Approximately two million new cases of human immunodeficiency virus (HIV) infection occur annually worldwide.\(^1\,2\) In the United States, the Centers for Disease Control and Prevention (CDC) reported that in 2017, among the estimated 410,000 new HIV diagnoses nationwide, 30% (120,000) occurred among persons (22 to 59 years of age) in metropolitan areas.\(^3\)

The majority of members in both the PCC/FFS and MCO populations were prescribed either emtricitabine/tenofovir disoproxil fumarate (Truvada\(^\text{®}\)) or emtricitabine/tenofovir alafenamide (Descovy\(^\text{®}\)) between January 1, 2019 to June 30, 2020 (Table 1).

There are currently two Food and Drug Administration-approved agents for PrEP: emtricitabine/tenofovir disoproxil fumarate (Truvada\(^\text{®}\)) and emtricitabine/tenofovir alafenamide (Descovy\(^\text{®}\)), which was approved on October 3, 2018. Massachusetts (Massachusetts) has no formulary restrictions on either agent.\(^4\)

Inclusion Criteria:
- Members ≥18 years of age enrolled in MassHealth with ≥1 pharmacy claim for PrEP therapy which does not include a switch to alternating therapy.
- Patients with third-party liability coverage between January 1, 2019 and June 30, 2020.

OBJECTIVE

To evaluate geographic differences in the utilization of two PrEP therapies, emtricitabine/tenofovir disoproxil fumarate (Truvada\(^\text{®}\)) and emtricitabine/tenofovir alafenamide (Descovy\(^\text{®}\)), among MassHealth plans.

METHODS

This retrospective analysis included pharmacy and medical claims analyzed by county from January 1, 2019 to June 30, 2020 to members covered by Massachusetts Primary Care Cooperative for Service (PCC/FFS) and Managed Care Organization (MCO) plans at any point during the study period. Member and prescriber geographic location were evaluated based on zip codes from pharmacy claims data and grouped according to county.

Inclusion Criteria:
- Members ≥18 years of age enrolled in MassHealth with a pharmacy claim for either emtricitabine/tenofovir disoproxil fumarate (Truvada\(^\text{®}\)) or emtricitabine/tenofovir alafenamide (Descovy\(^\text{®}\)) between January 1, 2019 to June 30, 2020.

Exclusion Criteria:
- Members with a pharmacy claim for an antimetabolite other than emtricitabine/tenofovir disoproxil fumarate (Truvada\(^\text{®}\)) or emtricitabine/tenofovir alafenamide (Descovy\(^\text{®}\)) between January 1, 2019 to June 30, 2020.
- Members with a medical diagnosis indicating HIV infection during the calendar year prior to pharmacy claims for emtricitabine/tenofovir disoproxil fumarate (Truvada\(^\text{®}\)) or emtricitabine/tenofovir alafenamide (Descovy\(^\text{®}\)).
- Primary Outcomes:
  - Differences in utilization of PrEP therapy by geographic location over the time period of January 1, 2019 to June 30, 2020
  - Claims for PrEP therapy analyzed by quarter

RESULTS

Inclusion criteria were met for 764,167 members during the study period. The majority of members in both plans were prescribed PrEP: 421,976 (55%) in the PCC/FFS plan and 342,191 (45%) in the MCO plan.

Ongoing county analyses of PrEP utilization are necessary to address any potential need to optimize PrEP utilization among MassHealth members.

LIMITATIONS

- Retrospective-claims analyses inherently have limitations and carry the risk of inaccurate or incomplete data.
- The analysis included members with ≥1 pharmacy claim for PrEP therapy which does not account for members in the duration of use for PrEP therapy.
- Inclusion and exclusion criteria may impact findings.
- Ongoing county analyses of PrEP utilization are necessary to address any potential need to optimize PrEP utilization among MassHealth members.

Conclusions:
- Data on geographic differences in utilization of PrEP in a Medicaid population is limited.

REFERENCES


4. Pavel Lavitas, PharmD, BCPS; Stephanie N. Tran, PharmD, BCPS; Thomas C. Pomfret, PharmD, MPH, BCPS; Warren Smith, PharmD; Kimberly Lenc, PharmD.

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