

BACKGROUND

South Africa has the world's largest HIV epidemic, and has made marked progress towards scaling up antiretroviral treatment (ART). As part of a strategy to improve linkage to care, retention in care and adherence on treatment for people living with HIV (PLHIV), the South African Government has implemented Adherence Guidelines for HIV, TB and NCDs (AGL), with a special focus on differentiated service delivery (DSD). The AGL and Service Delivery Package have been implemented in all districts and facilities in South Africa to address the breakdowns in the care cascade prioritized by the World Health Organization (WHO) Differentiated Care Framework.

Employing a phased approach to DSD implementation, South Africa is scaling up comprehensive interventions that cover a broad spectrum of Treatment for All. These interventions include but are not limited to: Treatment plans for newly diagnosed PLHIV; DSD models (DSDM) for patients who are stable on treatment; interventions for those failing on treatment; integration of services for HIV and other chronic conditions; and supportive strategies for children and youth living with HIV. In the most recent update to the NDoH National Strategic Plan (NSP) for 2017-2022, the department further outlines policies to enable people living with HIV, tuberculosis (TB), or a sexually transmitted infection (STI) to access appropriately tailored DSDM.

NDoH has launched a major effort to address populations of PLHIV that are among those at highest risk for poor adherence and unfavorable retention outcomes, including adolescents. DSD has been recognized for its potential to manage ART services in a way that is feasible, acceptable, and successful for adolescents. Another population of PLHIV in need of specialized services are those at high risk for advanced HIV disease progression. At the moment, South Africa is focusing on facility-based models of care, including the Advanced Clinical Care (ACC) pilot, to best address the needs of this population.

National goals for ongoing improvements as scale-up of DSD continues, include leveraging existing expertise in provision of DSD for ART and improving community buy-in of DSDM by increasing coordination with partners and community-based organizations. The reporting of monitoring and evaluation (M&E) data for the purposes of tracking the progress of DSD scale-up and ensuring quality are also a high priority of the NDoH.

DSD MODELS OFFERED

South Africa currently offers six models of DSD for ART. These include three which are facility-based models: the **Multi-Month Refill Model** (also known as appointment spacing), **Fast-Lane Refills** (sometimes called fast-track refills), and **Facility-Based ART Groups**. Both appointment spacing and fast lane are individual models. The community-based models include **Community-Based ART Groups**, a group model, and **Community ART Distribution**, an individual model. Since 2014, South Africa has also utilized a feature known as **Centralized Chronic Medicines Dispensing and Distribution (CCMDD)**, by which patients are dispensed ART medications at reduced intervals and the antiretroviral drugs (ARV) can be collected from a private, commercial pharmacy or other designated collection point. This model includes the features of the appointment spacing model and has some similar qualities as community ART distribution.

DSD UPTAKE & COVERAGE

Despite South Africa's large geographical area and high HIV prevalence, DSD scale-up efforts have been very successful. Models of DSD for ART are available in all 9 of South Africa's provinces; 3,989 health facilities are providing ART in the country, of which, 3,092 (76%) are supporting DSD; and 11 (79%) of the 14 ART-supporting implementing partners (IP) are supporting DSD.

Each of the 3,092 DSD facilities in the country provides the community-based ART group model and 96% (n=2,960) of DSD facilities provide appointment spacing and CCMDD (Figure 1). While the total number of facilities providing DSD in KwaZulu-Natal is unknown, data is available on the number of facilities in that province providing two models: 693 facilities in KwaZulu-Natal are providing fast-track and 348 are providing facility-based ART groups (Figure 1).

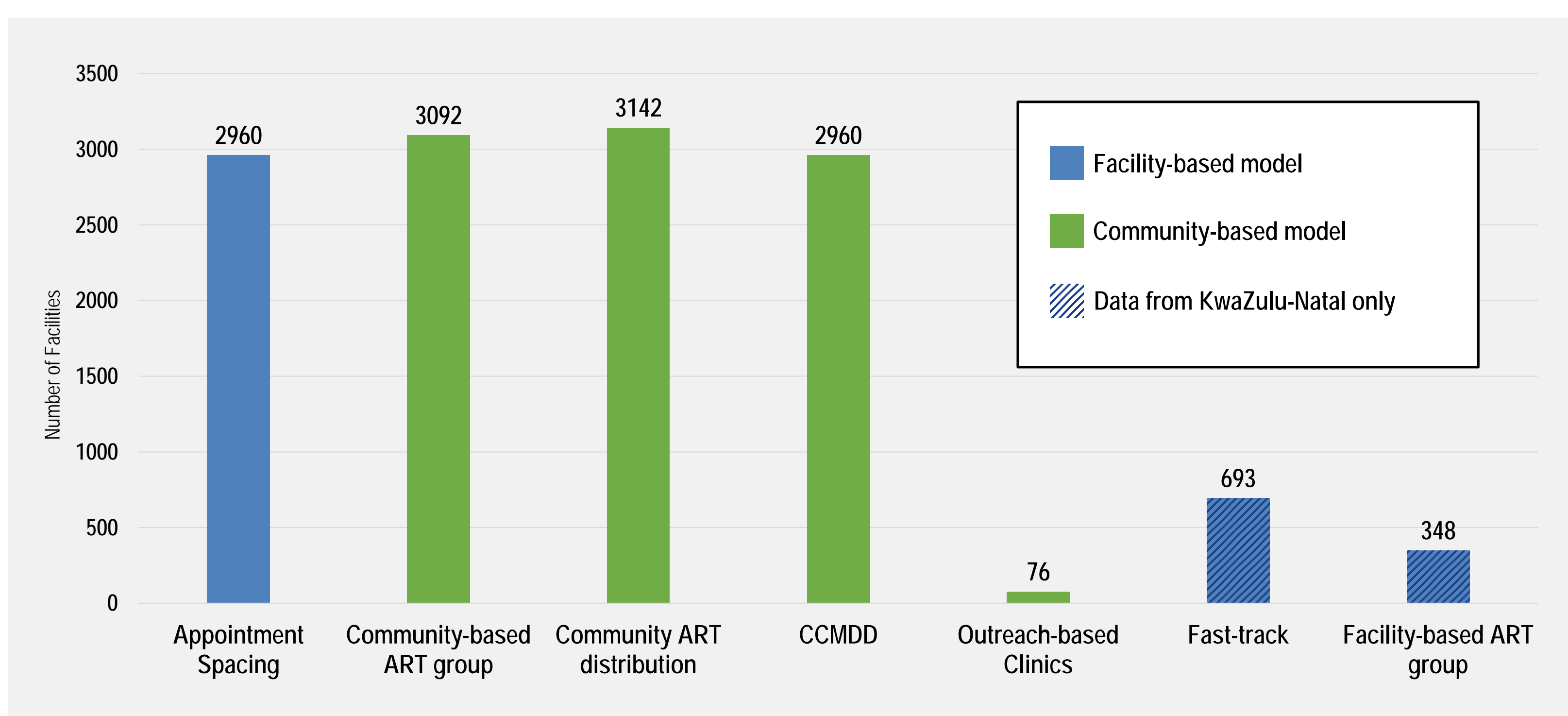


Figure 1. DSDM for ART Offered in South Africa, by Facilities Offering Each Model

DSD DASHBOARD

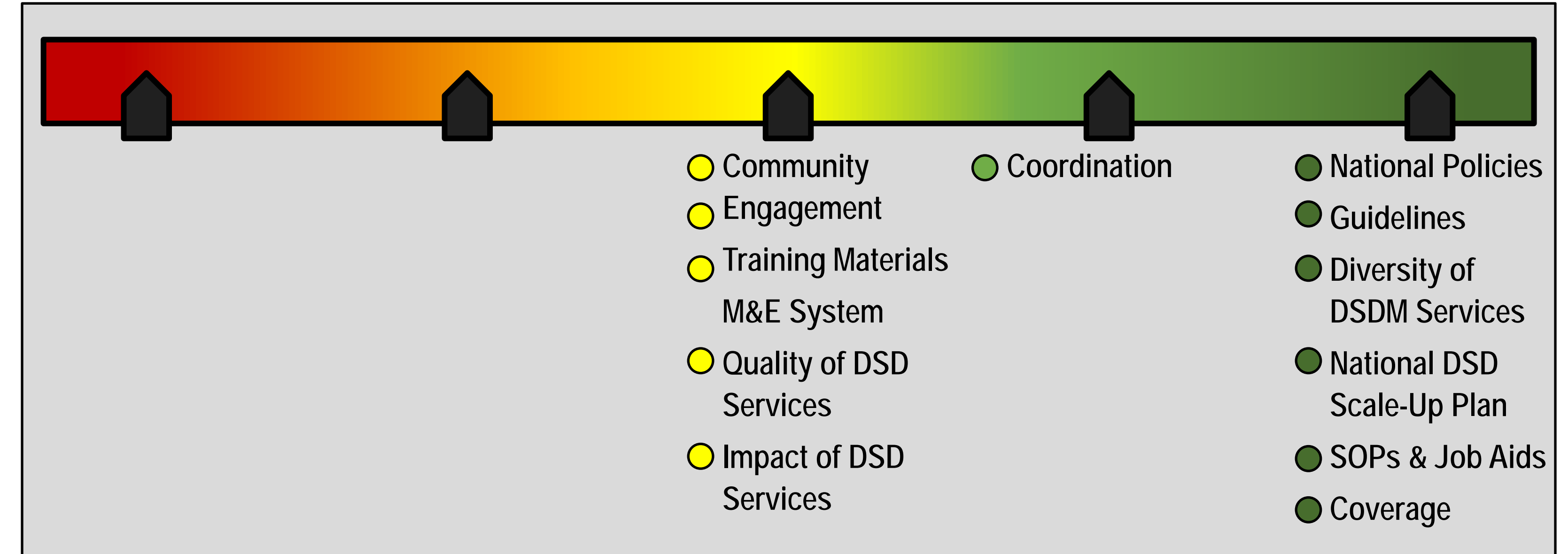


Figure 2. South Africa DSD Dashboard, January 2018

A self-assessment tool known as the CQUIN DSD Dashboard was used to quantify the progress being made as South Africa rolls out its national DSD guidelines. Across 12 different domains, a five-step color scale was used to rank progress and performance from red, indicating no activity, to dark green, indicating significant and robust implementation.

South Africa found that the largest number of domains were in the dark green category, the highest level of development (Figure 2). In the highest-ranked domains, the system met these clearly-defined set of standards: **National Policies** actively promote the use of DSDM for diverse patient groups; National HIV Treatment **Guidelines** provide detailed and specific guidance on implementation of DSDM; there is a **National DSD Scale-Up Plan** and it is being actively implemented; **Diversity of DSDM Services** was determined to be high due to the provision of models for diverse patient groups; step-by-step national standard operating procedures and job aids (**SOPs and Job Aids**) are available for at least three DSDM; and finally, **Coverage** of DSDM reaches >75% of the health facilities that provide ART in South Africa.

CASE STUDY/BEST PRACTICE

South Africa has piloted innovative DSDM approaches such as the **Automated Pharmacy Dispensing** system that is now available in four hospitals in Gauteng Province. This technological innovation enables clinicians to write electronic prescriptions that are uploaded to the electronic patient management system through a cloud-based data portal and automatically available to pharmacists. When new prescriptions are received, ARVs are packed by pharmacy staff and stocked in secure containers. When the patient arrives to pick up their medication, the prescription is dispensed through an automated process by a robotic hand.

Another innovative approach to ART provision utilizes a less cutting-edge but no less successful technology. Founded by a 21 year-old Cape Town-based entrepreneur, the **Iyeza Express** bicycle delivery service delivers chronic care medications, including ARVs, to patients living in low-income areas, particularly townships.



Automated Pharmacy in Gauteng



Iyeza Express delivers medication to low-income areas by bicycle

NEXT STEPS/WAY FORWARD

To capture information about DSDM coverage and patient-level outcomes, South Africa plans to address issues with the current M&E system, which remains a challenge for some models due to parallel reporting systems. One initiative to reach this goal involves continuing updates to the electronic health records database system.

As part of its national priority to boost the number of patients on ART and ensure viral suppression, South Africa has begun program evaluations that will measure the progress of implementing the national DSD scale-up plan and includes an evaluation on health care provider perspectives.