

## Higher coinsurance for PrEP therapies was associated with worse HIV outcomes at the state level

### BACKGROUND & OBJECTIVE

- Preexposure prophylaxis (PrEP) for preventing HIV transmission is an important measure in helping to reduce the spread of HIV. It has received an “A” rating from the United States Preventive Services Task Force (USPSTF), indicating substantial net benefit. Requirements enacted by the Affordable Care Act (ACA) require compliant plans to cover PrEP with no cost-sharing to patients.
- Previous work has examined access to and cost-sharing for PrEP in Medicare Part D.<sup>1</sup> There has been less attention on the commercial market.
- We sought to assess variation in coverage, use of prior authorization (PA), and cost-sharing across commercial plans from December 2016 through December 2025. In addition, we examined whether variation in measures of access was associated with contemporaneous HIV-related outcomes.

### DATA & METHODS

- **Data Sources:**
  - [Clarivate Fingertip Formulary](#) (2016-2025) for coverage, cost-sharing, and enrollment data
  - [AIDSVu.org](#) (2016-2023) for HIV outcomes at the state-level
- **Methods:**
  - To calculate enrollment-weighted coverage, PA, and cost-sharing measures, we focused on pharmacy coverage. We excluded Yeztugo from analyses as it is typically covered through medical benefits.
  - We aggregated Fingertip Formulary data to the state-year level and merged it with AIDSVu.org data on the number of new HIV diagnoses and the PrEP-to-need ratio (number of individuals taking PrEP to new HIV diagnoses).
  - We used linear regressions with year, drug, plan type, PBM, state, and payer fixed effects to examine associations of coverage, cost-sharing, and PA with plan characteristics including specialty drug status, the requirement to use specialty pharmacies, plan type, and formulary tier.
  - We used state-level Poisson regressions with state- and year-fixed effects to assess the association between access measures and the number of new HIV diagnoses and the PrEP-to-need ratio.
- All results are presented using enrollment weighting.

### RESULTS

- We identified substantial geographic variation across all measures. In 2025, the probability of a drug being covered ranged from **76.4% in Hawaii** to **95.0% in Montana**. The probability of PA ranged from **28.8% in Alaska** to **3.1% in Hawaii**. Average copays ranged from **\$35.66 in Nebraska** to **\$6.63 in Vermont**, while average coinsurance ranged from **3.5% in New Hampshire** to **20.4% in South Dakota**.
- Linear regressions indicated that, compared to other commercial plans, **ACA Marketplace, Municipal Plans, and Union plans had lower rates of coverage, while employers using PBM template plans had higher rates of coverage than other commercial plans.**
- **PA was less common in ACA Marketplace plans. Copays were lower in ACA Marketplace and Union plans. When a drug was considered specialty, copays were \$16.28 (p<0.05) higher. Copays were \$7.92 (p<0.01) lower for drugs requiring PA. Coinsurance was lower in ACA marketplace plans and higher in employer plans using PBM template plans.**
- Regressions examining state-level HIV outcomes suggest that a one percentage point increase in coinsurance is associated with a **0.5% (p<0.01) increase in new diagnoses**, and a **reduction of 12.7 (p<0.05) in the PrEP-to-need ratio.**

Figure 1. Geographic Variation in PrEP Coverage, Cost-Sharing, and Prior Authorization, 2025

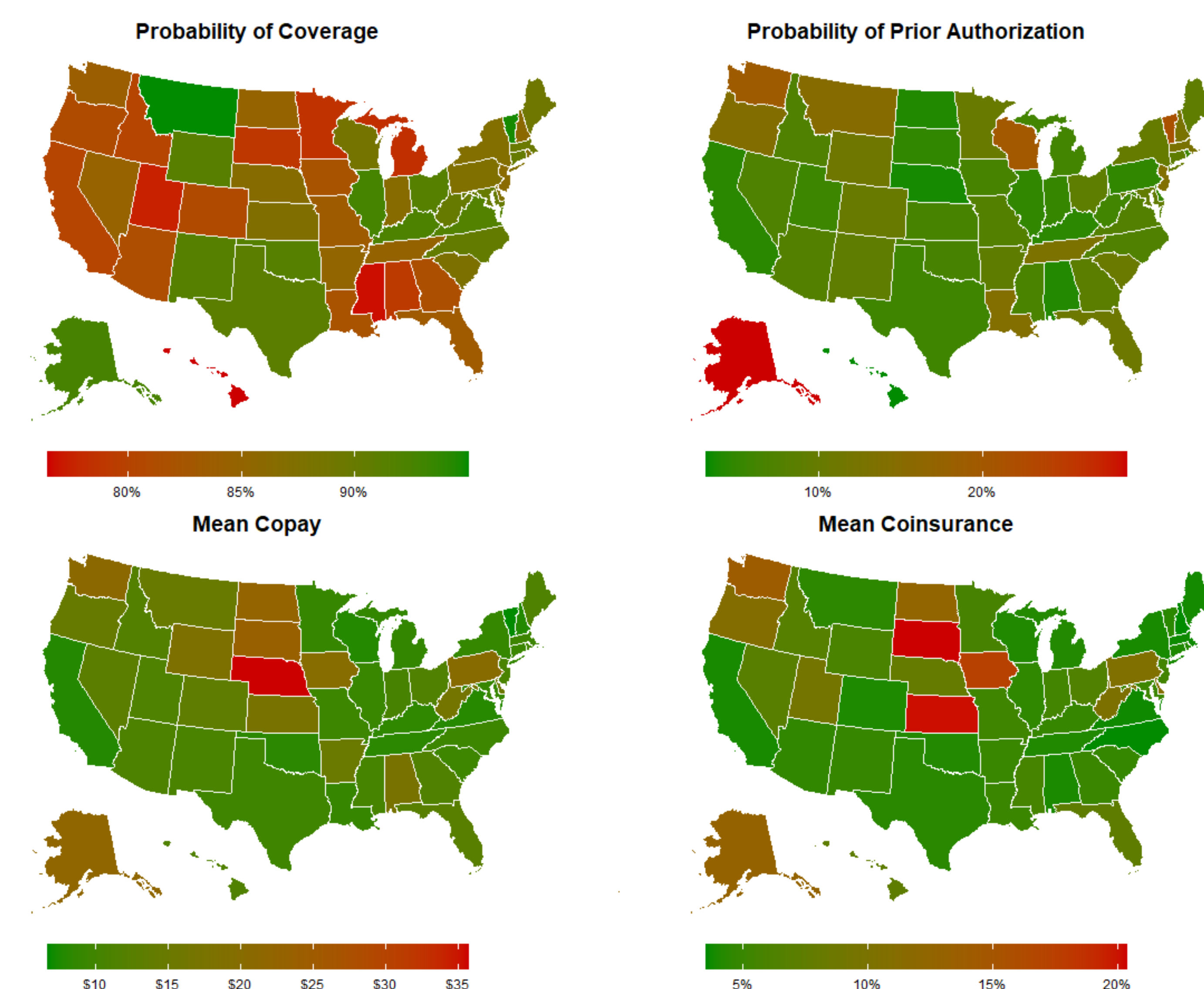
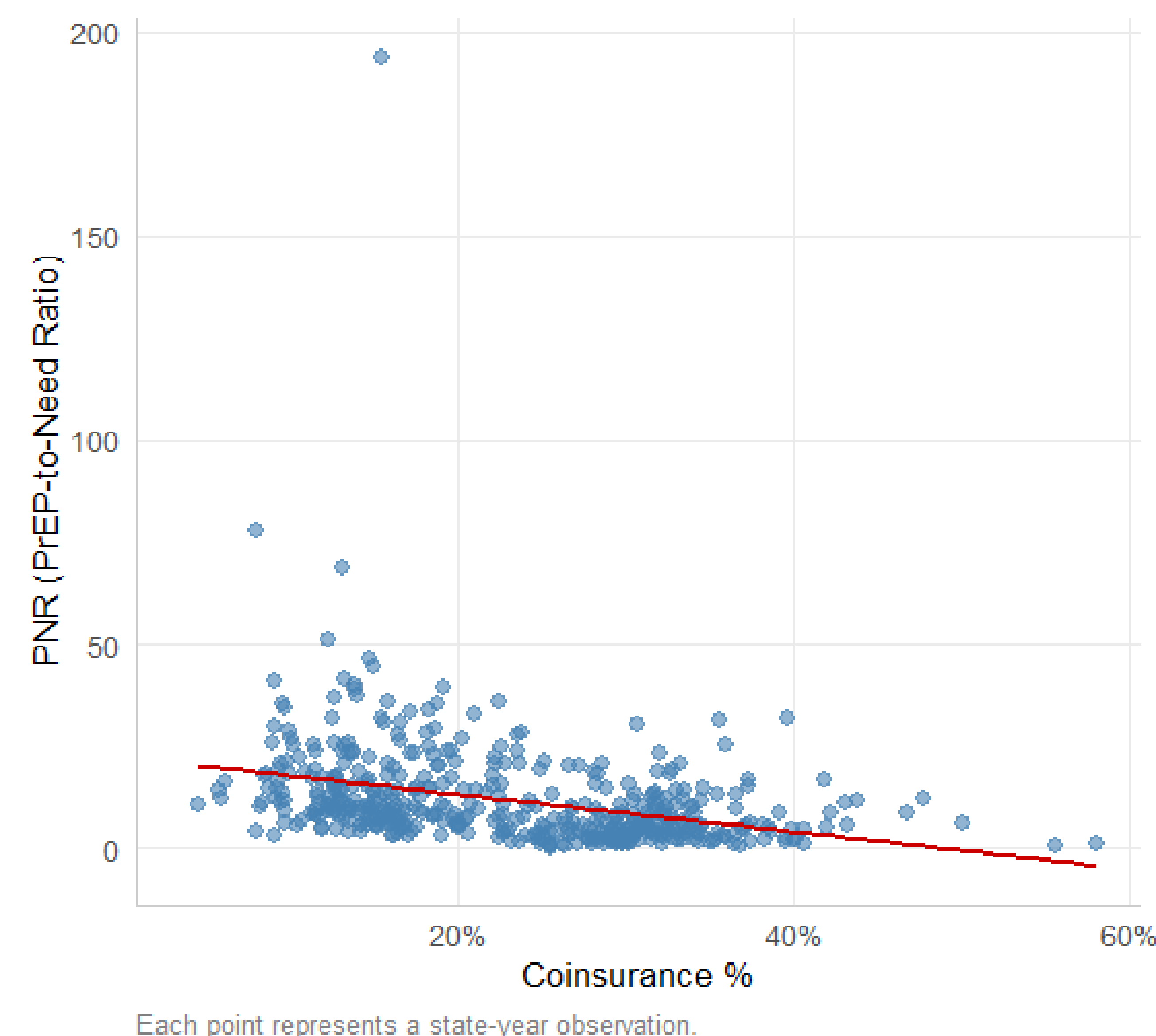


Figure 2. PrEP-to-Need Ratio vs Average Coinsurance, 2016-2023



### DISCUSSION AND CONCLUSIONS

- Our analysis of nationally-representative coverage data suggests patients continue to face access barriers to PrEP therapy, including the use of PA, copays, and coinsurance.
- In addition, our findings indicate that higher levels of coinsurance are associated with worse HIV outcomes at the state level.
- Taken together, this means that while PrEP therapy can play a major role in reducing HIV transmission, third-party financial and administrative barriers can limit the extent to which patients benefit.
- A key limitation is the inability to make causal statements about these relationships.

### REFERENCES

1. Tseng C, Dudley RA, Chen R, Walensky RP. Medicare Part D and Cost-Sharing for Antiretroviral Therapy and Preexposure Prophylaxis. *JAMA Netw Open.* 2020;3(4):e202739. doi:10.1001/jamanetworkopen.2020.2739