

PERSISTENCE TO HIV PRE-EXPOSURE PROPHYLAXIS FILLED THROUGH AN INTEGRATED HEALTH-SYSTEM SPECIALTY PHARMACY COMPARED WITH EXTERNAL PHARMACIES

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BACKGROUND

Persistence to HIV pre-exposure prophylaxis (PrEP) during times of increased HIV acquisition risk is integral to preventing new HIV acquisitions. Previous studies have shown real-world PrEP persistence is low and additional insight is needed into PrEP delivery strategies that improve persistence.

Objective: To measure persistence to HIV PrEP medication when filled through an integrated health-system specialty pharmacy (HSSP) compared with external pharmacies.

METHODS

Design Single-center, retrospective, cohort study comparing HIV PrEP persistence in patients with prescriptions filled by an integrated HSSP to those with prescriptions filled by an external pharmacy

Sample Adult patients initiating PrEP with emtricitabine-tenofovir disoproxil fumarate in the Vanderbilt PrEP Clinic

Study Period Enrollment 9/1/2016 to 3/31/2019 with outcomes reported through 10/31/2020

Primary Outcome Persistence measured as time from first prescription generated to either patient reported discontinuation or last prescription generated plus prescription day supply

Secondary Outcomes Proportion of Days Covered (PDC) measured using date prescription refills were prescribed and quantity provided by prescription, reasons for non-persistence, and patient reported reasons for discontinuation

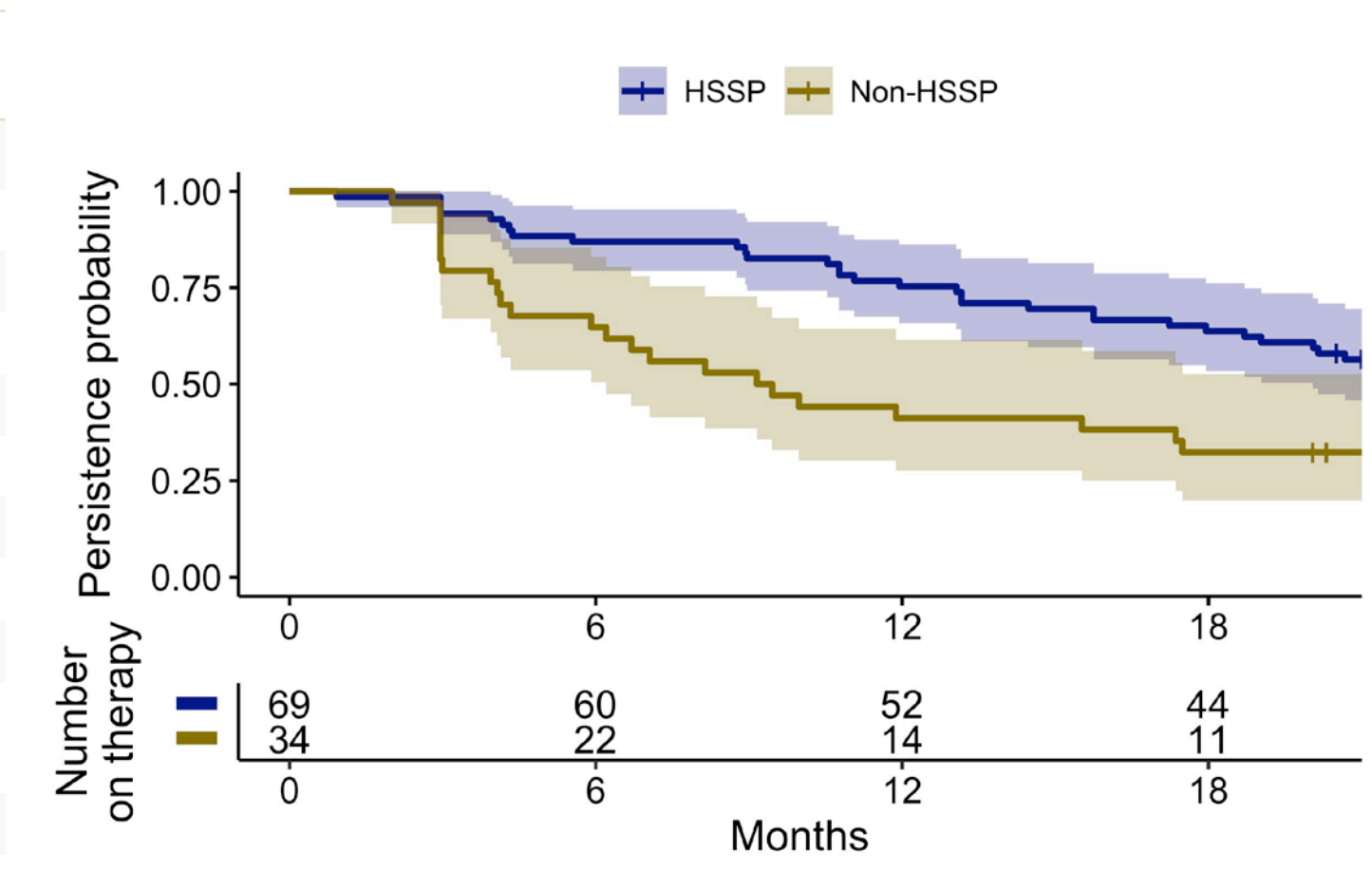
RESULTS

Table 1. Patient Characteristics at Baseline (n=103)

Characteristic (Number (%))	HSSP (n=69)	Non-HSSP (n=34)	Total (n=103)
Age at PrEP start [years; median (IQR)]	34 (28, 46)	32 (29, 42)	34 (29, 46)
Gender, male	66 (96)	30 (88)	96 (93)
Race			
White	56 (81)	24 (71)	80 (78)
Insurance Type			
Commercial	65 (94)	32 (94)	97 (94)
Other	4(6)	2(6)	6(6)
Indication for PrEP			
MSM at high risk	53 (77)	19 (56)	72 (70)
MSM (known serodifferent partner)	9 (13)	8 (24)	17 (17)
Number of sexual partners in the last 6 months			
0-1	21 (30)	13 (38)	34 (33)
2-5	23 (33)	8 (24)	31 (30)
>5	14 (20)	8 (24)	22 (21)
Not reported	11 (16)	5 (15)	16 (16)
Reported baseline condom use			
Consistent (100%)	10 (15)	6 (18)	16 (16)
Inconsistent (<100%)	46 (67)	17 (50)	63 (61)
No condom use	5 (7)	2 (6)	7 (7)
Not reported	8 (12)	9 (27)	17 (17)

HSSP, health-system specialty pharmacy; IQR, interquartile range; MSM, men who have sex with men; PrEP, pre-exposure prophylaxis

Figure 3. Persistence



- HSSP median days on treatment: 675 (IQR 308, 994)
- Non-HSSP median days on treatment: 222 (IQR 90, 580)

Figure 4. Risk of Non-persistence

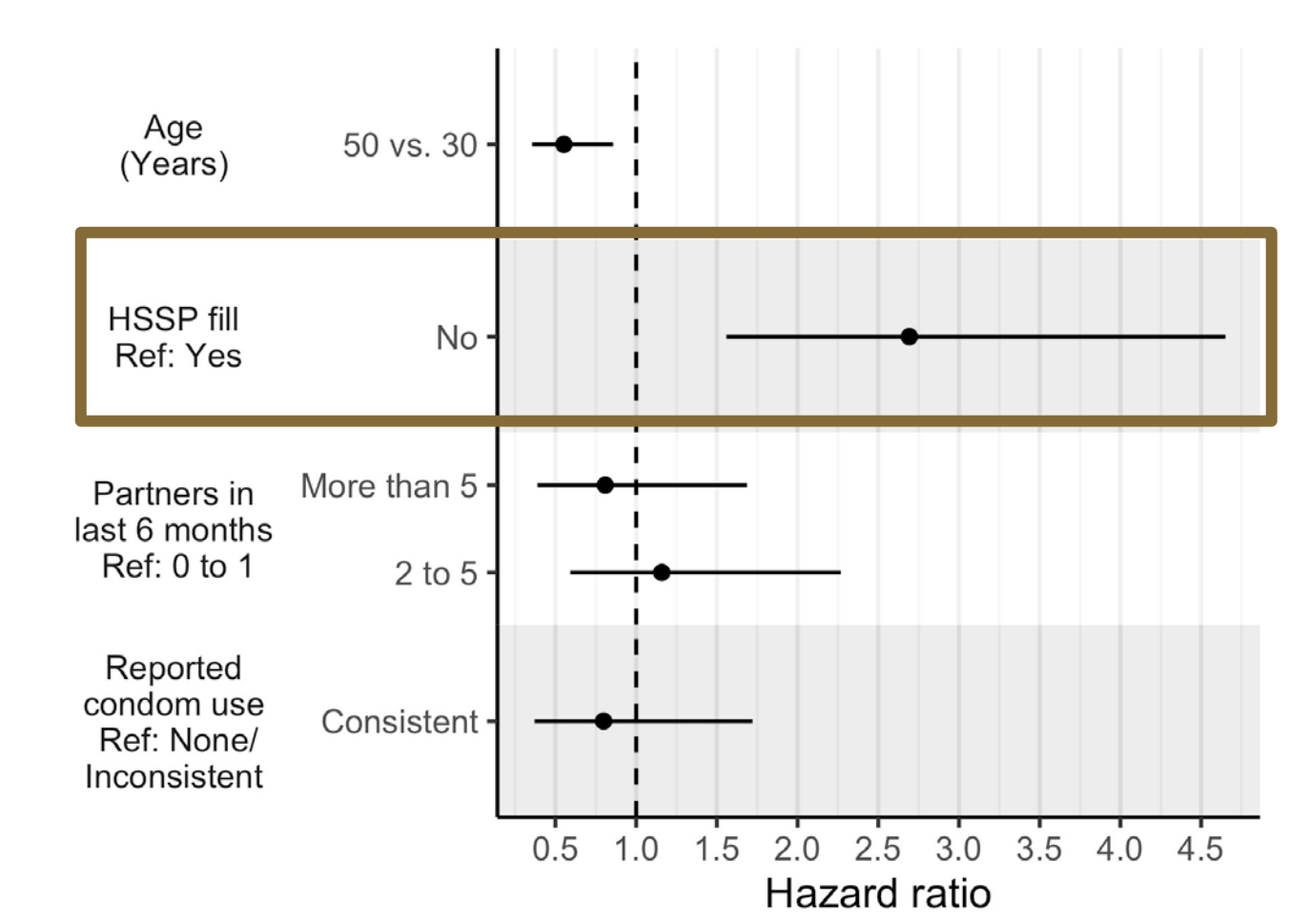


Figure 5. Non-persistence and Discontinuation Reasons (n=67 of 103 total patients)

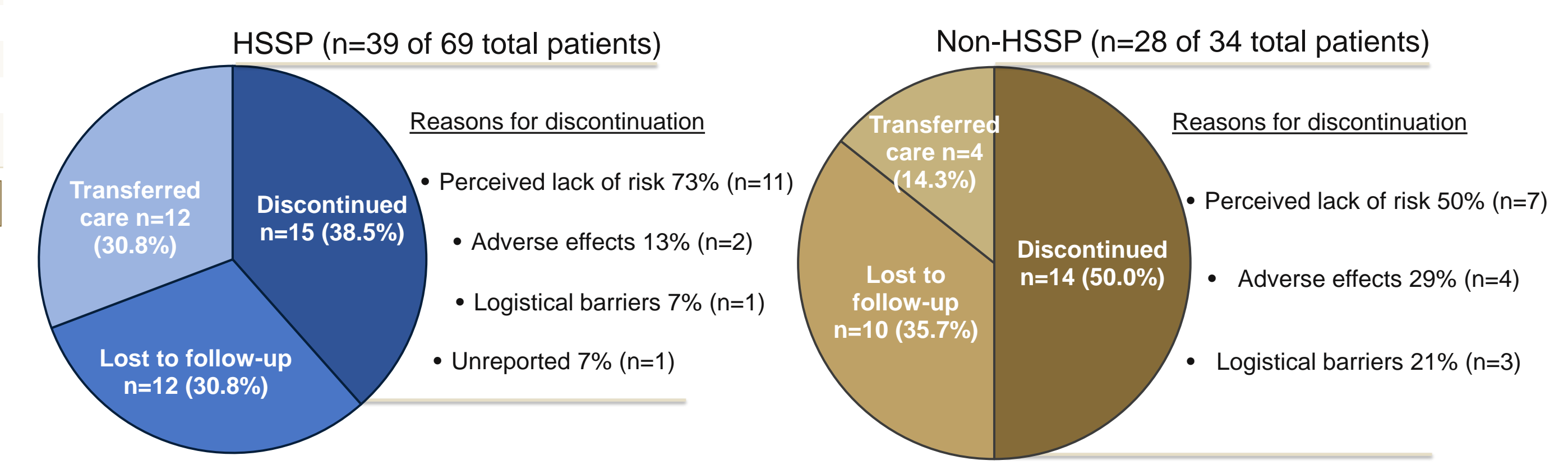


Figure 1. Vanderbilt Specialty Pharmacy Services

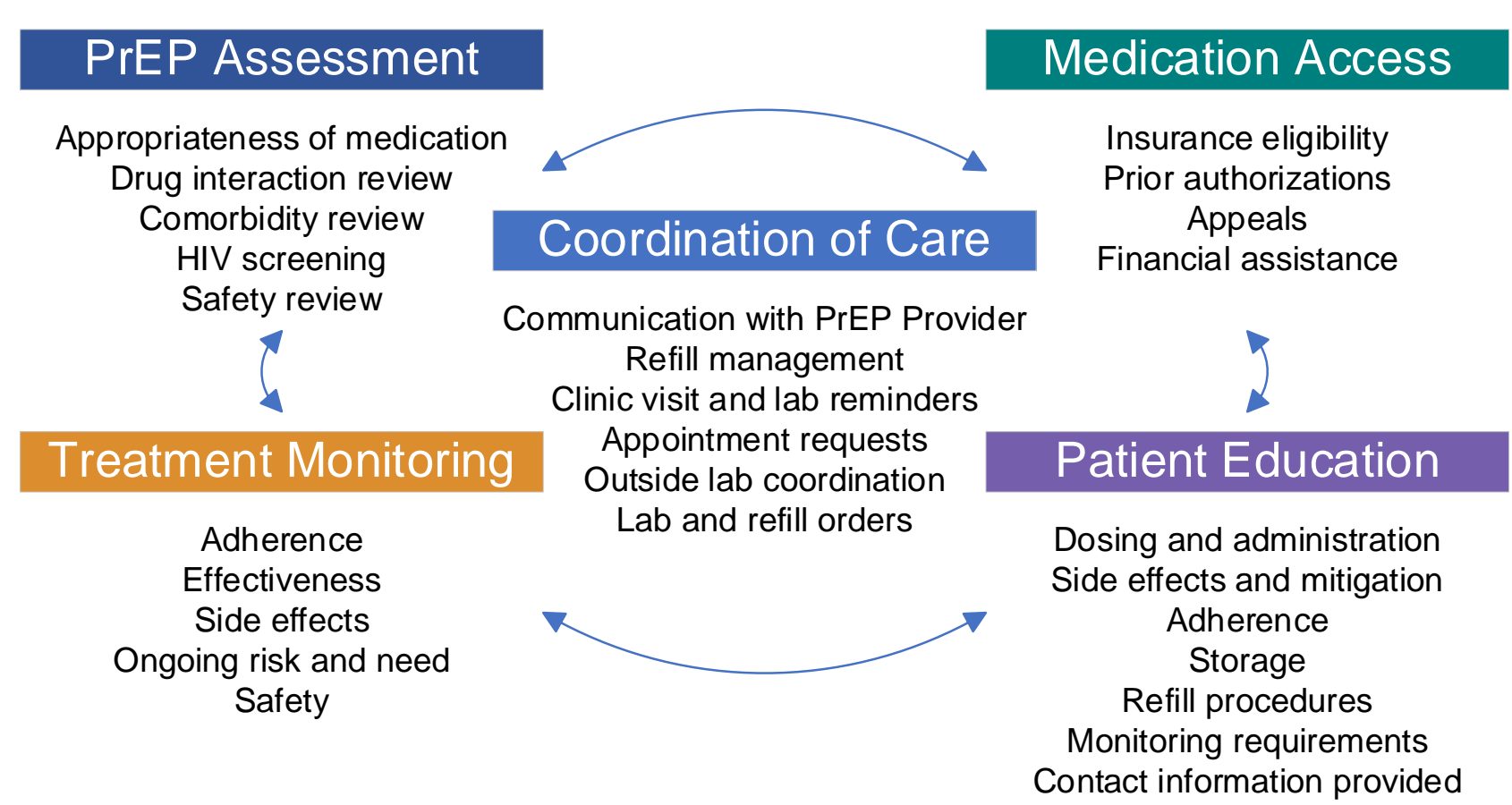
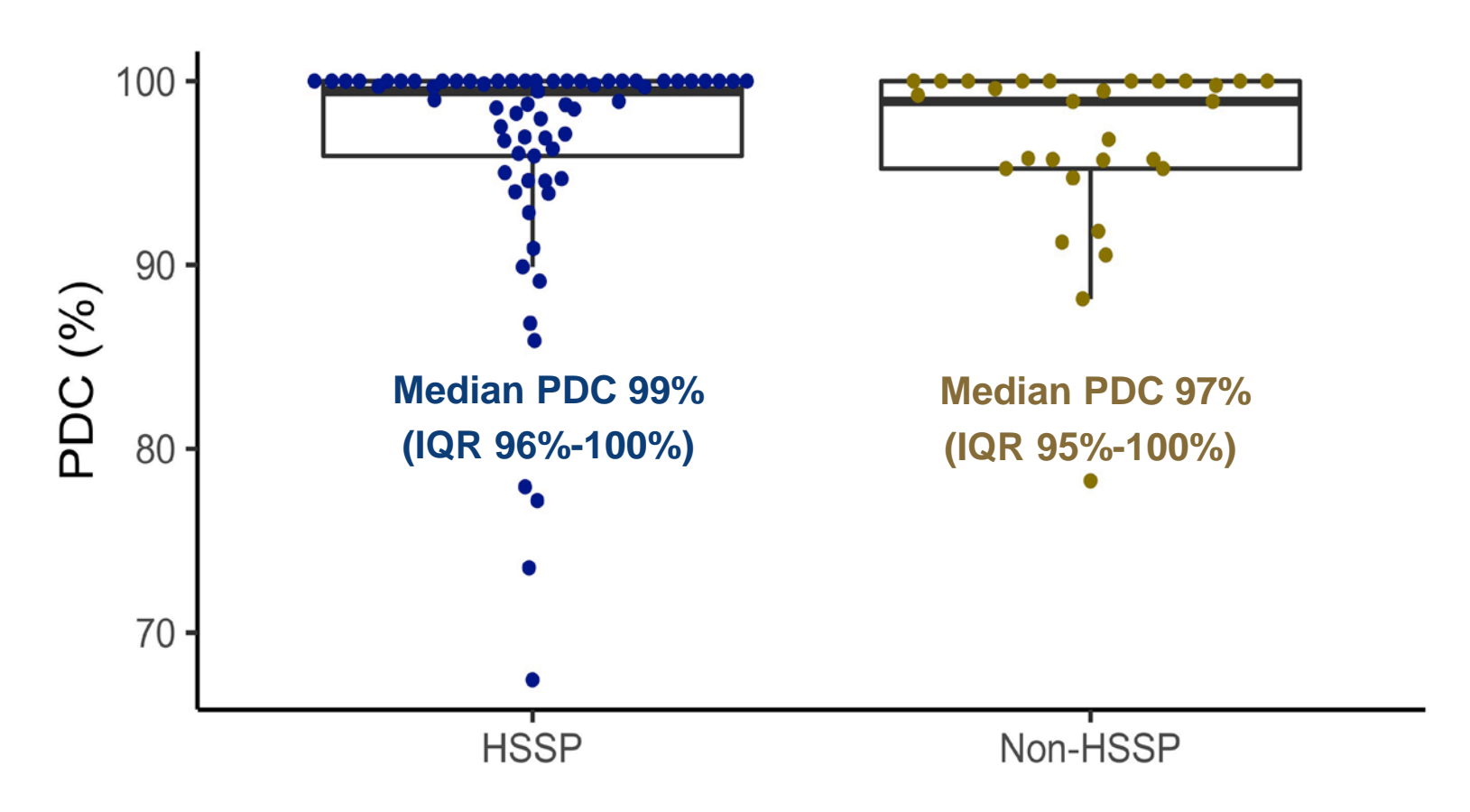


Figure 2. Adherence



CONCLUSIONS

- Patients receiving PrEP in a multidisciplinary clinic with prescriptions filled by the integrated HSSP had significantly higher rates of persistence.
- Patients were better maintained on PrEP therapy when their prescriptions were filled with the integrated HSSP compared to external pharmacies.