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Issue Brief

Catalyzing Expanded Access to Early Testing, Care, and Treatment for HIV-exposed Infants in Kenya

Kenya

Kenya is among four countries with the highest HIV disease burden in Africa (the others being Nigeria, South Africa, and Mozambique). As of 2015, approximately 1.5 million people, including an estimated 98,000 children under the age of 15 years, were living with HIV infection in Kenya,¹ where HIV prevalence has remained stable at almost 6% over the last five years, with geographical variation ranging from 0.4% to 26% depending on the region.² The mother-to-child HIV transmission rate stands at 6.1%.

Without treatment, up to 50% of HIV-positive children die before their second birthday, with a peak mortality at 2 to 3 months of age. Despite a relatively high pediatric treatment coverage rate at 77% of children living with HIV receiving antiretroviral therapy (ART), the HIV-associated mortality among Kenyan children remains high at 14%.² Access to early infant HIV diagnosis (EID) screening is key to identifying HIV-positive infants as early as possible and immediately initiating them on lifesaving treatment. While currently up to 68% of HIV-exposed infants in Kenya have access to conventional laboratory-based EID, initiation of ART for HIV-infected infants is frequently delayed due to the long turnaround times (30-60 days currently in Kenya) from sample collection to return of results to providers and caregivers.³

The Elizabeth Glaser Pediatric AIDS Foundation in Kenya (EGPAF-Kenya), with funding from Unitaid, is integrating new-to-market, point-of-care (POC) technologies for EID into the existing national EID network. POC testing platforms are easy to use in a variety of service delivery settings, such as healthcare facility and community as they do not require trained laboratory technicians to operate. This POC technology, which does not require moving the sample to the laboratory, allows HIV-exposed infants to be screened on-site at the facility and receive the test results the same day. Those infants with positive test results and newly identified HIV infection can be immediately started on ART.

The current national EID network includes hubs that send specimens to seven conventional laboratories. The project will adopt the current hub and spoke model by placing POC platforms in hub sites (site providing POC EID testing for patients at the site and specimen of patients from surrounding sites) which will support nearby surrounding spoke sites (regularly sending samples to the hub sites for POC EID testing).

Goal and Targets of POC EID in Kenya

Through the incorporation of POC EID into the national diagnostic network in Kenya, EGPAF aims to increase the number of infants whose HIV status is known and to significantly increase the number of infants living with HIV who are initiated on lifesaving treatment.

To reach this goal, EGPAF will focus on achieving the following targets by the end of 2019:

- A 20% increase in EID testing coverage among infants less than two months of age;
- Perform about 41,000 POC EID tests;
- Reduce turn-around time between sample collection and results receipt by caregiver from the current 30-60 days to zero days at POC testing sites (stand-alone and hub sites) and less than seven days at POC spoke sites;
- Reduce the turnaround time between a positive HIV test and start-up of ART in infants living with HIV to less than 14 days;
- At a current vertical HIV transmission rate of 5.8%, detect an estimated 2,391 infants living with HIV; and
- Ensure that at least 2,152 newly identified infants (90% of identified infants) are linked to treatment by the end of the project.

Strategic Project Site Selection in Kenya

To achieve these targets, EGPAF jointly undertook a site selection process with the Ministry of Health (MOH) in order to strategically place POC platforms within the national diagnostic network. Using criteria developed by Kenya's nationally-delegated POC Technical Working Group, project sites were selected based on a two-step approach of considering historical test volumes, and turnaround times from sample collection to return of results to caregivers. EID uptake is defined as the proportion of HIV-positive pregnancies with completed EID testing in

living infants at two months of age; and turnaround time is defined as time from specimen collection to release of test results to the caregiver. The first step was to prioritize the counties with high HIV burden followed by mapping out the health facilities within the high burden counties. Determination of sites to receive POC devices was based on review of 2015 site-level data for 1,148 health facilities from the national EID database. A majority of selected sites are already serving as hub sites (sample referral sites for surrounding smaller health facilities) in the current EID sample networking.

Phased Introduction and Expansion of POC EID Testing

Working hand-in-hand with the MOH and other national stakeholders, EGPAF will:

- Ensure that conditions for use of POC EID are met;
- Procure POC technology for EID;
- Place POC platforms in selected health facilities under the direction of the MOH and according to the national EID network plans;
- Generate and share lessons learned through routine project monitoring and formal evaluation studies with the World Health Organization and other partners (Kenya will be one of the sites for a POC EID impact study); and
- Develop and implement transition plans, to ensure sustainability of this work within each supported setting.

EGPAF supported the enrollment of the first POC EID site on 2nd August 2017 in Homabay County. During the pilot phase, six hub sites and 72 spoke sites in Homabay and Turkana counties will be closely monitored and supported from July through December 2017 to ensure that all aspects of POC EID testing are functioning effectively prior to expanding to additional sites. Lessons learned from the pilot phase will inform expansion to other counties. In a phased approach, the remaining sites will be enrolled over the period Q1 2018-Q2 2019.

References

- ¹ Joint United Nations on HIV and AIDS Programme, Prevention Gap Report 2016 (<http://www.unaids.org/en/resources/documents/2016/prevention-gap>)
- ² National AIDS Control Council, Kenya AIDS Response Progress Report 2016 (http://nacc.or.ke/wp-content/uploads/2016/11/Kenya-AIDS-Progress-Report_web.pdf)
- ³ National AIDS and STI Control Program, Kenya HIV Estimates Report 2015 (<http://nacc.or.ke/wp-content/uploads/2016/12/Kenya-HIV-Estimates-2015.pdf>)

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