

## Transgender-specific Differentiated HIV Care Models: An Implementation Science Study

### Background

In South Africa, transgender people (TGP) often face significant health challenges, including a disproportionately high burden of HIV due to pervasive stigma and discrimination, coupled with limited accessibility to suitable healthcare services in primary settings. To address these issues, the World Health Organization (WHO) endorses Transgender-specific Differentiated Service Delivery (TG-DSD), aiming to enhance acceptability, quality, and coverage of HIV services among key populations (KP), while reducing costs. Collaborating with transgender-led organizations across four health districts (Johannesburg, Cape Town, Nelson Mandela Bay, Buffalo City), the Wits RHI Key Populations program has initiated TG-DSD implementation, integrating gender-affirming care like hormone therapy (GAHT) with comprehensive facility-based and community HIV services, aligning with WHO guidelines. The ongoing Jabula Uzibone Study, launched in November 2023 and funded by the National Institute of Mental Health (NIMH), assesses the feasibility and cost-effectiveness of TG-DSD on HIV outcomes in South Africa, representing a collaboration between Wits RHI, HE2RO, Duke University, and the University of North Carolina.



### Specific Aims

**Aim 1: Assess barriers, facilitators, acceptability, and feasibility of TG-DSD** using site observation checklists, key informant interviews with facility staff, and surveys and in-depth interviews with TGP clients.

**Aim 2: Evaluate the effect of TG-DSD on viral suppression and Prevention effective adherence** - testing stigma and gender affirmation as mediators, using a longitudinal cohort of TGP clients that compares TGP enrolled at TG-DSD sites with TGP enrolled in SSD sites (200/arm on ART and 100/arm HIV negative who may or may not be on PrEP for a total N = 600).

**Aim 3: Estimate the cost associated with TG-DSD versus SSD using a micro-costing approach** to estimate the cost per service user served and per service user successfully treated at TG-DSD sites relative to SSD sites, as well as the budget needed for successful South Africa-wide implementation.

### Enrolment (as of 22 April 2024)

As of 22 April 2024, the study has enrolled 330 TGP (202 TG-DSD and 128 SSD); 17% (54/330) gender non-conforming, 16% (54/330) TG men, and 67% (222/330) TG women. The average age is 29 years. There 166 HIV positive TGP who are taking ART and 164 HIV negative TGP, of whom 47% (77/164) are taking PrEP.

SITE	HIV+		HIV-	
	DSD	SSD	DSD	SSD
	Enrolments at 22 Apr	Enrolments at 22 Apr	Enrolments at 22 Apr	Enrolments at 22 Apr
CoJ	46	24	32	49
BCM	13	8	12	7
NMB	24	11	13	9
CoCT	26	14	36	6
<b>Total</b>	<b>109</b>	<b>57</b>	<b>93</b>	<b>71</b>

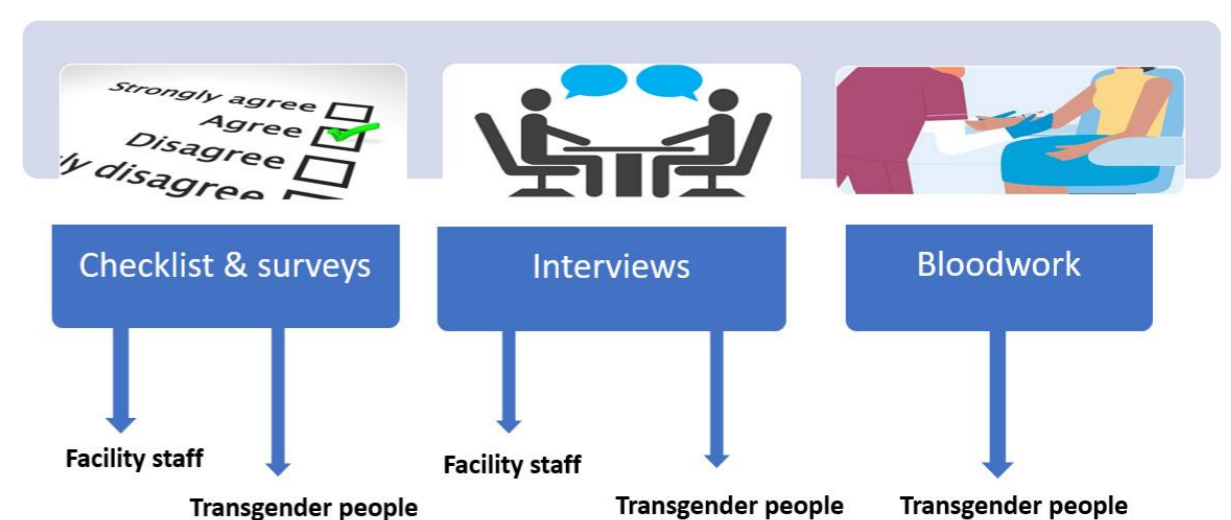
Jabula Uzibone enrolment (22 April 2024)

### Study Design

This is an observational multi-site mixed method prospective implementation study that compares models of care at standard service delivery (SSD) facilities to sites implementing a transgender-specific differentiated service delivery (TG-DSD) model of care. Facility-level comparisons include standardized observation checklists and key informant interviews with healthcare workers at SSD and TG-DSD sites. Transgender participants with and without HIV are recruited in equal numbers from SSD and TG-DSD sites. Comparisons of participants experiences between SSD and TG-DSD sites is measured using in-depth interviews, quantitative surveys, and baseline measures of viral load (if participant is taking ART) or tenofovir (if participant is taking PrEP). Cost of implementation of TG-DSD models versus SSD models will be estimated using a micro-costing approach.

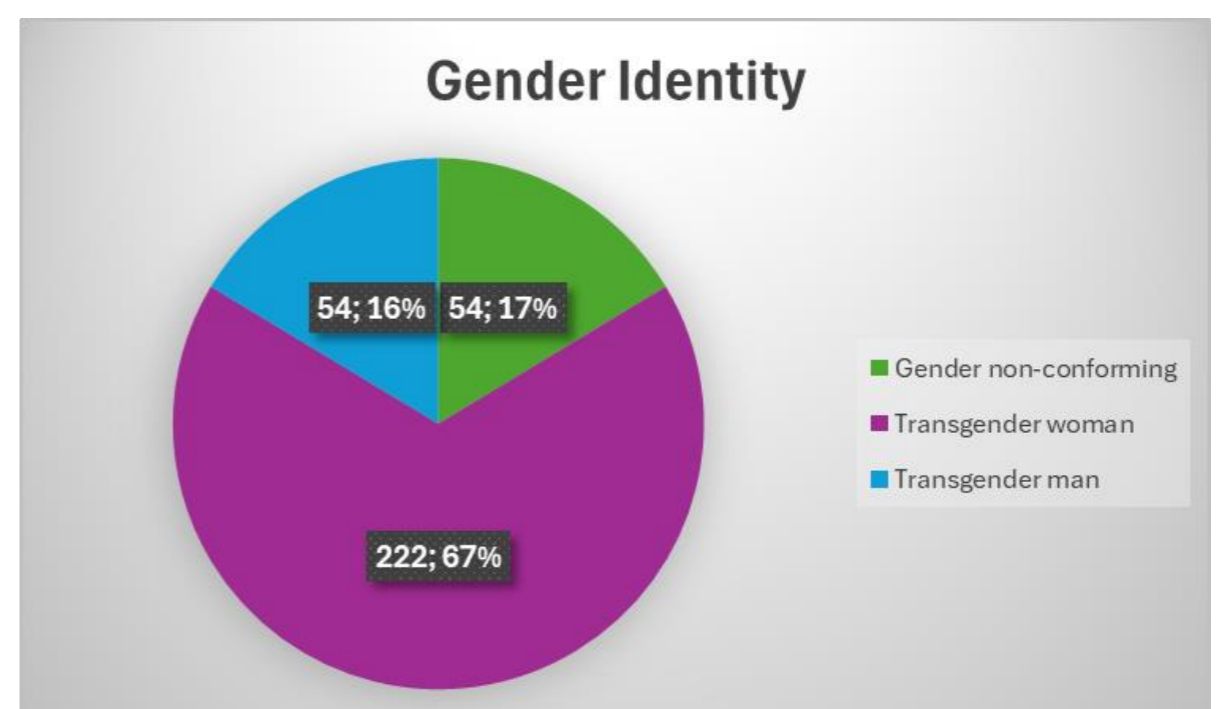
### Study Procedures

We will conduct key informant interviews and complete site-based checklists at baseline and 12 months for 4 TG-DSD sites and 4 standard sites. We will conduct quarterly surveys with the 600 transgender participants (300 at TG-DSD sites and 300 at standard sites) for a total of 5 surveys over 12 months. A subset (n= up to 60; 30 at TG-DSD sites and 30 at standard sites) will also complete a qualitative in-depth interview at baseline and at 12 months. Blood samples will be collected at baseline and 12 months for all transgender participants. HIV-RNA levels will be assayed among transgender participants living with HIV and tenofovir levels will be assayed among transgender people who are HIV-negative. Cost data will be collected over the course of the 12 months of data collection.



Data collection will take place over the course of 12 months for each participant

Data collected in the Jabula Uzibone Study



Jabula Uzibone study participants disaggregated by gender identity

### Study Team

Dr Tonia Poteat: Multiple Principal Investigator  
 Dr Audrey Pettifor: Multiple Principal Investigator  
 Dr John Imrie: Multiple Principal Investigator  
 Ms. Rutendo Bothma: Co-Investigator

