

## 2025 CHIPTS HIV NEXT GENERATION CONFERENCE

# Retention and Adherence in HIV Treatment: Comparing Differentiated Service Delivery (DSD) and Rise UP! Enhanced DSD (EDSD) Models for AGYW in Sub-Saharan Africa

Wanjiku W. Dyer, MBS and Czarina Igama, MBS  
Charles R. Drew University of Science and Medicine  
CDU Global Health Leaders Program Cohort 3  
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# HIV in Sub-Saharan Africa

## High Prevalence

- **UNAIDS 2024 Fact Sheet** (UNAIDS, 2024)
  - a. Sub-Saharan Africa accounted for 65% of the global total of 39.9 million people living with HIV worldwide
  - b. Women and girls (all ages) accounted for 62% of all new HIV infections in sub-Saharan Africa in 2023
  - c. 1.9 million AGYW (aged 15–24 years) living with HIV globally, with 77% of them residing in sub-Saharan Africa
  - d. 3x more likely to contract HIV than males
- **PEPFAR** adopted the UNAIDS 95-95-95 targets to end the HIV/AIDS pandemic by 2030. (Kaiser Family Foundation, 2024)

## Challenges for AGYW

- **Socioeconomic** (UNAIDS, 2024):
  - a. Poverty and limited access to education
  - b. Economic dependence on older partners, increasing vulnerability to HIV
- **Healthcare Access:**
  - a. Stigma and discrimination in healthcare settings (Kamire et al., 2022).
  - b. Lack of youth-friendly sexual and reproductive health services (Dzinamarira et al., 2024).
  - c. Inadequate sexual health education and information (UNAIDS, 2024).

# Research Focus

To compare health outcomes of Adolescent Girls and Young Women (AGYW) receiving HIV treatment utilizing the EDSD model at Rise UP! Zambia in comparison to DSD models utilized in other regions of sub-Saharan Africa.



# Rise UP! Zambia Enhanced Differentiated Service Delivery (EDSD) Model



1. **The Rise UP! Objective:** To assist the Republic of Zambia in addressing the PEPFAR 95-95-95 targets (ART initiation; ART retention and Viral Load Suppression) among all AGYW living with HIV
2. **Range of services** offered under the Rise UP! Model:
  - a. **Youth/adolescent-friendly HIV services** (clinical arm)
    - i. PrEP navigation
    - ii. Referrals
    - iii. Telehealth
  - b. **Psychosocial support** (community arm)
    - i. Adherence counseling
    - ii. Peer support
    - iii. Community Adolescent Action Groups (CAAGs)

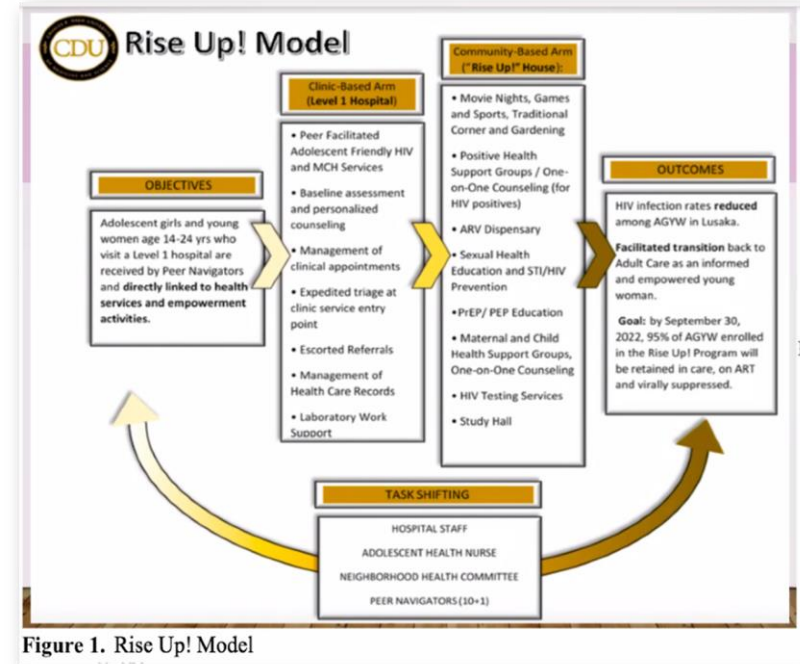


Figure 1. Rise Up! Model

# Differentiated Service Delivery (DSD) Models

## Standard/Conventional Care Model

- Centralized location
- Standard scheduling
- Provider-driven

## DSD Model

- Decentralized
- Flexible scheduling
- Patient-driven
  - Status-neutral testing

Ehrenkranz et al. (2021)




CQUIN (2025)

# Methods

- **Systematic Review:**
  - Analyzed studies on DSD models from various sub-Saharan African countries
- **Secondary Data Analysis:**
  - Utilized data from Rise UP! to evaluate:
    - Service demographics
    - Retention and viral load suppression rates
    - Success across various locations
- **Comparative Analysis:**
  - Compared data between DSD models and Rise UP! sites
  - Evaluated effectiveness based on retention and viral load suppression outcomes
- **Databases** used: PubMed, CINAHL, Google Scholar

# Comparative Analysis

Author(s)	Country	Age range (years)	Model	Interventions	Outcomes
	Zambia	15-24	EDES	<ul style="list-style-type: none"> <li>Clinic-based arm: Telehealth, personalized counseling, triage, lab work support</li> <li>Community-based arm: Peer navigation, support groups, maternal and child health support, PrEP navigation</li> </ul>	<u>FY2022</u> <ul style="list-style-type: none"> <li>12-month viral suppression: 95.5%</li> </ul> <u>FY2024</u> <ul style="list-style-type: none"> <li>Continuity of care rate: 91%</li> <li>Missed appointment rate: 9%</li> </ul>
Fox et al. (2019)	South Africa	18-29	DSD	Adherence clubs (ACs), decentralized medication delivery (DMD)	<u>ACs</u> <ul style="list-style-type: none"> <li>12-month retention: 89.5% vs. 81.6% (control)</li> <li>12-month viral suppression: 80% vs. 79%</li> </ul> <u>DMD</u> <ul style="list-style-type: none"> <li>12-month retention: 81% vs. 87%</li> <li>12-month viral suppression: 77% vs. 74%</li> </ul>
Hanrahan et al. (2019)	South Africa	18-24	DSD	Clinic- and community-based ACs	24-month retention: 40%
Amzel et al. (2018)	Lesotho	15-19 20-24	DSD	Teenage clubs, peer-support groups, community adherence groups	<u>15-19 y/o</u> <ul style="list-style-type: none"> <li>12-month retention: 74% vs. 55%</li> <li>12-month viral suppression: 85% vs. 74%</li> </ul> <u>20-24 y/o</u> <ul style="list-style-type: none"> <li>12-month retention: 70% vs. 65%</li> <li>12-month viral suppression: 88% vs. 90%</li> </ul>
Tapera et al. (2019)	Zimbabwe	≤24	Zvandiri/DSD	Support groups, ART refill groups, home visits, adherence communications, counseling, community outreach	<ul style="list-style-type: none"> <li>6-month retention: 99%</li> <li>6-month viral suppression: 99%</li> </ul>

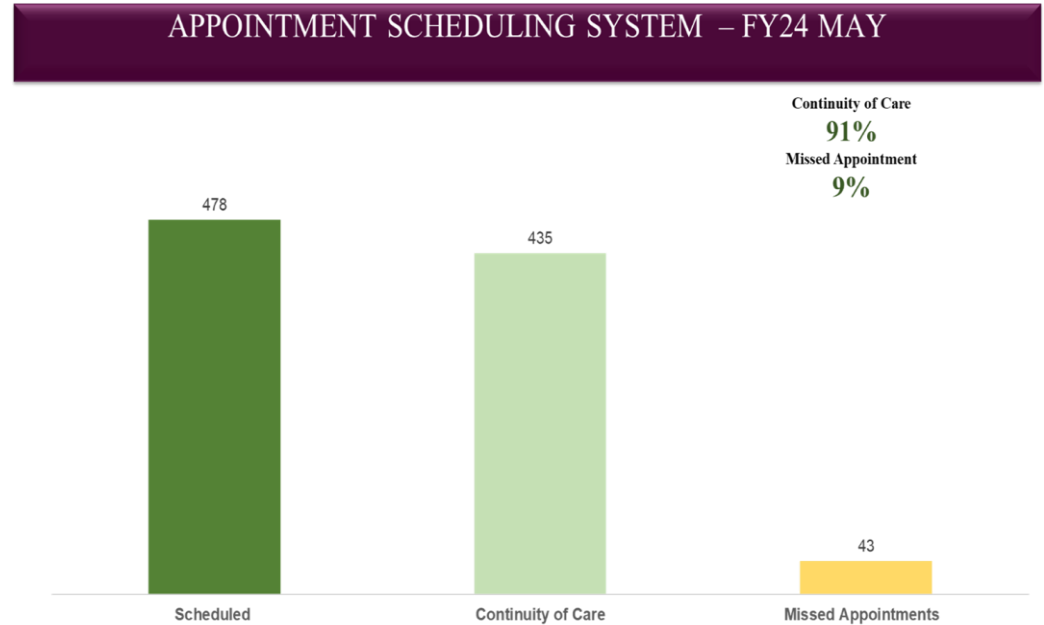
# Findings: Rise UP! Model Outcomes

## Outcomes

- 2,811 AGYW receiving treatment across all 9 RiseUP! supported sites
- 91% continuity of care rate and 9% missed appointments
- Personal testimonies highlight impact on mental health, resilience, and adherence

## Key Insights

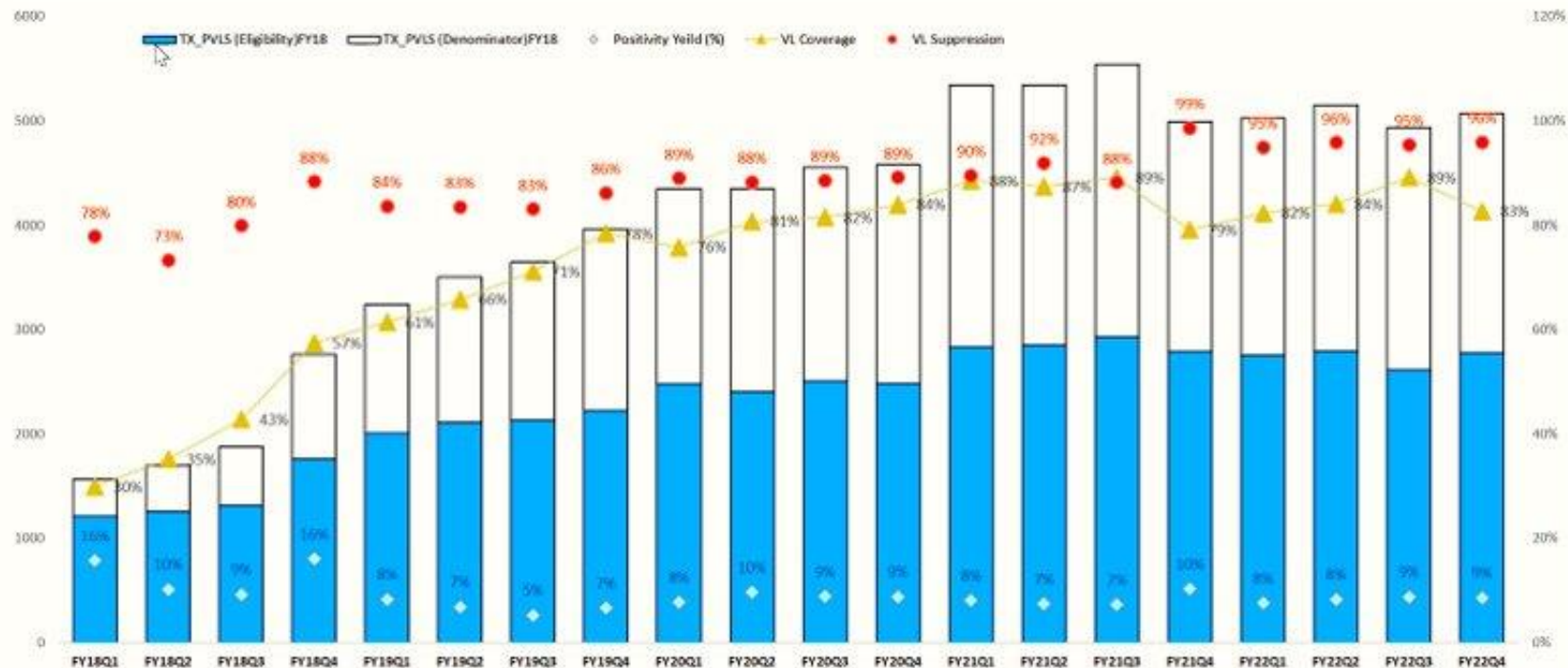
- Other DSD models require integration for higher efficacy.
- Rise UP!'s enhanced approach shows promising scalability and adaptability.





# Findings: Rise UP! Model Outcomes

## Rise Up! Program Steady in VL Suppression, Coverage & Positivity Yield Quarterly Trends



# Future Directions and Limitations

## **Limitations:**

- Variability (demographics, inclusion/exclusion criteria, data collection and analysis)
- Availability of literature and focus of studies
- Funding

## **Future Directions:**

Need for further research on scalability, sustainability, and adaptability of DSD models.

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*Coordinator, Global Health Leaders Program*

Tendayi Matenga, MPH, MBA  
*Administration and Finance Manager, Rise UP!*

*CDU Global Health Leaders Program*

*Rise UP! Program Team*



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# THANK YOU!

# Testimonial

During a door-to-door campaign in Matero, a young girl suffering from a severe STI was discovered, thanks to a compassionate community member.

The team stepped in, arranging for her hospital admission and necessary treatment. With her parents re-engaged in her care and ongoing community support, the girl resumed treatment and began to embrace her journey towards healing.

Both she and her mother are now active participants in support groups, fostering hope and resilience.

