Preferences for Long-Acting Injectable ART Delivery to Youth Living with HIV in South Africa

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BACKGROUND

- Youth living with HIV (YLHIV) face multi-level barriers to HIV treatment adherence including the transition to adult care, clinic wait times, stigma, and daily pill burden.
- Long-acting injectable (LAI) antiretroviral therapy (ART) has the potential to mitigate these barriers.
- Given limited real-world implementation, preferences for LAIs with YLHIV remain understudied in South Africa.

METHODS

- In May-July 2025, we administered a **discrete choice experiment (DCE)** to characterize preferences for the receipt of LAI ART with **YLHIV ages 18 to 29 years** in the Western Cape.
- Youth participants included those that had previously taken LAI cabotegravir and rilpivirine (CAB/RPV), as well as those that were non-virally suppressed.

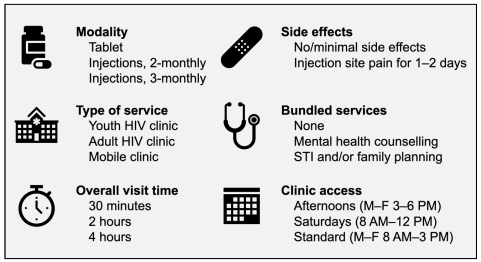


Figure 1. DCE attributes and levels

- Respondents completed **12 choice tasks** considering six attributes (**Figure 1**).
- Bayesian logistic regression models fit using MCMC algorithms were used to derive **part-worth utilities (β) and 95% credible intervals (CI)** from the posterior means for each level.
- Preference heterogeneity was evaluated across subgroups defined by age, sex, and prior LAI experience.

Youth living with HIV in South Africa preferred 2–3-month injectable ART, fixed-site HIV clinics, and integrated service delivery.

RESULTS

- 94 YLHIV [median age: 23 (IQR 21-25)] completed the DCE; 54 (57%) had previously taken LAI CAB/RPV and 12 (13%) were non-virally suppressed.
- YLHIV favored 2-monthly (β=0.99 95% CI 0.83, 1.15) and 3-monthly (β=1.05 95% CI 0.90, 1.21) injections (**Figure 2**).

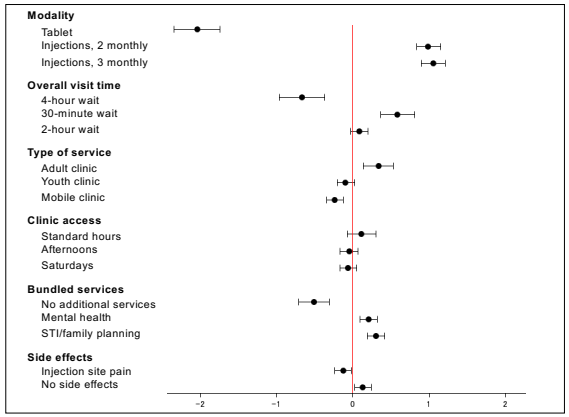


Figure 2. Part worth-utilities and 95% credible intervals for each level

- Bundling ART with STI/family planning (β=0.30 95% CI 0.19, 0.42) and mental health services (β=0.21 95% CI 0.09, 0.32) was preferred.
- YLHIV disfavored mobile service delivery (β=-0.24 95% CI -0.35, -0.13) and longer wait times (β=-0.67 95% CI -0.96, -0.37).
- Stratified analyses suggested a stronger preference for LAIs among males than among females (males: β=1.33 95% CI 1.17, 1.67; females: β=0.99, 95% CI 0.80, 1.17).

CONCLUSIONS

- YLHIV demonstrated a strong preference for LAI ART relative to oral ART, including among those who had previously taken LAI CAB/RPV
- Mobile service delivery was largely disfavored, suggesting that YLHIV may prioritize confidentiality over convenience when accessing HIV treatment.
- As LAI ART is scaled up in South Africa, programs should consider prioritizing fixed clinic-based delivery, bundled services, streamlined processes, and stigma-reduction strategies to center youth preferences.

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PLAIN LANGUAGE SUMMARY

Young people living with HIV in South Africa prefer getting HIV medication as an injection every 2 or 3 months instead of taking daily pills. They want to receive these injections at standalone health facilities, where they can also access other sexual and mental health services onsite. Understanding how youth prefer to access their medication helps ensure emerging HIV drugs are delivered appropriately in real-world settings.