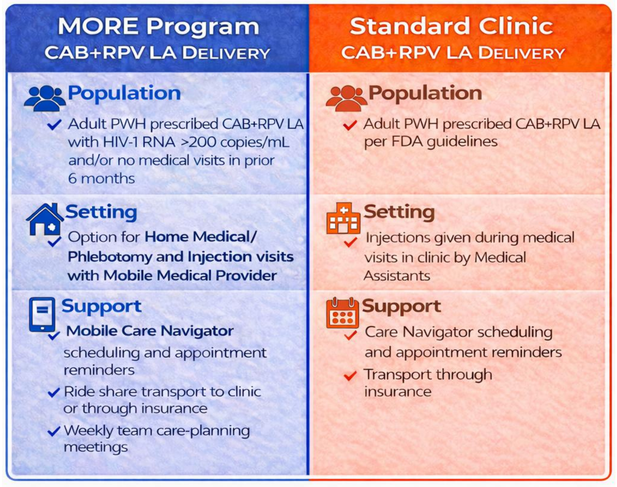
Home CAB+RPV LA Supports Sustained Persistence, Adherence & Viral Suppression in PWH With Challenges

Megan Dieterich[1,2], Eleanor Sarkodie[2], Keyerra Richardson[2], Rupa Patel[1], Janelle Schrag[2], Maria Rybicki-Newman[2], Robert Bangert[1], Stephen Abbott[1], Sarah Henn[1], Meghan Davies[1], Namrata Shah[2]
[1]Whitman-Walker Health, Washington, DC, US, [2]Whitman-Walker Institute, Washington, DC, US

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BACKGROUND

The Mobile Outreach Retention and Engagement program (MORE) at Whitman-Walker Health, a FQHC in Washington, DC, offers mobile care navigation, transportation, and optional home injections for PWH initiating CAB+RPV LA with adherence challenges defined as HIV-1 RNA ≥200 copies/mL and/or no medical visit in the prior 6 months. Real-world data in this population are limited.



METHODS

- **Study Design**: Effectiveness-implementation hybrid type-2 study comparing MORE participants receiving CAB+RPV LA to a 2:1 matched clinic cohort of PWH receiving CAB+RPV LA in clinic without MORE support
- **Primary outcome**: Persistence at 10 months (M10)
- **Secondary outcomes**: Adherence and viral suppression (HIV-1 RNA <200 copies/mL) at M10
- **Data collection:** EHR extraction and chart review validated by 2 independent reviewers
- **Definitions:**
  - **Persistence**: did not discontinue (D/C) without restart
  - **Adherence**: all injections in window (target +/-7 days)
  - **Late**: injections >7 days and <14 days after target date
  - **Missed**: injections >14 days after target date
  - **Confirmed Virologic Failure (CVF):** Two consecutive HIV-1 RNA ≥200 copies/mL

RESULTS

- Between November 2023 and February 2025, 54 MORE participants initiated CAB+RPV LA and had ≥10 months follow-up.
- MORE participants had a median age of 49 years; 41% cisgender women, 11% transgender women, and 90% Black/AA. The clinic cohort (n=108) was matched for age, gender, and race.

Mobile care navigation program with optional home CAB+RPV LA injections for PWH with adherence challenges achieves greater adherence, comparable persistence and 98% vs 97% viral suppression compared to standard clinic care at 10 months

- MORE participants had higher baseline (33% vs 5%, p<0.001) and prior-year (50% vs 27%, p=0.002) viremia than the clinic cohort, reflecting intentional outreach to PWH with adherence challenges.
- **Within MORE**, 63% (34/54) of participants were open to home injections and uptake was more likely in those with public insurance (*p*= 0.041) and those ≥ 40 years old (*p*=0.037).

Table 1. Baseline Characteristics

Characteristic		MORE n=54 (%)	Clinic n=108 (%)
Age		49 (IQR=26)	44 (IQR=22)
Gender	Male	25 (48%)	54(50%)
	Cis Female	22 (41%)	39 (36%)
	Trans Female	6 (11%)	15 (13%)
Race	Black/AA	49 (91%)	81 (92%)
	White	1 (2%)	4 (5%)
	Other	4 (7%)	3 (3%)
Ethnicity	Hispanic	4 (7.4%%)	6 (5.6%)
	Non-Hispanic	50 (92.6%)	101 (93.5%)
Insurance	Public	46 (85%)	82 (76%)
	Private	8 (15%)	26 (24%)
Baseline HIV-1 RNA ≥ 200	Yes	**18(33%)**	**5 (5%)**
	No	**36 (67%)**	**103 (95%)***
HIV-1 RNA ≥ 200 in prior year	Yes	**27(50%)**	**27(25%)**
	No	**27(50%)**	**81(75%)****

*p<0.001; **p<0.01*

Persistence and Injection Window Adherence

- Persistence at M10 was similar between groups: 89% (48/54) in MORE vs 88% (95/108) in the clinic cohort.
- Among participants who persisted, on-time injection adherence at M10 was higher in MORE than in the clinic cohort (90% [43/48] vs 79% [75/95]; $\chi^2(1)=2.50$, p=0.11).

Figure 1. 10 Month Persistence & Adherence by Group

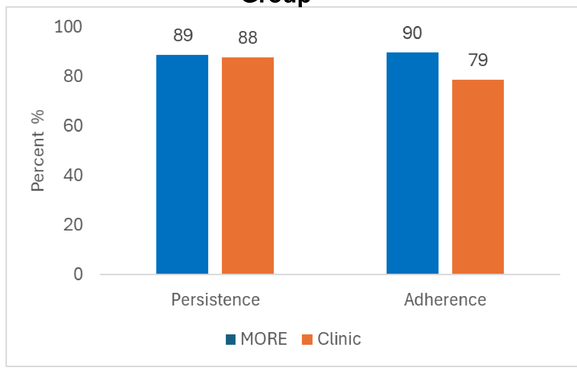


Table 2. 10 month CAB+RPV LA Injection Status

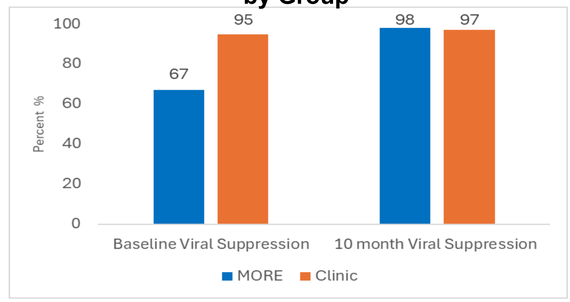
	MORE (n=54)	Clinic (n=108)
Late injection (>7 and <14 days)	2	6
Missed Insurance lapse restart CAB+RPV LA	3	1
Missed injection restart CAB+RPV LA	0	3
D/C Insurance change restart oral ART	0	2
D/C Missed injection restart oral ART	1	2
D/C due to ISR/SE restart oral ART	4	5
D/C Relocated	1	1
D/C missed injection discontinued (LTFU)	0	2

=1 individual

Viral Suppression at 10 Months

- M10 viral suppression was comparable in MORE (98%, 53/54) and clinic cohorts (97%, 100/103; 5 missing HIV-1 RNA results).
- One CVF with INSTI resistance (N155N/H) occurred in clinic cohort.

Figure 2. Baseline and 10 Month Viral Suppression by Group



Predictors of Persistence Across Groups

- The adjusted logistic regression model for persistence was significant ($\chi^2(5)=19.7$, p=0.001).
- **Older age** was associated with **lower persistence** (aOR 0.91 per year, 95% CI 0.85–0.98; p=0.013), whereas **male gender** was associated with **higher persistence** (aOR 9.6, 95% CI 1.11–82.7; p=0.04).

Table 3. Predictors of CAB+RPV LA Persistence

Variable	Category	Adjusted OR† (95% CI)
MORE	No	Reference
	Yes	1.14 (0.24-5.44)
HIV-1 RNA <200 in prior year	No	Reference
	Yes	0.86 (0.15-5.01)
Baseline HIV-1 RNA <200	No	Reference
	Yes	Not estimable ‡
Age	–	**0.91 (0.85-0.98)***
Gender	Female (cis+trans)	Reference
	Male	**9.6 (1.11-82.73)***

†Adjusted for MORE participation, HIV-1 RNA in prior year, baseline HIV-1 RNA, age and gender
‡Not estimable due to sparse data in one outcome category
*p<0.05

CONCLUSIONS

- Among PWH with adherence challenges, MORE achieved **higher on-time injection adherence** and **similar persistence** compared to clinic cohort.
- Despite higher baseline viremia, MORE participants had **similar M10 viral suppression** to clinic cohort.
- Optional home injections within a patient-centered support program were acceptable, feasible and helped overcome barriers and sustain engagement for PWH with prior adherence challenges.
- Improved viral suppression in this population may reduce community viral load, decrease transmission and advance efforts to end the HIV epidemic.

ADDITIONAL KEY INFORMATION

Author Contact: mdieterich@whitman-walker.org. This study was supported by ViiV Healthcare; Acknowledgements: WW MORE team, medical, PHQ and research staff, WWH patients and especially the patients of MORE for opening their homes to us!