

Despite the proven benefits of well-managed antiretroviral therapy (ART) for people living with HIV (PLHIV), 4% of PLHIV in KZN remain undiagnosed, and even more are not engaged in care.

Decentralising the provision of HIV services from overburdened health facilities to community sites can reduce barriers to acceptable, efficient and more prompt ART initiation and management, thereby supporting more PLHIV in achieving viral suppression.

A randomised controlled trial on delivery optimisation for antiretroviral therapy (DO ART) was conducted from 2016 to 2019 by the Human Science Research Council (HSRC) and partners to provide community-based ART initiation, monitoring and resupply to HIV-positive people in South Africa and Uganda. The results showed that in settings with high and medium HIV prevalence, community-based ART (CBA) services significantly increased viral suppression compared with clinic-based ART services, particularly among men.

The results also confirmed the safety and cost-effectiveness of this approach.

Funded through a grant from the Bill & Melinda Gates Foundation, HST set out to test the HSRC results in a real-world setting to improve the numbers of ART-eligible clients being initiated on treatment and their continuity of care towards viral suppression within six months. The DO ART Demonstration

Project has provided comprehensive screening services, ART initiation, and ongoing community-based management of patients on ART in eThekwini South and Nongoma Sub-districts in KwaZulu-Natal.

Conducted over 18 months in partnership with the Department of Health in KwaZu-lu-Natal's Nongoma and eThekwini South Sub-districts, the DO ART Project has decongested overburdened healthcare facilities, and served patients deterred from visiting facilities by lockdown restrictions, fears of COVID-19 infection, and inability to afford transport costs.

The aim was to demonstrate a 30% improvement in viral load suppression after six months among participant patients in the two districts receiving the CBA services, compared to

those receiving the clinic-based standard of care. The data-driven, patient-centred approach to case-finding yielded a 9.6% positivity rate, compared to an average of 2% through standard community testing. Case management for adherence and access to medication resulted in a retention rate of 95%; viral load coverage of 88% (exceeding the 79% provincial average); and a viral load suppression rate of 74% of the total cohort initiated, compared to the standard of care which is 34%.

The project also involved developing an understanding of the experiences and preferences among male and female participants receiving CBA services to inform appropriate service delivery. Community responses have been highly positive in affirming the value of the DO ART model.

The perspectives of clinical and field-based project staff on opportunities and challenges of implementing CBA were documented, and the financial and safety implications of implementing the CBA model were described.

This work will assist in establishing a body of knowledge around CBA implementation and its potential to expand the overall capacity of the health system. The project findings will influence policy and practice by informing provincial and national roll-out of CBA services through the Department of Health.

The DO ART model has proved to be an effective and sustainable means of countering the impact of COVID-19 on HIV care, showing that community-based treatment services are possible and desirable. By streamlining HIV service delivery for patients' needs, this integrated model reinforces and complements clinic-based efforts, and eases strain on health system resources, while providing improved health outcomes. The

project's results indicate an opportunity to scale up and synergise research, policy, and practice for increased coverage of this model.

Short-term continuation of the project (from September 2022 to March 2023) focuses on down-referral and integration of prevention activities, and provision of DO ART-related technical assistance to the Provincial and District Departments of Health and other Implementing Partners.

The project is transitioning in 2023 to a technical assistance approach in order to introduce this model in an additional six districts in a catalytic scale-up. This phase of the project utilises the learnings, policies, procedures and guidelines developed in Phase One to build a community ART model into DoH clinical care through their community services. We work with the DoH to train Mobile Clinic teams on strengthening KZN's community care model, and bringing ART services into the places where people live, work and play.



A DO ART team member serves a male client