

USING DATA TO DRIVE BETTER PROGRAMS

OVERVIEW

The U.S. President's Emergency Plan for AIDS Relief's (PEPFAR) approach to achieving epidemic control has taken a greater focus on data collection and use to drive better programs. Through enhanced routine program monitoring and program evaluation, PEPFAR country teams must document what their programs have achieved in terms of outputs, outcomes, and impacts in order to rapidly identify where there are challenges. Teams are then able to accurately determine the most effective programming and the course corrections needed to improve those programs. This understanding empowers decision-making and focuses increasingly limited resources to geographic areas and populations with the highest HIV burden.

To accomplish this, the U.S. Centers for Disease Control and Prevention (CDC), a key implementing agency of PEPFAR, takes a strategic approach to supporting monitoring and evaluation, targeting efforts using PEPFAR-supported data to drive better programs, promote evidence-based planning and impact, and ensure sustainability, accountability, and improved patient outcomes. These efforts are particularly focused on enhancing routine program monitoring, including PEPFAR's initiative targeting adolescent girls and young women (known as the Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe—DREAMS—initiative), viral load (VL) testing scale-up, improving the quality of routine program data, implementing program evaluation according to PEPFAR's evaluation standards of practice, and assuring program quality through the Site Improvement Monitoring System (SIMS) initiative.

CDC'S ROLE

CDC works to:

- Develop innovative analyses and visualizations and build capacity of staff and implementing partners to improve data use for decision-making
- Achieve the UNAIDS and PEPFAR goal of "90-90-90" through helping define the assessment structure for PEPFAR's VL testing (UNAIDS "90-90-90" strategy states that by 2020, 90 percent of all people living with HIV will know their HIV status; 90 percent of all people with diagnosed HIV will receive sustained ART; and 90 percent of people receiving ART will have viral suppression).
- Improve data quality at all levels, with a focus on building capacity of implementing partners, including ministries of health
- Build capacity of staff and implementing partners to plan and implement robust and pertinent evaluations
- Ensure services provided by CDC-funded partners meet the minimum, internationally accepted, standards

ACCOMPLISHMENTS / RESULTS

Enhanced Monitoring

Through enhanced routine program monitoring, CDC rapidly identifies programmatic and data challenges to determine what course corrections are needed to improve programs and better use increasingly limited resources to geographic areas and populations with the highest HIV burden. Innovative routine monitoring approaches, that are contextual to country programs, may include the collection of additional enhanced indicators to supplement routine reporting systems or more rapid collection of specific indicators to trigger timely action at the national, sub-national, and site level. The following activities are being established to implement enhanced monitoring:

- Assessing site-level data sources for ascertaining points of enhanced monitoring of prevention of mother-to-child HIV transmission and antiretroviral treatment (ART) programs
- Creating monitoring indicators for differentiated ART service delivery
- Developing target trackers and dashboards for rapid data checks and action

Data Use

CDC is dedicated to intensifying data use to understand the response of PEPFAR activities as the program focuses on areas and populations with the greatest HIV burden and as countries scale up efforts to find infected individuals and immediately link them to treatment. CDC provides technical assistance for data synthesis and triangulation work for mapping undiagnosed and hard-to-reach populations. In response to the need for

developing robust care cascades for understanding program gaps and program impact, CDC is working to standardize methodologies and guidance for developing programmatic cascades and cascade analytics for routine monitoring. This work occurs at multiple levels, first focusing on developing national and sub-national cascades, and then on cascades disaggregated by sex, age, and key population. In addition, CDC continues working with the World Health Organization on developing work on epidemiological cascade analysis guidance.

Viral Load

As PEPFAR countries invest in the scale-up of routine patient VL testing, it is critical to measure the impact and progress towards achieving the third “90” of the UNAIDS “90-90-90” strategy. Through collaboration with PEPFAR’s Viral Load Working Group and various country teams, CDC has helped develop and implement a monitoring and evaluation framework to assess VL scale-up and implementation toward this third “90.”

DREAMS

The DREAMS initiative monitors its programs through an enhanced monitoring and evaluation process geared toward routine PEPFAR data systems, as well as other available sources of data. Examples of these efforts include:

- Hosting quarterly partner meetings to review program progress and results;
- Assisting several DREAMS countries with the adoption of a unique identifier to track participants through the core package of services;
- Leveraging existing surveillance and ongoing studies to evaluate impact;
- And supporting DREAMS countries as they use macro- and micro-level data and other inputs including geospatial, antenatal clinic surveillance, population-based surveys, and programmatic data to create a model to detect changes in incidence at sub-national level

Data Quality

The ability to collect and report high quality data is the cornerstone of a data-driven approach. It highlights the need to focus on strengthening national systems and enhancing the quality of data generated by these systems. Multiple opportunities have arisen to collaborate and support partner countries to measure and enhance the quality of the data collected and reported through national systems. A routine data quality improvement (DQI) action pack has been developed to facilitate CDC’s commitment to high quality data. The resources package outlines the DQI approach and provides tools, resources, and guidelines for ensuring data produced at CDC-supported sites are of good quality. The quality improvement efforts are undertaken by CDC country offices, in partnership with national counterparts, implementing partners, and supported clinical and community sites.

Evaluations

In an effort to adhere to PEPFAR’s governing legislation and CDC’s policy for evaluation implementation and reporting standards of practice, CDC has supported country teams and implementing partners to understand requirements and build capacity to design and implement evaluations. Evaluation findings are to be used in program decision-making to improve efficiency and impact. Public data on 2014-2016 evaluations are available at www.PEPFAR.gov/evaluations.

Site Improvement Monitoring

PEPFAR’s SIMS initiative provides a standardized approach to monitoring program and service delivery quality against internationally recognized standards. The precursor to SIMS was a CDC-developed, facility-focused effort called Site Monitoring System (SMS). Three SIMS assessment tools are used to monitor site performance at the facility, community, and above-site levels. Triangulation of SIMS data with PEPFAR Monitoring, Evaluation, and Reporting indicator results and expenditure analysis provides an integrated view of performance, expenditure, and program quality at the implementing mechanism and site level.

FUTURE EFFORTS

CDC, with the assistance of PEPFAR, will continue to support staff and partners in the collection and use of timely and relevant data for use in decision-making to drive better programs. To accomplish this, CDC will build capacity through trainings and improve accessibility and interpretability of data through improved dataset structures, analysis methods, and visualization tools.