





BILL& MELINDA GATES foundation

Compendium of Management of the Polio Emergency Operations in Nigeria.

11 Years of eHealth Africa's Management of Polio Emergency Operations Centres and Other Related Projects.

Table of Contents



Introduction10Background13Beyond Polio20Importance of Polio Control in Nigeria22Complementary Projects25Testimonials38Recommendation/Conclusion51About eHealth Africa53Appreciation/Gratitude58	National Anthem/Pledge	3
Beyond Polio20Importance of Polio Control in Nigeria22Complementary Projects25Testimonials38Recommendation/Conclusion51About eHealth Africa53	Introduction	10
Importance of Polio Control in Nigeria22Complementary Projects25Testimonials38Recommendation/Conclusion51About eHealth Africa53	Background	13
Complementary Projects25Testimonials38Recommendation/Conclusion51About eHealth Africa53	Beyond Polio	20
Testimonials38Recommendation/Conclusion51About eHealth Africa53	Importance of Polio Control in Nigeria	22
Recommendation/Conclusion51About eHealth Africa53	Complementary Projects	25
About eHealth Africa 53	Testimonials	38
	Recommendation/Conclusion	51
Appreciation/Gratitude 58	About eHealth Africa	53
	Appreciation/Gratitude	58

National Anthem

Nigeria, we hail thee, Our own dear native land, Though tribes and tongues may differ In brotherhood we stand, Nigerians all, and proud to serve Our sovereign Motherland.

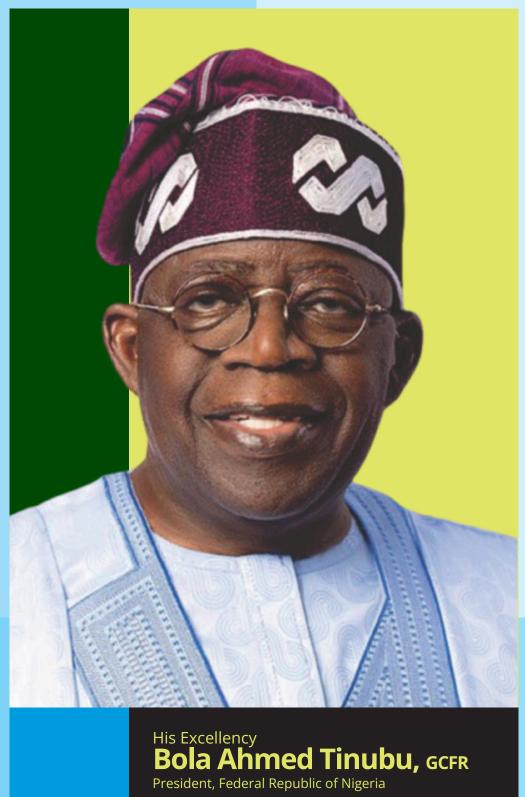
Our flag shall be a symbol That truth and justice reign, In peace or battle honour'd, And this we count as gain, To hand on to our children A banner without stain.

O God of all creation, Grant this our one request. Help us to build a nation Where no man is oppressed, And so with peace and plenty Nigeria may be blessed.

National Pledge

I pledge to Nigeria, my country To be faithful, loyal and honest To serve Nigeria with all my strength To defend her unity And uphold her honour and glory









His Excellency **Kashim Shettima** Vice President, Federal Republic of Nigeria

5









7





This topical review provides an overview of the Polio Emergency Operation Center (PEOC) project, initially implemented across eight states in Nigeria before three more EOCs were added in 2024. Designed as part of a coordinated effort to control and eliminate the spread of the poliovirus in Nigeria, the project involved multiple stakeholders and innovative strategies.

Introduction

Overview of the Polio Emergency Operation Center (PEOC) Project

Health systems are challenged to create productive and collaborative spaces for partners to foster the changes needed to improve the system. This challenge is magnified in emergency response due to the critical nature of the tasks and the multitude of players involved. Polio response in northern Nigeria is a joint effort spearheaded by the Nigerian government in partnership with UNICEF, Rotary International, the World Health Organization, the U.S. Centers for Disease Control & Prevention, USAID, and the Bill and Melinda Gates Foundation.

Following the World Health Assembly's 2012 declaration of Poliovirus transmission as a global emergency of public health concern, the Bill and Melinda Gates Foundation agreed to support Nigeria in establishing the Polio Emergency Operation Centres. These centers apply the Incident Management System (IMS) to manage the polio outbreak response and interrupt poliovirus transmission in Nigeria.

The National Polio EOC was established in October 2012 as a government-led emergency response center, with development partners as members. eHealth Africa was engaged to build and manage these facilities. Currently, there are eleven Emergency Operation Centers (EOC) across eleven states, including Abuja and Kano (established 2012), Katsina and Sokoto (established 2013), Borno, Bauchi, Yobe, and Kaduna (established 2014), and recently Kebbi, Zamfara, and Niger (established 2024). The EOCs serve as the initial point of contact for all polioeradication response activities, fostering a focused and fast response mechanism, coordinating vaccination campaigns, and building a strong accountability framework for partners and stakeholders.

> Currently, there are eleven Emergency Operation Centers (EOC) across eleven states,



Objectives and Terms of Reference

The main goal of the EOCs is to provide a productive and synergistic location for state health administrators and partners to discuss and devise solutions for public health issues (e.g., polio) affecting the region, ultimately improving the national healthcare system. eHealth Africa's responsibilities include:

- 1. Managing and maintaining the EOC and equipping it with necessary office supplies.
- Managing office staff, including a State Office Manager, Administrative Coordinator, EOC IM Secretary, and maintenance staff.
- 3. Providing technical support to EOC staff and members regarding IT needs.
- 4. Managing financial payments for Monitoring and Evaluation (M&E) consultants.
- 5. Disbursing emergency funding for polio campaigns in consultation with EOCs and the BMGF.
- 6. Providing data analytics and GIS support for strategy development, campaign planning, and reviews.
- Collaborating with State and National Government partners on legacy planning to support the full transfer of the EOCs to the Nigerian government.

Background

Polio in Nigeria: History and Challenges



Nigeria's battle with poliomyelitis has faced several challenges, which can be classified into three main categories: failure to vaccinate, failure of the vaccine, and problems related to the epidemiology of the virus. Longstanding weaknesses in health infrastructure, programmatic limitations in vaccination campaign implementation, weak accountability mechanisms, and public distrust of the Oral Polio Vaccine (OPV) since 2003 have all posed significant obstacles. The conflict in Northern Nigeria, particularly in the North Eastern region complicated vaccine delivery to the region. Supplementary Immunization Activities (SIAs) were temporarily suspended in 2013 due to conflict, limiting access to children, but the situation improved in March 2014, with about 84% of the target population becoming accessible.



weak accountability mechanisms, and public distrust of the Oral Polio Vaccine (OPV) since 2003 have all posed significant obstacles.



Nigeria has recorded a significant reduction in Wild Poliovirus (WPV) cases:

From 122 cases in 2012 to 0 cases in 2015.

Global Efforts to Control Polio

"The outstanding commitment and efforts that got Nigeria off the endemic list must continue to keep Africa poliofree," said WHO Director-General Dr. Margaret Chan. "We must now support the efforts in Pakistan and Afghanistan so they soon join the polio-free world."

Problem Statement

Prior to the establishment of PEOCs, polio programming lacked coordination. There were multiple standalone contributions from different sectors, including LGAs, states, and various partners supporting the Polio Eradication Initiative (PEI). The absence of a coordination platform prolonged the fight against polio and increased resource expenditure. The PEOC provides the needed platform for coordination among stakeholders for the PEI and other emergencies in the states where they were established.

The Polio EOC Project

Parties Involved:

The establishment of PEOCs involved collaboration between the Nigerian government and states, the BMGF as a donor, and eHA as the implementing agency. Many partners and organizations provided essential manpower and technical assistance for the operations of the EOC.

Key Results

Since the implementation of the PEOCs in 2012, Nigeria has recorded a significant reduction in Wild Poliovirus (WPV) cases: from 122 cases in 2012 to 0 cases in 2015. The support of the Polio EOCs contributed to this dramatic reduction. The EOCs have also been instrumental in reducing noncompliant vaccination cases and developing outreach projects targeted at communities where children are habitually missed.





The EOCs have also been instrumental in reducing noncompliant vaccination cases and developing outreach projects targeted at communities where children are habitually missed.

S/N	Indicators	2015	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 (Jan - May)	Total
1	Number of campaigns eHA supported during public health emergencies	177	134	213	175	161	159	245	217	139	272	204	398	2,494
2	Number of partners utilizing the EOC facility	124	381	634	734	745	355	742	1,066	948	1,255	2,024	4,116	13,124
3	Number of Polio campaign meetings supported by eHA	288	354	647	745	576	726	868	189	350	638	329	N/A	5,710
4	Number of Polio Emergency Meetings supported by eHA	465	547	477	547	358	473	648	364	677	1,202	901	N/A	6,659
5	Number of Public Health emergency meetings hosted in the EOC	86	75	134	167	217	387	352	826	1,590	2,082	1,873	1,066	8,855
6	Other meetings held in the EOC; IPC of COVID-19, SOD, IDT, VMT, Routine SERICC/ EOC, MSP, State debriefs etc.	54	41	134	214	287	365	456	817	1,624	3,480	2,379	1,083	10,934
7	Number of outbreak control rooms established within approved standards by country	N/A	N/A	N/A	N/A	3	3							
8	Number of cvDPV2 campaign meetings supported by EOC	N/A	342	422	653	103	86	1,606						
9	Number of public health practitioners supported with public health emergency management & technical training	362	273	365	372	547	342	183	662	213	356	436	3,840	7,951

Actions Taken

- Strengthening the accountability ladder of the Polio Emergency Operation Centers to address non-compliance.
- Introducing e-Tally to improve targeted population coverage in polio eradication.
- Implementing initiatives such as Reach-Every-Settlement (RES), Reach
 Inaccessible Children (RIC), Auto-Visual
 AFP Detection and Reporting (AVADAR),
 Community Informant in Inaccessible
 Areas (CIIA), and the Buratai Initiative
 (BI).
- Establishing operational working groups across all PEOCs to strengthen polio incident management.
- Enhancing the Data Management pillar by creating separate Data Managers' rooms across all PEOCs.
- Implementing a vaccine accountability initiative to improve targeted population coverage.

000000000





In 2014, the EOCs began supporting non-polio-related activities, using lessons from polio eradication efforts to strengthen other disease surveillance initiatives. The EOCs supported the Ebola outbreak response in 2014, limiting transmission to only 20 cases in Nigeria. They have also supported routine immunization programs and outbreak responses for other infectious diseases, such as measles and meningitis, and the Lassa Fever outbreak in 2015.

The EOCs supported the Ebola outbreak response in 2014

Importance of Polio Control in Nigeria



The Polio Emergency Operations Center (EOC) in Nigeria was established in 2012 to coordinate the country's response to the polio outbreak. Since their establishment, the EOCs have played a critical role in coordinating polio eradication efforts, leading to a drastic reduction in polio cases and strengthening the country's overall health system. The EOCs have built capacity in epidemiology, data analysis, and risk communication, contributing to Nigeria's ability to respond effectively to other disease outbreaks.

Objectives and Scope of the Compendium

- 1. Account for the Polio EOC.
- 2. Account for the successes recorded.

3. Account for the challenges encountered and lessons learned.

The scope of this document encompasses all eleven PEOCs across the country, centering around these objectives.

Project Outcomes

Since the implementation of the PEOCs, Nigeria has seen a dramatic reduction in WPV cases and improved targeted population coverage. The EOCs have been pivotal in coordinating polio eradication efforts and supporting responses to other disease outbreaks.



Successes and Achievements of the Project

Impact of PEOC on Polio Control and Other Outbreaks in Nigeria

- Vaccinator Tracking System (VTS): Tracked house-to-house vaccination teams to monitor coverage.
- Health Camps: Boosted polio vaccine uptake and provided interventions for other illnesses.
- Vaccine Direct Delivery: Ensured delivery of potent routine immunization vaccines to health facilities.
- Kano Connect: Improved communication and information flow across Kano State's healthcare system.
- Logistics Management Information System: Addressed supply chain challenges with real-time reports.
- End Game Strategy: Implemented response plans for non-compliance households.

The successful use of PEOCs in Nigeria has led to the certification of Nigeria and Africa as Wild Polio Virus-free regions on August 25, 2020.

Lessons Learned and Future Directions

Key Lessons Learned:

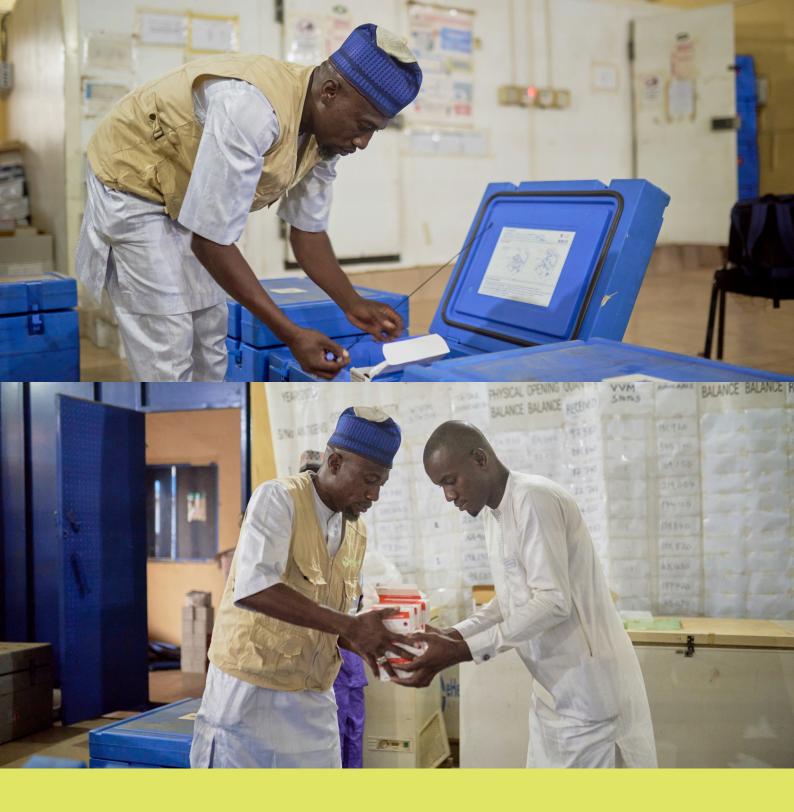
- Feasibility: The establishment and operation of EOCs are possible and effective.
- Resource Optimization: EOCs allow for maximal use of limited resources.
- Multipurpose Use: EOCs can be utilized for multiple purposes without affecting allocated resources.

Future Directions:

- Expansion: Extend PEOCs to become Public Health EOCs to address all public health threats.
- 2. Funding: Establish funding streams beyond donor contributions for sustainability.
- Integration: Train and monitor key State Ministry of Health staff as PEOC/PHEOC staff for outbreak response.

eHealth Africa's system-based approach in working with other stakeholders to end Polio in Africa is seen in the multiple projects implemented by the organisation. The following projects implemented by eHA complement the PEOCs in Nigeria.

Complementary Projects



Vaccine Direct Delivery

Vaccine Direct Delivery

Project Overview and Objective:

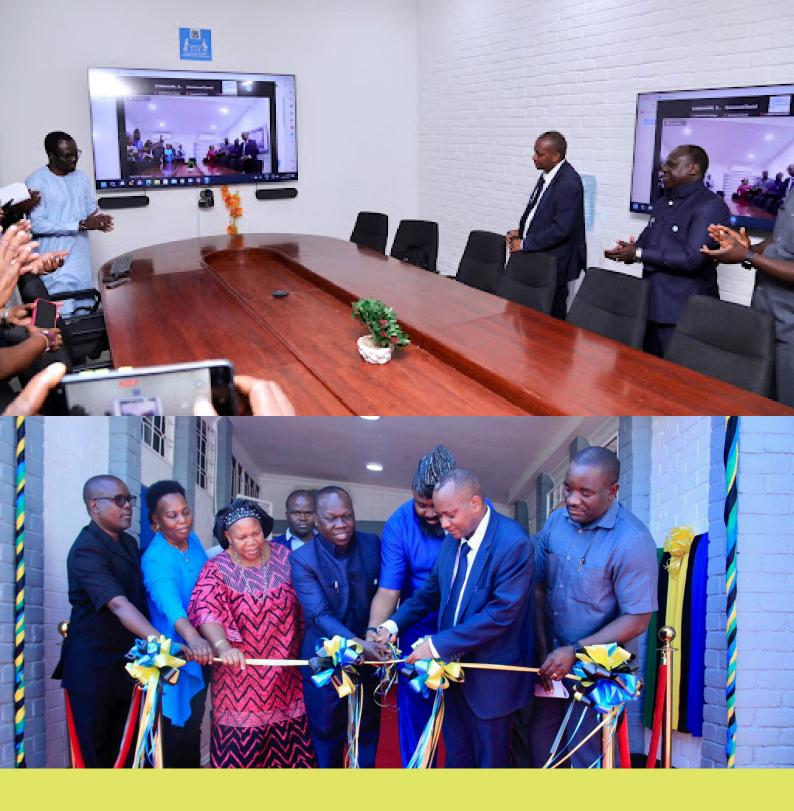
The Vaccine Direct Delivery (VDD) project, initiated by eHealth Africa (eHA), embodies the organization's commitment to developing people-centric and data-driven technological solutions aimed at enhancing health delivery systems for vulnerable communities. VDD is designed as a third-party logistics (3PL) service, ensuring the efficient and timely delivery of vaccines and dry commodities from state cold stores directly to health facilities at the ward level across operating states. Leveraging eHA's proprietary LoMIS Deliver application and dashboard, the project streamlines operational planning, data management, and visualization. The primary goals of the VDD project include:

- Ensuring the timely delivery of potent vaccines to Cold-chainequipped health facilities.
- Improving the availability of vaccines at health facilities for Routine Immunization (RI).
- Reduce the stockout rate of vaccines at primary healthcare facilities including those in hard-to-reach settlements.
- Enhancing data collection and reporting to support decisionmaking by partners.

Achievement and Impact:

 So far, 2,213,518 doses of vaccines and 1,046,497 dry goods have been delivered to 351 Healthcare facilities across 23 Local Government Area (LGA) Cold Stores and 328 coldchain-equipped ward-level health facilities in Sokoto state.

The VDD project has continued to ensure the availability of vaccines for vaccine-preventable diseases and improvement in vaccine uptake in Sokoto State.



Support to Polio Outbreak Control Rooms in Africa

Support to Polio Outbreak Control Rooms in Africa

Project Overview and Objective:

The Polio Outbreak Control Rooms (POCR) Project is a strategic initiative designed to bolster the ability of governments across Africa to combat Polio and other vaccine-preventable diseases. This is achieved through the establishment of Polio Outbreak Control Rooms and providing other relevant support as needed. The project's overarching aim is to enhance the responsiveness and effectiveness of health systems in managing and preventing polio outbreaks and other vaccine-preventable diseases.

Achievement and Impact:

The POCR project has recorded significant achievements, which include:

- Completed POCR Sites in 2024: Successful establishment of Polio Outbreak Control Rooms in Baidoa, Jowhar and Banadir, Somalia. Also successful was the establishment of Polio Outbreak Control Rooms in Haut Lomami, Tangayika, Democratic Republic of Congo. Establishment of Emergency Operation Center in Maroua, Cameroon.
- Ongoing Projects: Continuation of efforts to set up additional POCR sites in critical areas such as DCR Haut Lomami, Maputo MoH in Mozambique, and Garowe in Somalia.

The POCR project is a critical component in the global fight against Polio, significantly contributing to the eradication efforts and enhancing the capacity of African nations to manage public health challenges effectively.



Support for Laboratory Supplies Procurement

Support for Laboratory Supplies Procurement

Project Overview and Objective

The Support for Laboratory Supplies Procurement Project, in collaboration with the World Health Organization AFRO, aims to strengthen the capabilities of the Global Polio Laboratory Network (GPLN) labs. This project's primary objective is to equip these laboratories for robust and rapid sample analysis for polio detection and to enhance their sequencing capabilities.

Achievement and Impact

The project has achieved significant milestones in upgrading infrastructure and procuring essential equipment for various laboratories across Africa. The key achievements and their impacts are as follows:

- A 100% completion of Laboratory renovation and 90% completion of ICT upgrade in the National Virology Laboratory, University of Zimbabwe.
- 100% Completion and handover of Supply Hub at Noguchi Memorial Advanced Research Institute, Ghana.
- Completion of Needs assessment in 9 laboratories (South Africa, Zambia, Madagascar, Central African Republic, Senegal, Uganda, Ethiopia and Democratic Republic of Congo), and reassessment of Kenya Medical Research Institute (KEMRI) as upgrade kicks off in these countries.
- 85% completion of Civil work, IT upgrade, and Furniture at Institut Pasteur de Côte d'Ivoire



Geospatial Tracking System (GTS) to support effective polio program in Nigeria

Geospatial Tracking System (GTS) to support effective polio program in Nigeria

Project Overview and Objective:

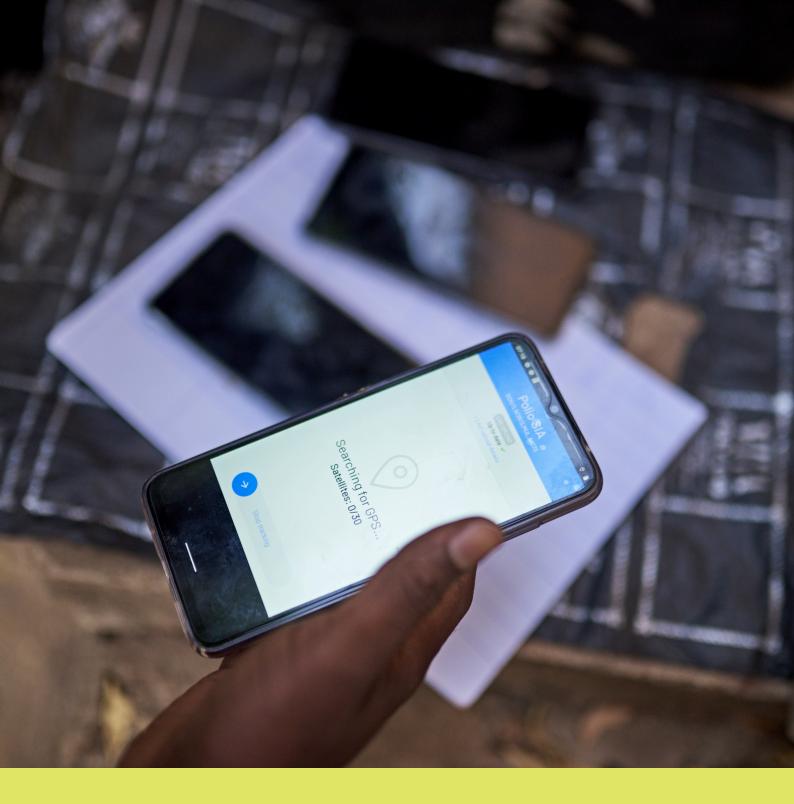
The Geospatial Tracking System (GTS) project, implemented by eHealth Africa, is a critical initiative aimed at supporting polio immunization efforts across Nigeria, particularly in the fight against the circulating Variant Polio Virus2 (cVPV2). Despite Nigeria being declared Wild Polio Virus (WPV) free in August 2020, the threat of cVPV2 persists. The GTS project works in tandem with The National Primary Health Care Development Agency (NPHCDA), WHO, UNICEF, and Global Polio Eradication partners. The primary goal of this innovative endeavor is to ensure that no child is missed during vaccination campaigns, leveraging GIS tracking and meticulous data collection to guide health workers to every settlement, including remote locations.

Achievement and Impact:

The GTS project has achieved significant milestones in its mission, as evidenced by:

- Validated the Master List of Settlement across all the Area of Intractable Transmissions including , Kaduna and Niger states.
- Deployment of field officers to domicile in all the LGAs in Kaduna & Niger state.

The GTS project exemplifies how technological innovation and determined human effort can join hands to create a healthier future for children across the nation.



Polio GIS Special Intervention

Polio GIS Special Intervention

Project Overview and Objective:

The Polio GIS project was initiated to bolster the efforts of the Government and Polio Eradication Initiative partners in combating the spread of Circulating Variant Poliovirus Type 2 (cVPV2). Targeting eight priority states - Borno, Katsina, Kebbi, Kaduna, Niger, Sokoto, Yobe, and Zamfara - the project aimed to ensure comprehensive coverage by vaccination teams, particularly in settlements facing security challenges and those difficult to access. Key objectives included updating and managing the Master list of Settlements (MLoS), developing micro plan templates, training local teams, tracking vaccination efforts in real-time, and conducting geospatial post-implementation coverage analysis.

Achievement and Impact:

The project successfully met all its objectives, yielding significant impacts in the fight against cVPV2:

 2,879 settlements, in 43 Local Government Areas of Kaduna, Yobe and Kebbi were successfully tracked during the Reaching Every Settlement (RES) Vaccination campaigns in Northern Nigeria.

The Polio GIS Special Intervention project represents a pivotal advancement in utilizing technology to enhance the effectiveness of vaccination campaigns, particularly in challenging and inaccessible areas. Its success lays a robust foundation for not only continuing the fight against polio but also for addressing other public health challenges with similar logistical complexities.



Engagement of Traditional Institutions

Engagement of Traditional Institutions

Project Overview and Objective

The provide aims to enhance advocacy by traditional leaders to increase ownership of the polio eradication activities and reduce vaccine hesitancy in communities in the very high-risk Northern States of Nigeria.

Achievement and Impact

- Project extension: our donor BMGF has approved the extension of the project from July 1, 2024 to Dec 31, 2024
- So far the project has successfully recruited 4 Sub-awardees who will be implementing the interventions across Northern and Southern Nigeria.
- The project has consistently provided oversight on subawardees to promote ownership of polio vaccination activities by communities.

The ETI Project is taking intentional steps in providing Technical Support to awardees and other stakeholders to improve community acceptance of Polio Vaccines and Improved uptake of polio and other Primary Healthcare services in the community across Nigeria.

Testimonials

"EOC and its functionality make our operations seamless by providing all necessary information, gadgets, and human resources for prompt service delivery. It is also a venue where key health players converge to brainstorm and develop effective strategies for the state."

Abuja Story of Change/Success Story/Quote Across Some PEOCs



Dr. Usman Abdulkadir Gana

The National IM

The National Polio EOC is a formidable center to be reckoned with.Over the years since its establishment, it has become a center of excellence for coordinating emergencies, including COVID - 19.

The eradication of WPV is a clear testimony to this fact, and the center was the engine room to this success.

The center has hatched a lot of innovations in the Polio Programme that have been applied across the continent with successful results.

All in the Polio Programme Space, call it the "University of Polio" and look forward to passing through it.



Dr. Boubacar Deign

Senior Technical Adviser-Gavi/NPHCDA

Since its inception in 2012, my involvement with the polio EOC has allowed me to witness firsthand the profound influence of this system on all emergency scenarios that have emerged in the nation. The smooth functioning of the polio program, bolstered by eHealth and its committed staff working diligently in the background, has been pivotal in ensuring the success of various endeavors. The EOC remains a central point for leading technical experts and resources from diverse entities, effectively tackling the changing obstacles linked to the polio program. Essential elements like the round-the-clock operational framework, well-coordinated personnel, and the overall upkeep of the facility have all played a part in its achievements.

Bauchi Story of Change/Success Story/Quote Across Some PEOCs



Dr. Rilwanu Mohammed

Executive Chairman/CEO BSPHCDA

"The EOC is the most favourable and conducive facility for coordination of PHC activities not limited to holding routine meetings with standard provision of international gadgets, also with friendly staff of eHA managing the facility and always available to attend to all needs of the state not only for the BSPHCDA activities but to all state enquiries/ support for MoH interventions"



Pharm. Muhammad Rabiu Fagge

Bauchi State BMGF/ADF Consultant

"EOC Is one of the most convenient places to work, connect and share knowledge.With experienced team that manages to keep the environment serene, conducive and mesmerising, you can't wish for anything better.The state of art equipment, refreshing atmosphere and permanent emergency mode of the centre coupled with the technical expertise of the staff makes work always worthwhile in the EOC.Thank you eHA for an excellent job.Cheers!!!"

Borno Story of Change/Success Story/Quote Across Some PEOCs



Dr. Mala Abdulwahab

Incident Manager, Borno EOC

EOC and it functionality makes our operations seamless by way of providing all the needed necessary information, gadgets and Human Resources at our disposal to fast track the prompt service delivery response. It also an Avenue where all the key Health players from the Govt and partner side converge in one space, brainstorm on all the thematic areas to bring out the best strategies that can work for the State. It also provides an easy way for accountability.



Mr. Almai Some

Pioneer Incident Manager, Borno Polio EOC

BRIEF OF MY STEWARDSHIP AS BORNO STATE POLIO EOC INCIDENT MANAGER.

Polio Emergency Operation Centre was established in Borno in July, 2013 appointing me as the 1st Incident Manager.The consortium built and managed by e-Health Africa have all the needed enabling environment making the first of its kind in the State. My 2 years 6 months of stewardship was fully supported by the management of the consortium by providing Office Accommodation, 24 hours functional network service for all technical services (polio and non polio activities), meeting arrangements, secretsriat services and a lot more. The human resources at the office were so dedicated and committed to doing their work. The services provided resulted in the interruption of Polio Virus from 17 cases when I started the EOC to O case when I hand over the office to my successor in December 2015.

Borno Story of Change/Success Story/Quote Across Some PEOCs



Dr. Musa Melton CDC AFENET BORNO STATE LEAD

The Borno State Polio Emergency Operations Center (EOC) is a prototype model of public health success in the fight against polio. Despite the challenges posed by the Boko Haram insurgency, the EOC has made significant strides in vaccinating children and interrupting wild polio virus transmission. The EOC's success can be attributed to several factors, including, Strong leadership and coordination, Innovative strategies, such as using satellite imagery and GIS mapping to identify inaccessible areas, Community engagement and mobilization, Partnerships with international organizations., Vaccination campaigns targeting high-risk areas and populations. The Borno State Polio EOC's achievements demonstrate that even in challenging contexts, effective public health strategies and collaboration can lead to significant progress in disease control and elimination.

there is teamwork and I have personally learned a lot from the EOC staff...

Thank you eHA for an excellent job.Cheers!!!"

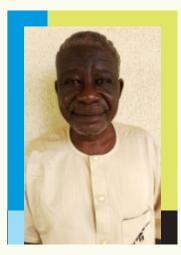
Kaduna Story of Change/Success Story/Quote Across Some PEOCs



Dr. Abdullahi Musa Garba

Incident Manager

EOC plays vital role in coordinating our public health activities particularly in immunization. Some of the areas that is been supported include: Provision of conducive environment/ atmosphere to host our stakeholders/partners to conduct planning meetings, and review of activities conducted on the field by the stakeholders., EOC also support our EOC meeting with light refreshment with tea and biscuits for all, The availability of 24hrs light and water as well as internet services also provide us the opportunity to conduct virtual meetings with National as scheduled with no technical issue, EOC also help us to conducts Outbreak investigations of Polio by proxy using teleconferencing to interface with the child and the care giver in the security compromise area where the State team and other supporting partners cannot access e.g Birnin Gwari LGA, EOC also supports the movement of the Incident manager for meetings and other engagement across the country, EOC helps the State to track vaccination in security compromised area with geocoordinate, Staff of EOC that are supported by ehaelth also support the State analyze data and also develop presentation for the monthly taskforce meeting.



Dr. Victor Gugong

NTLC FP & Pioneer IM

The establishment of the EOC in 2013 brought all the players in the Polio Eradication Initiative space under one roof. Coordination of all partners became easier. Decision making was made easier, taken faster using data collected and analysed in the EOC. The EOC ensured that we worked as a team. This enabled us to maintain the WPV free status in the state.

Kano Story of Change/Success Story/Quote Across Some PEOCs



Dr. Abubakar Labaran Yusuf

Hon. Commissioner of Health

"Kano EOC is an epitome of Excellence from its Infrastructure, Amenities, Personnel and its overall coordination of which I will commend eHealth Africa for keeping it as a status quo from its inception to date. The Center plays an exceptional role of exemplary coordination and effectiveness; by facilitating high-level meetings and strategies for the State Ministry of Health, it also ensures rapid containment measures and cultivates a culture of collaboration and accountability among government and our esteemed partners. This operationalization not only strengthens our ability to operate and work comfortable but also triggered our ability to respond swiftly to health emergencies and enhance public health resilience and preparedness in Kano State. Kudos to eHealth Africa"



Dr. Imam Wada Bello

Director Public Health & Disease Control, Kano State Ministry of Health

"The EOC that I knew transformed rapidly from just Polio EOC to PHEOC and played a vital role in that evolution of Kano State Health Security Agenda and management of Health emergencies from Polio, CSM, Measles, Lassa Fever , Diphtheria, Cholera , Covid-19 and new vaccines Introduction Rota and HPV, these was achieved through Coordination , Data Management, Information Sharing, Response coordination, Capacity building and Fosters partnerships among various stakeholders under Government leadership"

Kano Story of Change/Success Story/Quote Across Some PEOCs



Dr. Abdullahi Sa'ad Ahmed

Incident Manager, Kano EOC

"The Kano Emergency Operations Center (EOC) serves as the central hub for responding to not only Polio but a wide range of health challenges, from routine public health activities to swift and coordinated responses to outbreaks of Epidemic-Prone Diseases (EPDs). Orchestrating highlevel meetings and strategies for the State Ministry of Health, the EOC plays a crucial role in safeguarding public health emergencies. Particularly in epidemic management, Kano EOC acts as the linchpin, coordinating responses to diseases such as Polio, COVID-19, Lassa Fever, Measles, Diphtheria, and Cerebrospinal Meningitis, etc ensuring swift and effective containment measures. Its operationalization not only ensures the rapid containment of outbreaks but also fosters a culture of collaboration, coordination, and accountability between Government and Partners thereby promoting public health resilience and preparedness."

The Center plays an exceptional role of exemplary coordination and effectiveness; by facilitating high-level meetings and strategies for the State Ministry of Health...

Katsina Story of Change/Success Story/Quote Across Some PEOCs



Dr. Kabir Sulaiman

Incident Manager, Katsina

"Emergency Operation Center is the cornerstone of all coordinated Public Health interventions anywhere providing a conducive and enabling environment for all stakeholders.

Katsina State PEOC has achieved a lot in coordinating various strategies deployed to bring about successes recorded in the fight against Wild Polio Virus, Circulating variants and other VPDs. It is in deed a success story."



Dr. Sam Okiror

"Manager! We have approved the expansion of your EOC to continue the wonderful work you have been doing with your whole Team as attested by the EOC members. Please Keep it up".

Katsina Story of Change/Success Story/Quote Across Some PEOCs



Dr. Sulaiman Haladu

CDC-AFENET

"Katsina Polio Emergency Operations Centre has made a significant contribution by strengthening coordination, providing strategic direction using real-time data analysis to manage all operational aspects of the Polio Eradication Emergency Plan. This brings partners to work together, in collaboration ensuring accountability and effective resource utilization for all aspects of polio eradication activities. The success recorded by the EOC makes it an attractive model for coordination of other public health emergency intervention in the State".

Katsina State PEOC has achieved a lot in coordinating various strategies deployed to bring about successes recorded in the fight against Wild Polio Virus...

Sokoto Story of Change/Success Story/Quote Across Some PEOCs



Dr. Bilyaminu Balarabe

Director Disease control and Immunization, Sokoto EOC

The Polio Emergency Operations Center is a vital component of Nigeria's polio eradication efforts and the state's overall health security. The EOC's work helps to protect children from polio and other vaccine preventable diseases, and it also strengthens the state's capacity to respond to public health emergencies.



Sabiu Shehu Gandi State Health Promotion Officer

EOC is doing a very wonderful job in the state, i can remember sometimes in January/February this year a decision was taken at the EOC which is making huge impact in eradicating polio across the state, EOC insisted that ward team selection should be impose at the ward level, also locals should always be use during campaigns, likewise direct payment of healthcare workers, EOC makes sure each and every team member at the LGA/Ward level money are paid directly into their account.



Mubarak Yakubu Saleh

SC Solina

It is my pleasure working from the EOC, the way EOC follow up on campaign issues brought to the attention of the EOC is very encouraging, the leadership of the EOC is doing a great and wonderful job, I pray they keep it up.

Yobe Story of Change/Success Story/Quote Across Some PEOCs



Dr. Ahmed Ba'aba STL (Yobe) CDC-AFENET

Whatever skill you need to learn, there is always someone in the EOC who is competent to help you in developing capacity and completing your task.



Dr. Hauwa Larai Goni

Director of Public Health Yobe State Ministry of Health

The Yobe EOC environment is very neat and conducive for the activities I come to do, the staffs have the knowledge and skills to carry out their assigned roles and responsibility, there is teamwork and I have personally learned a lot from the EOC staff, and other colleagues that I come in contact at the EOC.

Recommendation/ Conclusion

NIN I

2

Recommendation

- **1. Streamline Operations:** The FMOH and SMOH should streamline the running of EOCs to ensure continuity and secure funding through national budgets.
- **2. Introduce Disease Surveillance Control Rooms:** Establish these at Polio Emergency Centers to strengthen public health preparedness and response.
- **3. Create LGA Data Committees:** Form these units at each LGA and link them to the Data Control Room at the Polio Emergency Centers to enhance monitoring and evaluation.
- **4. Expand PEOC Data Portal:** Broaden the scope to include all primary health care components.
- **5. Install Data Servers:** Foster ownership and strengthen public health and primary healthcare preparedness and response activities.

Conclusion

The successful implementation and operation of the PEOCs have been pivotal in Nigeria's fight against polio, leading to significant achievements in disease control and public health response. To sustain these gains and ensure continued progress in public health, it is crucial to streamline operations, introduce advanced surveillance systems, enhance data management, and secure funding through national budgets. By expanding the scope and infrastructure of the PEOCs, Nigeria can build a robust public health system capable of addressing various health threats, ensuring the well-being of its population, and serving as a model for other regions.

> By expanding the scope and infrastructure of the PEOCs, Nigeria can build a robust public health system capable of addressing various health threats...

About eHealth Africa

THUN

 $\Gamma \Pi$

Polio EOC Bauchi

ng Meeting for Z-DROP

Our Mission

eHealth Africa's mission is to build stronger health systems through the design and implementation of data-driven solutions that respond to local needs and provide underserved communities with tools to lead healthier lives.

Our Vision

Based in Africa, we establish new standards in health delivery and emergency response through the integration of information, technology, and logistics.

Our Values

Impact and Quality: We push ourselves to maintain high standards ensuring that we produce the most meaningful results in everything we do, no matter how big or small.

Innovative Problem Solving: We maintain a worldview driven by possibilities, not limitations. We take smart risks and foster an environment where creativity and innovation thrive.

Integrity: We are honest and truthful in our work. We always do what is right, even when it is not easy. We put our values into practice and hold each other accountable.

Profiles:

Since joining eHA in November 2012, Atef has been instrumental in transforming healthcare accessibility and quality in underserved regions. As the Executive Director, he has:

- As the pioneer Project Manager to the Polio Emergency Opeations Center Project, Atef spearheaded the establishment of eight Polio Emergency Operations Centers in Nigeria, funded by the Gates Foundation.
- Led the rapid response to the Ebola outbreak in Lagos, setting up an Emergency Operations Center within two weeks.
- Developed eHA's Nigerian Operations Department from the ground up.
- Contributed to Polio eradication projects in Nigeria,
 Ebola response in West Africa, and mapping projects in
 North Nigeria.
- Expanded Polio control rooms to over 19 countries in Africa.

Atef's humanitarian efforts have been recognized with a service award from Rotary International. He was also nominated to the Kano State COVID-19 Task Force during the outbreak, further showcasing his commitment to public health.

A seasoned Operations Management Professional, Atef brings over 10 years of operational and administrative oversight to complex programs. He excels in developing strategic business plans and key performance indicators to maximize program success.

Atef holds a BSc in Computer Communications Engineering from the Lebanese International University, Beirut, and an MSc in Global Studies.

Currently, as the Executive Director, Atef provides executive management for the entire organization as well as programmatic and strategic leadership in the framework of the organization's business development and relationship building. He also provides thought leadership for the organization's strategic capacity building.



Atef Fawaz

Executive Director, eHealth Africa Evelyn co-founded eHA in 2009. She served as Executive Director from 2009 to 2021, during that period she provided executive management for the entire organization as well as programmatic and strategic leadership in the framework of eHA's business development and relationship building. She also headed eHA's office in Sierra Leone and provided thoughtleadership for eHA's strategic capacity building.

Evelyn's efforts were key to raising over \$35m in funding over eHA's first four years. In 2014/2015, she led eHA to triple staff capacity in 12 months and oversaw the organizational development of eHA's expansion from 1 country to 4 countries including staff organization, restructuring, and program development.

Evelyn has received a number of awards including an Honorable Mention at the UC Berkeley Big Ideas Competition for Technology in Interest of Society, and a first place award with the Rick Hooper Scholarship Foundation on her thesis looking at Women's Human Rights and Access to Health Care in Muslim Societies of Northern Nigeria. Prior to founding eHA, Evelyn acted as Fellow of the Global Information Program at the University of California, Santa Cruz. Evelyn read Health Sciences at the University of California, Santa Cruz, and Walden University.



Evelyn Castle

Board Chairperson, eHealth Africa

Adam co-founded eHA in 2009.

He served as Executive Director from 2009 to 2021, during that period, Adam provided executive management for the entire organization. Adam leveraged his expertise in global health and informatics to strategically innovate and lead eHA's business development, research, private sector engagement, and health information technology initiatives. Furthermore, he also headed eHA's country offices in Nigeria and eHA's Global Health Informatics Teams, which is inclusive of GIS, Software, and IT Systems.

During the 2014-2016 Ebola outbreak, Adam rapidly built emergency response teams consisting of 300+ staff across Sierra Leone, Liberia, and Guinea in under two months. Furthermore, with less than one week's notice, he createdan Ebola response team in Lagos, Nigeria. Adam spearheaded the CDC's Ebola vaccine trial program in Sierra Leone, which was conceived, designed, and operational in under two months. Over the course of just one year, the Vaccine Direct Delivery program that Adam developed in Nigeria decreased stock outs of vaccines and related commodities from the extremely high rate of over 90% to an impressive 10%.

Prior to founding eHA, Adam served as the Associate Director for Programs and Instruction for the Global Information Internship Program (GIIP) at the Center for Global, International and Regional Studies, University of California, Santa Cruz. He holds a BSc in Information Systems and Technology Management from the University of California, Santa Cruz.



Adam Thompson

Vice Board Chairperson, eHealth Africa

Appreciation/ Gratitude

1

Appreciation/Gratitude

Today, we celebrate the Polio EOC Project and recognize all the people who supported it over the years. We are excited to see its success. The Polio EOCs were linchpins in Nigeria's fight against polio, providing a functional environment for partners to respond to outbreaks and manage campaigns.

We want to thank Michael Galway from the Bill and Melinda Gates Foundation for including eHealth Africa in this project, the pioneer NPHCDA Executive Director, Dr. Ado Muhammed, and the pioneer National IM, Dr. Andrew Etsano, for ensuring the vision of the EOCs was adopted.

There has been a turnover of Executive Directors (ED) and 2-3 Incident Managers (IMs) in some states recently. (both National and state)



Appreciation/Gratitude

Pioneer ED:

Dr. Ado Muhammed Pioneer National IM: Dr. Andrew Etsano Pioneer

State IMs:

Dr. Ahmed Tijjani - Kano EOC Dr. Abduljalil Abdullahi - Katsina EOC Dr. Victor Gugong - Kaduna EOC Dr. Almai Some - Borno EOC Dr. Aminu Shehu - Sokoto EOC Dr. Mansur Dada - Bauchi EOC Dr. Umar Chiroma - Yobe EOC Past ED: Dr. Faisal Shuaib Past National IM: Dr. Usman Adamu

Past State IMs:

Dr. Basheer Muhammad and Abdullahi Kauran-Mata - Kano EOC Dr. Kabir Suleiman - Katsina EOC Dr. Halliru Sabo and Dr. Neyu Ilya -Kaduna EOC Dr. Aliyu Shettima - Borno EOC Dr. Abdulrahman Dantsoho - Sokoto EOC Dr. Auwal A. Abubakar and Dr. Salisu Isah - Bauchi EOC Dr. Umar Chiroma - Yobe EOC Appreciate the NPHCDA Senior Directors, State PHCDA Executives/ Directors, and Hon. Commissioners. Also, the traditional rulers for their tireless contributions.

Partners:

The EOCs are utilized by a large number of partners and government agencies/bodies working on polio eradication, as well as other public health campaigns such as Yellow Fever, Measles, Meningitis, etc.

Partners include NPHCDA, FMoH, State Public Health Personnel - (SMoH, SPHCDA, and LGA), WHO, UNICEF, Core Group Partners Project, CDC, Rotary International, Red Cross, NCDC, EPID, AFENET, CHAI, SCIDaR (Solina, etc).

Funder: The Bill and Melinda Gates Foundation (BMGF)

None of this could have been done without the amazing government staff, partners, and eHA management teams who worked tirelessly to ensure the effective operations of the EOCs. We want to thank the NPHCDA Senior Directors, State PHCDA Executives/ Directors, the Hon. Commissioners, the traditional rulers, the EOC managers, IT coordinators, IM secretaries, stewards, drivers, gardeners, and all of the partner organizations (WHO, UNICEF, Core Group, CDC, Rotary International, Red Cross, NCDC, EPID, AFENET, CHAI). None of the successes of the Polio EOCs could have been achieved without your support.

We are excited about the transition of the Polio EOCs into Public Health EOCs because we are confident that the lessons learned, knowledge, and coordination developed over the last decade will be leveraged in combating other disease outbreaks and we can see real improvement in Nigeria's health system.

Current ED/CEO - NPHCDA - Dr. Muyi Aina

Current Nat. IM - Dr. Abdulkadir Gana

Kano EOC - Dr. Abdullahi Sa'ad Ahmed Katsina EOC - Dr. Kabir Suleiman

Kaduna EOC - Dr.Musa Abdullahi Garba

Borno EOC - Dr. Mala Abdulwahab

Sokoto EOC - Dr. Hamza Yusuf

Bauchi EOC - Dr. Sufyan Ahmad Jubril

Yobe EOC - Dr. Umar Chiroma

We are all confident that under your leadership, the legacy of the Polio EOCs will not only continue but will grow and expand. Thank you to every member of the PEOC project team involved since its inception, and best wishes going forward.

List of Contributors to the Compendium Development

- David Akpan
- Kazeem Balogun
- Haruna Kaita
- Favour Oriaku
- Dena Lu
- Judith Owoicho
- Safiya Abdulsalaam
- Aisha Kaoje
- Nasir Suleiman
- Kabir Suka
- Tijjani Alkali
- Sani Shehu
- Jonah Billy
- Mariam Ibrahim
- Muhammed Abba
- Hassan Saleh
- Late Fatimah Musa (RIPP)
- Late Abdulhafeez Ibrahim (RIPP)
- Fatimah Maiwada
- Abubakar Abdulkareem
- Samuel Eyitayo
- Fatimah Howeidy
- Nazir Ali
- Mas'ud Abdullahi
- Ameena Jagamu
- Terseer Dyege
- Aisha Nadabo
- Sekinat Williams
- Abubakar Lawal
- Na'imatu Toro
- Mukhtar Ibrahim
- Reyhan Usman
- Sadiya Umar
- Bashir Sabo
- Zaid Musa

Yobe - Polio Emergency Operations Center









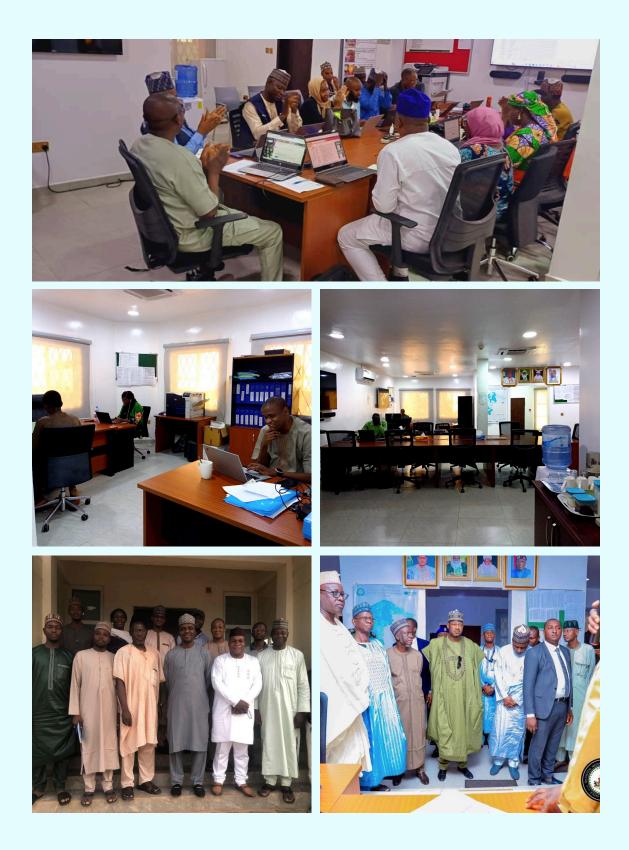


Bauchi - Polio Emergency Operations Center





Katsina - Polio Emergency Operations Center



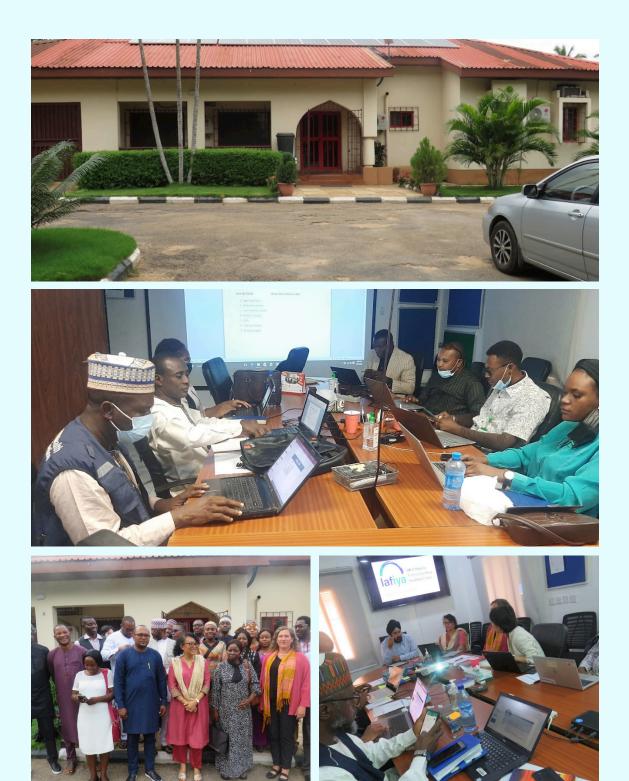
Sokoto - Polio Emergency Operations Center



Kano - Polio Emergency Operations Center



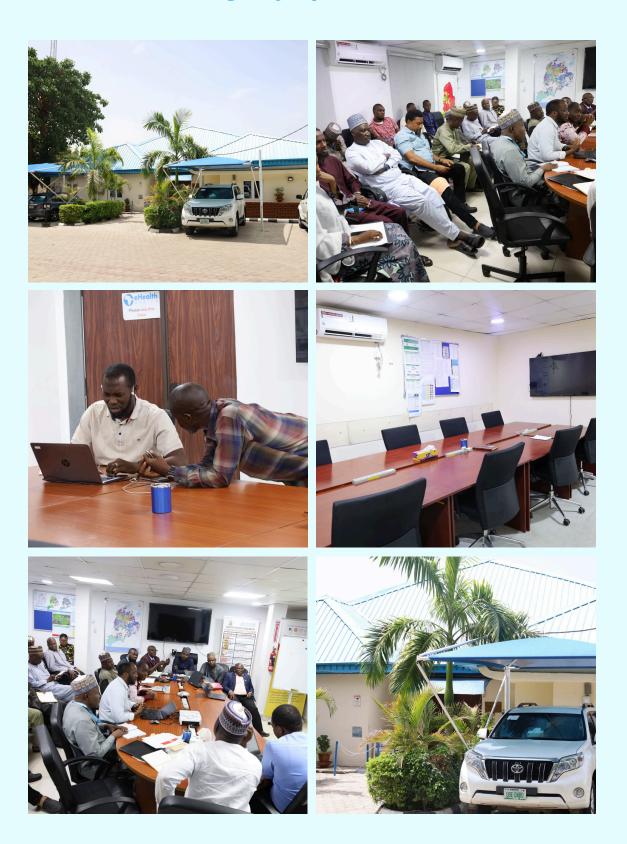
Kaduna - Polio Emergency Operations Center



Abuja - Polio Emergency Operations Center



Borno - Polio Emergency Operations Center



www.eHealthAfrica.org















