PREVALENCE OF COST-SHARING FOR HIV PRE-EXPOSURE PROPHYLAXIS AND ITS RELATIONSHIP TO MEDICATION ADHERENCE

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INTRODUCTION

Pre-Exposure Prophylaxis (PrEP) is the use of antiretroviral medication to prevent HIV infection, and when taken daily, is highly effective at preventing HIV infection.[1] The Affordable Care Act requires that all non-grandfathered health plans cover services recommended by the US Preventive Services Task Force (USPSTF) without member cost-sharing. Following an "A" recommendation from the USPSTF in 2019, health plans were required to cover at least one form of PrEP for individuals at high risk of HIV acquisition without cost sharing, effective for plans starting on or after June 30, 2020.[2] A generic version of Truvada, the predominant form of PrEP at the time, was also introduced in late 2020, independently reducing cost-sharing obligations for patients; there are currently one generic and two branded versions of oral PrEP available for use. However, despite the USPSTF recommendation, many patients still report cost-sharing for PrEP, potentially impacting patient utilization.[3]

OBJECTIVES

This study explores the prevalence of cost-sharing for PrEP among commercially insured individuals in Massachusetts. Because cost-sharing is known to impact patient adherence to prescription medications, the study also explores the relationship between cost-sharing and patient adherence to PrEP.[4]

STUDY DESIGN

The population of interest for this study included Massachusetts residents ages 18 to 64 with twelve months of commercial pharmacy coverage for at least one calendar year during 2019-2023 and at least one claim for oral PrEP. This study excluded individuals with an HIV or AIDS diagnosis or a claim for a non-PrEP antiretroviral medication indicated for HIV treatment.[5] Claims for oral PrEP medications (Truvada, Descovy, and generic Truvada) were identified using the Massachusetts All-Payer Claims Database.

Medication adherence was characterized using Proportion of Days Covered (PDC), which was calculated using prescription fill dates and number of days supplied. A new-user design was employed to measure adherence; individuals needed at least two PrEP claims and could not have a claim for PrEP three months prior to entry into the analytic cohort. Discontinuation was defined as having a 60-day gap in PrEP supply after exhausting all available medication. Individuals with a PDC ≥ 80% were considered adherent.

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2 "Prevention of Human Immunodeficiency Virus (HIV) Infection: Preexposure Prophylaxis." U.S. Preventive Services Task Force [Internet]. 2019 [cited 2025 Apr 11]. Available from: https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/prevention-of-human-immunodeficiency-virus-hiv-infection-pre-exposure-prophylaxis-june-2019

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5 Antiretroviral Medications. National HIV Curriculum [Internet, cited 2025 Apr 14]. Available from: https://www.hiv.uw.edu/page/treatment/drugs

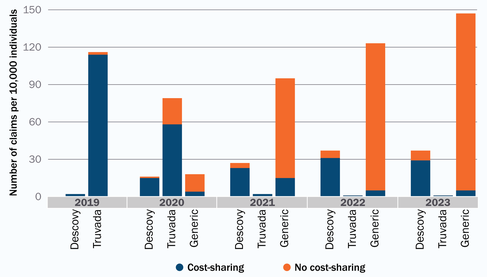
6 Preventing HIV with PrEP. Centers for Disease Control and Prevention [Internet]. 2025 [cited 2025 Apr 11]. Available from: https://web.archive.org/web/20250321014557/https://www.cdc.gov/hiv/prevention/prep.html#cdc_prevention_myths-on-demand-prep

7 Sosnowy C, Predmore Z, Dean LT, Raifman J, Chu C, Galipeau D, Nocka K, Napoleon S, Chan P. Paying for PrEP: A qualitative study of cost factors that impact pre-exposure prophylaxis uptake in the US. International journal of STD & AIDS. 2022 Dec;33(14):1199-205.

8 FAQs About Affordable Care Act Implementation Part 47. U.S. Department of Labor [Internet]. 2021 [cited 2025 Apr 11]. Access at: https://www.dol.gov/sites/dolgov/files/ebsa/about-ebsa/our-activities/resource-center/faqs/faqs-about-affordable-care-act-implementation-coverage-of-prep-2021.pdf

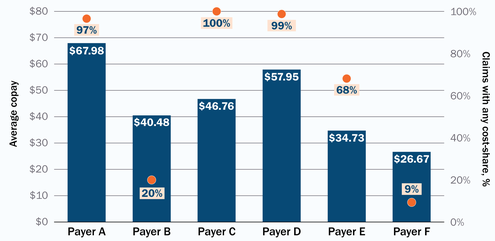
RESULTS

EXHIBIT 1. Cost-sharing by drug, normalized to 30-day increments, 2019–2023



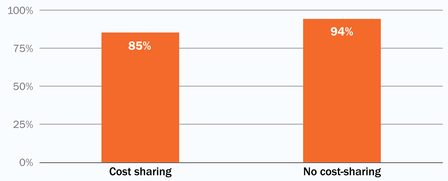
Note: Claim counts shown per 10,000 individuals. Source: HPC analysis of Massachusetts All-Payer Claims Database, 2023.

EXHIBIT 2. Average copay for a 30-day supply of Descovy, by payer, 2023



Note: Cost-sharing normalized to 30-day supply. Source: HPC analysis of Massachusetts All-Payer Claims Database, 2023.

EXHIBIT 3. Share of individuals with a proportion of days covered greater than or equal to 80%, 2021–2023



Source: HPC analysis of Massachusetts All-Payer Claims Database, 2023.

Following the USPSTF recommendation and introduction of the generic drug, the share of claims for PrEP with cost-sharing decreased from 98% in 2019 to 19% in 2023. Rates of cost-sharing and average cost-sharing amounts varied by drug type: in 2023, 78% of claims for Descovy had cost-sharing, accounting for 84% of all claims with cost-sharing (**Exhibit 1**). Similarly, 76% of claims for branded Truvada had cost-sharing in 2023, compared to 4% of claims for the generic (**Exhibit 1**). When cost-sharing for the generic occurred, the average copay for a 30-day supply was lower than for the branded versions ($29.98 in 2023, compared to $129.02 for Truvada and $109.86 for Descovy).

Generic utilization and cost-sharing varied across payers; among the six payers studied, generic utilization rates in 2023 ranged from 76% to 93% of all claims for PrEP. Payer variation in cost-sharing appeared to be correlated with, but not fully explained by, generic utilization, as one payer imposed cost-sharing on nearly all claims identified, despite 86% of those claims being for generic PrEP. For a 30-day supply of Descovy (where the allowability of cost-sharing is less clear), there was substantial payer variation in the rates and amounts of cost-sharing, ranging from 9% to 100% of claims incurring cost-sharing and copays ranging from $26.67 to $67.98 (**Exhibit 2**).

Individuals with cost-sharing for any PrEP drug had lower rates of medication adherence between 2021 and 2023 than those without (85% vs 94%, **Exhibit 3**).

CONCLUSIONS

While the share of individuals with cost-sharing for PrEP decreased after the USPSTF recommendation and introduction of the generic, some cost-sharing persists. Although some cases of cost sharing may be appropriate under current federal guidance, such as cost-sharing for branded Truvada in the presence of a generic alternative, others, such as the instances of cost-sharing for generic PrEP identified in this analysis, appear to conflict with federal policy.

Consistent with previous literature, this study found that cost-sharing was associated with decreased adherence to PrEP. Because clinical guidelines indicate that PrEP must be taken daily to be effective,[6] delays in filling or taking PrEP due to cost barriers may lead to increased risk of HIV acquisition and ensuing treatment costs. While this study did not examine cost-sharing for ancillary services related to PrEP use, such as routine bloodwork to assess kidney function, cost-sharing for these services have also been shown to be a barrier to PrEP uptake and adherence.[7] Though recent federal guidance has clarified that these services should also be covered without cost-sharing, it is unclear to what extent cost-sharing persists for these ancillary services.[8]

This study is not without limitations; the results may overestimate the impact that cost-sharing has on individuals, as we cannot discern whether a copay was paid for by an individual or through the use of a copay assistance program. Further, the sample only includes claims from a subset of commercial insurers in Massachusetts, and other insurers may impose cost-sharing on PrEP differently. Additionally, the adherence analysis assumes that individuals were using PrEP daily and not "on-demand," as this method was not approved by the FDA or recommended by the CDC during our study periods; this may lead to underestimates of adherence in the study population.[6] Still, the results suggest that further clarification of federal policy may be needed to ensure that patients are not subjected to potentially inappropriate cost-sharing.

POLICY IMPLICATIONS

While federal guidance requires that payers cover at least one form of oral PrEP without cost-sharing, these results indicate that patients may face inappropriate cost-sharing for PrEP and possibly highlight a need for further clarification or enforcement, especially as payer policies related to cost-sharing for preventive services impact patient behavior. Furthermore, as federal litigation surrounding the preventive services coverage requirement continues to develop, policymakers and health plans should consider how cost-sharing requirements can impact patient utilization of preventive services and health outcomes.

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