

# 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)



Taimur Khan<sup>1</sup>, Jonathan White<sup>2</sup>, Linda Mercado<sup>3</sup>, Bo Li<sup>4</sup>, Katherine Nelson<sup>5</sup>, Lisa Petty<sup>5</sup>, Michael Acquadro<sup>6</sup>, Nicola Barnes<sup>6</sup>, William R. Lenderking<sup>6</sup>, Neelima Jain<sup>4</sup>, Heidi Swygard<sup>5</sup>, Todd McKeon<sup>5</sup>, Annemiek de Ruiter<sup>7</sup>, Maggie Czarnogorski<sup>5</sup>, Nanlesta Pilgrim<sup>5</sup>

<sup>1</sup>Fenway Health, Boston, MA, United States; <sup>2</sup>Peter Shalit MD & Associates, Seattle, WA, United States; <sup>3</sup>Valley AIDS Council, Harlingen, TX, United States; <sup>4</sup>GSK, Collegeville, PA, United States; <sup>5</sup>ViiV Healthcare, Durham, NC, United States; <sup>6</sup>Evidera, Bethesda, MD, United States; <sup>7</sup>ViiV Healthcare, London, United Kingdom



## 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.

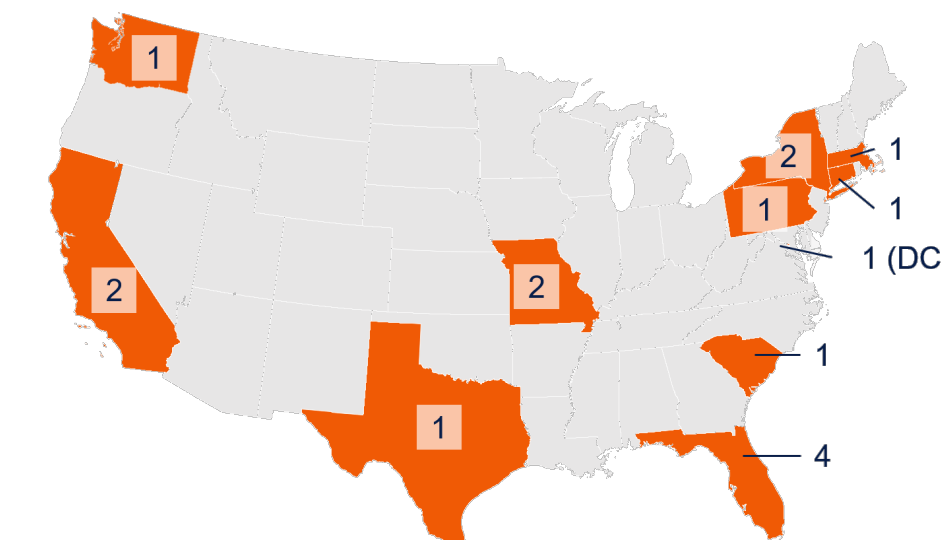
## Introduction

- In the United States (US), large disparities in HIV acquisition rates and PrEP use exist between different demographics.<sup>1</sup>
  - In 2022, men who have sex with men (MSM) and transgender men (TGM) accounted for 67% and <1% of new US HIV diagnoses, respectively.<sup>2</sup>
- CAB LA administered every 2 months via intramuscular injection is the first approved LA agent indicated for PrEP.<sup>3,4</sup>
  - CAB LA has demonstrated superiority to daily oral PrEP with tenofovir disoproxil fumarate plus emtricitabine for the prevention of new HIV acquisitions.<sup>5,6</sup>
- Real-world clinical experience with CAB LA might be helpful to alleviate initial provider implementation concerns.
- 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 HCPs 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.
- Change across six CAB LA implementation domains was assessed:

### Clinic Site Locations



- Acceptability using the Acceptability of Intervention Measure (AIM; 4 items).<sup>7</sup>
- Feasibility using the Feasibility of Implementation Measure (FIM; 4 items).<sup>7</sup>
- Resources needed to implement (4 items).
- Fidelity to dosing administration (6 items).
- Scheduling and patient management (5 items).
- Patient adoption and adherence (6 items).

## Results

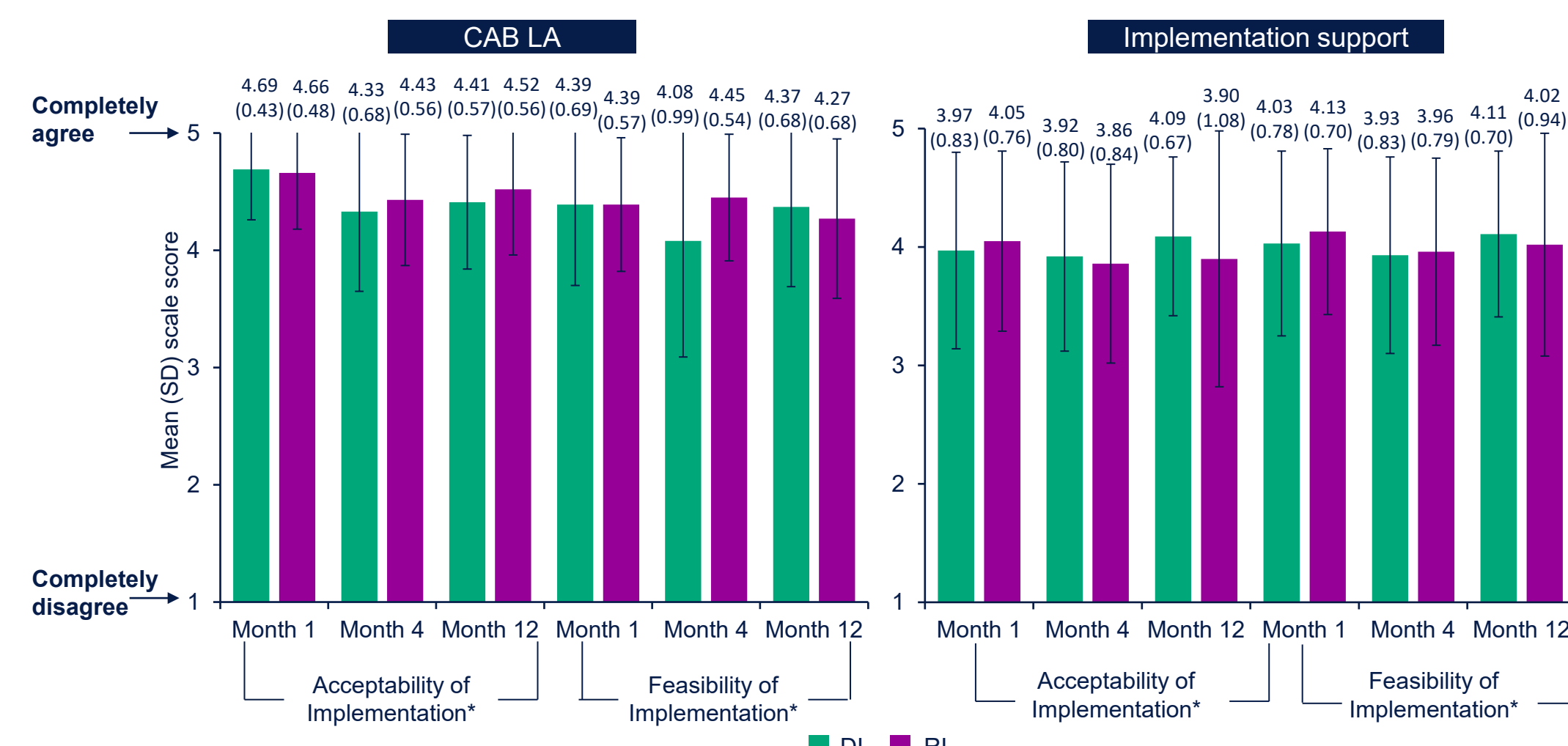
Table 1. HCPs Demographics and Characteristics at Baseline

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)

\*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), mixed race (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. DI, dynamic implementation; HCP, healthcare provider; IQR, interquartile range; RI, routine implementation.

- 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

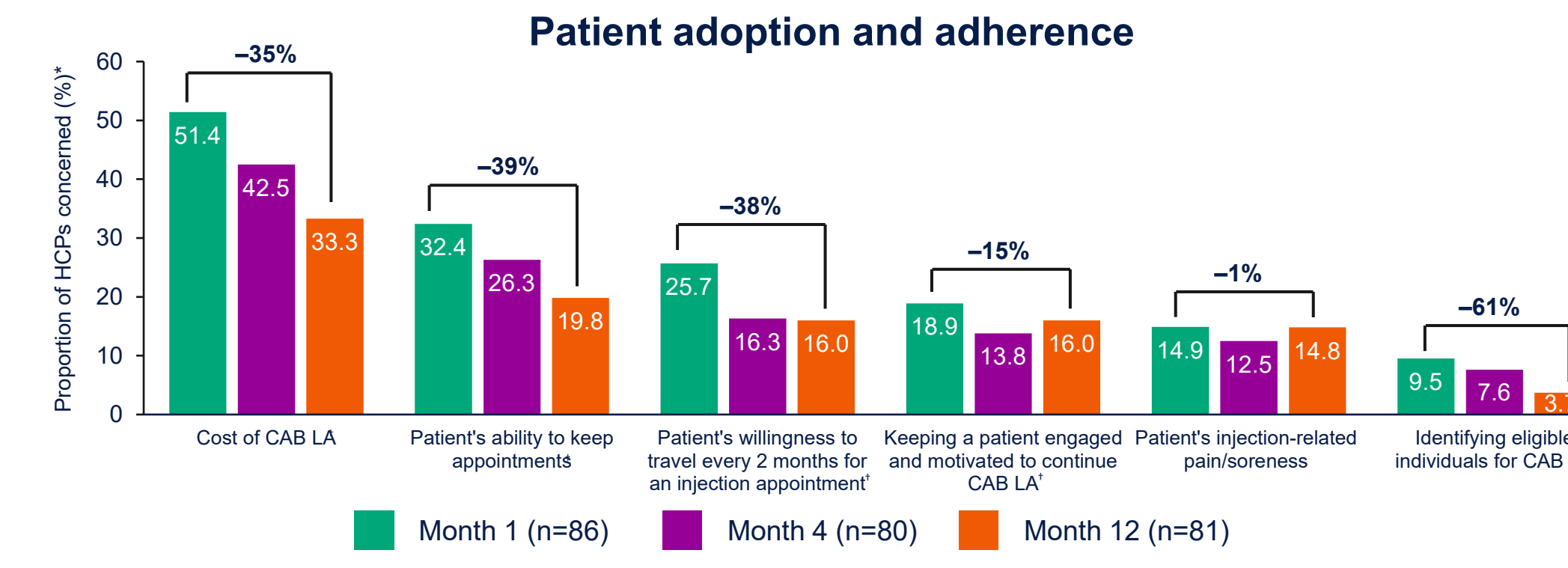
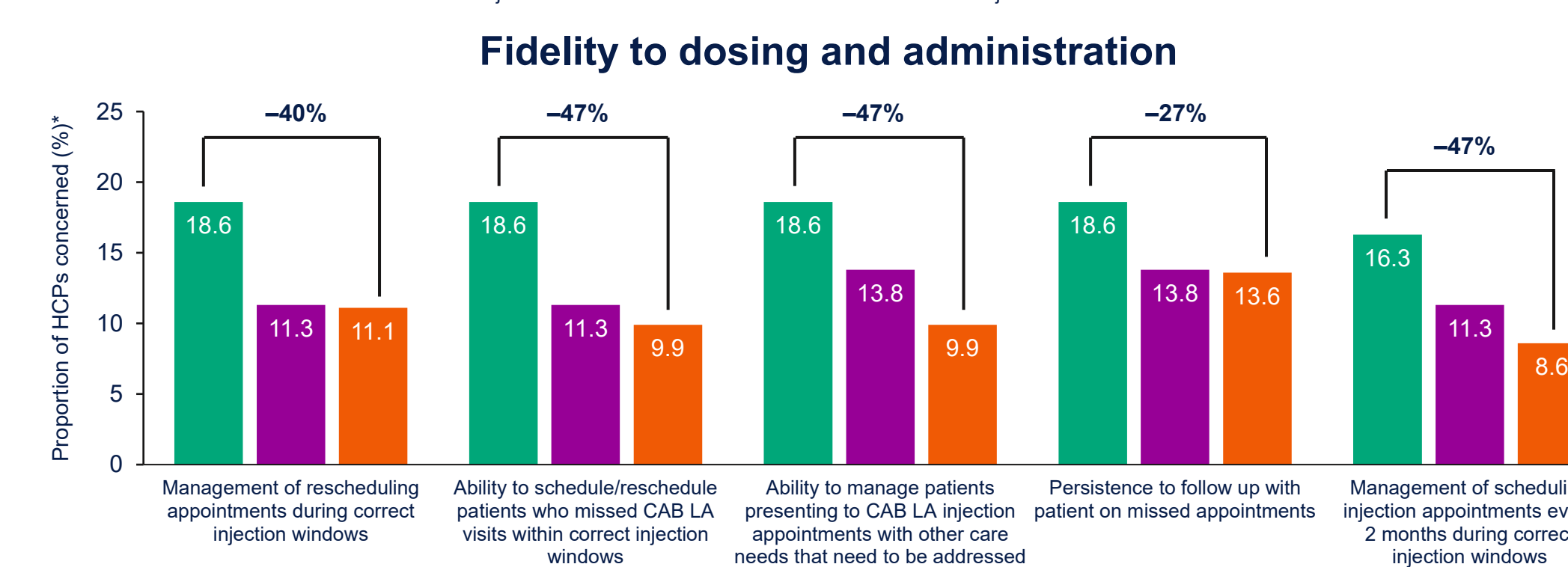
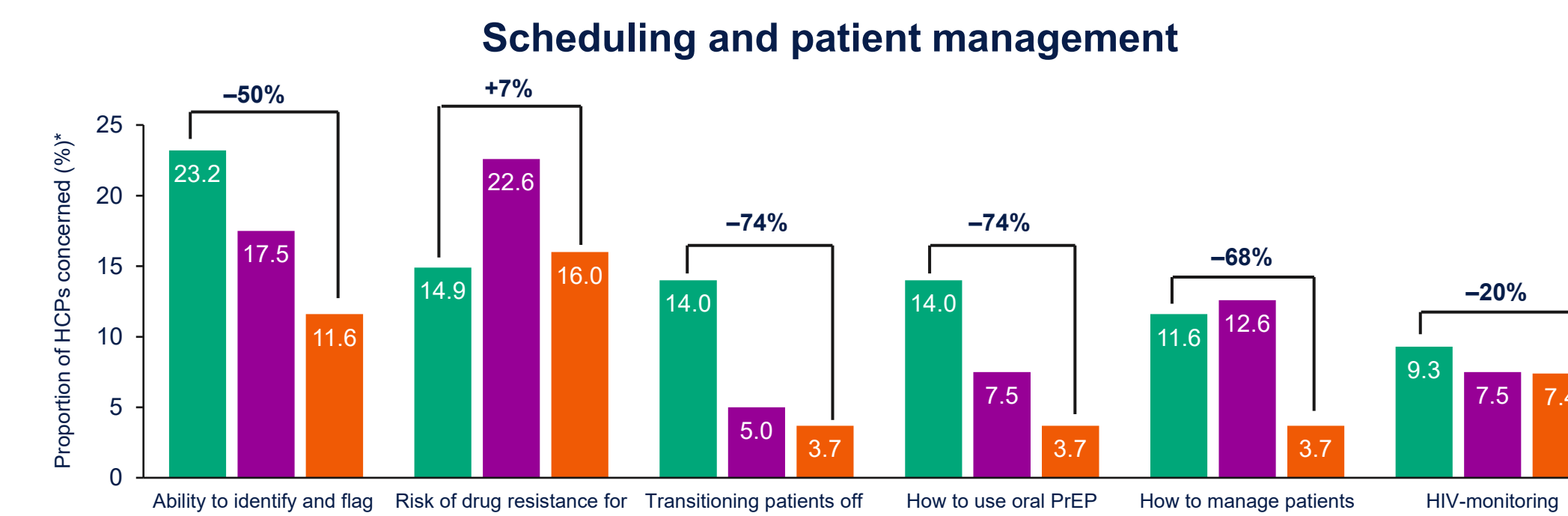
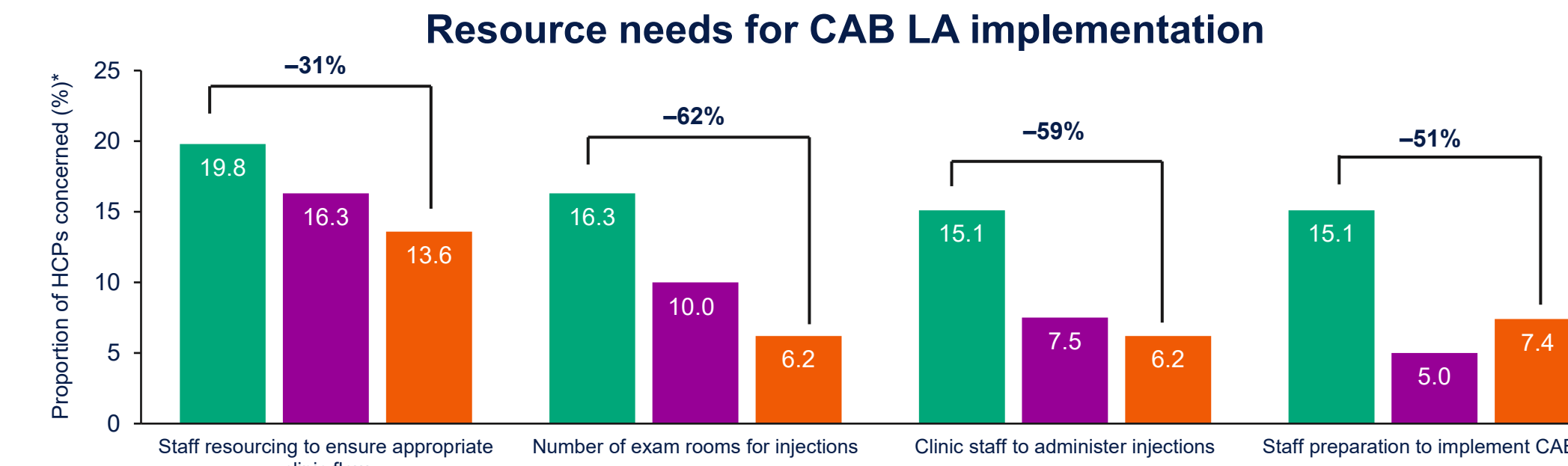


\*DI: Month 1, n=56; Month 4, n=51; Month 12, n=52; RI: Month 1, n=30; Month 4, n=29; Month 12, n=29. CAB, cabotegravir; DI, dynamic implementation; HCP, healthcare provider; LA, long-acting; PrEP, pre-exposure prophylaxis; RI, routine implementation.

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

**Acknowledgments:** We thank everyone who has contributed to the success of the PILLAR study; all study participants and their families, and the clinical investigators and their staff. PILLAR is funded by ViiV Healthcare. Editorial assistance was provided by Poppy Mashilo of Nucleus Global, with funding provided by ViiV Healthcare.

Figure 2. HCPs' Concerns About CAB LA Implementation Outcomes



\*Percentage of HCPs reporting being extremely/moderately concerned. The values in bold represent relative % change between baseline and Month 12. †N=74; 12 HCPs didn't answer question at baseline. CAB, cabotegravir; DI, dynamic implementation; HCP, healthcare provider; LA, long-acting; PrEP, pre-exposure prophylaxis; RI, routine implementation

- 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 proportion of HCPs in the DI arm reported a decrease in concerns around resourcing and fidelity to dosing and administration than HCPs in the RI arm.

**References:** 1. Centers for Disease Control and Prevention. Information from the CDC's Division of HIV Prevention. October 2023. Available from: <https://www.cdc.gov/hiv/policies/dear-colleague/dcl/20231017.html>. Accessed August 2024. 2. Centers for Disease Control and Prevention. Fast Facts: HIV in the United States. April 2024. Available from: <https://www.cdc.gov/hiv/data-research/facts-stats/index.html>. Accessed August 2020. 3. Centers for Disease Control and Prevention. Preexposure Prophylaxis for the Prevention of HIV Infection in the United States – 2021 Update. November 2021. Available from: <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>. Accessed August 2024. 4. U.S. Food and Drug Administration. FDA News Release. December 2021. Available from: <https://www.fda.gov/news-events/press-announcements/fda-approves-first-injectable-treatment-hiv-pre-exposure-prevention>. Accessed August 2024. 5. Delany-Morettle S, et al. *The Lancet*. 2022;399(10337):1779–1789. 6. Landovitz RJ, et al. *N Engl J Med*. 2021;385(7):595–608. 7. Weiner BJ, et al. *Implement Sci*. 2017;12:108. 8. Baker DM, et al. *IDWeek 2024 (Poster P-1879)*. 9. Liu A, et al. *CROI 2024 (Poster 1240)*.



## Disclaimer

**This content was acquired following an unsolicited medical information enquiry by a healthcare professional. Always consult the product information for your country, before prescribing a ViiV medicine. ViiV does not recommend the use of our medicines outside the terms of their license. In some cases, the scientific Information requested and downloaded may relate to the use of our medicine(s) outside of their license.**