

Improving Access to EID Coverage through Program Optimization Approach: Nigeria's EID Optimization Project Brief

Overview of EGPAF

Since its establishment in 1988, the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) has been pioneering the fight for a world where no child, mother, or family is devastated by HIV/AIDS. EGPAF employs contextually responsive and sustainable approaches for a wide range of areas such as advocacy, research, technical assistance, and program implementation. Through this work, the Foundation remains a committed partner in the global effort to end pediatric AIDS and continues to represent the amplification of a mother's love for her children which is the organization's driving force.

In Nigeria, EGPAF works in collaboration with stakeholders to provide targeted technical support to all levels of the healthcare system on developing scalable innovative models and improving access to services for infants, children, adolescents, women, and families affected by HIV.

Project Overview

In 2020, the number of children who acquired HIV in 21 focus countries was nearly three times greater than the [UNAIDS framework's](#) global target. Nigeria, among the top five focus countries, accounted for nearly two-thirds of children who acquired HIV in 2020, with a mother-to-child [vertical] transmission rate of 25%. In support of the shared goals to increase overall Early Infant Diagnosis (EID) coverage in Nigeria, Johnson & Johnson funded EGPAF Nigeria's EID Optimization project which was implemented in eleven comprehensive health facilities in Rivers and Taraba States.

The project aimed to provide technical assistance to increase overall EID coverage by leveraging existing resources including the current EID testing platforms, EID sample and result processing logistics, and the support network of Mentor Mothers. The project objectives were to first identify key barriers in the EID cascade in the two states then, utilizing EGPAF's validated Program Optimization Approach (POA), train and support health providers to apply Quality Improvement (QI) approaches to the identified gaps and, finally, to share promising tools and resources for adaptation in other similar settings. These activities culminated in generating evidence including a toolkit to strengthen national EID implementation.

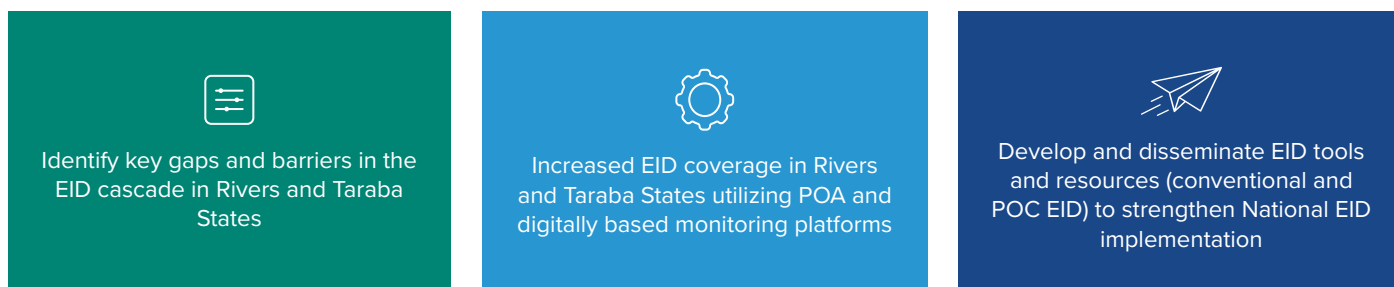


Figure 1. EID Optimization Project States in Nigeria



Photo: Temilade Adelaja /EGPAF, 2023

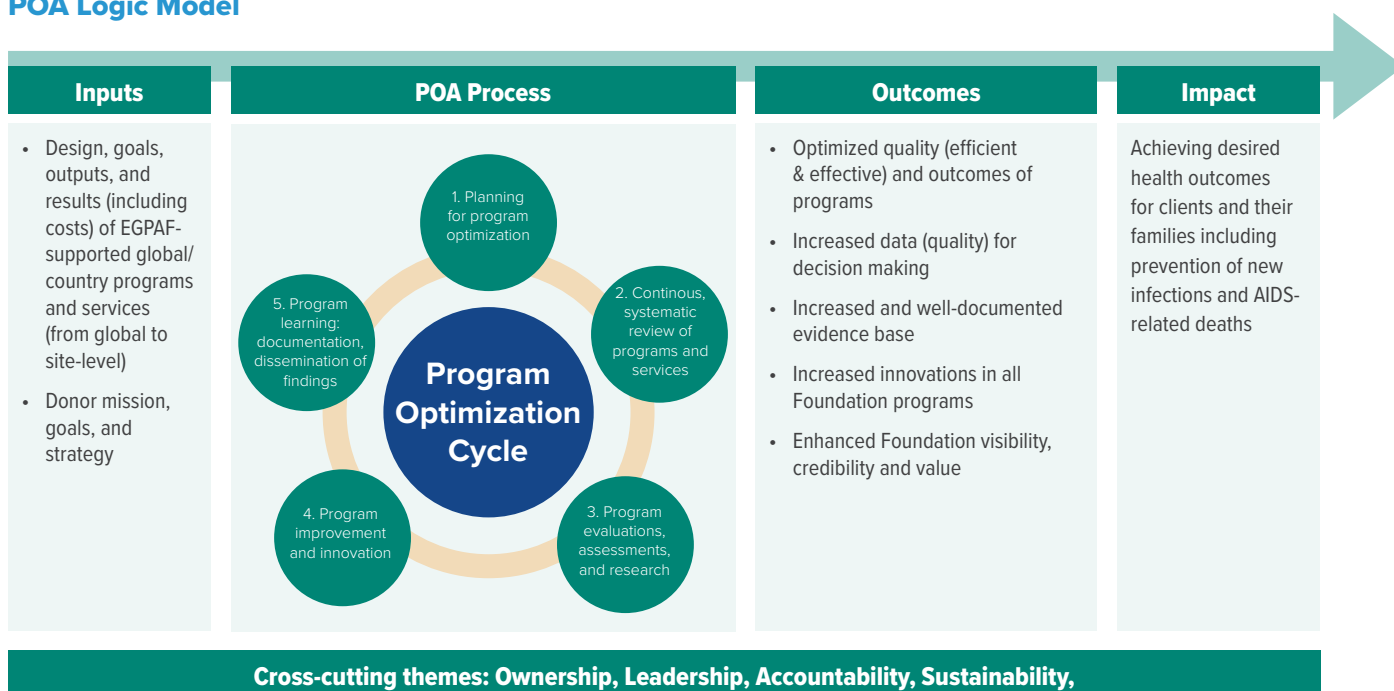
Project Objectives



Program Optimization Approach (POA) and Quality Improvement (QI)

With the goal of enhancing the quality of program implementation and the quality of care offered to clients, EGPAF utilizes POA, the Foundation’s custom approach to implementation science. POA entails the application of standardized processes and continuous use of evidence to enhance program design, implementation, quality, and impact. This distinct approach specifically emphasizes the integration of program assessments, evaluations, and data use with an overall focus on broader program improvement, which extends well beyond the typical focus of quality improvement (QI) on facility-level issues. Therefore, POA was selected as the guiding framework for the EID project.

POA Logic Model



At the site-level, the project applied the QI approach that has been widely adopted in public health systems across Sub-Saharan Africa. QI involves harnessing the power of health facility-based teams to implement continuous, rapid changes within their power to address existing challenges related to the WHO’s domains of quality of care: **Effective, Safe, People-centered, Timely, Equitable, Innovative, and Efficient**. Training the health care team on the principles of QI, including its methods and key principles, ensures effective monitoring of tested changes that result in improvement and can inform scale up of promising practices.

Illustrative Project Activities

- Design of an assessment tool and conduct of comprehensive baseline and endline evaluations of EID services in supported states and facilities. These assessments aimed to identify and comprehend health system gaps and facilitate the development of tailored interventions to address identified gaps.
- Training of Health Care Workers, pediatric and PMTCT Focal Persons from the MOH on the EGPAF-validated program optimization approach and quality improvement processes and tools. Trained staff were then supported to apply the skills at their respective facilities.
- Supported the establishment of health facility-based QI teams at all project facilities ensuring comprehensive and meaningful involvement of all relevant units and stakeholders to ensure collaboration and to establish synergy.

- Introduced health facility QI teams to the use of QI tools such as the run chart and table, process flow chart, QI documentation journal, etc. for tracking key improvement indicators to ensure systematic implementation and thorough documentation of QI processes.
- Comprehensively reviewed the existing EID process flow and data, and developed state-specific root cause analyses outlining the challenges leading to sub-optimal EID coverages, and a list of solutions including the proposed changes to be tested through QI projects.
- Facilitated joint mentoring and supportive supervisory visits (all partners and MOH) to project sites to provide on-site coaching, conduct performance reviews, identify programmatic gaps, and redesign tested changes with clearly defined processes for measuring follow-up steps.
- Delivered comprehensive technical support to facility teams for the identification and implementation of QI projects tailored to address challenges along the EID national testing algorithm. Emphasis was placed on proper documentation and reporting of changes that led to improvement.
- Use of EGPAF's digital monitoring platforms, such as the Quality Improvement Project Monitoring (QI-PM) App, to track the progress of QI projects' including key performance indicators with visualization on a PowerBI data visualization dashboard.
- Conducted learning sessions where healthcare workers from project sites had an opportunity to exchange knowledge and skills thereby fostering a stimulating environment for continuous capacity building and adaptability.
- Development of an EID Optimization toolkit, compiling evidence and experience from the field strengthening EID implementation generated during the implementation of the project.

Health System Strengthening and Ownership

By building transferable and sustainable capacity at the site level, this project contributed not only to improving EID coverage but also to strengthening the health system of Nigeria. Aligned with the National AIDS, Viral Hepatitis, and STIs Control Programme's commitment to be "anchored on a culture of continuous improvement" as they respond to HIV/AIDS in Nigeria ([NASCP, 2022](#), vision statement), this project bolstered sites' skills and abilities to make continuous improvement using the QI tools and POA principles they applied during the project. As emphasized during the project, QI experience is transferable to programmatic areas beyond EID and can be applied to areas beyond HIV and health to any area where there is a process or outcome the team wishes to target for continuous improvement. Responsibility for continuous capacity building for QI is being transferred to the Ministry of Health (MOH) who will uphold the commitment to providing continuously improving quality of services for infants and mothers living with HIV.

Key Success Factors

A number of factors led to the overall success of the EID project, including:

- Detailed introductory meetings with stakeholders were conducted to obtain buy-in and ownership. EGPAF worked closely with the MOH at the state and federal levels, agencies, and facilities' leadership to clarify roles and responsibilities and provide updates on the project plans and activities.
- A committed inter-professional team who believed in the power of QI and were willing to invest their time and zeal into this project dedicated to infants and mothers. The team included MOH colleagues, health facility teams, and EGPAF staff, including technical officers, country directors, administrative support, transit operators, technical advisors, and many others.
- Continuous QI coaching provided by EGPAF directly to health facility-based QI teams through a balance of in-person supportive supervision visits and virtual support (e.g., WhatsApp, email, zoom meetings) after rapport had been built.
- Strategic partnership with Lead Implementing Partners: Reaching Impact Saturation and Epidemic Control (RISE) and Institute of Human Virology Nigeria (IHVN) in Taraba and Rivers states, respectively, with a shared commitment toward improving EID coverage, joint technical assistance, and creating an environment for positive working relationships.
- Joint mentoring and supportive supervisory visits with stakeholders ensured that necessary skills were transferred and exemplified ownership of the project and responsibility for immediately addressing identified challenges during implementation. Visits also offered opportunities for periodic assessment of the project goals and objectives and space to provide guidance to the team on the overall implementation of the EID project.
- Easy-to-use tools and templates for run charts, process maps, and QI documentation journals stimulated thoughtful discussion among QI teams about what to improve and which projects were contributing to actual improvements.
- Posters of the fishbone diagram, process map, and run chart were provided to all facilities who were requested to hang these on a health facility wall where they would be readily visible. These posters served as continual visual reminders of the ongoing QI projects and the facility's broader commitment to strengthening the quality of care for infants and mothers, thus increasing awareness about QI.

- Knowledge sharing during EID learning sessions ensured that facilities were united and shared knowledge and experiences to discover new, better, and workable insights regarding QI. These learning sessions enable facilities to conduct peer reviews of their respective QI activities and learn better ways of optimizing EID through the QI approach.

“At the start of the QI project, we had no idea that such an impact would be created in reducing mortality due to vertical transmission and late diagnosis. The project was indeed a timely intervention, and my team is happy to have implemented a change that saved a life,” says Dr. Lilian Anunobi, Zonal Hospital Okrika’s ART Coordinator and QI Lead.

Recommendations

EGPAF Nigeria team recommends the following to programs similarly aiming to improve the quality of EID services for their infants and mothers:

- **Quality Improvement Champions** are among the greatest assets for any QI program. Identify individuals who are eager to make positive changes and empower them with QI tools and skills to be changemakers at their facilities.
- **Collaborate** closely with stakeholders at all levels of the health system, including lay cadre staff at health facilities. Stakeholders at different levels have different vantage points, skills, and degrees of power that they can leverage to support QI teams and projects.
- **Documentation** is essential for preserving learnings, data, and experiences throughout the project, especially as QI projects move quickly over the course of a few weeks or months. If QI teams face challenges maintaining high-quality documentation, hold a practical learning session where teams bring their QI documentation journals, receive capacity building on documentation, and strengthen their documentation during the session itself.
- It is never too early to share tools, results, and preliminary findings. QI and POA are forms of implementation science that focus on learning from experience during the implementation process. **Learning and sharing** of experience can be done across sites, states, programs, and countries.
- Repeat to teams that the QI expertise they are honing is transferable beyond EID to any programmatic area (e.g., advanced HIV disease, pediatric HIV, index testing), including areas beyond HIV (e.g., non-communicable disease services) and non-clinical areas (e.g., financial processes). Teams that appreciate the **transferable nature of their QI skills** will have stronger buy-in to the QI learning process and will be more likely to sustain QI after the wave of EID projects lessens and a new area takes precedence.

Contact Information

For more information on the EGPAF Nigeria and EID POC Optimization project, please contact:

Dr. Nguavese Torbunde, Country Manager, EGPAF Nigeria

Email: ntorbunde@pedaids.org