

Effect of Integrating Drop-in Centres (DiCsE) into Public Health Facilities on Service Utilization and Treatment Outcomes Among Key Populations Clients in Migori County, Kenya

John Odira¹; Elizabeth Adwar^{2*}; Dr. Maureen Adoyo³;
Eliza Owino⁴; Dr. Wilfred Obwocha⁵

^{1,2,3,4,5}School of Information Science, and Media Studies Department of Information science,
Health Records and Systems P.O Box 103, 40404, Rongo, Kenya.

Corresponding Author: Elizabeth Adwar^{2*}

Publication Date: 2026/08/03

Abstract: This study explored effect of integration of Key Population (KP) programs into public health facilities. Kenya have historically been implemented KP program through donor-funded Drop-in Centres (DICEs) providing dedicated HIV, STI, and TB services to Female Sex Workers (FSWs), Men who have Sex with Men (MSM), People Who Inject Drugs (PWID), transgender persons, and survivors of gender-based violence. Following the withdrawal and restructuring of donor support, many DICE services were integrated into public health facilities. Evidence on the effect of this transition on service utilization and treatment outcomes remains limited. **Staffing and mentorship:** Expand recruitment and retain KP-competent staff during transition to MOH platforms. **Protected service pathways:** Maintain confidential, KP-friendly service points within integrated facilities to reduce attrition linked to stigma. **Restore essential program supports:** There is urgent need to prioritize commodities, defaulter tracing, supervision, and fair compensation that were discontinued after integration. **Targeted training** that is linked integration training to measurable service-delivery outcomes, especially waiting time management and EMR documentation for Key Population clients. In terms of monitoring its critical to track cohort retention before/after integration at facility level to complement provider perceptions with routine program data as envisaged in the mixed-methods study document. The findings showed respondents had a median age of 35 years (IQR 31–39). Most held a diploma-level qualification (65.9%) and 78.8% reported receiving integration training. 139 of 170 valid responses (81.8%) confirmed losing at least one KP client to follow-up since integration. Among 50 respondents who provided plausible counts (per-respondent reports under 1,000), the cumulative reported loss was 3,909 clients, with a median of 23 clients per respondent. Losses concentrate in prevention services, PrEP/PEP, condom and lubricants distribution, moonlight outreaches at hotspots where the DiCE model was strongest. Of all these models non was being conducted after integration because CDC/CHMT/COAG does not support.

Keywords: Key Populations; HIV; STI; Tuberculosis; Integration; Drop-in Centres; Service Utilization; Treatment Outcomes; Migori County; Kenya.

How to Cite: John Odira; Elizabeth Adwar; Dr. Maureen Adoyo; Eliza Owino; Dr. Wilfred Obwocha (2026) Effect of Integrating Drop-in Centres (DiCsE) into Public Health Facilities on Service Utilization and Treatment Outcomes Among Key Populations Clients in Migori County, Kenya. *International Journal of Innovative Science and Research Technology*, 11(7), 2485-2496. <https://doi.org/10.38124/ijisrt/26jul1155>

I. INTRODUCTION

➤ Background Information

Globally, Key Populations continue to bear a disproportionate burden of HIV, sexually transmitted infections (STIs), and tuberculosis (TB). According to the World Health Organization, Key Populations account for more than 70% of new HIV infections in many countries

despite representing a small proportion of the general population.

In Kenya, HIV prevalence among Female Sex Workers, Men who have Sex with Men, and People Who Inject Drugs remains substantially higher than in the general population. To address these disparities, donor-supported programs

established Drop-in Centres (DICES) that provided specialized, stigma-free, and community-friendly services.

Recent changes in donor funding and sustainability strategies led to the integration of many DICE services into public health facilities. While integration is expected to enhance sustainability and health system ownership, concerns have been raised regarding confidentiality, stigma, service accessibility, and continuity of care.

Migori County hosts a large Key Population network associated with cross-border trade, fishing communities, transport corridors, and urban centres. Understanding the consequences of service integration is critical for informing future HIV program transition strategies.

➤ *Problem Statement*

The transition from donor-funded stand-alone DICE services to integrated public facility-based services represents a major health system change. Although integration aims to improve sustainability and efficiency, limited evidence exists on its effect on service utilization, retention in care, treatment outcomes, and client experiences among Key Populations in Kenya. The absence of such evidence limits policymakers' ability to optimize service delivery models following donor transition.

➤ *Research Objective*

• *Broad Objective*

To assess the effect of integrating Key Population program from Drop-in Centers into public health facilities on service utilization and treatment outcomes among Key Populations in Migori County, Kenya.

• *Specific Objectives*

- ✓ To determine the effect of integration on utilization of services among Key Populations.
- ✓ To assess changes in retention in care following integration.
- ✓ To evaluate treatment outcomes among Key Population clients before and after integration.
- ✓ To explore perceptions and experiences of Key Population clients regarding integrated services.
- ✓ To identify health system factors influencing successful integration.

II. LITERATURE REVIEW

➤ *Introduction*

This chapter reviews empirical and theoretical literature on the integration of Key Population (KP) HIV/STI/TB services into public health facilities. The review focuses on service integration, sustainability of HIV programs following donor transition, stigma and discrimination, workforce capacity, commodity security, retention in care, and health systems strengthening.

➤ *Concept of Service Integration*

Service integration refers to the organization and management of health services such that clients receive comprehensive care through coordinated and continuous service delivery. The World Health Organization (WHO, 2022) advocates integration of HIV, STI, and TB services into primary healthcare systems to improve efficiency, sustainability, and universal health coverage.

Historically, HIV services for Key Populations in many low- and middle-income countries were delivered through stand-alone donor-supported programs. Such vertical models often achieved high service coverage but faced sustainability challenges once donor funding declined (UNAIDS, 2024). Integration into public health facilities is increasingly viewed as a strategy for ensuring continuity of care while strengthening national ownership of HIV programs (WHO, 2022).

➤ *Sustainability of HIV Programs Following Donor Transition*

PEPFAR and USAID have invested significantly in Key Population programming across sub-Saharan Africa. These investments supported outreach activities, peer educators, community-based HIV testing, commodity distribution, and psychosocial support services (PEPFAR, 2024).

Research indicates that donor transitions often result in disruptions to service delivery if governments fail to absorb critical program components. Rodríguez et al. (2021) found that withdrawal of donor support in Kenya led to reduced outreach activities, weakened community engagement, and increased risks of loss to follow-up among vulnerable populations. Similarly, UNAIDS (2025) reports that sustaining HIV gains requires maintaining both clinical and community-based interventions after donor withdrawal.

➤ *Service Integration and Client Retention*

Retention in care remains a critical indicator of HIV program success. Studies show that peer-led interventions and community outreach significantly improve retention, adherence, and viral suppression among Key Populations (WHO, 2022; Grimsrud et al., 2021).

Differentiated Service Delivery (DSD) models have demonstrated effectiveness in improving continuity of care among stable HIV clients by reducing facility visits and bringing services closer to communities (WHO, 2025). The discontinuation of peer-led outreach following integration may therefore increase treatment interruptions and loss to follow-up.

➤ *Confidentiality and Policy Implementation*

Confidentiality is a key determinant of healthcare utilization among Key Populations. According to NASCOP (2024), HIV programs should ensure privacy, informed consent, and non-discriminatory services. Failure to operationalize KP-sensitive service standards within public facilities can undermine trust and reduce service uptake.

Several studies have documented implementation gaps when specialized HIV services are integrated into general healthcare systems. Giguère et al. (2022) found that weak policy implementation, inadequate training, and poor resource allocation often compromise quality of care during transitions from vertical to integrated service models.

➤ *Stigma and Discrimination in Healthcare Settings*

Stigma and discrimination remain major barriers to healthcare access among Key Populations. WHO (2022) identifies healthcare-related stigma as one of the leading causes of delayed testing, poor adherence, and treatment discontinuation.

Research conducted among Female Sex Workers and Men who have Sex with Men in East Africa found that fear of discrimination by healthcare workers significantly reduced healthcare-seeking behavior (UNAIDS, 2024). Dedicated Drop-in Centres were designed specifically to address these concerns by creating safe, confidential, and non-judgmental environments.

➤ *Workforce Capacity and Competency*

Human resource capacity is central to successful integration. WHO (2021) notes that integration requires healthcare workers to acquire competencies in HIV, STI, TB, and KP-sensitive service delivery.

Studies from Kenya and South Africa indicate that inadequate training of general healthcare workers often leads to poor quality of care and negative provider attitudes toward Key Populations (NASCO, 2024). Continuous professional development and mentorship are therefore critical components of successful integration.

➤ *Commodity Security and Financial Barriers*

The availability of HIV prevention commodities such as condoms, lubricants, PrEP, and STI medications is essential for maintaining service utilization. The Global Fund (2024) reports that commodity stock-outs contribute significantly to increased HIV transmission risks among Key Populations.

Evidence further suggests that introducing user fees for previously free services reduces access among economically

vulnerable populations (UNAIDS, 2025). Consequently, integration models should ensure uninterrupted commodity supply chains and maintain affordability. This was reported in Awendo, Muhuru Sub County Hospitals where clients either pay cash or use SHA.

➤ *Health Systems Governance and Integration*

Strong governance structures are necessary to coordinate integrated HIV services. WHO (2021) recommends that governments establish transition frameworks, harmonize reporting systems, and institutionalize monitoring mechanisms during donor transitions.

The Kenya Key Population Implementation Guidelines emphasize integration while maintaining KP-friendly services, peer engagement, and community participation (NASCO, 2024).

➤ *Health Systems Strengthening Pathways*

Integration is expected to improve: Service delivery, Health workforce coordination, Health information systems (HMIS), Access to commodities and Leadership, Governance and health care financing.

➤ *Theoretical Framework*

The study is guided by the Health Systems Strengthening Framework and Donabedian's Structure–Process–Outcome Model.

The health systems strengthening framework highlights the importance of service delivery, workforce, health information systems, financing, commodities, and governance in achieving improved health outcomes (WHO, 2022).

Donabedian's model proposes that quality healthcare outcomes are influenced by organizational structures and care processes. In this study, integration represents a structural intervention whose effectiveness depends on implementation processes such as training, commodity availability, and client-centered care.

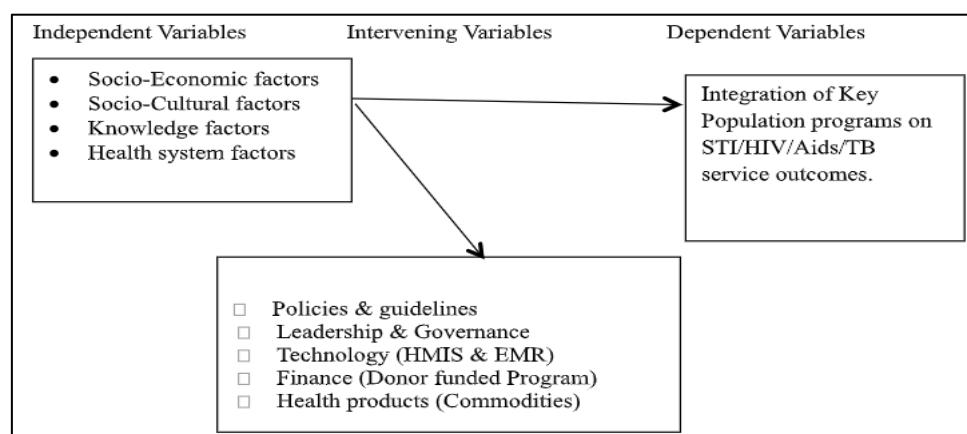


Fig 1 Conceptual Framework for the Determinants of Successful Integration of KP Programs

Source: Anderson, 1995, Amoti-Kaguma, Nuwaha, 2000 et al.

III. MATERIALS AND METHODS

➤ Study Area

Migori County, Kenya, specifically DiCES integrated into Public Health Facilities.

- Sori DiCE integrated into -Karungu Sub County Hospital
- Muhuru Fisherfox integrated into -Mugabo Dispensary
- Muhuru DiCE – integrated into- Muhuru Sub County Hospital
- Isebania DiCE integrated to- Tatagwiti Dispensary
- Awendo DiCE integrated into -Awendo Sub County Hospital
- Migori DiCE integrated into - Oruba Dip Dispensary

➤ Study Design

Mixed-methods convergent design.

➤ Study Population

Female Sex Workers (FSW), Men who have Sex with Men (MSM), People Who Inject Drugs (IDU), Transgender Persons (TP), Healthcare Providers (HCW) and Program Managers (Pos).

➤ Inclusion Criteria

- Registered KP clients.
- Receiving HIV/STI/TB services before and after integration.
- Aged 18 years and above.

➤ Sample Size

Use Cochran formula:

$$n = Z^2 pq / d^2$$

The sample size was determined using Cochran's (1977) formula for proportions. At a 95% confidence level, 5% margin of error, and an assumed proportion of 50%, the initial sample size was calculated as 384 respondents.

$$n_0 = \frac{Z^2 pq}{e^2}$$

Since the target population of healthcare providers was finite (N = 320), the finite population correction formula was applied:

Where:

- n_0 = initial sample size
- Z = Z-score at 95% confidence level = 1.96
- p = estimated proportion = 0.5
- $q = 1 - p = 0.5$
- e = margin of error = 0.05

$$n_0 = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2}$$

$$n_0 = \frac{3.8416 \times 0.25}{0.0025}$$

$$n_0 = 384.16$$

$$\text{Thus: } n_0 = 384$$

This yielded a sample size of 175 respondents. After adjusting for a 5% non-response rate, the final sample size was 184 respondents, targeted which was considered adequate to achieve the study objectives. About 170 respondents responded to the questionnaire and is used in analysis.

➤ Sampling Procedures

- Quantitative: Stratified random sampling.
- Qualitative: Purposive sampling.

✓ Data Collection

✓ Quantitative Data

• Program Indicators:

HIV testing uptake, STI treatment uptake, TB screening, ART initiation, Retention in care and Viral load suppression

✓ Qualitative Data

FGDs and KIIs

➤ Study Limitations

The vast Countywide distribution of DiCEs and KP client's nature reduced identification

IV. DATA ANALYSIS, PRESENTATION AND INTERPRETATION

➤ Socio-Demographic Characteristics of Participants

Table 1 Gender, Age and Education

Variable	Category	Frequency	Percent (%)
Gender	Female	90	52.9%
	Male	80	47.1%
Age (years)	Mean $\approx$ 35.8		
Education	Diploma	112	65.9%
	Degree	32	18.8%

	Certificate	26	15.3%
Work Experience	1–5 years	51	32.1%
	6–10 years	62	39.0%
	>10 years	57	35.8%
Trained on integrated STI/HIV/TB	Yes	134	78.8%
	No	36	21.2%

The analytic sample comprised 170 complete survey records from 6 DiCES-linked facilities in Migori County. The descriptive statistics table below summarizes all study variables.

Table 2 Descriptive Statistics for Study Variables

Variable	Response	n	Valid %
Age (years)	M (SD)	—	34.9 (6.7)
Age (years)	Mdn [IQR]	—	35 [31, 39]
Age (years)	Range	—	22–59
Gender	Male	80	47.1%
Gender	Female	90	52.9%
Professional cadre group	Adherence Counselor	12	7.1%
Professional cadre group	Clinical Officer	29	17.1%
Professional cadre group	Health Records / HRIO	24	14.1%
Professional cadre group	HTS Provider	32	18.8%
Professional cadre group	Key Population member	25	14.7%
Professional cadre group	Nurse	35	20.6%
Professional cadre group	Other cadre	4	2.4%
Professional cadre group	Peer Educator	9	5.3%
Highest education level	Certificate	26	15.3%
Highest education level	Diploma	112	65.9%
Highest education level	Degree	32	18.8%
Years of work experience	1-5 years	51	30%
Years of work experience	6-10 years	62	36.5%
Years of work experience	>10 years	57	33.5%
Received integration training	No	36	21.2%
Received integration training	Yes	134	78.8%

➤ *Service Utilization Before and After Integration*

Table 3 Service Delivery and Access

Integration improved accessibility	Disagree	49	28.8%
Integration improved accessibility	Neutral	38	22.4%
Integration improved accessibility	Agree	83	48.8%
Integration reduced waiting time	No	105	61.8%
Integration reduced waiting time	Yes	65	38.2%
Integration increased workload	No	59	34.7%
Integration increased workload	Yes	111	65.3%
Adequate staff for integrated services	No	98	57.6%
Adequate staff for integrated services	Yes	72	42.4%
Facility provides integrated services	No	29	17.1%
Facility provides integrated services	Yes	141	82.9%
Effect on health services	Reporting and monitoring	24	14.1%
Effect on health services	Service quality	63	37.1%
Effect on health services	Staffing and workload	83	48.8%
Lost clients since integration	No	31	18.2%
Lost clients since integration	Yes	139	81.8%

Note. N = 170. Valid % = percentage of valid responses within each variable. M = mean; SD = standard deviation; Mdn = median; IQR = interquartile range. Health-service effect categories were derived from open-text responses.

Respondents had a median age of 35 years (IQR 31–39). Most held a diploma-level qualification (65.9%) and 78.8% reported receiving integration training.

Table 4 Service Delivery and Access

Indicator	Yes / Agree	No / Disagree	Neutral
Integration improved accessibility	83 (48.5%)	49 (28.7%)	38 (22.2%)
Integration reduced waiting time	65 (38.2%)	105 (61.8%)	0
Workload increased after integration	111 (65.3%)	59 (34.7%)	0
Adequate staff for integrated services	72 (42.4%)	98 (57.6%)	0
Facility provides integrated services	141 (82.9%)	29 (17.1%)	0

➤ Retention of Clients in Care

139 of 170 valid responses (81.8%) confirmed losing at least one KP client to follow-up since integration. Among 50 respondents who provided plausible counts (per-respondent reports under 1,000), the cumulative reported loss was 3,909

clients, with a median of approximately 23 clients per respondent. Losses concentrate in prevention services, PrEP, condom and lubricants distribution, moonlight outreaches at hotspots where the DiCE model was strongest.

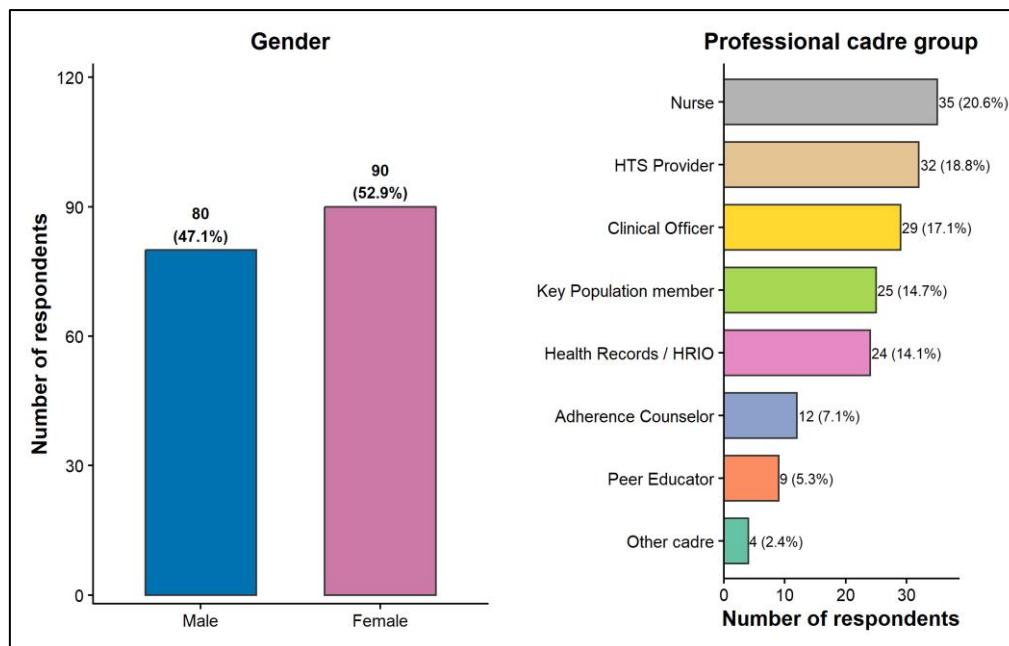


Fig 2 Gender and Professional Cadre Analysis

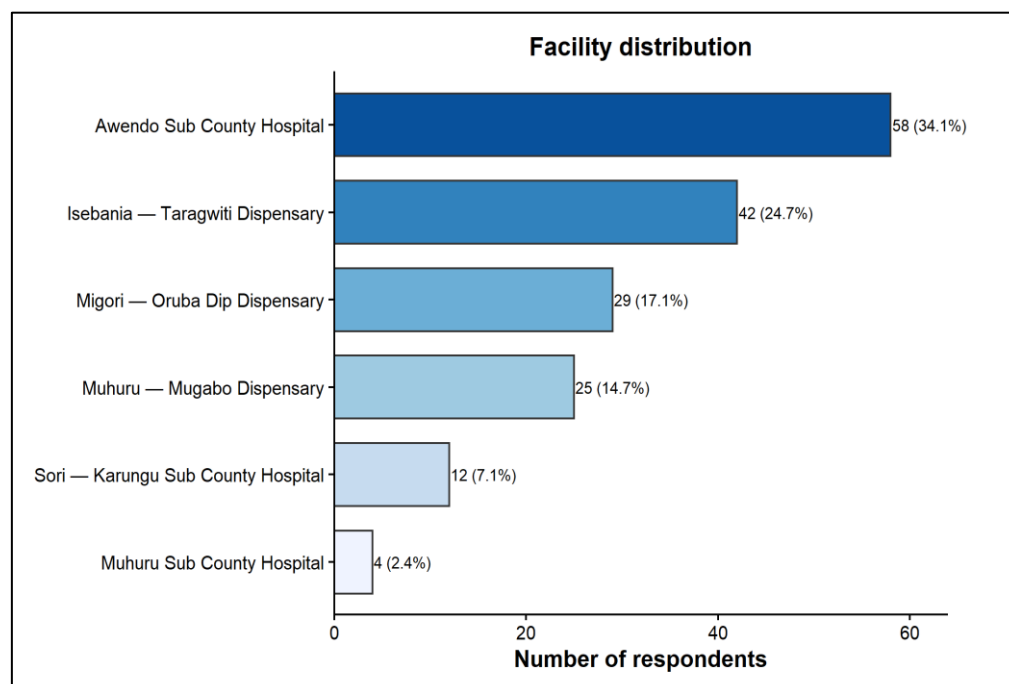


Fig 3 Health Facilities Distribution

➤ *Effect of Integration on Key Population Programming*

When asked how integration affected health services, respondents most frequently cited staffing and workload (83 responses, 48.8%) followed by service quality concerns.

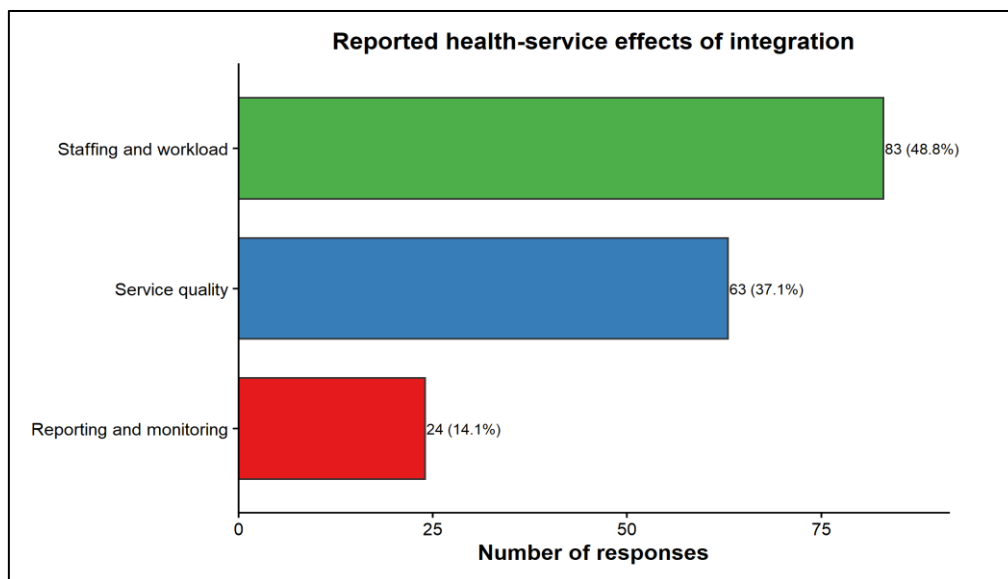


Fig 4 Respondents Reported Effect on Health Services

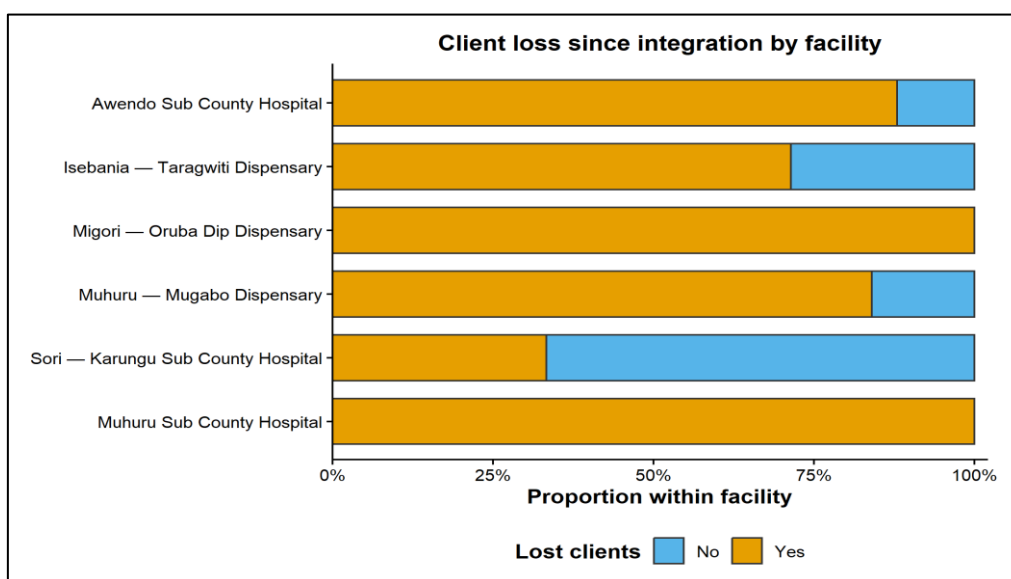


Fig 5 Client Loss Since Integration

Of all the 6 DiCEs on Migori and Muhuru DiCEs that was linked Oruba Dip dispensary in Suna West and Muhuru Sub County Hospital respectively near hotspots has not reported loss of clients.

➤ *Inferential Statistics on Outcome of Integrating Services*

Bivariate tests and the multivariable logistic regression model are reported in APA-style.

Table 5 Bivariate Inferential Statistical Tests

Analysis	Test	Test statistic	df	p
Integration training × improved accessibility	Chi-square	$\chi^2(2) = 8.49$	2	0.014
Integration training × lost clients	Fisher's exact	—	—	0.330
Increased workload × lost clients	Fisher's exact	—	—	0.006
Adequate staff × lost clients	Chi-square	$\chi^2(1) = 0.21$	1	0.650
Gender × increased workload	Chi-square	$\chi^2(1) = 12.07$	1	<0.001
Integration training × adequate staff	Fisher's exact	—	—	<0.001

Note. Chi-square tests were used unless expected cell counts were below five, in which case Fisher's exact test was applied. Test statistics are reported in APA format (e.g., $\chi^2(df) = \text{value}$). Analytic sample $N = 170$.

➤ *Responses on Integration Predictors Client Loss (Retention to Treatment)*• *Multivariate Analysis*

Table 6 Multivariable Logistic Regression Predicting Reported Client Loss

Predictor	SE	OR	95% CI	p
Integration training received	0.61	0.57	[0.15, 1.75]	0.36
Increased workload reported	0.59	0.20	[0.05, 0.58]	0.006
Adequate staffing reported	0.44	2.02	[0.86, 4.87]	0.110

➤ *Bivariate and Multivariable Findings*

Among tested associations, integration training was significantly associated with perceived improved accessibility ($p = 0.014$). Reported client loss differed significantly by workload status ($p = 0.006$): 93.2% of respondents without reported workload increase reported client loss, compared with 75.7% among those reporting increased workload. Gender was associated with reported workload increases ($p < 0.001$), and integration training was associated with perceptions of adequate staffing ($p < 0.001$).

Age did not differ significantly between respondents who reported client loss and those who did not (Wilcoxon rank-sum test, $p = 0.985$).

After adjusting for training, workload, and staffing adequacy, respondents reporting increased workload had lower odds of reporting client loss (OR = 0.20, 95% CI [0.05, 0.58], $p = 0.006$). Adequate staffing was not independently associated with client loss in the adjusted model (OR = 2.02, $p = 0.110$).

• *Research Hypotheses*

- ✓ H₀₁: There is no significant difference in service utilization before and after integration, the result showed that there was significant difference in service utilization before and after integration at $p < 0.014$ and 48.8% disagreed that utilization improved service. Therefore, fail to reject null hypothesis.
- ✓ H₀₂: There is no significant difference in retention in care before and after integration, the results showed significant variation at $p = 0.006$ in-terms of workload as a result of integration. This was tied to longer waiting time compromising quality of care to KP clients at $p = 0.001$, therefore fail to reject null hypothesis.
- ✓ H₀₃: Integration has no significant effect on treatment outcomes among Key Population clients, at $p = 0.006$ CI meaning retention into care and treatment outcomes of KP clients. The investigators could not a certain lost client's viral suppression a key determinant of successful treatment. Therefore, the investigator failed to reject null hypothesis.

➤ *Qualitative Thematic Findings*• *Theme 1: Improved Sustainability of Services*

The most frequently raised concern (cited in 17+ Female Sex Workers (FSW) and Peer Educators (PE) responses outlined a significant effect - the discontinuation of

hotspot outreach. Respondents say services are 'no longer brought at the hotspot,' free commodities (condoms, lubricants) have stopped, and prevention clients have defaulted because peer educators are no longer deployed to trace them. Re-uniting clients to continue care poses a significant challenge in viral suppression, treatment continuity and peer's psychosocial support.

• *Theme 2: Increased Access to Comprehensive Care and Client Retention*

USAID / PEPFAR Support frequently included commodities, training/sensitization, review meetings, defaulter tracing support, support supervision/ data Quality Audits (DQA), and salaries other activity allowances and airtime for internet connectivity. Respondents widely reported significant reductions or cessation of several of these support streams during transition.

Launch an active back-to-care campaign targeting the estimated KP clients lost to follow-up since transition. Use peer navigators to re-link clients and provide differentiated service delivery (DSD) for stable KP clients.

• *Theme 3: Concerns about confidentiality and policy implementation gaps*

Inadequate operationalization of KP-sensitive service standards within MOH facilities. No clear transition plan or absorption framework for Dice-employed staff (peer educators, counsellors). Weak commodity security for KP-specific items (condoms, lubricants, PrEP) post-integration. Limited investment in continuous KP-sensitivity training/sensitization for general MOH cadres. Absence of hotspot/outreach budget lines in integrated facility plans.

• *Theme 4: Stigma and Discrimination at MOH Facilities*

Respondents reported that KPs face 'too much stigma and discrimination at the MOH public health facilities from doctors' and other staff, leading some clients to disengage. The previously confidential, KP-tailored environment at DiCEs has been replaced by a general Out Patient Department service delivery experience perceived as judgmental.

• *Theme 5: Workforce Capacity and Skills Gaps Including Attitudes*

Although 78.8% of respondent's reported having received integration training, recurring comments highlight that 'patients being seen by non-trained staff don't measure to quality services,' that many public health care providers are 'not conversant with key populations programming,' It was also noted that burnout from higher caseloads has reduced job

satisfaction with about 57.6% of respondents indicate staffing is inadequate.

- *Theme 6: Commodity and Service Cost Issues*

About 57.6% of respondents noted that condoms, lubricants and certain drugs are no longer free at MOH facilities, and that KPs are now charged for services that were previously donor-subsidized at DiCEs. This is a significant access barrier for a low-income and highly stigmatized population.

- *Theme 7: Human Resource for Health and Systems Disparities*

Former KP program interventions offered at DiCEs staff cite salary variance from USAID/CDC to COAG/CHMT Tukicheki program, highlighting different management systems and unclear absorption pathways into County Government public service payroll. Insufficient confidentiality safeguards in OPD-based KP service points.

- *Theme 7: Recommendations for Strengthening Integration*

- ✓ *Governance and Systems:*

Adopt a single reporting and patient management system across program and MOH staff. Reinstate joint support supervision and DQA visits with KP-focused indicators. Develop a county-level KP transition policy aligned with the Kenya KP Implementation Guidelines.

- ✓ *Salary and Other Allowances:*

Harmonize pay, a single reporting system and formal integration of program staff into MOH establishment.

- ✓ *KP-Friendly Access:*

Restore and protect re-establish KP-dedicated service windows or sessions within MOH facilities to preserve confidentiality and reduce stigma exposure.

- ✓ *Outreaches and Defaulter Tracing Mechanisms:*

Reinstate hotspot outreach and peer-led services through formal contracting of peer educators.

Strengthen Workforce by recruiting additional clinical officers and HTS providers staffs to address the 57.6% who report inadequate staffing. Mandate KP-sensitivity and integrated STI/HIV/TB training for all OPD staffs, not only HTS providers.

Absorb former KP DiCEs workers into MOH establishment with harmonized pay and clear career pathways. Ensure secure commodity supply guarantee free condoms, lubricants and PrEP at every integrated site through a ring-fenced KP commodity line. Restore defaulter-tracing kits and airtime support for community-based follow-up.

This report analyses 170 survey responses gathered from six Drop-in Centers (Dices) and the public health facilities into which Key Population (KP) HIV/STI/TB services have been integrated in Migori County, Kenya. Respondents included healthcare workers (nurses, clinical officers, HTS providers, HRIOs, adherence counsellors) and

KP community members (Female Sex Workers, Men who have Sex with Men, Peer Educators).

The integration of KP services from stand-alone Dices into Ministry of Health (MOH) facilities was intended to improve sustainability, reduce duplication and broaden the service basket available to KPs. The field evidence shows a mixed picture: while a plurality of respondents agree service accessibility has improved (48.5%), the majority report longer waiting times (61.8%), heavier workloads (65.3%) and inadequate staffing (57.6%). Critically, 81.8% of respondent's report losing at least one KP client to follow-up since integration, with reported losses ranging up to several hundred per facility.

The dominant qualitative themes are: loss of KP-friendly outreach and hotspot services after DiCE closure, stigma and discrimination at MOH facilities, commodity stock-outs (condoms, lubricants, PrEP), loss of trained KP peer educators, disparity in pay and management systems between former program staff and MOH staff. Recommendations Centre on re-establishing KP-friendly entry points, training MOH staffs on KP sensitivity, restoring commodity supply chains and harmonizing HR systems.

V. SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

➤ *Introduction*

This chapter discusses the findings of the study on the integration of Key Population services into Ministry of Health public facilities in Migori County following the transition from donor-funded Drop-in Centres (DiCEs). The findings are interpreted within the context of existing literature, health systems strengthening frameworks, and HIV program sustainability.

➤ *Sustainability of Services Following Integration*

The findings revealed that the most significant effect of integration was the discontinuation of hotspot outreach activities, peer-led services, and community commodity distribution. Respondents reported that services are no longer delivered at hotspots and that peer educators are no longer actively tracing clients or providing psychosocial support.

These findings support studies by Rodríguez et al. (2021) and UNAIDS (2025), which found that donor transitions frequently result in disruptions to community-based HIV services when governments fail to absorb outreach components. While integration improved institutional ownership, it appears to have weakened the community-based structures that previously supported retention and prevention among Key Populations.

The findings suggest that sustainability should not be measured solely by continuation of facility-based services but also by preservation of community engagement mechanisms that are critical to HIV prevention and treatment outcomes.

➤ *Access to Comprehensive Care and Retention in Care*

Respondents acknowledged that USAID and PEPFAR support previously provided training, supervision, data quality audits, commodity distribution, and peer-led follow-up services. Following integration, many of these support mechanisms were reduced or discontinued.

This finding is consistent with WHO (2025) recommendations emphasizing the importance of differentiated service delivery models in maintaining retention and treatment adherence among vulnerable populations. Peer navigators and community outreach workers play a crucial role in linking clients to care, reducing missed appointments, and improving viral suppression.

The recommendation to launch a back-to-care campaign aligns with global evidence demonstrating that active tracing and re-engagement strategies can significantly reduce loss to follow-up among HIV clients (WHO, 2022).

➤ *Confidentiality and Policy Implementation Gaps*

Participants identified significant policy implementation gaps, including inadequate operationalization of KP-sensitive standards, lack of clear staff absorption frameworks, weak commodity security, and limited investment in KP-sensitivity training.

These findings mirror observations by Giguère et al. (2022), who reported that integration often fails when policies are adopted without adequate implementation resources. Although Kenya's Key Population guidelines emphasize confidentiality, non-discrimination, and community engagement, respondents perceived substantial gaps between policy intentions and actual practice. The absence of dedicated outreach budgets and transition plans further suggests inadequate planning for long-term sustainability.

➤ *Stigma and Discrimination in Public Health Facilities*

One of the most consistent findings was the persistence of stigma and discrimination within public health facilities. Respondents reported judgmental attitudes from healthcare workers and loss of the safe, confidential environment previously offered by DiCEs.

This finding supports extensive literature identifying healthcare-related stigma as a major barrier to HIV service utilization among Key Populations (WHO, 2022; UNAIDS, 2024). Previous studies among Female Sex Workers and Men who have Sex with Men in East Africa have similarly shown that discriminatory provider attitudes discourage healthcare utilization and contribute to disengagement from care. The findings suggest that integration alone does not automatically result in equitable access to services unless accompanied by deliberate stigma-reduction interventions.

➤ *Workforce Capacity, Skills Gaps, and Staff Attitudes*

Although 78.8% of respondents reported receiving integration training, concerns persisted regarding provider competence in Key Population programming. Participants indicated that many healthcare workers remain unfamiliar

with KP-specific needs and that increasing workloads have contributed to staff burnout.

These findings align with WHO (2021), which emphasizes that successful integration requires continuous capacity building rather than one-time training interventions. Similar studies in Kenya have demonstrated that provider knowledge and attitudes significantly influence the quality of HIV services delivered to Key Populations (NASCO, 2024).

The reported staffing shortages further highlight the importance of adequate workforce planning during service integration.

➤ *Commodity Availability and Service Costs*

More than half of respondents reported reduced availability of free condoms, lubricants, and other commodities following integration. Participants also noted that some services that were previously subsidized through donor support now incur charges.

These findings corroborate reports from UNAIDS (2025) and the Global Fund (2024), which identify commodity stock-outs and financial barriers as major determinants of reduced service utilization among vulnerable populations. Given that many Key Population clients experience economic vulnerability, introducing service fees may significantly reduce access to prevention and treatment services. The findings reinforce the need for ring-fenced commodity financing mechanisms within integrated service models.

➤ *Human Resource and Systems Disparities*

The study revealed significant disparities between former donor-supported staff and Ministry of Health personnel, particularly regarding salaries, reporting systems, supervision structures, and employment terms.

These findings are consistent with health systems transition literature showing that workforce integration remains one of the most challenging aspects of donor transitions (Rodríguez et al., 2021). Unclear absorption pathways may negatively affect staff motivation, continuity of expertise, and overall program performance. The findings further indicate the need for harmonized reporting systems and formal integration of former DiCE staff into county health systems.

➤ *Recommendations for Strengthening Integration*

Participants proposed several interventions to strengthen integration, including restoring hotspot outreach, re-establishing peer-led services, harmonizing salaries, creating dedicated KP service windows, strengthening workforce capacity, and ensuring uninterrupted commodity supplies.

These recommendations align with WHO (2022), NASCO (2024), and UNAIDS (2025), all of which emphasize that successful integration should preserve the core elements that made specialized KP programs effective. Integration should therefore be viewed not as replacement of

KP-friendly services but as incorporation of these services into broader health systems while maintaining confidentiality, accessibility, and community participation. Key recommendations are.

- *County Government*
Strengthen integrated KP services.
- *Ministry of Health*
Develop integration policies and guidelines to absorb shock in case of abrupt service disruption.
- *Implementing Partners*
Support transition health care financing and technical assistance during any program changes.
- *Researchers*
Conduct longitudinal evaluations/assessment up to two or more years for long time impact and seamless retention procedures in care and treatment outcomes.

➤ Conclusion

- The findings demonstrate that integration of Key Population services into Ministry of Health facilities has improved institutional ownership and sustainability but has simultaneously exposed significant weaknesses in outreach, retention, confidentiality, stigma reduction, workforce preparedness, and commodity security. Without deliberate investment in community engagement, peer navigation, KP-sensitive care, and workforce strengthening, integration risks reversing gains previously achieved through donor-supported programs.
- The study therefore underscores the importance of adopting a balanced integration model that combines the sustainability advantages of public-sector ownership with the client-centered approaches that characterized the former Drop-in Centre mod
- The forced integration of KP HIV/STI/TB services from DiCEs into MOH public health facilities in Migori County has delivered limited gains in formal accessibility but has materially weakened the prevention pillar, increased staff workload and triggered widespread client loss to follow-up. Without urgent corrective action, restoring outreach, securing commodities, training MOH staff in KP-sensitive care and harmonizing HR systems, the county risks reversing years of treatment and prevention gains among its most vulnerable populations. Integration is a sound long-term policy direction; however, the transition must be staged, resourced and KP-led to safeguard service utilization and treatment outcomes.

➤ Recommendation

- Staffing and mentorship: Expand recruitment and retain KP-competent staff during transition to MOH platforms.
- Protected service pathways: Maintain confidential, KP-friendly service points within integrated facilities to reduce attrition linked to stigma.

- Restore essential program supports: Prioritise commodities, defaulter tracing, supervision, and fair compensation that were discontinued after integration.
- Targeted training: Link integration training to measurable service-delivery outcomes, especially waiting time management and EMR documentation for Key Population clients.
- Monitoring and evaluation: Track cohort retention before/after integration at facility level to complement provider perceptions with routine program data as envisaged in the mixed-methods study document.

➤ Copy Right @ 2026, Mr. John Odira

This is an open access article distributed under creative common attrition licence which permits unrestricted use, distribution and reproduction in any medium provided the original worker is proper.

➤ Citation: Mr John Odira, 2026

Application development for acceptance academic QUEU management (FIFO), *African Journal of Health Sciences*

REFERENCES

- [1]. Belay, Y. A., Yitayal, M., Atnafu, A., & Taye, F. A. (2022). Barriers and facilitators to the implementation and scale up of differentiated service delivery models for HIV treatment in Africa: A scoping review. *BMC Health Services Research*, 22(1), 1431. <https://doi.org/10.1186/s12913-022-08825-2>
- [2]. Coleman, M. (2025). Integrating HIV and primary healthcare for key populations: Community-led models from Vietnam, Nigeria and Eswatini. *Journal of the International AIDS Society*, 28(Suppl.), e70027. <https://doi.org/10.1002/jia2.70027>
- [3]. Fleischman, J., Kachale, F., Mhuriro, F., Mugambi, M., Ncube, G., Ndwiga, A., Nyirenda, R., Carter, A., Rodrigues, J., & Segal, K. (2022). Catalyzing action on HIV/SRH integration: Lessons from Kenya, Malawi, and Zimbabwe to spur investment. *Global Health Action*, 15(1), 2029335. <https://doi.org/10.1080/16549716.2022.2029335>
- [4]. Global Fund. (2024). *HIV Program Sustainability and Transition Guidance*.
- [5]. Godfrey, C., Vallabhaneni, S., Shah, M. P., & Grimsrud, A. (2022). Providing differentiated service delivery to the ageing population of people living with HIV. *Journal of the International AIDS Society*, 25(Suppl. 4), e26002. <https://doi.org/10.1002/jia2.26002>
- [6]. Ministry of Health Kenya. (2022). *Kenya digital health strategy 2020–2025*. Government Printer.
- [7]. Ministry of Health Kenya. (2023). *Kenya health sector strategic plan 2023–2027*. Government Printer.
- [8]. Ministry of Health Kenya, National AIDS and STI Control Programme (NASCOP). (2023). *Kenya HIV estimates report 2023*. Government Printer.
- [9]. Ministry of Health Kenya, National AIDS and STI Control Programme (NASCOP). (2024). *Guidelines*

- on HIV prevention, treatment and care in Kenya. Government Printer.
- [10]. Opuni, M., Figueroa, J. L., Sanchez-Morales, J. E., Salas-Ortiz, A., Ochoa-Sanchez, L., Morales-Vazquez, M., Banda, L. M., Olawo, A., Korir, J., DiCarlo, M., Persaud, N., & Bautista-Arredondo, S. (2023). The cost of providing comprehensive HIV services to key populations: An analysis of the LINKAGES program in Kenya and Malawi. *Global Health: Science and Practice*, 11(3), e2200538. <https://doi.org/10.9745/GHSP-D-22-00538>
 - [11]. Rodríguez, D. C., Mohan, D., Mackenzie, C., Wilhelm, J., Eze-Ajoku, E., Omondi, E., Qiu, M., & Bennett, S. (2021). Effects of transition on HIV and non-HIV services and health systems in Kenya: A mixed methods evaluation of donor transition. *BMC Health Services Research*, 21(1), 457. <https://doi.org/10.1186/s12913-021-06451-y>
 - [12]. Social Health Authority Kenya. (2024). *SHA-SHIF implementation framework*. Government Printer.
 - [13]. UNAIDS. (2024). *Kenya country fact sheet 2023*. Joint United Nations Programme on HIV/AIDS.
 - [14]. UNAIDS. (2025). *Global AIDS update 2025*. Joint United Nations Programme on HIV/AIDS.
 - [15]. World Health Organization. (2021). *Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: Recommendations for a public health approach*. World Health Organization.
 - [16]. World Health Organization. (2022). *Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations*. World Health Organization.
 - [17]. World Health Organization. (2022). *Classification of digital health interventions: A shared language to describe the uses of digital technology for health*. World Health Organization.
 - [18]. World Health Organization. (2025). *WHO guideline on HIV service delivery: Updated guidance on the integration of diabetes, hypertension and mental health services, and interventions to support adherence to antiretroviral therapy*. World Health Organization.
 - [19]. World Health Organization. (2025). *Overview of WHO recommendations on HIV and sexually transmitted infection testing, prevention, treatment, care and service delivery*. World Health Organization.