



# Epidemic Control Rooms

The HIV Epidemic Control Room is a technology-enabled approach that supports decision-makers to analyze data in real time for continuous program improvement.

## THE OPPORTUNITY

Despite large investments in the collection and management of HIV data, information is not used routinely to understand program performance and inefficiencies. Challenges in the routine use of data include the inability to synthesize data across multiple information systems, a lack of access to real-time data analyses and visualizations, and poor accountability mechanisms to track the implementation of prioritized actions. A structured mechanism for regular and rapid review of data can help programs quickly identify HIV cascade inefficiencies; understand reasons for under-performance; and course correct service delivery to improve HIV outcomes.

## THE DATA.FI SOLUTION

Data.FI works with USAID Missions and host country governments to establish **Epidemic Control Rooms**, also referred to as situation rooms. Epidemic Control Rooms allow decision-makers to access data across disparate sources in one place so the data can be analyzed in real time for HIV surveillance and response. The Data.FI approach to Epidemic Control Rooms is grounded in three principles:

**Technology Enabled:** We build technology-enabled data analytics and visualization platforms that integrate and/or triangulate data from multiple sources, including electronic medical records, labs, pharmacies, census data, and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) monitoring, evaluation, and reporting (MER) indicator data. Depending on information system maturity and resources, Data.FI can support countries to improve data management, analysis, and visualization by doing the following:

- Developing or strengthening data systems to optimize data collection and management
- Building data integration layers and central data warehouses to pool data from different sources
- Creating customizable interactive dashboards to drill down indicators by time, geography, and partner

**Standardized and Methodological:** We build the capacity of subnational health management teams, ministry officials, and implementing partners to adopt a proven methodology and institutionalize data review for strategic planning and program improvement. This approach includes processes for identifying critical information needs; developing standard visualizations to facilitate problem identification; analyzing root causes; and strengthening multidirectional feedback mechanisms across various levels of the health system.

**Action-Oriented:** We work with governments to convene regular data review meetings within Epidemic Control Rooms, allowing service providers, implementing partner staff, and decision-makers from subnational and national teams to closely monitor HIV data in real time, identify gaps, and identify and triage solutions. We operationalize performance tracking and accountability tools to follow up on action plans, monitor performance improvements, and improve transparency, enabling continuous feedback and learning as a catalyst for ongoing program adaptation.



Dr. Richard Amenyah (UNAIDS/Nigeria) and Dr. Ime Usanga (Akwa Ibom State Government) in the epidemic control room, discussing high frequency reporting data from USAID activities.

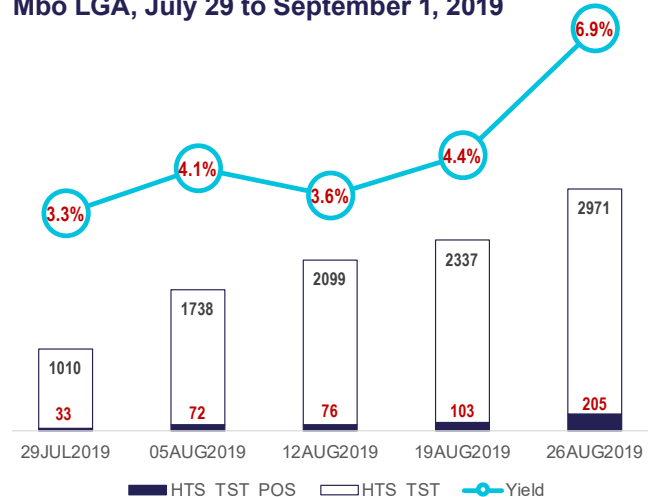
Photo credit: Tyra Fom, Data.FI/Nigeria

## WHAT IS THE IMPACT?

In Nigeria, Data.FI, in partnership with FHI360's Strengthening Integrated Delivery of HIV/AIDS Services (SIDHAS) project, implements a situation room data review approach in Akwa Ibom State. This data review meeting is convened by the State Ministry of Health and the Akwa Ibom State Agency for the Control of AIDS with attendance from U.S. Agency for International Development (USAID) implementing partners. This process provides a cost-effective approach for stakeholders to engage weekly with high-frequency reporting data to identify and act on gaps related to performance or data quality.

Routine data reviews in the situation room have contributed to improved HIV case finding and yield of HIV testing in Akwa Ibom State. Real-time monitoring of the geospatial distribution of newly diagnosed HIV cases led to the identification of a clustered epidemic among mobile fishing communities in coastal areas. This prompted the rapid deployment of HIV testing teams to intensify case finding in this area, resulting in the doubling of HIV testing yields and a sixfold increase in total HIV positive diagnoses over a five-week period.

**HIV Tests, Positive Results, and Testing Yield in Mbo LGA, July 29 to September 1, 2019**



## PUTTING THE SOLUTION INTO ACTION

The scale and scope of Data.FI's Epidemic Control Room solution can be adapted for specific country needs, priorities, and digital maturity. Epidemic Control Rooms can be implemented at subnational and national levels, and require regular participation and buy-in of stakeholders from country PEPFAR teams, implementing partners, and Ministry of Health staff. Physical space in a government health or implementing partner office is needed, along with capabilities for internet and teleconferencing, to enable multiple stakeholders to review the same information at the same time. The frequency of review and real-time availability of data will depend on data collection and management systems and processes in each country. Data.FI will work with teams to ensure compliance with appropriate processes to access data for routine review.

Data.FI can support implementation of the solution through the following:

- Optimizing access to data through development of standard operating procedures or information system improvement
- Design and development of data analytic and visualization products
- Capacity strengthening to adapt methodology; train health teams in data analysis, visualization, interpretation, and use; and ongoing coaching and mentoring of teams to build leadership and facilitation skills to manage change
- Equipment to outfit the Epidemic Control Room and infrastructure for internet connectivity and teleconferencing solutions

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