

## BACKGROUND

- HIV pre-exposure prophylaxis (PrEP) has been shown to reduce sexual transmission of HIV by more than 90% when taken regularly.<sup>1,2,3</sup> However, PrEP adherence and usage patterns differ from HIV anti-retroviral treatment usage and adherence.<sup>4</sup>
- Walgreens local specialty pharmacies (LSPs) provide personalized comprehensive pharmacy care specific to PrEP and other chronic disease states on health system campuses and communities impacted by HIV nationwide.

## OBJECTIVES

- To describe overall adherence, as modified proportion of days covered (mPDC), and demographic characteristics that show observational difference among patients treated at Walgreens LSPs.

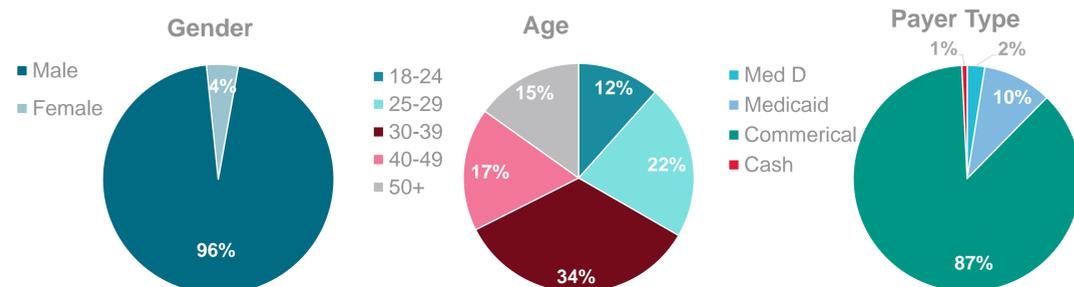
## METHODS

- Study Design:** Retrospective cohort design using Dec. 2016 – Nov. 2017 data from IQVIA's™ longitudinal retail prescription database.
- Study Population:** Patients ages 18 or older who filled the combined formulation of emtricitabine and tenofovir disoproxil fumarate for at least 90 days in the period.
- Study Criteria:** Only patients exclusive to Walgreens LSPs were included; patients were excluded who used combined HIV-antiretroviral therapy in the study period or year prior.

## RESULTS

- As showing in **Figure 1**, PrEP users were mostly male (96%), aged 25-39 (56%), and used commercial insurance for their PrEP prescriptions (87%).
- Half (50%) were new to PrEP in the study period and almost all prescriptions (99%) were filled in urban settings (not shown).

**Figure 1. Demographics of PrEP Users**



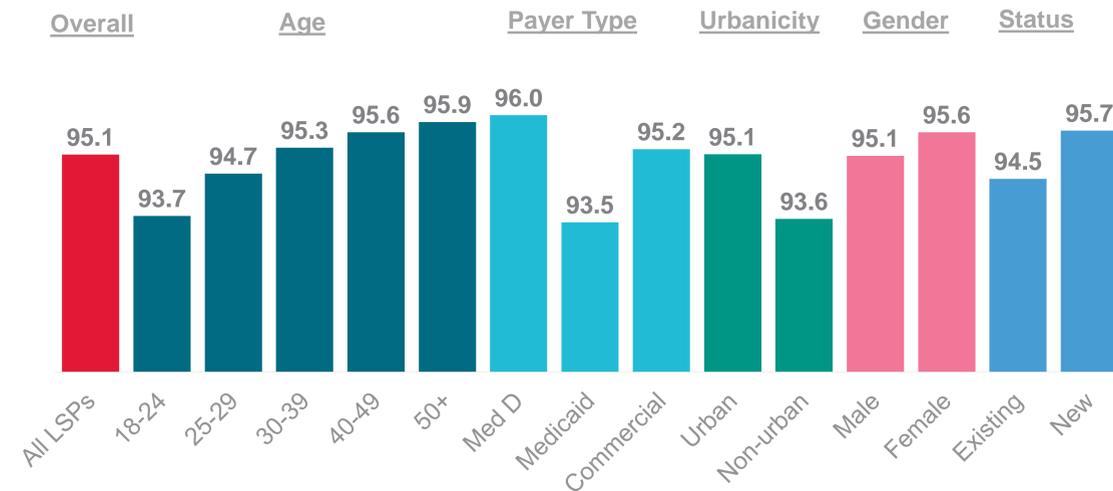
## RESULTS (CONT.)

- The formula for modified PDC (mPDC) takes into account length of therapy:

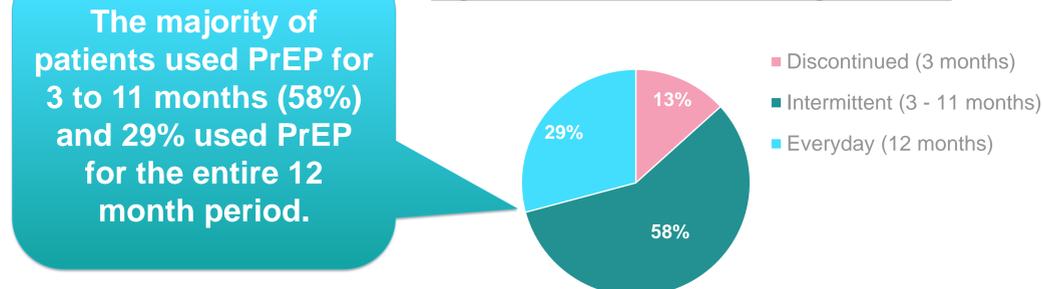
$$PDC^m = \frac{\text{days with medication in period}}{(\text{last fill date} + \text{days supply}) - \text{first fill date}}$$

- Patients on PrEP at Walgreens LSPs had a mean mPDC of 95% during periods of use. Observed mean mPDC was higher among older age groups, females, patients on Medicare, patients new to Walgreens, and urban patients (**Figure 2**).
- The majority (92%) of patients at LSPs achieved adequate adherence (defined as a mPDC of 80% or higher) and these results were consistent with results of mean mPDC by demographic factors.

**Figure 2. Mean Modified PDC Overall and by Demographic Variables**



**Figure 3. Pattern of PrEP Usage at LSPs**



## LIMITATIONS

- Limitations of this study include: (a) the study was observational; (b) the study population encompassed patients in one retail chain only; and (c) these results may not be generalizable to other settings.

## CONCLUSIONS

- Patients utilizing Walgreens LSPs had high mean mPDC and several demographic factors were associated with higher adherence. Additionally, LSPs had a high proportion of patients with adequate adherence.
- Walgreens LSPs have experience in providing PrEP services, access to treatment, copay assistance, financial assistance and adherence support. See **Figure 4** for a list of pharmacy services provided by Walgreens.

**Figure 4. Walgreens Pharmacy Services**



## IMPLICATIONS FOR PRACTICE

- Traditional PDC adherence calculations may warrant modifications to consider variations in length of therapy commonly observed in PrEP users. Healthcare providers may consider coordinating their services with pharmacies to help PrEP users stay adherent to their prescribed regimes.
- Additional research is needed on strategies to promote PrEP adherence and to better understand the differential usage patterns observed.

## REFERENCES

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