Results and Lessons Learned from a Quality Improvement Initiative to Integrate Oral PrEP and Family Planning Services in Nairobi County
Background

In Kenya, adolescent girls and young women (AGYW) face both high HIV incidence and a high risk of unintended pregnancy. AGYW in Kenya ages 15–24 account for 30% of all new HIV infections,* and 54% of sexually active AGYW ages 15–19 have an unmet need for contraception.† HIV prevention and family planning (FP) are critical to protecting the sexual and reproductive health and rights of AGYW, and integrating these services could improve access, uptake, and continuation of both.

Regionally, the Evidence for Contraceptive Options and HIV Outcomes (ECHO) trial found a high HIV incidence among women who were seeking effective contraception, a result that catalyzed a global move toward integrating HIV prevention, including pre-exposure prophylaxis (PrEP), in FP services. Following the release of the ECHO trial results, the World Health Organization updated its guidance on contraception for women at high risk of HIV and recommended that, in settings with high HIV prevalence, HIV testing and prevention should be included in FP services. PEPFAR Country Operational Plan guidance also endorses better integration of HIV prevention and FP services in high-HIV prevalence settings.

“ECHO is a wake-up call to put HIV prevention on-site at every family planning clinic, including PrEP and female condoms.”

Civil Society Advocacy Working Group on HC-HIV


PROJECT SUMMARY

From February 2020 through October 2021, FHI 360 and local partner LVCT Health, through the USAID-and PEPFAR-supported CHOICE collaboration, worked with the Kenyan Ministry of Health (MOH) at the national level through the National AIDS and STI Control Programme (NASCOP), at the county level through the Nairobi Metropolitan Services (NMS), and with health officials at the sub-county level to apply a collaborative quality improvement (QI) approach in selected health facilities in Nairobi County. The goal of this project was to increase access to and uptake of oral PrEP among AGYW by integrating oral PrEP services into FP services. The objectives were to:

- **ENGAGE** county and sub-county stakeholders, staff from selected health care facilities, and AGYW in Nairobi County to learn and apply QI methods to support and champion the integration of PrEP delivery in FP services
- **IDENTIFY** tools, practices, and facility-level changes that support the effective delivery of integrated PrEP and FP services to AGYW
- **DISSEMINATE** the results of the QI collaborative and promote utilization of effective PrEP-FP integration practices and tools to other PrEP and FP policymakers, program implementers, and providers in Kenya and the region

The project applied the Plan-Do-Study-Act (PDSA) QI methodology to test and adapt several change ideas for strengthening PrEP-FP integration.

**Goal:**

Increase access to and uptake of oral PrEP among AGYW by integrating oral PrEP services into FP services using a collaborative QI approach.

The QI methodology tries potential solutions on a small scale through four steps in cycles that increase learning and improvement with each cycle:

1. **PLAN** a change,
2. **DO** try it out on a small scale,
3. **STUDY** the results,
4. **ACT** to make necessary changes.
COLLABORATIVE PROCESS

The project was implemented in three government health care facilities in Nairobi County:

- Mukuru Health Centre (Embakasi East Sub-County)
- Lungalunga Health Centre (Makadara Sub-County)
- Kangemi Health Centre (Westlands Sub-County)

The NMS health management team selected these facilities based on high volumes of AGYW accessing contraceptives and high PrEP targets.

MOH leadership was central to the project, with all activities led by the national, county, and/or sub-county health managers and the implementing partner, LVCT Health, providing support. Evidence generation and learning were continuous and important to informing subsequent steps of the project.
FIGURE 3. Key milestones in the collaborative QI process

**FEBRUARY 2020**
Established leadership of the QI collaborative, including county health managers and sub-county health managers
Enrolled participating health care facilities

**AUGUST 2020**
Conducted QI planning workshop (virtually)

**DECEMBER 2020**
Conducted FP/PrEP Integration Provider Training Workshop, Part 1

**MARCH 2021**
Conducted FP/PrEP Integration Provider Training Workshop, Part 2

**JUNE 2020**
Conducted facility entry meetings

**JULY 2020**
Gathered additional input from FP providers and AGYW clients

**OCTOBER 2020**
Reviewed training approach, job aids, and monitoring and evaluation (M&E) approach with the national Ministry of Health
Reviewed training approach, job aids, M&E approach, and tools with the Nairobi Metropolitan Services Directorate of Health Services

**APRIL 2021**
Initiated implementation and weekly facility coaching visits

**JULY 2021**
Conducted refresher trainings on how to use the PrEP Rapid Assessment Screening Tool (RAST) in health facilities

**OCTOBER 2021**
Conducted second QI learning forum

**AUGUST 2021**
Conducted first QI learning forum
Conducted Ambassador Training with DREAMS Ambassadors from each facility and local and AGYW champions sites to assist with PrEP demand creation
INTEGRATION APPROACH

At the first QI workshop, staff from all three health facilities chose to pursue an internal, bidirectional, referral-based supermarket model of integration. While the goal of the project was to increase access to and uptake of oral PrEP in FP services, the facility staff also wanted to increase access to contraception through PrEP services.

FIGURE 4. Integrated SRH and HIV service configurations
Adapted from unpublished figure developed by the Interagency Working Group on SRH and HIV Linkages, November, 2019. SRH=sexual and reproductive health.
A combination of new and existing tools were used in implementation, with priority given to using relevant MOH-endorsed tools where possible.

- **STANDARD OPERATING PROCEDURES (SOPS)** – Developed PrEP-FP integration SOPs to describe the steps the FP, HIV testing, and PrEP providers should take to screen and refer their clients for other services within their facilities and how service data would be collected and analyzed to report on integration indicators

- **TRAINING MATERIALS** – Adapted existing provider training curricula to train FP, HIV testing, and PrEP providers on the SOPs and strengthen skills in adolescent-friendly service provision

- **COUNSELING JOB AIDS** – Introduced existing tools for FP providers to use to help FP clients assess risk and make an informed choice of HIV prevention approaches, including PrEP

- **SCREENING TOOLS** – Trained FP providers to use the existing NMS PrEP RAST and trained PrEP providers to use the NMS Contraceptive Needs RAST

- **REFERRAL FORM** – Adapted an existing NMS referral form and trained providers to use this form to document the services clients received and referrals for HIV testing and prevention/SRH services within the facility

- **M&E FORMS** – Developed new forms to track service data and calculate integration indicators within a facility

- **DEMAND CREATION MATERIALS** – Used existing materials to train PrEP Ambassadors in the facilities and communities

**MONITORING AND EVALUATION**

Reporting tools were developed and introduced to measure indicators of PrEP-FP integration at the facility level. Facility staff completed two data tracking forms weekly to extract and summarize PrEP-FP integration data and calculate the following indicators of delivery of integrated PrEP-FP services.

**FIGURE 5. PrEP-FP integration M&E indicators**

1. Percentage of FP clients screened using RAST for indication for referral for further PrEP assessment at the health facility

2. Percentage of FP clients found to have indication(s) for referral for further PrEP assessment at the health facility upon completion of RAST

3. Percentage of FP clients found to have indication(s) for referral for further PrEP assessment at the health facility upon completion of RAST who were referred for PrEP

4. Percentage of FP clients referred for PrEP found to be eligible for PrEP upon further PrEP assessment

5. Percentage of FP clients referred for PrEP found to be eligible for PrEP upon further PrEP assessment who were initiated on PrEP
Facility staff completed the tracking forms using service delivery tools that are completed by FP and HIV prevention service providers during clients’ visits. Some of the tools were already in use (e.g., MOH 512 Daily Activity [Family Planning] Register, HTS Lab & Referral and Linkage Register, PrEP Clinical Encounter Register), others were modified versions of existing tools (e.g., RAST), and others were newly introduced as part of the FP-PrEP integration activity (e.g., referral form).

RESULTS

- Over seven months of implementation, **4,014 (62%) of 6,624** FP clients at the participating facilities were screened for PrEP. Of those screened, **179** were determined to be eligible for PrEP and **77 (43%)** of those eligible initiated PrEP.

- The majority of those who initiated PrEP (**41 out of 77**) were ages **15–24**.

- Wide variation in performance on key indicators was observed across the three facilities. However, overall performance gradually improved over time as facilities reviewed their data and made adjustments based on the data.

- The project was not designed to assess PrEP continuation among those who did accept PrEP or their satisfaction with the integrated services received.
IMPLEMENTATION CHALLENGES

The project experienced a number of challenges to increasing access to and uptake of oral PrEP in FP services over the implementation period. These challenges fell into three categories: context, facility and staffing, and client-level challenges.

CONTEXT CHALLENGES, which resulted in significant delays in starting and consistently implementing activities, included:

• COVID-19-related restrictions delayed project start-up due to facility closures and limited in-person planning meetings and workshops between project staff and collaborators at the outset of the project
• A national health care worker strike delayed implementation of provider trainings and start-up of other activities at the facility level
• An HIV test kits shortage prevented some clients who were interested in oral PrEP from starting it since clients must test negative for HIV on the day PrEP is started

FACILITY AND STAFFING CHALLENGES, which also resulted in inconsistent delivery of integrated services within and across facilities, included:

• Reluctance by some providers to integrate services due to high workload; some providers reported it was too time consuming to educate and counsel a client on PrEP if the client was hearing about PrEP for the first time
• Compensation expectations from providers — e.g., some wanted additional monthly pay (“motivation”) to offer integrated services
• Negative attitudes among FP and HIV testing providers toward providing PrEP to AGYW

CLIENT-LEVEL CHALLENGES, which stemmed from lack of awareness about PrEP among FP clients and lack of male partner support, included:

• High rates of transfers/attrition among trained providers
• Lack of cohesion and teamwork among providers in PrEP, FP, and HIV testing
• Inconsistent documentation in project M&E tools
• Inconsistent administration and interpretation of the RAST, including making assumptions about a client’s risk based on certain characteristics (e.g., providers often felt that a married woman is not at risk of HIV infection and therefore is not eligible for PrEP)
• QI structures/processes weak in some facilities

• Poor understanding of HIV risk and oral PrEP prior to discussing PrEP with an FP provider limited demand for PrEP when it was offered; many clients were not ready to start PrEP the same day it was offered and asked for more time to think about it before making a decision
• Some clients declined PrEP referrals because they wanted to discuss them with a partner first
• Some clients declined PrEP referrals for fear of intimate partner violence (IPV)
• Some clients accepted the referral but left the facility before seeing the next provider due to long queues or “getting lost”
LESSONS LEARNED AND RECOMMENDATIONS

Numerous lessons were learned throughout this project, especially during QI workshops and learning forums, as well as during other collaborative activities such as facility-based coaching and joint supervision visits. These lessons were shared on an ongoing basis with national MOH stakeholders who are planning to introduce PrEP-FP integration in five counties (Marsabit, Uasin Gishu, Kakamega, Makueni, and Nyeri) before rapidly scaling it up to the rest of the country. Key lessons and recommendations from this QI initiative to inform future PrEP-FP integration efforts in Kenya and the region include:

• Routine engagement and co-design with FP/RH and HIV stakeholders at national, county, and sub-county levels is critical to progress, scalability, and sustainability. These stakeholders should have roles in key activities, including QI workshops, trainings, and joint supervision.

• FP, HIV testing, and PrEP providers should be trained together on PrEP-FP integration to foster cooperation in rolling out integration procedures.

• Given staff attrition/transfers, training on PrEP-FP integration should be institutionalized in pre-service training and supplemented via on-the-job continuing medical education (CME) sessions.

• More than one provider at each service delivery point should be equipped to provide integrated services so that these services are not suspended when a provider transfers or goes on leave.

• FP providers should receive in-depth, ongoing training on how to properly screen FP clients for PrEP, including how to discuss potential risk for married clients (e.g., asking about the possibility of a spouse having multiple partners) and to minimize assumptions about a client’s risk.

• Ongoing training in providing adolescent-friendly services and reducing provider biases toward PrEP use among AGYW (e.g., values clarification training) remains an important need.

• FP, HIV testing, and PrEP providers need to understand clearly and specifically how and to what extent integration of the other service is expected and for those expectations to be reinforced by facility, sub-county, county, and national leadership; job aids and SOPs are helpful in setting these expectations and supporting implementation.

• Routine coaching and supervision — ideally involving county and sub-county leadership in addition to facility leadership — can help reinforce expectations about integrated service provision, identify and reduce provider biases, and ensure implementation and reporting of integration procedures with fidelity.

• Regular data reviews and supervision/coaching are needed to ensure providers are administering the RAST properly, allowing them to identify clients who may benefit from PrEP and make appropriate counseling and referrals.

• Delivery of integrated services at the facility level must be supported by reinforcements throughout the health system — e.g., ensuring adequate supply of commodities.

• New procedures and tools may be needed to routinely monitor and evaluate PrEP-FP service integration; ownership and understanding of these tools by facility staff will promote sustainability.

• M&E tools (e.g., registers) may need to be combined — and where possible digitized — to ease the burden of documenting integrated services delivery.

• For the supermarket model, the referral process may need to be strengthened. Potential solutions include escorted referrals by trained peer ambassadors; reduced wait times for the referred clients; and a mechanism to follow up with potential PrEP clients who are eligible but not ready for PrEP the same day they are referred.
• Greater investments are needed in awareness raising and demand creation for PrEP, especially among AGYW and their partners, both in the community (e.g., through PrEP Ambassadors) and at the facility (e.g., through health talks in waiting rooms) to increase “readiness” for PrEP and reduce the burden on facility-based providers to provide basic education on PrEP.

• Asking about IPV and providing appropriate support to clients who disclose or express concerns about IPV need to become a routine part of PrEP counseling.

• To optimize impact, integrated PrEP-FP services should be accompanied by efforts to address structural barriers to PrEP uptake by AGYW — e.g., gender-based violence, stigma, and relationship dynamics with male partners.

• QI methodologies are a promising approach to advance service integration but require strong QI structures/processes in place at the facility level and robust involvement of QI focal points at sub-county and county levels.

Conclusion

This locally led project in Nairobi County, Kenya — implemented in partnership with the MOH at the national, county, and sub-county levels — applied a collaborative QI approach in three health facilities to increase access to and uptake of oral PrEP among AGYW receiving FP services. While the overall number of FP clients who initiated oral PrEP during the implementation period was low, the project illuminated critical challenges — and potential solutions — related to operationalizing service integration in high-volume public health facilities. The project generated valuable insights and lessons to inform future integration efforts, including the Kenyan government’s national scale-up of PrEP-FP integration.

ACKNOWLEDGMENTS

This collaboration was made possible by the generous support of the American people through the U.S. Agency for International Development (USAID) and the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) through the terms of cooperative agreement 7200AA19CA00002 and 7200AA19CA00003. The contents are the responsibility of the EpiC project and the RISE project and do not necessarily reflect the views of USAID, PEPFAR, or the U.S. Government.

We would like to thank the team that contributed to conceptualizing, implementing, and learning from this work, including:

• Kenya Ministry of Health National AIDS and STI Control Program: Mary Mugambi, Moses Otieno, Ruth Kamau, Violet Otindo

• Kenya Ministry of Health Department of Reproductive and Maternal Health: Albert Ndewiga

• Nairobi Metropolitan Services: Carol Ngunu, Anthony Kiplagat, Esther Kiambati, Faith Kiruthi

• Embakasi East Sub-County: Moses Owino, Catherine Mboche, Vanessa Chelimo, Beatrice Bwabi

• Makadara Sub-County: Nelly Dindi, Christabel Achieng, Gladys Ochoi, Lucien Debe

• Westlands Sub-County: Sahra Mohammed, Catherine Mwaniki, Levitan Ombima, Agatha Kimathi

• Mukuru Health Centre: Jared Mogaka

• Lunga Lunga Health Centre: Ann Maru

• Kangemi Health Centre: Sarah Wachuka

• LVCT Health: Lilian Otiso, Annrita Ikahu, Patriciah Jeckonia, Nelius Ruiri, Naumy Mumo, Maryline Mireku, Regeru Regeru, Janet Mugambi, Linet Okoth

• FHI 360: Holly Burke, Allison Cole, George Mutinda, Njambi Njuguna, Rose Wilcher

Photo credit: Jessica Scranton