Improvement in Provider Experiences From Baseline to Month 12 With Integrating Cabotegravir Long-Acting (CAB LA) for PrEP Into Care in an Implementation Science Trial (PILLAR)

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**Presenting on behalf of the authors.*

Key Takeaways

- **Healthcare providers' (HCPs') concerns for delivering cabotegravir long-acting (CAB LA) for pre-exposure prophylaxis (PrEP) improved as early as Month 4 and continued through Month 12**
- **Over time, clinics reported an increased ability to manage more patients receiving CAB LA per week while requiring fewer staff**
- **At Month 12, HCPs reported that CAB LA was highly acceptable and feasible to implement into standard of care**

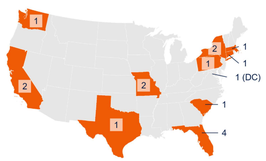
Introduction

- In the United States (US), large disparities in HIV acquisition rates and PrEP use exist among different demographics[1]
  - In 2022, men who have sex with men (MSM) and transgender men (TGM) accounted for 67% and <1% of new US HIV diagnoses, respectively[2]
- CAB LA administered every 2 months via intramuscular injection is the first approved LA agent indicated for PrEP[3,4]
  - CAB LA has demonstrated superiority to daily oral PrEP with tenofovir disoproxil fumarate plus emtricitabine for the prevention of new HIV acquisitions[5,6]
- Real-world clinical experience with CAB LA might be helpful to alleviate initial HCP concerns regarding implementation
- PILLAR is a 12-month, phase 4, implementation science trial evaluating the feasibility and acceptability of different strategies for delivering CAB LA for PrEP in the US for MSM and TGM
  - To our knowledge, PILLAR is the first implementation science trial to gender align participants per community request and includes TGM, who are often not included in clinical studies
- Here, we report changes in HCP implementation outcomes with CAB LA over 12 months in the PILLAR study (NCT05374525)

Methods

- A total of 17 sites in the US were included in the study. Sites were randomized 2:1 to routine implementation (RI) and dynamic implementation (DI)
  - RI: standard of care
  - DI: standard of care and enhanced support (implementation facilitation and support strategies and tools)
- HCPs providing PrEP services were enrolled and completed surveys at Months 1, 4, and 12
- Changes across 6 CAB LA implementation domains were assessed:
  - Acceptability using the Acceptability of Intervention Measure (AIM; 4 items)[7]
  - Feasibility using the Feasibility of Implementation Measure (FIM; 4 items)[7]
  - Resources needed to implement (4 items)
  - Fidelity to dosing administration (6 items)
  - Scheduling and patient management (5 items)
  - Patient adoption and adherence (6 items)

Clinic Site Locations



Results

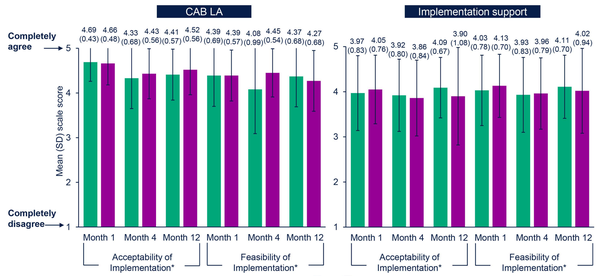
Table 1. HCP Demographics and Characteristics at Baseline

Characteristic, n (%)*	DI (n=56)	RI (n=30)	Total (N=86)
Gender			
Cisgender male	21 (37.5)	13 (43.3)	34 (39.5)
Cisgender female	30 (53.6)	13 (43.3)	43 (50.0)
Other gender†	5 (8.9)	4 (13.3)	9 (10.5)
Median age, years (IQR)	38 (23–73)	40 (27–68)	38 (23–73)
Race			
Black	9 (16.1)	4 (13.3)	13 (15.1)
White	28 (50.0)	19 (63.3)	47 (54.7)
Other‡	19 (33.9)	7 (23.3)	26 (30.2)
Ethnicity			
Hispanic/Latinx	12 (21.4)	9 (30.0)	21 (24.4)
Provider type			
Physician/Physician assistant	22 (39.3)	10 (33.3)	32 (37.2)
Nurse/Nurse practitioner	8 (14.3)	6 (20.0)	14 (16.3)
Medical assistant	5 (8.9)	2 (6.7)	7 (8.1)
Pharmacist	4 (7.1)	3 (10.0)	7 (8.1)
Office administrator/Clinic administrator	4 (7.1)	3 (10.0)	7 (8.1)
Other roles§	13 (23.2)	6 (20.0)	19 (22.1)
Specialty‖			
Infectious disease/HIV specialist	19 (70.4)	14 (93.3)	33 (78.6)
Internal medicine/Primary care/General doctor/ Family practitioner	7 (25.9)	7 (46.7)	14 (33.3)

DI, dynamic implementation; HCP, healthcare provider; IQR, interquartile range; PrEP, pre-exposure prophylaxis; RI, routine implementation.
*Unless otherwise specified. †Gender queer (DI, n=1; total, n=1), non-binary (RI, n=1; total, n=1), and "I prefer not to answer" (DI, n=4; RI, n=3; total, n=7). ‡Asian (DI, n=7; total, n=7), multiple races (DI, n=4; total, n=4), other race (DI, n=3; RI, n=3; total, n=6), and "I prefer not to answer" (DI, n=5; RI, n=4; total, n=9). §PrEP educator/PrEP navigator (DI, n=1; RI, n=4; total, n=5), laboratory staff/technician/phlebotomist (DI, n=2; RI, n=1; total, n=3), social worker/case manager (DI, n=2; total, n=2), front desk staff/scheduler (RI, n=1; total, n=1), and other (DI, n=8; total, n=8). ‖This question was applicable among HCPs who prescribe medication (n=42), and multiple responses could be selected.

- Overall, 86 HCPs enrolled between April and October 2022 and completed Month 1 surveys (Table 1); 80 and 81 HCPs completed Month 4 and Month 12 surveys, respectively

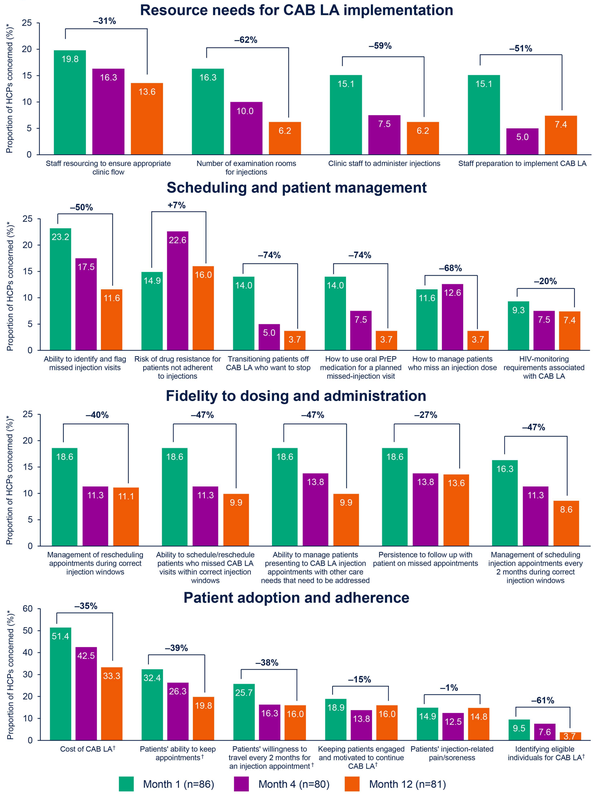
Figure 1. HCPs' Perceptions of Acceptability and Feasibility of Implementing CAB LA for PrEP Over Time



CAB, cabotegravir; DI, dynamic implementation; HCP, healthcare provider; LA, long-acting; PrEP, pre-exposure prophylaxis; RI, routine implementation.
*DI: Month 1, n=58; Month 4, n=51; Month 12, n=52; RI: Month 1, n=30; Month 4, n=29; Month 12, n=29.

- HCPs reported high levels of acceptability and feasibility of CAB LA at Month 1 (mean scale scores ≥4.4), Month 4 (mean scale scores ≥4.1), and Month 12 (mean scale scores ≥4.3) across both cohorts (Figure 1)
  - Change from baseline to Month 12 between cohorts was not statistically significant

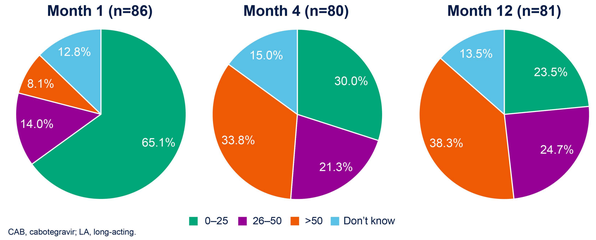
Figure 2. HCPs' Concerns About CAB LA Implementation Outcomes



CAB, cabotegravir; HCP, healthcare provider; LA, long-acting; PrEP, pre-exposure prophylaxis.
*Percentage of HCPs reporting being extremely/moderately concerned. The values in bold represent relative percentage change between baseline and Month 12.
†N=74; 12 HCPs did not answer the question at baseline.

- Across time points, HCPs reported reduced concerns for implementing CAB LA (Figure 2). Between Month 1 and Month 12, concerns related to:
  - Resources needed to implement CAB LA reduced by an average of 51%
  - Scheduling and managing patients, fidelity to dosing and administration, and patients' adoption and adherence reduced by an average of 46%, 42%, and 32%, respectively
  - A higher percentage of HCPs in the DI cohort reported a decrease in concerns around resourcing and fidelity to dosing and administration than HCPs in the RI cohort

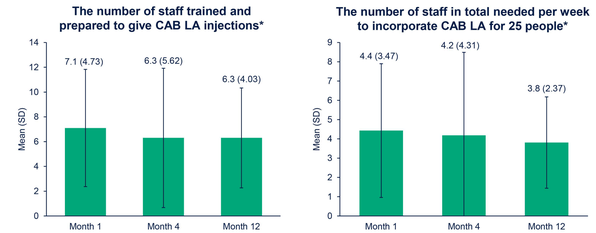
Figure 3. Number of Patients on CAB LA That Clinics Can Manage per Week



CAB, cabotegravir; LA, long-acting.

- The number of patients on CAB LA that clinics could manage per week increased from Month 1 to Month 12 (Figure 3)

Figure 4. Staff Considerations for Delivering CAB LA



CAB, cabotegravir; LA, long-acting; SD, standard deviation.
*Month 1, n=86; Month 4, n=80; Month 12, n=81.

- The number of staff trained and prepared to administer CAB LA injections reduced between Month 1 and Month 12 (mean [SD]; Month 1: 7.1 [4.73] vs. Month 12: 6.3 [4.03]), as well as the number of staff needed per week to implement CAB LA (mean [SD]; Month 1: 4.4 [3.47] vs. Month 12: 3.8 [2.37]; Figure 4)

Conclusions

- In PILLAR, clinics were able to effectively integrate CAB LA into standard of care as early as Month 4, consistent with results observed in the EBONI study at Month 4[8]
  - Concerns reported by HCPs around the implementation of CAB LA at baseline improved as early as Month 4 and continued to improve to Month 12
- High levels of feasibility and acceptability were reported by HCPs implementing CAB LA at baseline, which continued through Month 12
- Over time, clinics' ability to manage more patients receiving CAB LA per week increased while requiring fewer staff
- The use of available implementation tools, such as injection schedulers, appointment reminders, injection training videos, and guidance documents, support CAB LA implementation[9]

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