polyphagia and polyuria) and random blood glucose (RBG) testing. Patients with a history of DM and those with no history of DM but an RBG≥7.8mmol/L, were followed by point-of-care glycated haemoglobin (HbA1c) testing, and were considered to have DM if HbA1c was ≥48 mmol/mol. Regression model was used to predict DM range hyperglycaemia.

Results: Of 1,344 TB patients, the mean age was 41.0(±17.0) years, and 64.7% were male. A total of 1,011 (75.2%) had pulmonary TB, and 133 (10.4%) had at least one DM symptom. Overall, the prevalence of DM was 7.8%, of which 36 (2.8%) TB patients with no history of DM were newly diagnosed with DM by RBG screening and confirmatory HbA1c testing. TB/DM patients were older than those with only TB (50.0 ±14.0 years vs 40.0±17.0 years, p<0.001). Patients with RBG≥7.8mmol/L were more likely to be aged ≥35 years (p=0.018), with pulmonary TB (p =0.003), and have at least one DM symptom (p<0.001). There was a substantial agreement (Kappa=0.74) between the on-site glucometer and point-of-care HbA1c tests in detecting DM range of hyperglycemia.

Conclusion: Use of clinical-demographic markers together with blood glucose screening identified the overall prevalence of DM and patients requiring further evaluation among TB patients. These markers were associated with DM-range hyperglycaemia and highlight the importance of early testing and co-management of TB and DM

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The Cost of Cumulative Risk: A Multi-Country Simulation of the Epidemiological and Economic Impact of Childhood Sexual Violence on HIV Risk Behaviors in Seven African Countries

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Background: Adolescent girls and young women (AGYW) in sub-Saharan Africa face a "syndemic" of vulnerabilities where childhood adversities drive HIV incidence. While the link between childhood sexual violence and individual sexual risk is established, the aggregate burden across the full spectrum of sexual risk and its economic implications remains under-quantified. This study modeled the population attributable fraction (PAF) of sexual risk behaviors due to childhood SV and estimated the "Cost of Inaction" across seven diverse HIV prevalence settings.

Material and Methods: We analyzed individual participant data from Violence Against Children and Youth Surveys (VACS) in Côte d'Ivoire, Eswatini, Kenya, Lesotho, Mozambique, Namibia and Tanzania (n=16,540). Using a counterfactual simulation framework, we estimated the excess risk of four HIV drivers attributable to sexual violence before age 18: multiple partners, inconsistent condom use, transactional sex, and high-risk sex. We utilized Monte Carlo probabilistic sensitivity analysis. These estimates were integrated with national HIV prevalence data (0.6%-6.8%) and UNAIDS treatment benchmarks to model the excess Lifetime Treatment Liability (LTL) for a synthetic cohort of 100,000 AGYW per country.

Results: Childhood sexual violence was a pervasive driver of risk, with prevalence ranging from 5.5% (95% CI: 4.6–6.6) in Eswatini to 19.2% (14.4–25.3) in Côte d'Ivoire. The "violence penalty" was consistent: childhood sexual violence accounted for a PAF of 7.6% (6.3–8.9) to 22.3% (17.1–27.0) of transactional sex cases. For high-risk sex, childhood sexual violence contributed 6.2% to 18.7% of the total population burden. Economically, this "hidden liability" was substantial. In hyper-endemic Lesotho, the excess HIV risk linked specifically to the childhood sexual violence-to-high risk sex pathway generated an estimated $0.94 million (0.75–1.14) in lifetime treatment costs per 100,000 AGYW. Even in lower-prevalence Kenya, the model projected savings of $160,000 (90,000–240,000). Across all nations, eliminating childhood sexual violence would avert an average of $440,000 per 100,000 youth in direct HIV treatment costs.

Conclusions: Childhood sexual violence acts as an upstream driver of the HIV epidemic, inflating the prevalence of high-risk behaviors by 6-19%. Child protection interventions are high-efficiency HIV prevention strategies; preventing initial trauma yields a quantifiable "Prevention Dividend," freeing critical resources for epidemic control.

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Molecular Diagnostics for the Detection of Sexually Transmissible Infections in Cameroon: A Baseline for Diagnostic Implementation and Health Systems Scale-Up

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Background: Sexually transmissible infections (STIs) are rampant in Cameroon and pose a significant public health challenge as they contribute substantially to reproductive morbidity, mortality, and HIV transmission. Comprehensive epidemiological data on the burden of non-viral, non-classical STIs such as Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG), and Mycoplasma genitalium (MG) remains very limited. This is largely driven by health system inertia and sluggish adherence to adopting molecular diagnostic testing over traditional methods, which severely impedes effective national surveillance and targeted control strategies.

Aim: This study aims to evaluate and quantify the routine diagnostic burden of these three priority bacterial infections within an urban hospital setting in the city of Douala, providing the operational baseline necessary to guide molecular diagnostic implementation and scale-up strategies.

Methods: A cross-sectional implementation-model study was conducted between August 2023 and October 2024. Routine clinical diagnostic workflows were integrated to screen sexually active patients suspected of having STIs within a major urban apex facility in Douala. Urine specimens were collected from 522 participants and successfully analysed using an integrated molecular workflow: AMPLIX 12 for extraction of genetic material, and the N. gonorrhoeae/C. trachomatis/M. genitalium Real-TM kit from Sacace™ Biotechnologies for multiplex detection of CT, NG, and MG using the DT lite 4s1 thermal cycler. Statistical analyses were performed using Jamovi v2.3.21.

Results: A total of 420 (80.46%) females and 102 (19.54%) males aged 15–74 were successfully integrated into the testing workflow. Of these, 18.36% were positive for at least one pathogen. CT demonstrated the highest prevalence (11.11%), followed by NG (3.64%) and MG (3.26%). Females accounted for 8.23% of CT, 2.68% of NG, and 2.29% of MG infections. Co-infections were operationally mapped and observed between CT and NG (1.34%), CT and MG (0.77%), and NG and MG (0.19%). No triple co-infections were observed.

Conclusion: The prevalence uncovered via multiplex qPCR is significantly higher than historical data derived from syndromic management or culture methods, portraying a massive, silent burden of STIs in Cameroon. These findings demonstrate the field feasibility of high-throughput multiplex molecular testing in an African hospital context. They highlight an urgent implementation need to transition from syndromic management to highly sensitive molecular diagnostics to optimize health systems delivery, update clinical guidelines, and improve reproductive health outcomes.

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Building HIV Prevention and Care Infrastructure within a Large Academic Learning Health System: Lessons Learned Across Healthcare and Community Settings

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Background: Academic Learning Health Systems (aLHS) are designed to continuously generate and implement evidence to improve patient care, drive discovery, and ensure innovation, quality, safety, and value in health care. Despite this promise, aLHS have been slow to systematically embed HIV prevention and care implementation, particularly for populations that are under resourced and/or experiencing differing outcomes. We describe the development of an HIV prevention and care implementation infrastructure within a large aLHS, including the strategic, organizational, and operational foundations required to sustain ongoing research, implementation, and translation activities.

Materials and Methods: To build implementation capacity within a large aLHS, we established the Wake Forest HIV Research & Innovation Collaborative (WHIRC), a multidisciplinary initiative. WHIRC is embedded within Advocate Health, a large, integrated health system spanning multiple regions across the Southeast and Midwest United States, and serving diverse patient populations in urban, suburban, and rural settings. Guided by the principles of the aLHS framework, WHIRC aims to foster research into and the adoption of sustainable HIV prevention and care innovations within the Advocate Health catchment area to improve health care quality and outcomes among people with HIV (PHW). Using structured collaborative brainstorming and prioritization, WHIRC members identified key infrastructure domains and priority focus areas to guide WHIRC activities.

Results: WHIRC identified core infrastructure domains to support HIV prevention and care research and implementation across the aLHS: (1) data and informatics infrastructure; (2) implementation science and evaluation; (3) community engagement and partnership; and (4) clinical innovation and dissemination. Key activities included: development of a centralized electronic health record (EHR) dashboard to monitor evidence-based and implementation activities; creation of a standardized data infrastructure plan, including a standardized algorithm for EHR-based cohort identification and data extraction; establishment of a community engagement framework, informed by participatory approaches; and development of strategies to support equitable implementation of evidence based interventions and de-implementation of low-value or ineffective practices. Additional health system opportunities included strengthening referral pathways between community-based organizations and clinical providers, integrating HIV prevention into routine care settings (e.g., family medicine), expanding access to pre-exposure prophylaxis (PrEP), and leveraging EHR data to identify and target underserved populations, particularly in rural areas.

Conclusions: Deliberate and collaborative infrastructure development is critical for embedding HIV prevention and care within an Academic Learning Health System. Aligning governance, data systems, implementation science capacity, clinical operations, and community engagement can accelerate the translation of evidence into routine practice and support improved health outcomes, particularly among populations disproportionately affected by HIV. WHIRC is well-positioned to serve as a model for synergistic collaboration to advance implementation and translation science within a large aLHS, providing a robust platform for the multi-site implementation and evaluation of HIV prevention and care innovations.

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The Synergy of HIV and Syphilis in a UNAIDS 95-95-95 Landscape: A Study of Female Sex Workers at a Specialised STI Wellness Centre in Eswatini

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Background: Eswatini has achieved the UNAIDS 95-95-95 targets while upscaling its prevention program. Evidence indicates that individuals with an active STI are two to five times more likely to acquire HIV. This risk is even higher in Female Sex Workers (FSWs), who are at a higher risk of acquiring HIV than the general population. The AHF LaMvelase Wellness Centre provides person-centred STI diagnosis and treatment services, as well as HIV testing and prevention commodities, primarily to high-risk groups and secondarily the general population. This study assesses the yield of new HIV diagnoses and syphilis burden among FSWs within this specialised epidemic control context.

Material and Methods: We conducted a cross-sectional, descriptive analysis of 4193 clients' records routinely collected at the Wellness centre, between September 2024 and June 2025. The FSW cohort was disaggregated into 3 categories: Non-Reactive (NR), Reactive and on ART. Syphilis reactivity was tabulated with HIV status to identify co-infection trends.

Results: Of the 4193 clients attended to, 8.1% (n=338) were FSWs, and 0.26% (n=11) were men who have sex with men (MSM). Around 0.68% (n=25) of the 4193 tested HIV positive, and 3.8% (n=160) of them tested Syphilis positive. Out of the 25 identified HIV positives, 48% were FSW (n=12). The HIV positivity rate was 3.6% (12/338) among FSWs, which is 5 times higher than the clinic average (0.68%), and 10 times higher than the general clients (13/3476=0.37%). Syphilis prevalence among FSW was 11.2% (38/338), and 3.2% (122/3855) in the rest of the clients, increasing by 3.5 times the risk of Syphilis among FSWs. Only 5 clients were concomitantly diagnosed with both HIV and Syphilis, 2 of whom were FSWs. A FSW was 7.6 times more likely to be diagnosed with both Syphilis and HIV compared to the general population attending the clinic.

Conclusion: Despite Eswatini reaching the UNAIDS 95-95-95 targets, FSWs remain a critically underserved hotspot of new infections, facing a disproportionately high burden of both HIV and Syphilis. This means that the work is not finished. Public health efforts must shift toward person-centered and specialised wellness models designed for FSW to address the synergistic threats of STIs and HIV.

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Targeted Case-Finding in Eswatini: The Role of an STI Wellness Centre in Sustaining Epidemic Control

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Background: HIV prevalence in Eswatini remains high at around 25% in Eswatini. While the country has successfully achieved the UNAIDS 95-95-95, the challenge remains in identifying the hidden percentage of people living with HIV (PLHIV) who are not yet in care. The HIV case detection rates fluctuate between 2-5% across the country, necessitating innovative approaches to reach the remaining undiagnosed individuals. AIDS Healthcare (AHF) Eswatini (AHF) implemented a specialised Wellness program at the LaMvelase clinic, focusing on the screening, diagnosis and treatment of STIs, alongside HIV prevention and SRH services. This study investigates HIV trends and the effectiveness of integrated STI services in identifying new infections among high-risk populations in this post-95-95-95 landscape.

Material and Methods: A retrospective cross-sectional descriptive analysis of 4193 clients' electronic and data-based records from the STI Wellness centre, from September 2024 to June 2025. Different data key points were included (demographics, key populations status, Syphilis serology, HIV testing outcomes, etc.). Risk ratios and associations were assessed.

Results: Of the 4193 clients, 63.1% (n=2645) were female, and 44.2% (n=1854) were aged 25-34 years. At presentation, 12.0% (n=504) were known positive on ART, and 25(0.60%) were newly diagnosed as HIV-positive. Gender disparity was observed: The positivity rate for females (0.79%) was three times higher than for males (0.26%). Female Sex Workers (FSWs) emerged as a critical sub-group, accounting for 48% (n=12) of the 25 new HIV positives despite representing only 8.1% of the female cohort. Furthermore, the 25-34 age group accounted for 56% (n=14) of new HIV cases. 19 (76%) of new positives presented with either a positive syphilis test or a symptomatic STI. Specifically, Syphilis-positive clients showed a 3.1% (5/160) case detection rate compared to 0.5% (20/3989) in Syphilis-negative clients, representing a 6-fold increase in risk. Prevention services showed high efficacy; 702 clients were on PrEP, with only one seroconversion (0.14%), indicating 99.9% effectiveness.

Conclusion: Integrated STI management is essential for sustaining epidemic control. The six-fold HIV risk among Syphilis-positive clients and high positivity in FSWs demonstrates that targeted Wellness interventions are appropriate for active case-finding. Prioritising these "hotspots" with biomedical prevention services is critical for reaching the remaining undiagnosed individuals.

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From Classroom to Community: Lessons Learned in Growing Youth HIV Implementation Science Leaders

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Background: Eswatini continues to be listed among the highly HIV-burdened countries across all ages. Preparation of advanced practice nurses has been identified as one of the key strategies to improve adolescent HIV care and prevention. Despite ongoing efforts to address youth HIV in Eswatini, limited contextually relevant implementation science training exists for frontline nurses and peer leaders. Our project, Eswatini Youth HIV Innovators, aimed to develop a tailored curriculum; however, evolving participant needs, abbreviated timelines, resource constraints, and cultural contexts necessitated adaptations to the initial objectives and deliverables. Here, we highlight key lessons learned from program initiation through implementation.

Material and Methods: As part of the Local Implementation Science Network (LISN), we conducted an iterative, qualitative process evaluation of the curriculum and Eswatini national research agenda. Initial curriculum objectives and deliverables were refined through ongoing stakeholder engagement and IS experts, with a total of 8 family nurse practitioners and 6 HIV peer leaders trained, incorporating feedback from facilitated discussions and implementation reflections.

Results: Initial curriculum plans emphasising didactic instruction were adapted to incorporate applied, project-based learning in response to feedback from stakeholders and pedagogical experts. Three key lessons emerged: (1) co-creation and facilitation with stakeholders and implementation science experts improved curriculum relevance and engagement; (2) flexibility in objectives and deliverables was essential to accommodate varying knowledge levels and Family Nurse Practice (FNP) student schedules; and (3) integrating a final project component enhanced participants' experience in collaboration and ability to apply implementation science concepts in real-world settings once they matriculate. These adaptations resulted in revised deliverables, including fewer modules, greater emphasis on practical application, and ongoing support mechanisms.

Conclusions: Development for implementation science capacity building in resource-constrained settings requires flexible, context-responsive approaches. Lessons from this project highlight the importance of iterative adaptation, stakeholder co-creation, and revisiting initial objectives and deliverables. These findings offer practical guidance for similar efforts seeking to build implementation science capacity among diverse, frontline workforces.

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Enhancing Retention in HIV Care through a Pre-Emptive Tracking Model in High-Attrition Military Health Facilities in Tanzania

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Background: Interruption in treatment (IIT), defined as no clinical contact for more than 28 days after a scheduled appointment, threatens continuity of HIV care and viral suppression, particularly among mobile populations. Prior to implementation of the intervention in June 2024, seven military-supported HIV facilities accounted for more than 80% of IIT events across supported military clinics, with appointment adherence below the program target of ≥95%. Existing tracking approaches were largely reactive, with follow-up initiated only after disengagement from care. To address this gap, a pre-emptive tracking model was implemented to identify individuals at increased risk of missed appointments and rapidly intervene before prolonged treatment interruption occurred.

Materials and Methods: A pre-post implementation analysis using routine program data was conducted across seven military-supported HIV clinics in Tanzania between FY24Q1 and FY25Q4. The intervention targeted individuals receiving antiretroviral therapy (ART), prioritizing those with prior IIT history, repeated late attendance, or recently missed appointments. Daily review of clinic appointment data was used to identify high-risk individuals and trigger rapid follow-up actions. The model combined advance appointment reminders, phone tracing within 24–48 hours of missed visits, coordinated community follow-up, expert-client support, person-centered counselling, tailored consultations, and flexible scheduling. Multidisciplinary facility teams reviewed follow-up outcomes routinely to adapt implementation approaches and strengthen retention efforts. Descriptive trend analyses were conducted to compare appointment adherence, missed appointments, and IIT events before and after implementation.

Results: IIT events declined from 300 in FY24Q1 (October–December 2023) to 51 in FY24Q4 (July–September 2024), representing an 83.0% reduction following implementation of the model. Overall appointment adherence increased from 82.0% at baseline to above 95.0% and remained sustained through FY25Q4. Among individuals with prior IIT history, appointment adherence improved to 96.0–99.0% by September 2024. Missed appointments declined by 66.6% between April and September 2024, while the proportion of individuals returning to care after IIT exceeded 85.0% following implementation. IIT rates remained low at approximately 0.4% of individuals receiving ART over the subsequent 12 months.

Conclusions: A proactive, data-driven implementation model integrating rapid risk identification and early follow-up can substantially reduce IIT and improve retention in HIV care in high-attrition settings. Findings demonstrate the value of adaptive implementation strategies embedded within routine health systems and support broader scale-up of pre-emptive retention approaches in resource-constrained and mobile populations. Further evaluation of long-term sustainability and cost-effectiveness is warranted.

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Strengthening Quality Assurance in HIV Rapid Testing: Reducing Misdiagnosis through Enhanced Proficiency Test Monitoring

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Background: Progress toward the UNAIDS targets of 95-95-95 relies on HIV testing systems that deliver not only broad coverage but also high diagnostic accuracy to identify people living with HIV correctly. However, HIV misdiagnosis remains a major public health concern, especially in resource-limited settings. Against this backdrop, the Southern Provincial Health Office, with support from the U.S. Centers for Disease Control and Prevention (CDC), implemented an enhanced rapid HIV testing training and monitoring (through proficiency testing) program for HIV testers, designed to enable early detection of testing errors and reduce misdiagnosis.

Methods: The provincial Health Office trained the district laboratory personnel to be trainers of trainers (ToT) on HIV rapid testing and monitors/assessors.This approach increased the number of competent trainers and assessors at the district level, thereby increasing the number of trained and certified HIV rapid testers as training were conducted in each district. The HIV testing sites were subjected to certification based on compliance with the national testing guidelines. Additionally, capacity was strengthened in the 42 district laboratory hubs to conduct routine quality monitoring and technical assistance to health facilities within defined zones.

Results: The training on HIV rapid testing was successfully conducted in 15 districts, with four (4) rounds of HIV proficiency panels administered in intervals of six months between 2023 and 2025. Among 425 HIV testing sites evaluated in 2023, 222 (52.2%) exhibited misdiagnosis on proficiency testing (PT) panels. Rural facilities (61.7%) were 1.69 times more likely to misdiagnose compared to urban facilities (38.3%) (p=0.007; 95%CI 1.15 - 2.49). There was an increase in the number of HIV testing sites (591) being monitored in 2024, coupled with a marked reduction in misdiagnosis to 10%. In 2025, 572 sites were assessed, with 95% producing accurate results on PT panels, and urban and rural facilities were comparable. All failing testing sites received scheduled mentorship and close supervisory follow-ups.

Conclusion: Decentralization of the HIV training program was associated with reductions in misdiagnosis and expanded coverage of certified HIV testers. However, in the context of ongoing health workers attrition in facilities, scheduled periodic onsite orientations, refresher training, competency assessments, and mentorship in HIV rapid testing are imperative to sustain testing quality and diagnostic accuracy.

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Scaling Advanced HIV Disease Competency: Pre–Post Evaluation of a National Training Curriculum across Kenyan Counties

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Background: Despite the global scale-up of antiretroviral therapy (ART), Advanced HIV Disease (AHD) remains a major contributor to HIV-related morbidity and mortality in Kenya. Nationally, AHD affects approximately one-third of people living with HIV at the point of ART initiation, re-engaging in care after treatment interruption or at diagnosis of treatment failure. This reflects gaps in early diagnosis, timely linkage to ART, retention in care and adherence support needed to sustain viral suppression. These gaps are partly caused by healthcare capacity gaps to deliver a comprehensive AHD package of care, more so in health systems where HIV services are integrated into general healthcare platforms. In response to this, the Ministry of Health developed and rolled out a national AHD training curriculum targeting different cadres across all levels of health facilities. Evidence of the real-world effectiveness of this training is limited. We evaluate knowledge gains across cadres and curriculum topics in six Kenyan counties to inform mentorship, curriculum refinement, and technical support.

Materials and Methods: A quasi-experimental pre–post implementation evaluation was conducted across six Kenyan counties (Baringo, Bomet, Laikipia, Nandi, Narok, and Samburu) between January 2025 and March 2026. Participants completed identical 20-item multiple-choice assessments before and after a three-day, in-person training delivered through lectures, case-based discussions, and practical skills sessions covering 11 topics. Pre–post differences were assessed using Mann–Whitney U tests. One-way ANOVA with Tukey's HSD post hoc tests was used to examine differences across professional cadres and modules. Effect sizes were estimated using eta-squared (η^2). Statistical significance was set at $p < 0.05$.

Results: Analysis of 437 records (232 pre-training, 205 post-training) revealed an increase in the overall mean score from 61.6% to 76.8% (+15.2 pp, $p < 0.001$), with gains across all six counties, ranging from +10.1 points in Baringo to +18.1 in Narok. Baseline knowledge varied significantly across professional cadres ($F = 8.14$, $p < 0.001$, $\eta^2 = 0.178$); post-training differences were statistically significant but notably attenuated ($F = 3.85$, $p = 0.001$, $\eta^2 = 0.104$), with cadre pairs showing significant differences decreasing from 6 to 2. Laboratory scientists demonstrated the greatest improvement, rising from the lowest baseline score (47.2%) to parity with other cadres post-training (+24.1 percentage points, $p < 0.001$). Significant variation in gains was observed across modules ($F(7) = 55.85$, $p < 0.001$, $\eta^2 = 0.087$). The largest improvement was in CMV and toxoplasmosis management (+53.4 percentage points), while cryptococcal disease management achieved the highest post-training proficiency (89.4%). AHD monitoring and evaluation (M& E) showed minimal improvement (53.7%) and remained significantly lower than all other domains ($p < 0.001$).

Conclusion: The national AHD training demonstrates significant knowledge gains, reduced inter-cadre disparities, and the largest post-test improvement among laboratory personnel, supporting scalable healthcare worker training as key strategy for strengthening AHD service delivery health systems. Curriculum refinement and mentorship are needed to address competency gaps in M&E of AHD services.

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Exploring Opportunities for and Barriers to Implementation of Prep for Postpartum Women in Community Clinics: Qualitative Findings from Focus Group Discussions with Women in Southwestern Uganda

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Background: Mother-to-child HIV transmission accounts for 18% of new infections in Uganda, underscoring the need for effective HIV pre-exposure prophylaxis (PrEP) delivery for women during perinatal periods. Healthy Families PrEP (HFP) is a reproductive-health-focused HIV prevention intervention that supports PrEP use through education and counseling and was piloted at a regional referral hospital in southwestern Uganda. To inform adaptations of the successful HFP intervention for postpartum women in community clinics, we conducted formative research to identify opportunities and challenges to PrEP implementation.

Material and Methods: From December 2025 to February 2026, we conducted four focus group discussions (FGDs) with HIV-negative women aged 18–45 in southwestern Uganda who reported pregnancy in the past two years and/or desired pregnancy within one year, had received PrEP from nearby health facilities, and had a partner with positive or unknown HIV serostatus. Semi-structured FGD guides were mapped to the Consolidated Framework for Implementation Research and socioecological model. We conducted rapid qualitative analysis, distilling findings into matrices with exemplary quotes to support in-person implementation mapping and guide intervention adaptations.

Results: Twenty-nine women participated; 69% (n=20) reported a partner living with HIV, and all had prior pregnancies. At the individual level, women valued privacy in counseling while also describing distinct benefits of individual (e.g., asking questions), couple (e.g., improved trust and provider-mediated disclosure), and group (e.g., peer learning and support) counseling. Side effects were challenging but could be mitigated during pregnancy and breastfeeding through adequate nutrition and hydration. Adherence was motivated by perceived relationship benefits and by viewing PrEP as part of being a “good mother” by protecting the infant. At the interpersonal level, male partners were both barriers and facilitators, often influencing financial and health decisions; women wanted provider-mediated partner engagement to promote shared decision-making. At the community level, stigma—PrEP being mistaken for HIV treatment or linked to sex work—prompted concealment of medication use. Women often prioritized provider guidance over advice from traditional healers or relatives. Having a trusted support person aware of PrEP use reduced stigma and adherence challenges. Structurally, poverty, transport costs, and food insecurity hindered PrEP uptake and adherence. Despite these barriers, women emphasized that PrEP’s benefits outweighed its challenges.

Conclusions: PrEP is acceptable among postpartum women in Uganda, with adherence driven by motivations related to infant health and partnership stability. Women are eager to take PrEP and receive HIV prevention support from healthcare providers, despite social and structural challenges. Engaging male partners in conversations about HIV prevention and shared decision-making regarding PrEP is important to women and crucial to improving PrEP access, uptake, and adherence. Adaptations to the HFP intervention will address challenges such as transportation, food insecurity, male partner engagement, and community stigma by prioritizing education and engagement initiatives for men, providing reimbursement for travel costs for clients, and leveraging existing village health teams to provide education, anti-stigma messaging, and medication refills within communities. Implementation of long-acting PrEP modalities may mediate some barriers such as pill concealment and frequent travel for refills.

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Using the Information, Motivation, and Behaviour Skills Model to Promote Rational Medicine Use among Breastfeeding Women in Uganda

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Background: Safe medicine use during breastfeeding is a neglected public health concern, especially in low- and middle-income countries. In Uganda, common drug-related problems, including self-medication, incomplete dosing, inappropriate drug selection, poor adherence, and adverse reactions, pose risks to mothers and infants and contribute to antimicrobial resistance. Limited access to reliable information and inconsistent counseling exacerbate these challenges. Behavioral interventions based on the Information-Motivation-Behavioral Skills (IMB) model have improved health behaviors elsewhere, but evidence on their application to medicine use among breastfeeding women in African urban settings is limited. This study evaluated the effectiveness of an IMB-based educational intervention in improving knowledge, attitudes, and practices regarding medicine use.

Methods: A quasi-experimental study was conducted among 184 breastfeeding women (≥18 years) with infants ≤12 months attending six urban clinics in Kampala, Uganda. Participants were recruited via systematic random sampling and assigned to intervention (n=92) or control (n=92) groups. The intervention comprised 12 weekly sessions using lectures, group discussions, videos, and printed materials to enhance knowledge, motivation, and behaviors regarding medicine use. Controls received standard health education. Outcomes were assessed at baseline and three months using structured Likert-scale questionnaires. Analyses included repeated-measures ANOVA and mixed-effects regression, with effect sizes reported as partial eta-squared (η^2) and Cohen's d.

Results: Baseline characteristics were comparable between groups. At three months, the intervention group had significantly higher scores in Knowledge (89% vs. 80%; MD=8.3, 95% CI: 6.0–10.6), Motivation (81% vs. 70%; MD=11.5, 95% CI: 8.6–14.4), and Behavior (91% vs. 81%; MD=9.9, 95% CI: 7.3–12.5), all $p<0.001$. Regression analyses confirmed significant time × group interactions. Specific improvements included safer medicine practices, increased reliance on healthcare providers, and better record-keeping and disclosure of medicine use.

Conclusion: An IMB-based educational intervention significantly improves breastfeeding mothers' knowledge, attitudes, and behaviors regarding medicine use. Integrating such interventions into routine maternal health programs can promote safer medicine practices.

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Arrested because We Help: Psychological Burden, Demotivation and Impact of Arrests on MSM Community Counsellors in Dakar, Senegal – A Mixed-Methods Study after the February 2026 Media Crisis

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Background: Community counsellors (peer educators) are key actors in the HIV care continuum for men who have sex with men (MSM) in Senegal. In February 2026, a national media crisis intensified stigma and arrests of people perceived as homosexual, directly affecting counsellors, patients and healthcare providers. We explored the impact of these arrests on counsellors' mental health, motivation, and HIV testing trends in Dakar.

Methods: A mixed-methods study was conducted in June 2026 across multiple HIV care facilities in Dakar. Semi-structured interviews were carried out with MSM reference physicians and MSM community counsellors using a CAP (Knowledge, Attitudes, Practices) guide. HIV testing data were extracted from national databases for Q1 2022–2026, aggregated at Dakar region level. Thematic analysis was used for verbatim.

Results: Interviews revealed severe psychological burden among counsellors: anxiety, depression, paranoia, fear of arrest, and desire to leave the country. Physicians reported numerous arrests of MSM patients, and a flight of key populations to neighbouring countries. Counsellors described a significant drop in motivation, contractual non-recognition, and complete suspension of index testing due to fear of threats. HIV testing among MSM in Dakar showed a marked decline between the period before the crisis and Q1 2026.

Conclusions: Repeated arrests of MSM counsellors, patients and physicians create a climate of fear that affects frontline providers' mental health and reduces testing access in Dakar. Urgent measures are needed: official professional cards, recognised employment contracts, law enforcement training on medical confidentiality, and intersectoral advocacy.

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Operational Evaluation of Integrated Point-of-Care CD4+ Testing and HIV Retesting to Strengthen AHD Service Uptake among Newly Diagnosed Clients: Evidence from 23 Hub Facilities in Northern Nigeria

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Background: Ranging from 30-50%, the prevalence of advanced HIV disease (AHD) among newly diagnosed people living with HIV starting ART remains high. Clinically, advanced HIV disease in the pre-ART phase has been identified as the major cause of early HIV mortality and treatment complications such as immune reconstitution inflammatory syndrome (IRIS), a state of hyper-inflammatory response in the first few months of ART treatment. The implementation of the WHO's package of care interventions for AHD is limited by barriers such as service delivery constraints, poor clinical work coordination and provider knowledge gap. Due to these identified barriers, identifying asymptomatic AHD clients among newly diagnosed HIV clients in resource limited settings remains clinically and programmatically challenging, resulting in delayed AHD screening, late diagnosis and treatment. This study evaluates the point-of-care integration of CD4+ test and HIV retesting in a large-scale PEPFAR-supported HIV programme.

Objectives: I. Assess the operational feasibility of baseline CD4+ and confirmatory HIV tests in AHD pilot sites.
II. Measure the outcome of integrated Advance HIV Disease and HIV diagnosis in clinical programmes.

Methodologies: To boost AHD service uptake in the ACE2 project, we piloted simultaneous rapid CD4+ and HIV confirmatory tests at all testing points across 23 AHD hub facilities (Kano 16, Bauchi 4 and Jigawa 3) from October 2024 to August 2025 and monitored the trend of AHD service integration across these sites. Paper-based data collection of CD4 and HIV confirmatory tests were reported on LAMIS, the programme electronic medical record platform.

Findings: Over the 11-month period, we commenced 2,635 clients ≥5 years across the hub pilot sites, and 91% (2,405) of these clients had same-day baseline CD4+ test conducted and documented at the point of re-testing. Due to known barriers, 230 (9%) of these clients were missed at enrolment.

Conclusion: Integrating facility-based point-of-care CD4+ and re-testing in limited resource settings facilitate AHD service uptake, timely diagnosis and reduced AIDS complications associated with AHD among newly diagnosed HIV clients. This can be implemented to scale along the full AHD hub-and-spoke model service delivery chain. Future research should explore the feasibility of implementing integrated AHD screening-rapid HIV confirmatory tests in community testing settings.

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Understanding Patient Choice in a Feasibility Trial of Choice-Based ART Support in Cape Town, South Africa

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Background: Adults newly starting or restarting antiretroviral therapy (ART) are at risk of early disengagement from HIV care. We hypothesised that offering a choice of ART support modality—informed by existing support models, formative qualitative work and a discrete choice experiment—could better meet individual support needs and preferences during this critical engagement window. This preliminary analysis describes the support options selected by participants and the reasons for their choices.

Methods: We enrolled 77 adults newly starting or restarting (after an interruption of ≥3 months) ART at a large primary care clinic in Gugulethu (February-May 2026). Participants were randomised to standard of care (SOC; n=21), in-person group support (n=20), or choice of support (n=36; the focus of this analysis). Choice participants selected one of four options for adherence support (in addition to the SOC): in-person group support, WhatsApp group support, an AI companion (AI Coach), or no additional support (SOC only). Using data from the enrolment visit, we tabulated the options selected. Reasons for choice were coded thematically. Each participant could have multiple themes coded.

Results: The 36 choice participants had a median age of 42 years, 56% were female, and most were restarting ART (83%). Choices were spread across all four options: in-person group support (n=14, 39%), WhatsApp group support (n=10, 28%), AI Coach (n=3, 8%), and SOC only (n=9, 25%). Choice patterns varied by gender: women most often selected WhatsApp group support (35%) or in-person group support (35%), while men most often selected in-person group support (44%). Reasons for choice reflected seven themes: privacy and control over disclosure, peer learning and shared experience, flexibility and fit with daily life, digital access and ease of use, emotional support and safe expression, autonomy and avoidance of social contact, and familiarity with usual clinic care. Participants choosing in-person group support described peer learning and shared experience, and emotional support and safe expression. Participants choosing WhatsApp group support described digital access and ease of use, flexibility and fit with daily life, privacy and control over disclosure, and autonomy and avoidance of social contact. The few participants choosing AI Coach described similar reasons. Participants choosing SOC only described privacy and control over disclosure, familiarity with usual clinic care, and autonomy and avoidance of social contact. Of 23 participants choosing non-digital support (in-person or SOC only), 16 had smartphone access, suggesting that digital access alone did not determine choice.

Conclusion: Choice-arm participants did not converge on a single preferred support model. Their reasons reflected different priorities, including convenience, privacy or stigma concerns, and digital access. Offering choice within ART services may help match support to what feels acceptable and usable for people starting or restarting ART. The ongoing study will assess engagement with support options and HIV treatment outcomes.

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Factors Influencing Willingness to Initiate Long-Acting Injectable Lenacapavir PrEP among Clients Accessing HIV Prevention Services in Nigeria

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Background: Long-acting injectable Lenacapavir (LeN) PrEP has the potential to improve HIV prevention by reducing adherence challenges associated with daily oral PrEP. Understanding factors influencing clients' willingness to adopt this novel prevention option is critical for successful programme scale-up. This study assessed the acceptability of LeN PrEP and identified key motivations for its uptake among clients receiving HIV prevention services in Nigeria.

Methods: A cross-sectional analysis was conducted among clients attending 29 LeN PrEP-implementing facilities across Anambra, Ebonyi, Gombe, and Kwara States between April and May 2026. Data were collected using Clientshot, a digital client feedback platform embedded within routine service delivery. Information on current HIV prevention methods, willingness to initiate LeN PrEP, reasons for adoption, and service experience was analysed using descriptive statistics.

Results: A total of 118 clients completed the survey. Respondents were predominantly male (52.5%; 62/118), while 47.5% (56/118) were female. Most participants (75.4%) were aged 20–39 years, comprising 36.4% aged 20–29 years and 39.0% aged 30–39 years. More than half of respondents (53.4%) had attained tertiary education, while 31.4% had completed secondary education, reflecting a relatively well-educated population accessing HIV prevention services. Overall, 48 (40.7%) respondents were already receiving LeN PrEP. Among the remaining 70 clients using other HIV prevention methods or none, 62 (88.6%) reported they were very likely to initiate LeN PrEP. Convenience, particularly the elimination of daily pill-taking, was the most frequently cited motivation for uptake (55 responses), followed by perceived superior HIV protection (38), greater privacy and discretion (36), and recommendations from healthcare workers (21). Health workers were the leading source of awareness about HIV prevention services (46.6%), highlighting their pivotal role in promoting LeN PrEP. Overall satisfaction with HIV prevention services was high (89.0%), and 97.0% of respondents indicated they would recommend their facility to others. Among existing LeN PrEP users, 95.8% described the enrolment process as easy or very easy, demonstrating strong acceptability of service delivery.

Conclusions: LeN PrEP demonstrated high acceptability among both current users and prospective clients. Convenience, privacy, provider engagement, and confidence in effectiveness were the principal drivers of adoption. Integrating comprehensive client education with strong provider-led counselling may accelerate uptake of long-acting HIV prevention interventions during national scale-up.

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Utilisation of AI-Powered Chatbots for Health Promotion among Adolescent Girls and Young Women in High HIV-Burden Settings in South Africa: Implications for Implementation and Scale-Up

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Background: AI-powered digital health tools are increasingly being developed to support health promotion and address health information gaps among adolescents and young people (AYP), a population that remains disproportionately vulnerable to poor HIV and SRHR outcomes. Although growing evidence suggests that digital health interventions can improve access to health knowledge and services among AYP, their reach and uptake remain uneven. Structural barriers, including mobile phone ownership, digital literacy, and reliable internet access, limit access among those most in need. As digital health technologies become increasingly integrated into health systems, there is a risk that unequal access could exacerbate existing health inequities rather than reduce them. Understanding who uses AI-powered health interventions, is therefore critical for informing equitable implementation and scale-up strategies and maximising their public health impact.

Methods: Two AI-powered digital health chatbots focusing on SRHR, HIV prevention and health and wellbeing were co-designed with young people in South Africa. The chatbots function as an AI "companion" providing safe, non-judgmental, multilingual, and accurate information, trained on the South African National Department of Health clinical guidelines. Cross-sectional data were collected through a self-administered online survey between October and November 2025. A sample of n=1379 adolescent girls and young women (AGYW) accessing health services were included in the analysis. Descriptive statistics and multivariable logistic regression models were computed to describe and examine sociodemographic, behavioural, and digital access factors associated with ever using the AI-powered chatbots. A subgroup analysis was conducted among participants reporting recent risky sexual behaviour.

Results: The mean age of participants was 21 years (SD= 1.77), with 1.7% living with HIV and 46% have ever been pregnant or mothers. Most (64.3%) were currently in education and training and 93.4% resided in urban areas. Majority (95%) owned a personal smart phone, with 72.1% reporting ever using generative AI and 71.8% had used either one of the two AI-powered chatbots. In the adjusted model, factors associated with significant likelihood of using AI-powered chatbots were being in education and training (AOR 1.55; 95% CI: 1.11 – 2.18), reporting ever being pregnant or a mother (AOR 1.50; 95% CI: 1.08 – 2.08), and knowing someone who has used these AI-powered chatbots (AOR 6.44; 95% CI: 4.17 – 9.94). On the other hand, living with HIV was significantly associated with lower likelihood of using AI-powered chatbots (AOR 0.35; 95% CI: 0.14 – 0.87). Similar associations were observed among AGYW reporting recent risky sexual behaviours. Within this subgroup, increasing age (AOR 0.88, 95% CI: 0.79–0.97) and living with HIV (AOR 0.25, 95% CI: 0.08–0.74) were associated with lower odds of chatbot use.

Conclusion: Overall, the use of AI-powered chatbots was high among AGYW accessing health services in South Africa, with social network influence emerging as the strongest driver of uptake. This underscores the importance of peer-led promotion strategies in scaling digital health tools. On the other hand, targeted efforts to engage older AGYW and those living with HIV are needed to ensure that AI-powered health technologies reach those with the greatest HIV prevention and care needs.

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Translating Twice-Yearly Injectable Lenacapavir into Community-Based HIV Prevention: A Next-Generation Delivery Model for Equitable Access in South Africa

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Background: Twice-yearly injectable lenacapavir (LEN) has the potential to transform HIV prevention by addressing many of the adherence challenges associated with daily oral PrEP. However, its public health impact will depend on innovative delivery strategies that reach populations most affected by HIV. The Accelerating Community-Centred Equitable Lenacapavir (ACCEL) programme was designed to translate this biomedical innovation into routine practice through community-based, differentiated service delivery for adolescent girls and young

Methods: ACCEL is a three-year Type II hybrid implementation study embedded within South Africa's national lenacapavir rollout. The programme combines peer-led mobilisation with decentralized HIV prevention services delivered through community pharmacies, nurse-led mobile sexual and reproductive health clinics, hair salons, key population drop-in centres and selected primary healthcare facilities. A shared Electronic Care Management (ECM) platform links peer navigators, referral pathways and service providers through digital referrals, barcode tracking and longitudinal client management, creating an integrated, person-centred model of care. Implementation will be evaluated using the RE-AIM framework through population surveillance, respondent-driven sampling, qualitative implementation research, programme monitoring, economic evaluation and mathematical modelling.

Innovation: ACCEL moves HIV prevention beyond traditional clinic-based care by delivering long-acting HIV prevention in trusted community spaces where people already access everyday services. Hair salons create accessible entry points for young women through integrated sexual and reproductive health services; community pharmacies provide convenient, stigma-reducing access through Pharmacist-Initiated Management of Antiretroviral Therapy (PIMART); and mobile clinics extend services to underserved rural communities. These delivery platforms are supported by peer navigators and real-time electronic care management, enabling seamless referrals, continuity of care and equitable access across multiple service providers.

Expected Impact: ACCEL will provide the first real-world evidence on the population impact, equity, implementation outcomes and cost-effectiveness of delivering twice-yearly lenacapavir through multiple community-based platforms. The findings will inform South Africa's national scale-up strategy by identifying delivery models capable of reaching underserved populations while strengthening integration between community services and the public health system. This implementation model offers a scalable blueprint for translating next-generation HIV prevention technologies into sustainable programmes across high HIV burden settings.

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Phone Ownership, Sharing, and Barriers to Mobile Health Communication among Adolescents and Young People Living with HIV in Uganda

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Background: Depression is common among adolescents and young people living with HIV (AYPLHIV) in Uganda, yet depression screening is rare due to overtaxed healthcare workers and a paucity of mental health professionals. Digital health tools could help close this gap, but successful development and deployment require a greater understanding of how AYPLHIV in Uganda access and use phones. We described phone access, ownership, sharing, and SMS use.

Methods: We conducted a cross-sectional mixed-methods study at Mukono, Kayunga, and Kawolo hospital HIV care clinics in central Uganda. We enrolled 124 AYPLHIV aged 18–24 by consecutive sampling and administered a structured questionnaire with closed and open-ended items on phone access, ownership, sharing, device powered-on time, health SMS use, and barriers to using phones for health-related activities. We summarized quantitative data as proportions and medians and analyzed open responses using inductive content analysis.

Findings: Of 124 participants (median age 21.5 years; 68.3% female, 59.7% urban, 40.2% with primary or less education), 83.1% could use a phone daily. Among those 103, 92.2% personally owned a phone, and 31.1% shared use of it with relatives; phones stayed on most of the day for 87.4%. Although 72.8% received SMS several times per week, only 46.6% had used SMS for health. Open responses converged on three barriers: privacy concerns and fear of HIV status disclosure, costs (smartphone scarcity, airtime, data), and limited reading literacy, which led many to prefer voice over SMS.

Discussion: The daily access gap likely reflects barriers beyond ownership, such as airtime and network. Sharing limits private health communication even for owners. Low SMS use for health reflects three constraints: others may see messages on a shared phone, sending SMS costs money, and reading literacy is variable. Voice interaction over a phone call avoids all three, which explains the preference.

Conclusion: For digital health to reach AYPLHIV in central Uganda, tools should account for phone sharing and address barriers, including airtime and data costs, privacy, and limited literacy. Voice-based digital health tools, such as interactive voice response (IVR), may be preferred to overcome barriers.

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Willingness to Participate in Future Clinical Trials of Long-Acting PrEP Implants for HIV Prevention Tailored to Sexual and Reproductive Health and Rights among LGBTQ Communities Attending Marpi Clinic in Kampala, Uganda

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HIV/ AIDs remains a one of the major causes of death in Uganda. The LGBTQ community remain at substantial risk of HIV infection due to violence, criminalization and stigmatization at healthcare centres, making SRHR needs remain unmet. The study evaluated willingness to participate (WTP) clinical trials of long-acting PrEP (LAP) implants among LGBTQ at high risk of HIV infection in Uganda.

From January to October 2024, a cross sectional survey was conducted within key population cohort at risk of HIV acquisition. The inclusion criteria was; HIV negative test results, aged 14-24, willing to use contraception, Hepatitis B negative, not pregnant and attending the MAPRI clinic. Participants completed willingness to participate (WTP) questionnaire for hypothetical future trials of LAP at 9 months. Multivariable logistic regression models were fitted to estimate odds ratios and the 95% confidence intervals of independent predictors associated with WTP in future clinical trials of LAP.

The study enrolled 285 (62%) eligible participants, median age was 20, interquartile range 19 to 22 years, 144 (51%) reported at least a secondary level education, 163 (57%) were single or never married and 2 in 5 participants (114, 40%) had one child. Most participants had one or more new male partners (124, 44%), about 39 (24%) reported no condom use with new male partners.

Nearly half 131(46%) of LGBTQ at high risk for HIV expressed WTP in future trials of long-acting PrEP implants. Unmet SRHR need and risky sexual practices with criminalization and stigma may encourage WTP in future clinical trials.

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Investigating Predictors of Willingness to Receive an HIV Vaccine in a South African Sample of Health-Seeking Young Adults

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Background: HIV continues to be a major global health challenge, leading to substantial morbidity, mortality, and economic burden. Low- and middle-income countries have long borne the brunt of the global epidemic, with South Africa home to the largest population of people living with HIV worldwide. Promisingly, new infections have generally decreased due to immense treatment-as-prevention efforts. However, HIV incidence remains a significant concern, particularly among young people and, more specifically, adolescent girls and young women in Eastern and Southern Africa. This population accounts for 28% of all new HIV infections globally and 77% of new infections among young people in the region. Many experts believe that the addition of a protective HIV vaccine is critical to fully controlling the epidemic. However, as we have witnessed in recent years, vaccine availability does not necessarily result in public acceptance and uptake. Therefore, considering how instrumental an HIV vaccine could be in curbing HIV incidence, it is important to explore young adults' willingness to receive one and the factors that may influence this willingness.

Material and Methods: This quantitative study employed a cross-sectional design to investigate willingness to receive a future HIV vaccine and associated factors. Specifically, sociodemographic factors, psychological antecedents of vaccination, HIV stigma, HIV knowledge, and perceived HIV risk and severity were examined. In this study, 173 HIV-negative young adults between the ages of 18 and 25 were recruited through convenience sampling at two youth clinics in Khayelitsha, Cape Town. This population is characterised by high levels of HIV incidence and is likely to be prioritised during initial HIV vaccine implementation efforts. Data were collected through facilitated face-to-face surveys in either English or isiXhosa and stored on REDCap. Statistical analyses were performed using IBM SPSS Statistics (Version 28.01, 2021). Descriptive statistics were generated for key variables, followed by inferential analyses, including Fisher's Exact Tests and one-way ANOVAs, to compare groups. Non-parametric alternatives were used where assumptions for parametric testing were not met. Regression analyses were conducted to assess predictors of vaccine willingness.

Results: Willingness to receive an HIV vaccine was high, with 82% of participants reporting that they would be willing to accept vaccination. HIV stigma, collective responsibility, and constraints were significantly associated with willingness to receive an HIV vaccine. Among the five psychological antecedents of vaccination, collective responsibility ($\beta = 0.216$, $p = .008$) and constraints ($\beta = -0.196$, $p = .015$) emerged as the key predictors of willingness. In contrast, sociodemographic variables, HIV knowledge, and perceived HIV risk and severity showed no significant association with willingness (all $p > .05$).

Conclusions: These findings suggest that public health interventions aimed at enhancing HIV vaccine uptake should consider fostering a sense of collective responsibility while addressing HIV stigma and barriers linked to health-seeking behaviour. Understanding the factors that influence willingness to receive an HIV vaccine is crucial for effective public health planning and implementation. The findings contribute to the growing literature on HIV vaccine acceptability among young adults in South Africa and may help inform future vaccine rollout strategies.

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Implementation Readiness for Integrating Long-Acting Injectable HIV Prevention and Treatment into One-Stop Shops Delivering Comprehensive Infectious Disease Services in Nigeria: A Mixed-Methods Implementation Science Study

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Background: As the global HIV response enters a new era, long-acting injectable antiretroviral therapy (LA-ART) and long-acting pre-exposure prophylaxis (LA-PrEP) offer unprecedented opportunities to improve adherence, reduce stigma, and expand equitable access to HIV prevention and treatment. In Nigeria, One-Stop Shops (OSSs) have evolved into comprehensive, community-centred service delivery platforms that integrate HIV services with screening, diagnosis, treatment, and referral for tuberculosis (TB), hepatitis B, hepatitis C, sexually transmitted infections (STIs), and other infectious diseases. Despite their strategic role, little is known about the readiness of OSSs to implement and sustain next-generation HIV technologies while maintaining integrated infectious disease services. This study aims to evaluate implementation readiness and identify organizational, health system, and contextual factors that influence the successful integration of long-acting injectable HIV interventions into OSSs in Nigeria.

Methods: This study will employ a convergent mixed-methods design informed by the Consolidated Framework for Implementation Research (CFIR). OSSs across selected states in Nigeria will be purposively sampled to capture diverse implementation contexts. Quantitative assessments will measure organizational readiness, implementation climate, leadership engagement, workforce competency, infrastructure, commodity security, cold-chain capacity, financing, and digital health readiness. Qualitative in-depth interviews with healthcare providers, programme managers, policymakers, community representatives, and clients will explore perceptions of acceptability, appropriateness, feasibility, adoption, and sustainability. Data will be analyzed using multivariable regression and thematic analysis, with findings integrated to identify priority implementation strategies for successful program adoption and scale-up.

Expected Outcomes: The study is expected to identify critical implementation determinants influencing the integration of long-acting injectable HIV prevention and treatment within OSSs, including workforce preparedness, supply chain resilience, policy and financing gaps, service integration, client engagement, and community trust. Findings will generate practical, context-specific implementation strategies to strengthen integrated HIV, TB, viral hepatitis, and STI services while improving equitable access to innovative HIV prevention and treatment technologies.

Conclusion: Introducing long-acting injectable HIV interventions through integrated One-Stop Shops represents a transformative opportunity to strengthen people-centred infectious disease service delivery in Nigeria. By generating evidence on implementation readiness and actionable strategies for adoption, this study will inform national policy, strengthen health system resilience, and support sustainable scale-up of integrated HIV and infectious disease services in resource-constrained settings. The findings will contribute to implementation science by providing a scalable model for integrating innovative HIV technologies into comprehensive infectious disease program across sub-Saharan Africa.

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Challenges Faced by Adolescent Girls in Uganda that Affected Timely Delivery of HIV Prevention Services; Observational Findings from HPTN084-01 Study at Kampala, MU-JHU Site

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Background: Consistent use of efficacious biomedical HIV prevention products is key to reducing HIV incidence among adolescent girls in Uganda, in addition to behavioral interventions like risk reduction counselling. The HPTN 084-01 study was conducted in South Africa, Uganda and Zimbabwe to assess the safety, tolerability and acceptability of long-acting injectable cabotegravir (CAB-LA) for HIV prevention among cisgender adolescent females aged below 18 years. We describe the Kampala, Uganda site (MU-JHU) experience on challenges faced by adolescents that affected timely receipt of their CAB-LA injections or oral PrEP offered in the trial.

Methods: Five CAB-LA injections were scheduled at study weeks 5, 9, 17, 25 and 33 followed by 48 weeks of oral TDF/FTC at quarterly visits. Throughout the study, participants received HIV counselling, risk reduction counselling and adherence support individually and in group sessions. Telephone calls or text reminders were sent prior to scheduled visits with home visits being done for missed visits. Once traced by study staff, participants who did not adhere to their visit schedules shared their experiences which were documented in health visitor visit forms.

Results: Retention in this study was very high with only 3 of the total 17 participants enrolled (17.6%) registering a missed visit(s) as follows. One missed 1 oral TDF/FTC visit. The second one missed 1 CAB-LA visit and 2 oral TDF/FTC visits. The third one missed 3 oral TDF/FTC visits. Challenges greatly affecting their study visits and PrEP use were: 1) Family disputes that led to relocation. 2) Mistreatment from stepmothers that motivated participants to run away and decide to marry early. 3) The urge to be independent from tough parents. 4) Negative rumors about oral PrEP in the communities. 5) Employers not permitting time off to attend study visits.

Conclusion: HIV prevention service providers should tailor services to accommodate the socioeconomic challenges that female adolescents face which may hinder their adherence to PrEP provision visits. Community rumors, myths and misconceptions about PrEP products also need to be addressed.

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The Potential of Rapid-Prototyping Approaches for Adapting Safety Planning Suicide Prevention Interventions for Implementation in Adolescent HIV Care in South Africa and Botswana

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Background: Suicide exacts a heavy toll worldwide, especially among adolescents living with HIV (ALWH) in low- and middle-income countries (LMICs). Prevention efforts are lagging in sub-Saharan Africa, and novel approaches are needed to adapt low-resource, evidence-based suicide prevention interventions and develop tailored implementation strategies for integration into adolescent HIV care. Rapid prototyping is a novel implementation approach where systematic, cyclical testing of an intervention with immediate feedback is used to refine content and implementation. In high-income settings, rapid prototyping has been employed in healthcare where implementation strategy development with immediate feedback is necessary to optimize quality and safety. However, the use of rapid prototyping is still nascent in LMIC settings. As such, we have proposed two rapid-prototyping pilot studies in Gaborone, Botswana and Cape Town, South Africa to adapt and refine the implementation of Safety Planning – an evidence-based suicide prevention intervention – for ALWH.

Materials and Methods: In each pilot study, we will engage local community advisory boards (CABs), suicide prevention experts, and key stakeholders to tailor the safety planning intervention to the local context and design a preliminary implementation plan; train interventionists to deliver the Safety Planning session and provide follow-up phone contacts; use a rapid prototyping approach to refine and iterate implementation; monitor engagement in the Safety Planning session and follow-up contacts; survey ALWH participants; conduct exit interviews with ALWH participants (n=20, 10 per site), family members (n=20, 10 per site), and implementers (n=4, 2 per site) to assess acceptability and feasibility; and review recorded sessions to assess fidelity. The rapid prototyping approach will proceed as follows: 1) Implement: The interventionist will pilot the Safety Planning session with a consenting ALWH participant. 2) Review: The interventionist will provide immediate feedback to the study team on the implementation in using a semi-structured guide. 3) Refine: The study team will revise the implementation plan in collaboration with the interventionist. The process will repeat for the delivery of each Safety Planning session, with a parallel assessment structure to implement, review, and refine the follow-up contact implementation.

Results: Enrollment into the rapid prototyping pilot in South Africa is ongoing, with recruitment in Botswana planned to begin shortly. Adaptations were needed to the written Safety Plan to ensure the list of clinical sources of support map to local resources. Early findings suggest it is feasible to train lay (peer navigator) health providers to deliver the Safety Planning intervention.

Conclusion: If employed in a low-resource setting, rapid prototyping could facilitate rapid translation of an evidence-based practice through generation of real-world insights into content and implementation refinement over a short time-period, at a reduced cost, requiring only a small sample size. Further, this multi-country rapid-prototyping exercise has the potential to facilitate regional learning with respect to adaptation and implementation of evidence-based suicide prevention interventions for ALWH.

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Age-Related Differences in Return-to-Care Pathways among Children and Adolescents Living with HIV Following Treatment Interruption in Eswatini

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Background: Treatment interruptions (IIT) among children and adolescents living with HIV (CALHIV) remain a critical barrier to achieving optimal treatment outcomes in Eswatini. While national ART coverage is high, viral load suppression among CALHIV remains suboptimal, with estimates ranging between 70–80% among adolescents and lower retention rates compared to adults. Younger children depend on caregivers for treatment adherence, while adolescents face additional psychosocial and structural barriers that increase the risk of treatment interruption. These gaps highlight the need for age-responsive differentiated service delivery models. Ensuring timely return to care and adherence to ART re-initiation following IIT is essential to prevent poor clinical outcomes.

Methods: A retrospective analysis of routine programme data was conducted among 102 CALHIV identified as having interrupted treatment between August and December 2025 through the Project implemented by Young Heroes across 34 constituencies in Eswatini. Linkage Facilitators based at health facilities identified IIT clients for tracing. Located clients received age-appropriate adherence counselling at household level by Home Visitors and were referred back to care, with escort support provided as needed. Primary outcomes were successful return to care and adherence to scheduled ART re-initiation appointments. Analyses were stratified by age group.

Results: All 102 CALHIV (50% female; 50% male) were successfully re-initiated on ART. Return-to-care pathways varied by age. Children aged <10 years were more likely to return following phone-based tracing alone: 76% returned after a phone call only, while 24% required additional follow-up and escort support. Among adolescents aged 10–14 years, 72% required both phone follow-up and escort support, while 28% returned after phone contact alone. Among older adolescents aged 15–19 years, 52% returned after phone contact only, while 48% required both phone follow-up and escort support.

Conclusions: Age-related differences significantly influence return-to-care pathways following treatment interruption. Younger children respond well to caregiver-mediated tracing, while younger adolescents require more intensive follow-up. Older adolescents show improved responsiveness to phone-based tracing but still require tailored engagement. Differentiated, age-responsive tracing strategies are essential to improving retention and viral suppression among CALHIV in Eswatini.

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Implementing Integrated Nutrition and Psychosocial Support for Children Living with HIV: Programmatic Evidence from South India

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Children Living with HIV (CLHIV) face intersecting challenges of malnutrition, anemia, poverty and psychosocial distress, that undermine treatment outcomes and overall well-being. The Sanjeevan Project was implemented in Bengaluru and nearby peri-urban areas, India, to strengthen HIV care through integrated nutrition support and psychosocial services delivered via community and health-system linkages.

Sanjeevan is a CSR-supported programme implemented by Alliance India and Karnataka Network of Positive People (KNP+) with support from Teva Pharmaceuticals between August 2024 and March 2025 across Bengaluru and nearby districts. The programme targeted 555 CLHIV aged 2–17 years, identified through government ART centres, NGOs, hostels, and orphanages. Monthly nutritional kits were distributed for three consecutive months, with routine monitoring of anthropometric indicators and hemoglobin levels. Baseline quantitative data were collected for all 555 children, with complete follow-up data available for over 500 children and end-line measurements for approximately 400 children. Descriptive statistics were used to assess trends in nutritional indicators. Psychosocial support was delivered through yoga, arts-based activities, counseling, and storytelling sessions.

Qualitative insights were gathered through 40 in-depth interviews with children and caregivers and 4 focus group discussions with programme staff and healthcare providers to assess feasibility, acceptability, and implementation processes.
At baseline, 75.7% of children were anemic, including 13.2% with severe anemia, and 33.9% were underweight. Over the three-month intervention period, underweight prevalence declined by 2.1 percentage points, average body weight increased from 37.9 kg to 38.8 kg, and notable improvements were observed in wasting, particularly among female children.

The integration of nutrition delivery with psychosocial activities improved engagement, caregiver trust, and continuity of follow-up. However, persistent anemia and higher vulnerability among younger children and girls showed the need for stronger clinical integration beyond supplementation alone.
The Sanjeevan Project demonstrates the feasibility and value of integrating nutrition and psychosocial support within community-linked HIV care for CLHIV in urban Indian settings.

Programme findings highlights the importance of multi-sectoral collaboration, routine monitoring, and psychosocial support in addressing complex vulnerabilities with stringent nutritional intervention. Future interventions should strengthen linkage with clinical anemia management, refine services for high-risk subgroups, and support scale-up within national frameworks. This implementation strategy moves us beyond clinical routines, ensuring that children living with HIV receive the thoughtful, continuous care they need to grow and thrive

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Community-Driven Models for PrEP Uptake among Pregnant and Breastfeeding Women in Kampala, Uganda: A Retrospective Program Analysis

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Background: Pregnant and breastfeeding women (PBW) remain at increased risk of HIV acquisition, placing both mothers and infants at risk of adverse outcomes, including vertical HIV transmission. Although the World Health Organization recommends pre-exposure prophylaxis (PrEP) for HIV-negative women at substantial risk, uptake remains inconsistent because of stigma, structural barriers, and limited integration into maternal health services. Community-driven HIV prevention approaches that engage communities in programme design, implementation, and monitoring have the potential to improve equitable access and acceptability of PrEP services. This study assessed PrEP uptake and associated factors among PBW enrolled in the Kampala HIV Program implemented by Reach Out Mbuya Community Health Initiative, which integrated community-driven strategies to strengthen maternal HIV prevention.

Methods: We conducted a retrospective analysis of routine programme data collected from October 2023 to June 2025 among PBW aged 15–49 years attending antenatal and postnatal clinics at six high-volume health facilities in Kampala. Sociodemographic characteristics (age and marital status) and behavioural factors (partner relationship, intimate partner violence [IPV], and partner HIV status) were extracted. PrEP uptake was the primary outcome. Predictors of uptake were assessed using multivariable modified Poisson regression. Community-driven interventions included peer-led sensitisation, participatory counselling, and structured community feedback mechanisms that informed service delivery and strengthened programme responsiveness.

Results: Among 3,258 PBW, 2,846 (87.4%) initiated PrEP, with a mean age of 26.6 ± 4.7 years. Uptake was higher among pregnant women than breastfeeding women (88.1% vs. 85.8%; p=0.06). Significant differences were observed across marital groups, with the highest uptake among separated/divorced (95.1%), followed by single/never-married (94.7%) and married/cohabiting women (91.1%) (p<0.001). Women reporting IPV had markedly lower PrEP uptake than those without IPV (17.4% vs. 87.9%; p<0.001). Similarly, uptake was lowest among women with HIV-positive partners (47.6%), compared with those whose partners were HIV-negative (73.8%) or whose status was unknown (87.8%) (p<0.001). After adjustment, married/cohabiting (aPR=1.34; 95% CI: 1.20–1.49), single/never-married (aPR=1.36; 95% CI: 1.17–1.57), and separated/divorced women (aPR=1.36; 95% CI: 1.09–1.69) were more likely to initiate PrEP than women in other categories. Women experiencing IPV were significantly less likely to initiate PrEP (aPR=0.24; 95% CI: 0.09–0.68; p=0.01). Peer-led education, participatory counselling, and continuous community feedback strengthened trust, promoted service acceptability, and supported sustained PrEP uptake, although structural barriers such as IPV and partner-related vulnerabilities continued to limit equitable access.

Conclusions: Community-driven HIV prevention approaches successfully supported high PrEP uptake among PBW in Kampala, demonstrating the value of embedding community engagement within routine maternal health services. However, women experiencing intimate partner violence and those with HIV-positive partners remained underserved, highlighting the need for tailored interventions. Scaling up community-led strategies alongside partner HIV testing and disclosure support, IPV screening and referral, and community-led monitoring could further strengthen equitable PrEP access. Community-driven implementation offers a scalable, people-centred approach for advancing maternal HIV prevention and accelerating progress toward eliminating vertical HIV transmission in high-burden settings.

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Designing for Mobility: A Human-Centered Approach to Supporting Engagement for Mobile Populations across the HIV Care Continuum

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Learning Objective: This workshop introduces human-centered design (HCD) as a practical approach to understanding the intersection of geographic mobility and care engagement to co-create more person-centered HIV services. After this workshop, participants will be able to:
- Distinguish key forms of mobility and describe commonly used measurement approaches (e.g. surveys, routine data, GPS).
- Analyze how mobility shapes engagement with HIV care and prevention in different settings.
- Reframe mobility from a 'barrier' to a design opportunity and apply HCD principles to collaboratively prototype an intervention to support care engagement for mobile individuals
- Identify practical next steps for using HCD in their own work.

Background: Despite growing recognition of mobility as a determinant of HIV outcomes, this is not routinely translated into service design. This interactive workshop explores how mobility shapes engagement with care, and how services can be redesigned to reflect the needs of mobile populations and healthcare providers. Using case studies and HCD methods, participants will work in small groups to map mobility-related barriers across the HIV care continuum and reframe mobility from a barrier to a design opportunity. Through a guided design sprint, participants will prototype a service intervention and identify practical next steps for applying these approaches in their own work.

Active Learning: Participants will engage in a facilitated HCD workshop combining case-based learning and co-creation. Groups of 4-6 will focus on different parts of the care continuum using case studies of real-world personas (e.g. seasonal farm worker, cross-border miner) engaging with HIV services. Participants adopt different stakeholder roles (e.g. mobile PLWH, provider, programme manager) to map mobility-related obstacles across the care journey from different perspectives. Using a guided design sprint, groups will ideate and prototype a mobility-responsive intervention. Outputs are shared through a gallery walk with facilitated Q&A and a final individual reflection. Activities emphasize collaboration, storytelling, and practical skill-building.

- Rapid framing (10 minutes):
Method: Facilitator sets aims and introduces HCD (empathy, problem framing, prototyping, iteration). Facilitator clarifies the distinction between geographic mobility and health-system movement. Facilitator introduces the group to methods of mobility measurement.
Learning outcome: Distinguish key forms of mobility and describe commonly used measurement approaches.
- Case vignette role play (25 minutes):
Method: Empathy and Define stages of the HCD process. Storytelling and use of personas. Journey mapping.
Learning outcome: Analyze how mobility shapes engagement with HIV care and prevention in different settings.
- Design sprint (30 minutes):
Method: Ideate and Prototype stages of the HCD process. Creative, rapid idea generation using post-its, flipcharts, stickers. Sketch a simple prototype for one intervention clearly outlining 'who', 'what', 'where' and 'when' (IAS DSD components).
Learning outcome: Reframe mobility from a 'barrier' to a design opportunity and apply HCD principles to collaboratively prototype an intervention.
- Gallery walk (15 minutes):
Method: Groups rotate and visit one other group's station.
- Individual reflection (10 minutes):
Method: Discussions stop to allow each participant to fill in a reflection on what they will take away for their own work in programs, service delivery, or policy.

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Factors Associated with HIV Viral Suppression among People Receiving Antiretroviral Therapy (ART) in Bishkek, Kyrgyzstan, 2021–2023

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Introduction: Sustained viral suppression is a critical measure of antiretroviral therapy (ART)effectiveness and essential to achieving the UNAIDS "95-95-95" strategy, which seeks to ensure that 95% of people with HIV on ART attain viral load suppression by 2030. In Kyrgyzstan, where HIV incidence continues to rise, an increasing number of people are on ART. Understanding the factors associated with viral suppression is important for interrupting HIV transmission.

Methods: We conducted a retrospective cohort study among adults (>18 years) with HIV in Bishkek, Kyrgyzstan. Participants included people initiating or reinitiating ART from June 2021 to June 2023 and on ART for ≥6 months. We performed multiple Poisson regressions to estimate adjusted risk ratios (aRR) for factors associated with viral load suppression (≤200 copies/ml based on the most recent test).

Results: Among 377 participants, 95% achieved HIV viral suppression and 85% had undetectable viral load (≤40 copies/ml). Participants were mostly male (60%), 30-49 years old (60%), and self-employed (49%). All were on a dolutegravir-containing ART. The proportion of those with viral suppression was below 90% for people who were re-initiating ART, with advanced HIV disease at diagnosis, who started ART >3 months after their HIV diagnosis, who injected drugs in the last 12 months, and with monthly or unclear frequency of ART appointments. One-quarter of people self-reported an interruption in ART for ≥15 days. People without skipped ART doses had a higher likelihood of being virally suppressed (aRR=1.11 (95% confidence interval=1.03-1.19).

Conclusion: The results of the study show a high level of viral suppression, and Kyrgyzstan is achieving the target of 95% viral load suppression among PLHIV, even though one-quarter of participants reported skipping ART doses. This skip rate is consistent with literature from other settings using dolutegravir-based regimens. Understanding the frequency and reasons for lack of adherence is important to maintain high viral suppression.

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HIV Positivity among In-School and Out-of-School Adolescent Girls and Young Women in Ebonyi State, Nigeria: A Comparative Analysis

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Background: Despite ongoing prevention efforts, adolescent girls and young women (AGYW) aged 15–24 years remain highly vulnerable to HIV infection across sub-Saharan Africa, including Nigeria. Out-of-school AGYW face higher HIV risk than in-school peers due to socioeconomic vulnerabilities and risky behaviors, highlighting need for targeted prevention and testing (Matovu et al., 2021; Arije et al., 2021; Danjuma et al., 2025). This study compares HIV positivity among in-school and out-of-school AGYW reached through community-based HIV testing services in Ebonyi State, Nigeria

Methods: A retrospective analysis of programmatic HIV testing data among AGYW aged 15–24 years in Ebonyi State was conducted. Data from HIV testing services implemented through community outreach activities between January and December 2025 were analyzed. AGYW were categorized as in-school (currently enrolled in secondary or tertiary education) or out-of-school (not enrolled) based on self-reported educational status. HIV positivity rate was calculated as the proportion of confirmed HIV-positive cases among those tested in each group. A two-proportion z-test was used to assess differences in HIV positivity between in-school and out-of-school AGYW, with statistical significance set at $p < 0.05$.

Results: A total of 75,188 AGYW were tested through community-based HIV testing services, comprising 29,675 in-school and 45,513 out-of-school AGYW. Overall, 63 AGYW tested HIV-positive, yielding an HIV positivity rate of 0.08%. HIV positivity was significantly higher among out-of-school AGYW, with 50 positive cases (0.11%), compared to 13 positive cases (0.04%) among in-school AGYW. A two-proportion z-test comparing HIV positivity yields between the two groups demonstrated a statistically significant difference at the 5% significance level ($z = -3.19$, $p < 0.05$),

Conclusion: Out-of-school AGYW demonstrated a significantly higher HIV positivity rate than their in-school counterparts, highlighting increased vulnerability to HIV infection. The findings underscore the need for strengthened targeted HIV prevention, testing, and linkage-to-care interventions for out-of-school AGYW, while maintaining school-based HIV prevention programs in Ebonyi State.

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From Lived Experience to Leadership: Evidence-Based Peer Provider Models for Adolescent Health across Eastern and Southern Africa

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Background: Peer providers are a critical resource to realize the sexual and reproductive health and well-being of adolescents. Peer providers can successfully provide critical health knowledge, psychosocial support, foster health-seeking skills, navigate health services in a non-stigmatizing way, and connect adolescents to other community resources. Their skill set and frontline experience are critical contributions to youth employment and workforce readiness. Research has evaluated the effectiveness of different peer models for a range of outcomes; however, there is need for research and guidance on real-world implementation strategies.

Method: Most Significant Change (MSC) interviews were conducted remotelyto understand lived experiences of peer providers through a targeted, youth-engaged and strengths-based process. We recruited peer providers aged 20–35 years who were currently or previously affiliated with a civil society organisation through multiple channels. Following a review of 105 initial submissions of interest from across countries in ESA , MSC interviews were conducted with peer providers (n=14) in five countries.

Results: Peer providers' narratives revealed the acquisition of critical skills that enabled meaningful change at both individual and community levels. In the domain of leadership, participants described career growth: “Being a peer supporter changed how my life is now because, today, I am the Executive Director of such a big global organization. It all came from having such a platform, access to information, and empowerment. It’s also about having platforms to speak about my passions and what I stand for”, there was also notable growth in public speaking and professional confidence: “I have developed public speaking skills from presenting more often during meeting also interacting with the girls and colleagues I’m confident enough to present well and able to deliver my work/ tasks effectively”. This growth extended into clinical and psychosocial support, with providers describing their capacity to guide peers through complex situations: "I am confident to guide peers and advise them how to solve issues, especially when dealing with complex cases like HIV or pregnancy." Beyond individual counselling, participants articulated an advocacy role centred on rights and informed decision-making: "It's about ensuring that they have access to resources and understand their rights, so they can make decisions from a place of knowledge." Providers also expressed a hopeful, future-oriented vision for adolescent health in their communities: "My vision for the future of adolescent health is seeing young girls coming to the clinic, young people using contraceptives, giving birth to healthy babies, those on ART adhering to their medication and giving birth to HIV-negative babies."

Conclusion: Peer provider programmes demonstrate transformative potential that extends beyond peer-facilitated service delivery for adolescents and young people. Our findings stress the dual benefit of peer provider models: adolescents and their communities gain trusted, rights-oriented health support, while providers gain capabilities that strengthen their own wellbeing, leadership and future opportunities. Sustained investment in these programmes, including structured training, supervision, and formal recognition and fair remuneration is essential to realising this potential at scale.

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Prevalence of Syphilis among Pregnant Women Using HIV/Syphilis Combo Testing: Results from Ebonyi State, Nigeria

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Background: Mother-to-child transmission of HIV and syphilis remains a significant public health challenge in Nigeria, particularly in resource-limited settings where access to comprehensive antenatal screening may be limited. The use of dual HIV/syphilis (DUA) rapid diagnostic tests provides an integrated and efficient approach for early detection and timely intervention among pregnant women attending antenatal care services, especially considering that the prevalence of syphilis among pregnant women in Nigeria is 0.6%. In Ebonyi state, there are limited recent data on syphilis prevalence among pregnant women. This study therefore aimed to determine the prevalence of syphilis among pregnant women in Ebonyi State from January to December 2025.

Methods: A retrospective analysis of routine programme data from the National Data Reporting System (NDARS) was conducted. Data on pregnant women tested with HIV/syphilis dual kits and those positive for syphilis were analyzed, positivity yield was calculated as the proportion of positives among those tested.

Results: A total of 102,052 new antenatal clinic (ANC) attendees were recorded during the reporting period, of whom 84,597 were screened for syphilis, resulting in a testing coverage of 82.8%. This left a screening gap of 17,455 pregnant women (17.1%), largely attributable to stock-outs and the non-availability of syphilis test kits. Among those screened, 40 tested positive for syphilis, yielding a prevalence of 0.05%. All identified positive cases were promptly referred for appropriate treatment to prevent congenital syphilis.

Conclusion: Despite achieving high syphilis screening coverage among ANC attendees, gaps in testing persisted due to stock-outs and limited availability of DUA. Strengthening commodity security and ensuring uninterrupted access to testing supplies are essential to achieving universal antenatal syphilis screening, facilitating early case detection and treatment, and preventing congenital syphilis.

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Improving Retention in HIV Care: A Review of Aligning Antiretroviral Refill Schedules with Local Market Days in Jigawa State

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Background: Health-seeking behaviour is a function of complex social, economic and medical interrelationships shaping the health system to address healthcare needs of individuals and groups. Local customs, resources and norms are integral yet untapped opportunities for the HIV response in many African settings including Nigeria. Lack of transport fare to distant facilities often located outside the 30 km of the clients' radius pose challenge to antiretroviral (ARV) refill appointment compliance, manifesting as missed appointments, defaulting and interruption in treatment in many low-resource settings. Hence, ART-experienced clients go through a continuous circle of interruption in treatment and re-engagement with associated negative treatment outcomes at each loop. Hence, this study evaluated the aligning of ARV refill schedules with local market days in selected rural hospitals in Jigawa state.

Methods: We conducted an observational descriptive study of the pattern of ARV refill appointments and corresponding continuity of treatment at Jahun and Kafin Hausa General Hospitals to assess the impact of synchronising refill appointments with the traditional local market days of these localities. We analysed quarterly ART clients data for six quarters from January 2024 to May 2025.

Results: Using baseline numbers of ART clients of 307 and 886 in Kafin Hausa and Jahun General Hospitals respectively, we found an average continuity of treatment proxy of 100% during the period. While the least average combined retention proxy of 96.5% was recorded in the third quarter of 2024, the average combined retention proxies for the two sites remains 100% during the period.

Conclusion: Synchronising ARV refill dates on local market days in areas where local market plays significant social and economic roles increases continuity of treatment of ART clients.

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Patient-Provider Communication and Satisfaction with HIV Care: An Implementation Target for Person-Centred Service Delivery in South Africa

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Background: Patient-healthcare worker (HCW) communication is a modifiable aspect of care that may shape patient engagement in HIV services yet remains understudied in South Africa. We aimed to characterise patient perceptions of HCW communication behaviours, assess their association with satisfaction with care, and identify factors associated with perceived poor HCW communication.

Methods: We conducted a cross-sectional baseline survey among adult antiretroviral therapy (ART) patients with viral load >50 copies/mL, ≥2 weeks late for a scheduled visit, or newly initiating/reinitiating ART, at eight clinics in eThekwini, South Africa (August 2025-April 2026). HCW communication was assessed using the 13-item Patient-Provider Communication Behaviour (PPCB) scale (5-point Likert scale, 1=strongly disagree to 5=strongly agree;12 items on communication behaviours, one on overall visit satisfaction). We assessed associations between mean PPCB score (12 items) and overall satisfaction using Spearman's correlation, and identified factors associated with mean PPCB scores using adjusted linear regression.

Results: Among 588 participants [68.9% female, median age 40 years (IQR 34–47)], overall perceptions of HCW communication were moderately positive (mean PPCB score = 3.30, SD 0.90). Highest-rated behaviours included HCWs greeting patients in a way that made them feel comfortable, listening carefully, and understanding patients. Lowest-rated behaviours – encouraging patients to ask questions, responding to patient concerns, involving patients in health decisions, checking treatment-plan acceptability, and confirming understanding – reflect core domains of shared decision-making and patient autonomy central to person-centred care. A moderate positive association was observed between mean PPCB score and overall satisfaction (Spearman's correlation = 0.56, p<0.001). In adjusted linear regression analyses, older age (β=0.01/year; 95% CI: 0.01–0.02; p<0.001) and male sex (β=0.23; 95% CI: 0.07–0.38; p=0.004) were associated with higher mean PPCB scores, while being late for clinic visit (β=-0.31; 95% CI: -0.49 to -0.13; p=0.001) and each additional year on ART (β=-0.02; 95% CI: -0.03 to -0.00; p=0.043) were associated with lower scores.

Conclusion: These findings identify specific, addressable gaps in patient-centred communication within routine public-sector HIV care, particularly in active patient engagement, shared decision-making and patient autonomy. Strengthening HCW communication practices is needed to improve patient experience and HIV service quality, especially for groups reporting poorer communication experiences.

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HIV Burden and Care Cascade Gaps in the Emergency Department: Evidence from a Community Health Centre

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Background: Substantial progress has been made towards the UNAIDS 95–95–95 targets yet gaps remain within the HIV care cascade. Emergency departments (ED) routinely manage large numbers of patients who may not otherwise access the health system. Despite South Africa's high HIV prevalence, testing and linkage to care are often not prioritized in the ED, due to perceived increase in workload We sought to quantify the burden of HIV and gaps in the care cascade in ED patients, thereby informing the need to integrate status neutral HIV testing and linkage-to-care processes into routine ED workflows.

Material and Methods: We conducted an interim cross sectional analysis of individuals presenting to an ED at a community health center in Cape Town from January 19 to June 2, 2026, as part of an ongoing study offering universal HIV testing and status-neutral referral for prevention or treatment as indicated. Using a fixed interval sampling strategy, we enrolled individuals aged ≥12 years who were able to provide informed consent, clinically stable and agreed to HIV testing or disclosure of known positive HIV status. Participants completed a questionnaire assessing demographics, social determinants of health, and self-reported HIV care cascade outcomes and were universally offered point-of-care (POC) HIV testing. Descriptive statistics were used to summarize participant characteristics and cascade outcomes. Multivariable logistic regression models were used to estimate adjusted odds ratios (aOR) of Living With HIV (LWH) versus not LWH by age, sex, social determinants of health, substance use, and prior mental health diagnosis, with 95% confidence intervals (CI) and statistical significance defined as $p<0.05$.

Results: Among 347 participants, 94 (27.1%) were LWH. Of these, 8 were newly diagnosed in the ED (8.5%) and 86 (91.5%) were already aware of their status. Among those aware of their status, 79 (91.9%) were linked to care, with 78 (90.7%) currently taking antiretrovirals (ART). Of the 78 on ART, 46 (59.0%) reported their viral load was undetectable, 2 (2.6%) reported a detectable viral load, and 30 (38.5%) were unsure of their viral suppression status. All participants enrolled identified as Black African. Out of all participants LWH, median age was 38.5 (IQR 29–49) years and 66 (70.2%) were female. Compared with participants aged 12-24, both age 25-40 years (aOR 2.81, 95% CI 1.28-6.17) and age >40 years (aOR 4.10, 95% CI 1.85-9.08) were associated with higher odds of LWH Female sex (aOR 2.66, 95% CI 1.47-4.80), and positive AUDIT-C score (aOR 1.98, 95% CI 1.14-3.45) were also associated with higher odds of living with HIV.

Conclusion: HIV prevalence was high among individuals presenting to the ED, especially among older women and those with a positive AUDIT-C score. Many participants, despite reporting linkage to care and ART use, were unsure of the viral suppression status., POC viral load testing may be a useful biomedical investigation in the ED setting. Implementing universal, status neutral test and connect strategies in EDs could help close critical HIV treatment gaps.

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Implementing TB Contact Investigation in Nigeria's Private Health Facilities: Cascade Coverage, Diagnostic Yield and Number Needed to Screen

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Background: Contact investigation is a key tuberculosis (TB) case-finding activity because it brings screening closer to people who have been exposed to infectious TB cases. In high-burden settings, missed opportunities in contact identification, symptom screening, diagnostic evaluation, and linkage to care can limit the contribution of contact investigation to TB control. In Nigeria, private health facilities provide care to many people with TB, but their role in systematic contact investigation has often been less developed than that of public facilities. Under the Institute of Human Virology Nigeria Community–Public–Private Mix (CPPM) project, private facilities were supported to identify and screen contacts of bacteriologically confirmed TB index cases and link presumptive TB cases to diagnostic services. This implementation analysis assessed cascade coverage, diagnostic yield, and number needed to screen within private-sector contact investigation.

Methods: We conducted a retrospective analysis of routine programme data from TB contact investigation activities implemented in private health facilities between January 2024 and December 2025. Contacts of bacteriologically confirmed TB index cases were identified and screened for TB symptoms according to national guidelines. Contacts with symptoms suggestive of TB were classified as presumptive TB cases and referred for diagnostic evaluation through facility-based or linked diagnostic services. The contact investigation cascade was assessed using the number of index cases, contacts identified, contacts screened, presumptive TB cases, presumptive cases evaluated, and contacts diagnosed with TB. Screening coverage, diagnostic evaluation coverage, diagnostic yield, and number needed to screen were calculated using routine programme records.

Results: A total of 564,359 contacts were identified from 160,827 bacteriologically confirmed TB index cases, representing an average of 3.5 contacts identified per index case. Of the contacts identified, 545,025 (96.6%) were screened for TB symptoms. Among those screened, 115,623 (21.2%) were classified as presumptive TB cases, and 111,918 (96.8%) completed diagnostic evaluation. Overall, 16,179 contacts were diagnosed with TB, corresponding to a diagnostic yield of 3.0% among screened contacts. The number needed to screen to detect one TB case was 34. These findings show high completion across the contact investigation cascade, from contact identification and symptom screening to diagnostic evaluation and case detection.

Conclusion: Contact investigation delivered through private health facilities achieved high screening and diagnostic evaluation coverage and identified a substantial number of TB cases among contacts of bacteriologically confirmed index cases. The diagnostic yield and number needed to screen show that private-sector contact investigation can contribute meaningfully to TB case detection when implemented with clear screening procedures, diagnostic linkage, and routine cascade review. Embedding this approach within routine private-facility TB services offers a practical pathway for expanding contact investigation and reducing missed TB diagnoses in high-burden settings.

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From Data to Action: Leveraging Organizational Network Analysis to Enhance Coordination and Decision-Making in HIV Programs: Evidence from a Multi-Stakeholder HIV Response in Bayelsa State, Nigeria

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Background: Effective HIV programming requires strong coordination, clear communication, and well-aligned stakeholder engagement across systems. However, in resource-constrained sub-national settings, poor coordination and fragmented stakeholder engagement remain significant barriers to the optimal implementation of programs. In complex, multi-stakeholder environments, limited visibility of relationships, communication flows, and decision-making structures often leads to inefficiencies, duplication of efforts, and suboptimal outcomes. Organizational Network Analysis (ONA) provides a data-driven approach to mapping relationships, identifying bottlenecks, and strengthening collaboration.

Objectives: This study presents implementation evidence on the use of ONA to enhance coordination and decision-making in OVC programs in Bayelsa State.

Description: The Center for Clinical Care and Clinical Research Nigeria (CCCRN) applied Organizational Network Analysis across a multi-stakeholder HIV response involving health facilities, community structures, government agencies, and implementing partners in eight LGAs of Bayelsa State. We conducted a network mapping among 120 actors to assess connectivity, information flow, and referral linkages. Key interventions included identification of central and peripheral actors, strengthening weak ties, enhancing communication channels, and establishing structured coordination mechanisms. We conducted a cross-sectional program review between January and December 2025. Data were analyzed using network metrics and SPSS version 20.

Findings: The application of ONA revealed critical gaps in coordination, including weak linkages between community and facility actors, as well as an over-reliance on a few central entities. Following targeted interventions, network density increased by 89%, and referral linkages improved significantly. Bi-directional referral completion rates increased from 28% to 92%, while response time for service coordination reduced by 28%. Stakeholder collaboration improved, with enhanced information sharing and joint decision-making. These changes contributed to improved program efficiency, sustainability, better case tracking, and strengthened service delivery outcomes across the HIV cascade.

Conclusion/Recommendation: Organizational Network Analysis is a powerful tool for strengthening coordination and improving decision-making in complex HIV programs. By translating network insights into targeted actions, programs can enhance collaboration, optimize resource use, and improve health outcomes. Scaling ONA-informed approaches can strengthen multi-stakeholder responses and accelerate progress toward HIV epidemic control in similar settings.

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Sustained Linkage and Stable Positivity across the Public–Private Mix Tuberculosis Cascade in Abia State, Nigeria, 2024

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Background: Public-Private Mix (PPM) models expand access to tuberculosis screening, diagnosis, and notification by linking private providers to public tuberculosis programmes. In high-burden settings, sustaining cascade performance at scale can be challenging because of seasonal fluctuations, reporting delays, and variable diagnostic capacity. In Abia State, Nigeria, the PPM network has maintained relatively stable performance despite high service volumes. We assessed quarterly PPM cascade data from 2024 to evaluate stability, identify operational bottlenecks, and generate implementation lessons relevant to similar high-burden settings.

Methods: We conducted an analysis of routine 2024 PPM programme data from Q1 to Q4 in Abia State, Nigeria. Indicators included screening volume, presumptive tuberculosis identification, examination completion, Xpert coverage, positivity, notification completion, and PPM contribution to overall state notifications. Changes in positivity between quarters were assessed using two-proportion z-tests with $\alpha = 0.05$. Operational trends across the cascade were examined to identify actionable insights for programme improvement.

Results: Among 200,715 individuals screened, 33,094 (16.5%) were identified as having presumptive tuberculosis, and 32,751 (99.0%) completed diagnostic examination. A total of 3,342 tuberculosis cases were diagnosed, corresponding to a positivity rate of 10.2%. PPM facilities notified 3,360 cases, yielding 100.5% notification completion and indicating clearance of previously unreported cases through end-of-year reconciliation. Overall, the PPM network contributed 63.8% of all tuberculosis notifications in the state. Examination completion remained consistently high at approximately 99% across all four quarters. Presumptive yield increased modestly from 15.2% in Q1 to 17.8% in Q4, while Xpert coverage remained stable at 8-9%. Positivity was also stable over time, with no statistically significant difference between Q1 and Q4 (9.9% vs 10.3%; $z = -0.92$, $p = 0.36$).

Conclusions: Abia State's PPM tuberculosis network sustained high linkage to diagnosis and notification while maintaining stable positivity across the 2024 cascade. These findings suggest that strong PPM systems can preserve diagnostic yield even under high service volume and routine programme pressures. Key implementation lessons include maintaining screening quality while expanding reach, ensuring consistent access to molecular diagnostics, and institutionalizing routine data reconciliation to close reporting gaps. Disaggregated performance dashboards and targeted facility feedback may further strengthen accountability and support scale-up of resilient PPM models in other high-burden settings.

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Recent HIV Infections among Key Population at Marpi Clinic-Mulago: Prevalence and Associated Factors

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Globally, Human Immunodeficiency Virus (HIV) remains a significant public health challenges. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), an estimated 39 million people were living with HIV by the end of 2023, approximately 630,000 died from HIV-related illnesses, and more than 1.3 million new infections were recorded. Sub-Saharan Africa continues to shoulder the greatest burden, accounting for the majority of new infections, particularly among women and young people also key populations. In 2023, women and girls represented about 62% of new infections in the region. Although progress has been made in expanding prevention, testing, and antiretroviral therapy services, the epidemic remains a leading cause of morbidity and mortality.

In Uganda, notable declines in HIV prevalence and incidence have been observed over the past decade. However, transmission persists at concerning levels. By the end of 2023, Uganda registered approximately 38,000 new HIV infections, with adolescent girls and young women disproportionately affected. The national adult HIV prevalence was estimated at 5.1%, with women bearing a higher burden than men. Monitoring recent HIV infections and identifying associated risk factors are critical for informing targeted prevention strategies, particularly among key and vulnerable populations.

This study aimed to determine the prevalence of recent HIV infections and examine associated factors among HIV-positive participants. A retrospective review of 383 client records was conducted. Demographic, behavioral, and clinical data were extracted and analyzed using STATA version 14.2. Descriptive statistics summarized participant characteristics, including age, sex, education level, marital status, religious affiliation, and risk behaviors. Inferential analyses identified factors independently associated with recent HIV infection. Adjusted odds ratios (AORs) with 95% confidence intervals (CIs) were calculated, with statistical significance set at $p < 0.05$.

Among 383 participants, females constituted 57.2%, while males 42.8%. The mean age was 26 ± 5.5 years, reflecting a predominantly young cohort; 42.8% were under 25 years and 28.7% were aged 25–29 years. Nearly half (49.6%) had attained primary education. Most participants identified as Christian (69.5%), and 74.2% reported never been married. Regarding key population categories, 56.4% were sex workers, 21.2% were men who have sex with men, and 7.8% were people who inject drugs. Exchanging sex for gifts or material support was the most frequently reported risk behavior (59.9%), highlighting the concentration of vulnerability within high-risk groups.

The prevalence of recent HIV infections among HIV-positive individuals was 61.6%, indicating substantial ongoing transmission. Multivariable analysis revealed that having multiple sexual partners significantly increased the odds of recent infection (AOR: 1.35; 95% CI: 1.08–1.69). Conversely, education demonstrated a protective effect. Participants with secondary education (AOR: 0.14; 95% CI: 0.02–0.83) and primary education (AOR: 0.18; 95% CI: 0.04–0.90) were significantly less likely to have recent infections compared to those with no formal education.
In conclusion, the high prevalence of recent HIV infections (61.6%) reflects active and ongoing transmission within key populations. Multiple sexual partnerships increase vulnerability, while higher educational attainment appears protective. These findings emphasize the need for sustained surveillance of recent infections and targeted interventions among high-risk populations to curb continued transmission.

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TB Preventive Treatment Initiation among People Newly Enrolled in HIV Care in PEPFAR-Supported Health Facilities across 9 States in Nigeria, 2018–2021

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Background: Nigeria is among countries with the highest TB and TB/HIV burdens globally. The World Health Organization (WHO) recommends people living with HIV (PLHIV) receive TB preventive treatment (TPT) as part of a comprehensive package of HIV care, given its demonstrated benefits in reducing morbidity and mortality. In 2018, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) program committed to providing TPT to all eligible PLHIV and Nigeria prioritized TPT scale-up. We assessed factors associated with TPT initiation among PLHIV in PEPFAR-supported health facilities in Nigeria to inform strategies to improve TPT coverage.

Materials and Methods: We performed a retrospective cohort analysis of PLHIV newly enrolled in HIV care between January 1, 2018 and December 31, 2021 at 59 health facilities across 9 states in Nigeria with follow-up until December 31, 2023. We abstracted data from electronic medical records and excluded those who initiated TPT before enrolling in care. We compared demographic and clinical characteristics of PLHIV who initiated and did not initiate TPT using Pearson's chi-square test. We used multivariate logistic regression to estimate the odds of initiating TPT with 95% confidence intervals (CI), adjusting for age, sex, state, year of enrollment in care, WHO clinical stage at enrollment, and first recorded HIV viral load (VL). We set statistical significance at P-value <0.05.

Results: A total of 7,994 PLHIV were enrolled in care and 7,546 (94.4%) initiated TPT. The proportion of PLHIV initiating TPT increased from 78.8% in 2018 to 87.3% in 2019, 96.2% in 2020, and 97.7% in 2021. PLHIV who initiated TPT had a median (interquartile range) age of 29 (24−35) years, while those who did not were older at 32 (25−40) years. TPT initiators were proportionally more often than non-initiators to be male (52.5% vs. 30.8%), in WHO clinical stage 1 at enrollment (94.7% vs. 74.8%), and have suppressed HIV VL (≤1,000 copies/mL) (90.7% vs. 70.5%); P<0.001 for all. Males were significantly more likely to initiate TPT (adjusted odds ratios [aOR] 2.21; 95% CI 1.69−2.90), as were those who enrolled in care in 2020 (aOR 2.15 [1.53−3.01]) or 2021 (aOR 4.84 [3.18−7.34]), relative to those who enrolled in 2018. The odds of TPT initiation were significantly lower among those aged 5−14 years (aOR 0.34 [0.16−0.71]), 35−44 years (aOR 0.69 [0.51−0.93]), 45−54 years (aOR 0.61 [0.39−0.95]), and ≥55 years (aOR 0.43 [0.23−0.78]), relative to those aged 25−34 years. Additionally, the likelihood of TPT initiation varied widely across the 9 states, ranging from aORs of 0.07 (0.04−0.13) to 0.96 (0.44−2.10).

Conclusions: By 2021, approximately 98% of PLHIV enrolled in HIV care initiated TPT, highlighting a major achievement corresponding with programmatic prioritization of TPT scale-up. These findings can inform strategies to sustain progress and improve TPT initiation among PLHIV aged 5−14 years and ≥35 years, females, and in states with lower TPT coverage. Additional studies may elucidate underlying reasons for these disparities, including assessments of geographic differences in program implementation, TPT availability, reporting, or other structural factors, to devise tailored approaches to close remaining gaps in TPT uptake.

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Prep Cascade Performance among Key Populations in Four Nigerian States: Programmatic Insights on Uptake, Gender, and Age Disparities

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Background: Pre-exposure prophylaxis (PrEP) is a core HIV prevention strategy for key populations (KP) at substantial risk of HIV acquisition. Understanding gaps along the PrEP cascade is essential for optimizing service-delivery and improving equitable access. This analysis describes PrEP assessment, eligibility, and uptake patterns among KP in Nigeria, with a focus on typology, gender, and age-specific disparities.

Methods: We conducted a retrospective analysis of routine PrEP program data collected from January–December 2025 across four Nigerian states. Data were aggregated across KP sub-types: men who have sex with men (MSM), female sex workers (FSW), people who inject drugs (PWID), and transgender (TG) persons and disaggregated by sex and age group (15–19, 20–24, 25–49, ≥50 years). Cascade indicators included PrEP assessment, eligibility, and receipt of at least one PrEP product. Descriptive analyses were used to compare program effectiveness and equity across KP typologies and demographic subgroups.

Results: A total of 170,006 KP clients were assessed for PrEP, of whom 169,997 (≈100%) were deemed eligible. Overall, 70,858 clients-initiated PrEP, corresponding to an uptake of 41.7% among those assessed. PrEP uptake varied by typology: FSW had the highest uptake (44.5%), followed by MSM (42.0%) and TG (40.6%), while PWID had the lowest uptake (34.4%). Marked gender disparities were observed. Among TG clients initiated on PrEP, females accounted for only 16%, compared to 84% males dropping from 28% females who were assessed and eligible. Among PWID, females constituted 36% of PrEP initiations despite representing 20% of those assessed. Age-disaggregated analysis showed that most PrEP initiations occurred among clients aged 25–49 years 55.6% (39,372/70,858), while adolescents aged 15–19 years accounted for only 10.2% (7,256/70,858) of initiations. Adults aged 50+ represented only 1.6% (1,161/70,858) demonstrating declining PrEP uptake with increasing age.

Conclusion: PrEP programming across Anambra, Ebonyi, Kwara, and Gombe demonstrated strong reach among FSW and young adult populations, reflecting effective demand creation in these groups. However, significant equity gaps persist, particularly among transgender persons, older adults (≥50 years), and across sex subgroups within TG populations. High attrition between PrEP eligibility and initiation highlights the need for strengthened linkage, differentiated service delivery, and targeted interventions to improve equitable PrEP access and maximize HIV prevention impact in Nigeria.

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Determinants and Strategies for Implementation of an Adapted Data to Care Vertical HIV Prevention Intervention in a South African Context

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Despite progress in preventing new HIV infections in children, retention in vertical transmission prevention (VTP) remains a challenge in low-resource settings. The REMInD intervention used an adapted Data to Care (D2C) approach with tracing to support mother-infant pairs in completing VTP care. This qualitative study aimed to explore the potential implementation determinants and strategies to enhance the successful implementation of the REMInD intervention in Gugulethu, South Africa. Interviews were conducted with nurses, policy implementers, and mothers who had participated in the REMInD proof-of-concept study. We applied the Consolidated Framework for Implementation Research (CFIR) to identify determinants that could influence future implementation. Data were analysed using inductive thematic analysis.

Key potential implementation determinants were identified across multiple CFIR domains. Within the Inner setting domain, limited availability of human resources and infrastructure posed key barriers for many women. Under the Individual domain, the capability to retrieve and use data reports was a central concern. The Innovation domain was reflected in the perceived complexity of data retrieval and tracing procedures, particularly in informal settlements with poor infrastructure. Finally, in the Outer setting domain, HIV-related stigma emerged as a potential barrier. To address these challenges, several strategies were proposed by participants: (i) train and give access to the intervention for all nurses to mitigate staffing shortages, (ii) partnerships with NGOs to enhance patient tracing and support service delivery, (iii) collaboration within the health system to sustain support and resource availability, and (iv) dedicated champions to drive implementation.

These findings highlight intersecting systematic, contextual, and individual factors influencing REMInD and similar D2C implementation. Strategies addressing staffing, infrastructure, and tracing gaps could enhance implementation success and HIV retention in low-resource settings.

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The Impact of Curable STIs on Reproductive Health Outcomes in Eastern and Southern Africa: Systematic Review and Meta-Analysis

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Background: Eastern and Southern Africa (ESA) disproportionately carries a high burden of curable bacterial sexually transmitted infections (STIs) and HIV burden and is associated with adverse reproductive and obstetric outcomes. There is sparse evidence among non-pregnant women and men regarding infertility, pelvic inflammatory disease (PID), ectopic pregnancy and male reproductive outcomes. Further, the synthesis of pathogen-specific risks and intervention effectiveness is limited. Our review aimed to evaluate the impact of curable bacterial STIs on adverse reproductive and obstetric outcomes and identify evidence gaps and programmatic care-process insights in ESA.

Methods: We searched three databases for articles published between 1987-2024 that reported on laboratory-confirmed STIs preceding reproductive outcomes in ESA. Study designs included prospective and retrospective cohorts, quasi-experimental designs, and cluster-controlled trial. Hartung–Knapp random-effects meta-analysis pooled risk ratios (RR) for preterm birth (PTB) and low birth weight (LBW) were reported. Narrative synthesis summarised other outcomes and programmatic interventions. Risk of bias was assessed using the Newcastle–Ottawa Scale and ROBINS-I.

Results: We 1,501 identified articles, of which 13 met the inclusion criteria. The PTB meta-analysis (n=5), showing a robust association with STI exposure (RR:1.51, 95% CI: 1.37–1.68; I^2 = 0%). Subgroup analysis indicated consistent effects for any STI (RR:1.49;95% CI: 1.46–1.53) and a larger, imprecise effect for Trichomonas vaginalis (RR:2.37; 95% CI: 1.11–5.05). LBW analysis (n=3) was highly heterogeneous (RR:2.04, 95% CI: 0.04–104.13; I^2 = 87.1%), with discordant Treponema pallidum estimates and single-study evidence for Mycoplasma genitalium (RR = 5.22; 1.37 – 19.90). Narrative synthesis highlighted high neonatal nasopharyngeal positivity for CT (43%), NG (29%), and TV (24%) among exposed infants, and increased PID risk from repeated CT infections. Sensitivity analysis confirmed PTB robustness; publication bias assessment was inconclusive due to the few studies. Programmatic data showed high acceptability (>97%) and same-day treatment (>93%) for point-of-care testing, but partner notification and treatment and repeat testing were inconsistently implemented. Evidence gaps persisted for men, non-pregnant women, and long-term sequelae.

Conclusions: Curable bacterial STIs were consistently associated with increased risk of PTB in ESA; however, LBW evidence remained inconclusive. Improving obstetric outcomes requires early antenatal care (ANC) booking, repeat curable bacterial STI testing, same-day treatment, partner notification and treatment, and test-of-cure. Evidence gaps in non-pregnant women and men underscore the need for longitudinal studies. Integrating STI testing and effective contact tracing within ANC aligns with the WHO triple elimination goals and UNAIDS 95-95-95 targets.

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Clinical Outcomes of Rapid Same-Day Treatment Initiation among Advanced HIV Patients with Positive Urinary Lipoarabinomannan (TB-LAM) at AHF Matsapha Clinic, Eswatini

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Background: Tuberculosis (TB) remains a leading cause of mortality among Advanced HIV Disease (AHD) patients. Sputum-based diagnostics face significant delays or failures in immunosuppressed individuals. The urinary lipoarabinomannan (TB-LAM) lateral flow assay allows for rapid, point-of-care TB screening. The AIDS Healthcare Foundation (AHF) Matsapha Clinic sits within a major industrial hub employing a large workforce in sub-optimally ventilated textile factories. These structural conditions, combined with limited occupational healthcare access, create a high-risk environment for unrecognized TB transmission and delayed diagnostic presentations.

Methods: A retrospective review of records for AHD patients was conducted at AHF Matsapha Clinic, Eswatini. Data were extracted for patients presenting from January to March 2026. Inclusion criteria were a confirmed HIV-positive status with AHD (CD4 cell count <200cells/µL) and a positive u-LAM test. Demographics, treatment timing, mortality and 3-month retention rates were analyzed.

Results: Out of 68 patients with AHD, 35 (51.5%) were u-LAM positive and had been unable to produce sputum for conventional TB testing. The age of u-LAM positive patients ranged from 20 to 53 years, median age being 35. The cohort was heavily feminized, consisting of 23 females (65.7%) and 12 males (34.3%). Clinical management followed an aggressive rapid-initiation protocol, whereby: 100% (n=35) of the u-LAM positive patients were started on Anti-Retroviral Therapy (ART) and Anti-Tuberculosis Treatment (ATT) on the same day as their positive test result. At the 3-month follow-up milestone, the cohort achieved a 100% retention rate on treatment with zero mortality.

Conclusion: Routine TB u-LAM screening successfully uncovered a high burden of active TB in more than half of the patients presenting with AHD. Implementing a same-day "test-and-treat" strategy with both ART and ATT yielded favorable short-term clinical outcomes, demonstrating that immediate therapeutic intervention was associated with excellent short-term retention and no observed mortality during the first 3 months of follow-up.

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Plugging into Health: A Peer-Powered Revolution for Youth

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In today's youth culture, a "PLUG" is a popular slang term for a peer who supplies various items or commodities, from the latest sneakers to essential health products. This term has also come to represent students who engage in the business of trading contraceptives, such as morning-after pills, within their schools. Building on this concept, the Plug App emerges as an innovative DSD model that harnesses the power of ICT and a peer-to-peer approach to tackle critical health challenges faced by adolescents and young students. By leveraging the trusted relationships among peers, the Plug App aims to drastically reduce unintended pregnancies, HIV transmission, and STIs, revolutionizing how young people access and receive vital health services.

The Plug App revolutionizes health services for young people by allowing them to order HIV/SRHR commodities directly through the app. Peers, known as "Plugs," deliver these essential items right to their doorstep in campus. But it doesn't stop there each Plug provides vital information and education about the products they deliver and can even conduct necessary testing on the spot. Empowered with comprehensive HIV/SRHR knowledge and equipped with all the necessary tools, these community-based Plugs ensure young people have easy access to contraception, HIVST, PrEP, PEP, and condoms. The Plug App transforms peer support into a powerful, effective delivery system for sexual and reproductive health services. The uniqueness of the PLUG App lies in its innovative peer-to-peer delivery system, leveraging peers within educational institutions, known as "Plugs," to deliver a wide range of sexual and reproductive health commodities. This approach fosters trusted relationships, making adolescents more comfortable accessing sensitive health services. The app integrates comprehensive services, including contraception, HIV self-testing, PrEP, PEP, and condoms, along with IEC provided by trained Plugs. Utilizing technology, the app offers discreet, on1demand ordering and real-time tracking, ensuring accessibility and convenience. Plugs are empowered with extensive knowledge and tools, enabling them to deliver high-quality care and support.

This community-centered model not only addresses physical health needs but also enhances health literacy and empowers youth, promoting a holistic approach to preventive care and significantly reducing unintended pregnancies and STI transmission.

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Secondary Distribution of HIV Self-Tests to Link High-Risk Men Who Purchase Sex to Clinic Services: A Time-Limited, Stepped-Wedge Cluster Randomized Trial

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Background: Men who purchase sex (MPS) are vulnerable to acquiring and transmitting HIV, have low engagement in HIV services, and are under-prioritized for epidemic-control interventions. Secondary distribution of HIV self-tests (HIVST) increases male partner testing, but its effectiveness on clinic services engagement is unknown. The Pamoja study aimed to link MPS for HIV confirmatory testing and ART/PrEP initiation by secondary HIVST distribution to MPS from women who sell sex (WSS).

Methods: Pamoja was a stepped-wedge randomized trial with 3-month time-limited intervention exposure in 25 clusters in Kisumu and Siaya counties, Kenya (NCT05882916). Per cluster, 200 WSS were rapidly enrolled and asked to distribute 4 HIVST to MPS. HIVST contained cluster-specific and male-tailored information about benefits of PrEP/ART and designated clinics for confirmatory testing and initiation. WSS were surveyed about their experiences at 6-week follow-up visits. Monthly data on male HIV service utilization was extracted from Kenyan electronic health records (EHR). Our primary outcome, male HIV testing, was assessed using interrupted time-series analysis comparing outcomes in the 3-month intervention period to one-year prior using mixed-effect generalized additive models.

Results: From March 2024–April 2026 we enrolled 5000 WSS with 96% retention (n=4,823). WSS reported distributing 14,411 of 19,288 HIVST provided: 69% to MPS, 17% to other sex partners. Of these 76% reportedly used HIVST and 21% sought confirmatory testing. From EHR data, on average 98 men/cluster tested for HIV monthly during the intervention period (SD 78.5). Compared to pre-intervention, there was no significant difference in male HIV testing (IRR 1.07, 95%CI 0.79, 1.36), test positivity rate (OR 0.77, 95%CI 0.43, 1.39), or number of men initiating ART/PrEP (IRR 1.37, 95%CI 0.85, 2.20). Twenty-five adverse events occurred, 19(0.004%) related to HIVST distribution.

Conclusions: Over 6 weeks, HIVSTs were successfully re-distributed from WSS to MPS or other sex partners with high reported use. Within the time-limited intervention period, we could not detect a significant increase in men linking to their designated cluster-based clinics. Sensitivity and exploratory analyses of qualitative and implementation data are planned to better understand the high variability of EHR data, the potential for HIVST distribution to impact HIV transmission and MPS test-seeking attitudes and behavior.