# Using data to advance the South African HIV Response for Key Populations





A part of the





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#### At a glance

Partners/Client:

- University of Witwatersrand (RHI)
- South African Department of Health

Technology:

- Vantage HIV Solution
- Vantage Program Oversight Solution

#### **Technology Partners**

• Microsoft

Location

• Seven districts in four provinces across South Africa



#### **The Background**

The University of Witwatersrand Reproductive Health and HIV Institute's (Wits RHI) Key Populations Program supports the South African Department of Health (DoH) to reduce the incidence and impact of HIV on key populations (KP). USAID/Southern Africa supports provision of HIV prevention, care, and treatment services to sex workers (SW) and transgender (TG) individuals in seven key districts in four provinces across the country. This is PEPFAR's first dedicated HIV program for the TG community in Africa.

Wits RHI has developed a highly successful hub-andspoke, community-based approach to reach these mobile populations. Fixed clinics are referral points for mobile teams of peer educators and professional nurses. They target community hotspots to reach individuals most vulnerable to HIV infection where they live and work.

Mobilizing, tracking and tracing, and ensuring continued PrEP or ART use of this mobile cohort are reliant on easily accessible and accurate data at all levels of the program, from site-based nurses to senior management. Wits RHI needed continuous feedback on performance to refine operational decisions and ensure that they retained all clients in care.





#### The Challenge

Like other key populations initiatives around the world, the program faced the challenge of integrating data from multiple sources. Some of the specific requirements were:

- district

# **The Solution**

- DoH and donor environments.
- mobile data collection app.
- actionable data.





• Localized instances of the DoH health management information system (TIER.Net) that needed to be customized per

• Different conventions for handling key population Type and Gender in different source systems

• Changes to DOH policies restricting access to patient – level data outside of the TIER.Net system causing reporting challenges across donor-funded programs within South Africa

Complex, manually collated registers for documenting oral pre-exposure prophylaxis (PrEP) that could not be easily ingested by an automated system

Wits RHI partnered with Vantage Health Technologies to bid for and deliver this initiative. Vantage consulted on the development of metrics, methodology and the Program's data pipeline: created an adaptive management system that included a comprehensive set of M&E data visualizations.

The Vantage team set out to configure a system that could deliver visibility and insight in a standardized, transparent, auditable way. Vantage provides a unified analysis, reporting and rollup hierarchy that integrates data from seven facilities, the national PrEP register, and a custom system for tracking outreach activities.

Some key features of the Vantage Program Oversight Solution included:

• An extensive mapping matric that reconciles the various naming conventions used to identify key populations in the

• A solution that ingests summarized facility data when patient level data can no longer be accessed based on Vantage's

• Provision of a tool, procedure and training to extract data from the PrEP registers into a flattened format that could be easily ingested into the Vantage system allowing insight into PrEP activity performance. The tool supports official Monitoring, Evaluation and Reporting (MER) guide indicators as well as custom metrics required by USAID.

• Harmonized indcator results, trends and insights displayed in various Vantage visualizations: updated weekly to provide

Weekly, automated emails delivered to key stakeholders highlighting key indicators, gaps to targets and problem areas.







### **The Outcome**

In addition to Vantage enabled data analytics, the Program on its own makes a major contribution to controlling the pandemic in South Africa through key population targeted interventions such as microplanning, enhanced peer outreach approaches (EPOA), community/door-to-door outreach, and adaptive management for performance improvement.

The Vantage solution has enabled these program successes. Its outputs are routinely used in site meetings, donor interactions, monthly DoH District presentations, quarterly DoH Provincial presentations, and all internal performance meetings. As well as providing healthcare indicator performance, the system has been used to communicate financial and human resources data, to understand performance in the context of spend and staffing.

#### **Results**

# Tested

• **21000** sex workers

• 3853 transgender individuals

Linking 95% of all new positive HIV patients to antiretroviral therapy and 32% HIV new negatives to PrEP services.

## 90%

Viral load suppression rate for both sex worker and transgender patients.

### 4800 or 95%

People testing positive of HIV initiated onto antiretroviral therapy

#### **8100 or 32%** People testing negative on PrEP medication.

### **Stakeholder Perspectives**

"The key thing is that analysis is done for people; the interpretation is done by the system. That improves accuracy, and means people are not muddled by the detail. As management, you know staff are getting the right messages. This also builds the capacity of people who are not data specialists – that's a key advantage over spreadsheets and databases. Also, Vantage Health Technologies are another set of eyes on the data, and that drives input quality.

The Vantage weekly emails distil a very big picture into something that is short and sharp – a consolidated, synthesized, toplevel picture that is very readily accessible with an easy narrative built in. We do daily WhatsApp reports, but I use the consolidated picture to flag issues with the Agreement Officer Representative (AOR); and if I see things that cause disquiet, I can ensure that managers are aware and find out what's driving them. It does what it is designed to do: data that supports adaptive management. I have also found that from a management perspective, an improvement in the level of engagement with data among my staff members.

Vantage helped us to look into the granularity around viral load suppression management. Viral load coverage at the sites has gone up from the 70s and 80s into the very high 80s and 90s. Vantage stimulated quality improvement programming around those gaps.

Vantage also provides us with easily accessible data that we use to showcase our capabilities and results with other partners that we are or would like to be collaborating with."

Naomi Hill, Chief of Party – Wits RHI Key Populations Programme







# case study

"We are mainly interested in test & trace, viral load suppression, and PrEP. The automated weekly emails give us a digest of where we are behind with COP targets and help us to see what the specifics are to make up the gap. The automated emails have a consistent process and reduce the burden on program M&E staff. We don't see shifts weekly, but we use them to understand broad trends. I also use the digest of percentage of target met versus the percent of the year elapsed.

They give me a national overall summary, as well as districtby-district. We use the emails in internal USAID meetings, and they definitely inform our conversations."

Joseph Lawrence, Agreement Officer's Representative, USAID

"In the past, to ensure that all staff members are equipped with the data they need, I have always had to conduct data analysis manually and prepare data dashboards and visualizations to share via emails and present in meetings. Vantage provides me and all the staff members with this information in an automated and systematic manner. This has cut down my workload, allowing me to focus on more strategic issues or on problem solving and brainstorming solutions to issues we encounter. I focus on utilizing information as a catalyst for improving our practices.

Vantage has also helped to deliver tangible results. For example, there has been a definite increase in linkage to care as a result of Vantage – both ART and PrEP. The weekly reporting and feedback processes have resulted in us picking up issues faster in order to ensure that initiations are done better."

Cara O'Connor, Senior Advisor, Strategic Information, Wits RHI Key Populations Programme





