US Socioeconomic Disparities and Geographic Variations in HIV Pre-Exposure Prophylaxis Providers

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Conclusions

- This is the first study to illustrate socioeconomic and geographic disparities in pre-exposure prophylaxis (PrEP) provider availability in the USA
- The disproportionate growth of PrEP users relative to providers, and low ratios of PrEP providers to users and primary care providers, in various geographies in the USA suggest workforce disparities and underscore the urgent need to improve and expand access to PrEP
- Ensuring provider availability and equitable PrEP access is critical for meeting the growing needs of different key populations across geographies in this era of new advanced PrEP modalities

Plain Language Summary

- While the number of people using HIV prevention medications is rising, not everyone in the USA has the same access to healthcare providers who offer those medications
- This study used prescription data between 2021 and 2023 to look at healthcare providers offering HIV prevention medication across different regions of the USA
- HIV prevention medication was mostly prescribed by nurse practitioners or physicians' assistants (37%) and family medicine doctors (30%); 65% of providers worked in neighborhoods with mostly White people and only 13% worked in low-income neighborhoods
- The ratio of healthcare providers who offer HIV prevention medications to people who use those medications was low in Southern states and areas where levels of new HIV diagnoses are high ('Ending the HIV Epidemic' [EHE] regions), suggesting that these places do not have enough providers offering HIV prevention care
- New policies and/or interventions are needed to make sure the same level of access to HIV prevention care is available for all people who need or want it, in order to stop the spread of HIV

References: 1. AIDSVu. Deeper Look: PrEP. Available at: https://aidsvu.org/resources/deeper-look-prep/ (Accessed February 2025). **2.** Siegler AJ, Bratcher A, Weiss KM. *Am J Public Health*. 2019;109(9):1216–23.

Background

PrEP utilization has increased by 17% from 2022 to 2023 in the USA; however, despite this increase in PrEP use, disparities exist across different races, ethnicities, socioeconomic statuses, and geographies¹

Access to providers offering PrEP services also remains limited and unevenly distributed across the USA²

— The US Public Health Service recommends quarterly visits with a licensed provider, making physical access to providers a critical part of PrEP access²

Objective

To examine socioeconomic and geographic disparities in PrEP provider availability in the USA

Methods

• PrEP providers who prescribed ≥1 PrEP regimen and PrEP users from January 2021 to December 2023 were identified using the IQVIA Longitudinal Access and Adjudication Dataset claims database, a de-identified US prescription claims database

PrEP provider data was linked with:

- Zip Code Tabulation Area-level demographic data from the Census 2020 and the American Community Survey 2018–2023 estimates
- 2. County-level primary care provider data (2021–2023) from the Health Resources and Services Administration; all primary care (non-specialist) services in the region were included

• At multiple USA geographic levels, the ratio of PrEP providers to (1) PrEP users and (2) all primary care providers, as well as (3) the mean proportion of PrEP claims dispensed out of all prescribed PrEP claims, was evaluated

Results

PrEP Provider Characteristics

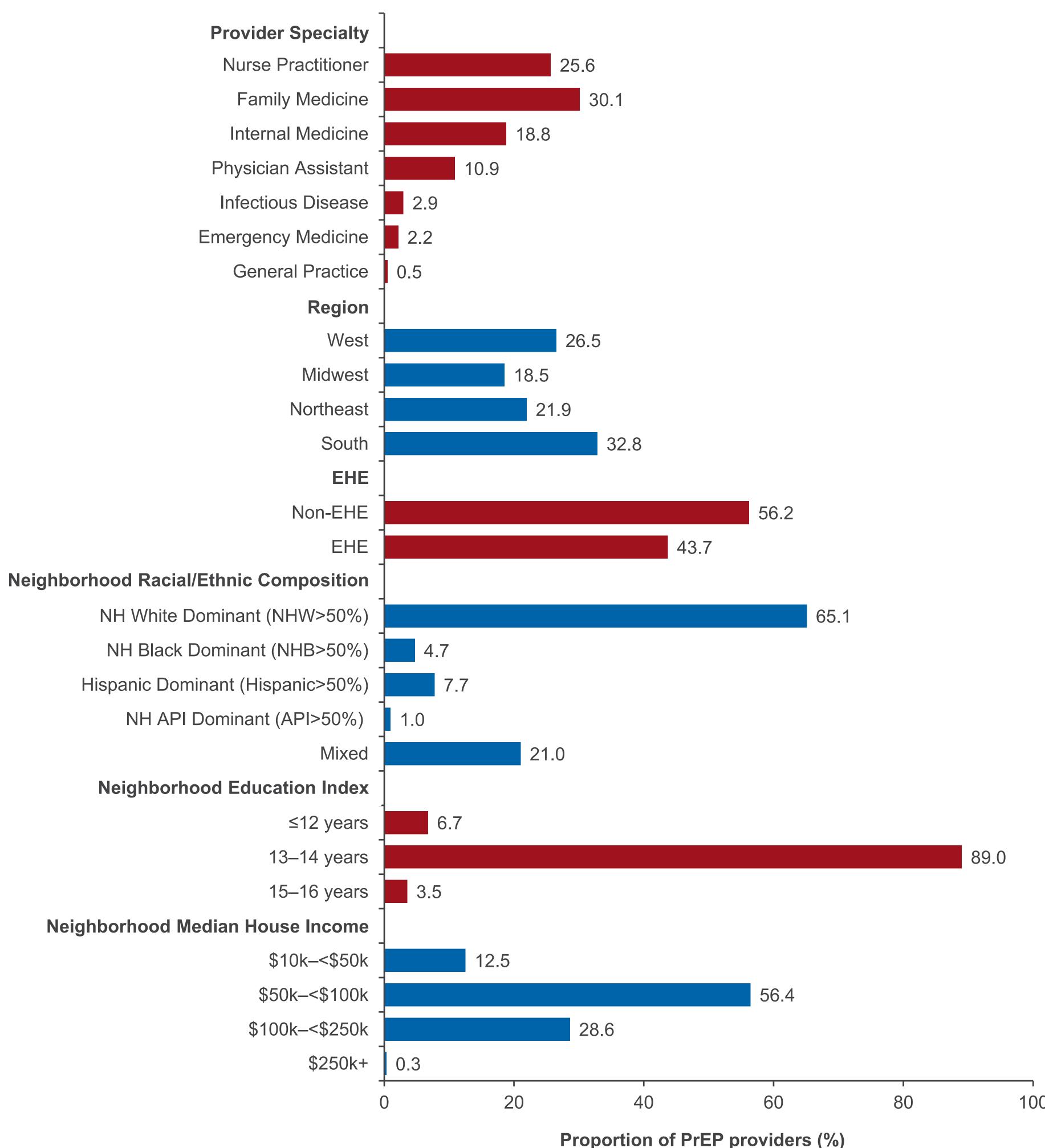
- Most PrEP providers were nurse practitioners/physicians' assistants (37%) or family medicine doctors (30%) (Figure 1)
- Most providers practiced in predominantly White neighborhoods (65%), with only 5% in predominantly Black neighborhoods and 8% in predominantly Hispanic neighborhoods; 13% practiced in low-income neighborhoods (Figure 1)

Figure 1. Demographic Characteristics of PrEP Providers and the **Neighborhoods They Serve in the USA (2021–2023)**

nissing/unknown for provider specialty (9.0%), region (0.2%), EHE region (0.1%), neighborhood racial/ethnic composition (0.5%), neighborhood education index (0.8%), and neighborhood median house income (2.1%). API, Asian/Pacific Islander; EHE, 'Ending the HIV Epidemic'; NH, non-Hispanic; NHB, non-Hispanic Black; NHW, non-Hispanic White: PrEP, pre-exposure prophylaxis.

Ratio of PrEP Providers to PrEP Users Between 2021 and 2023

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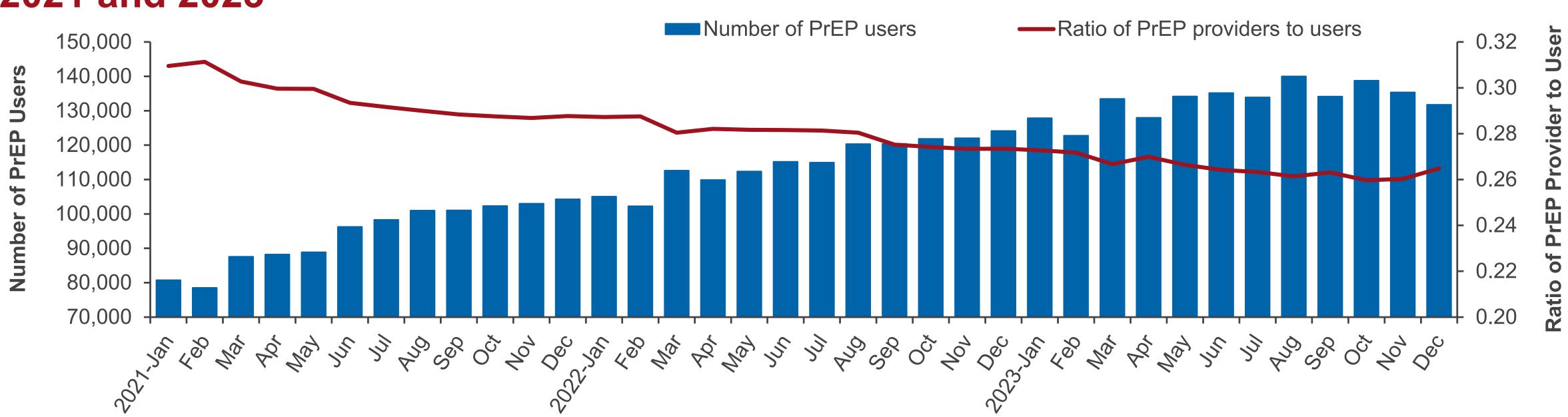


• The number of PrEP providers increased from 24,988 in January 2021 to a high of 36,593 in August 2023 and then declined to 34,895 in December 2023 • The number of PrEP users increased from 80,725 in January 2021 to 131,759 in December 2023 (Figure 2)

• The ratio of PrEP providers to PrEP users decreased from 0.31 in January 2021 to 0.26 in December 2023 (Figure 2)

Conflicts of Interest: LT, JY, CN, JG, KB, JG, DK, GB, and WZ are employees and shareholders of Gilead Sciences, Inc. This study was funded by Gilead Sciences, Inc.

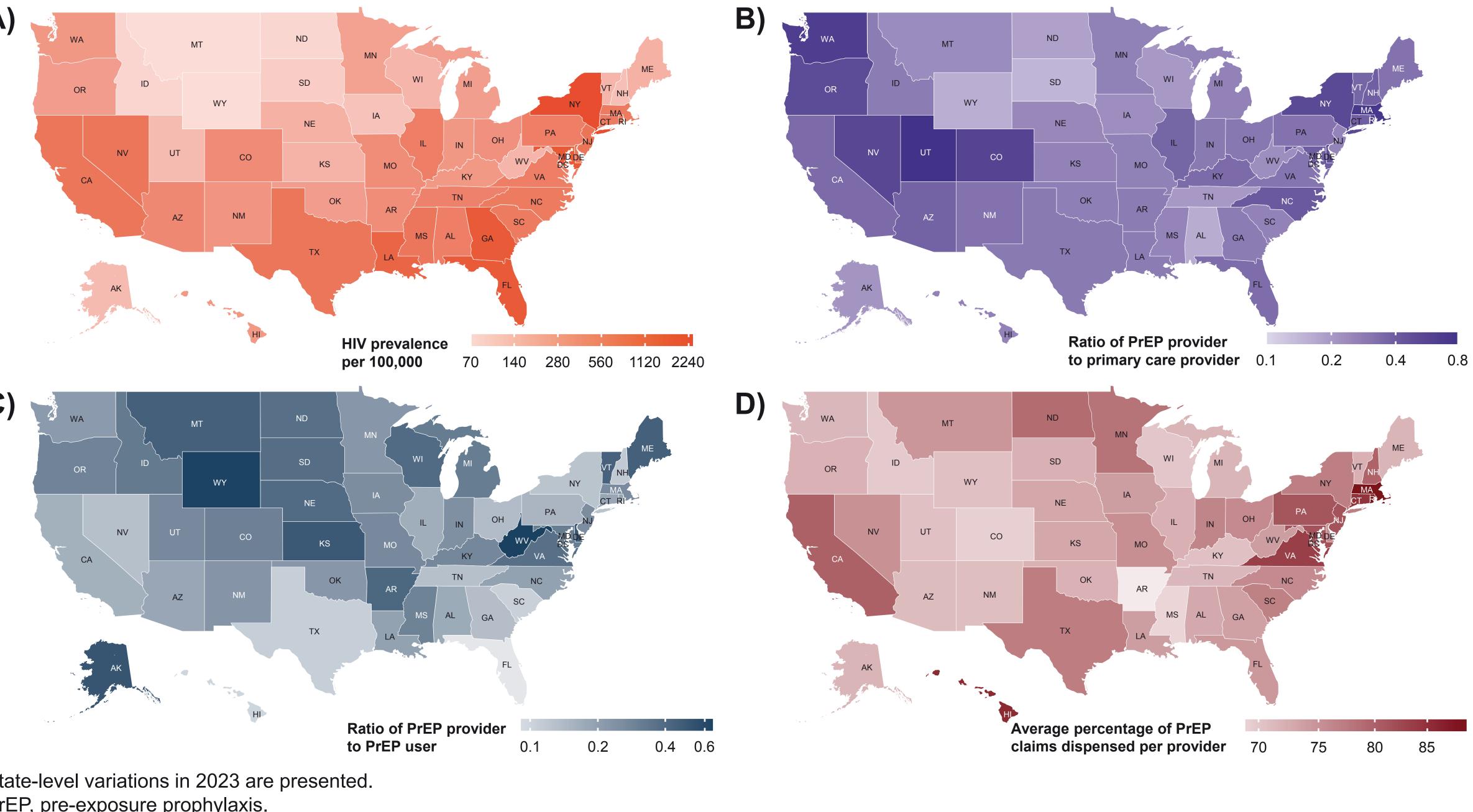
Figure 2. Number of PrEP Users and Ratio of PrEP Providers to Users Between 2021 and 2023

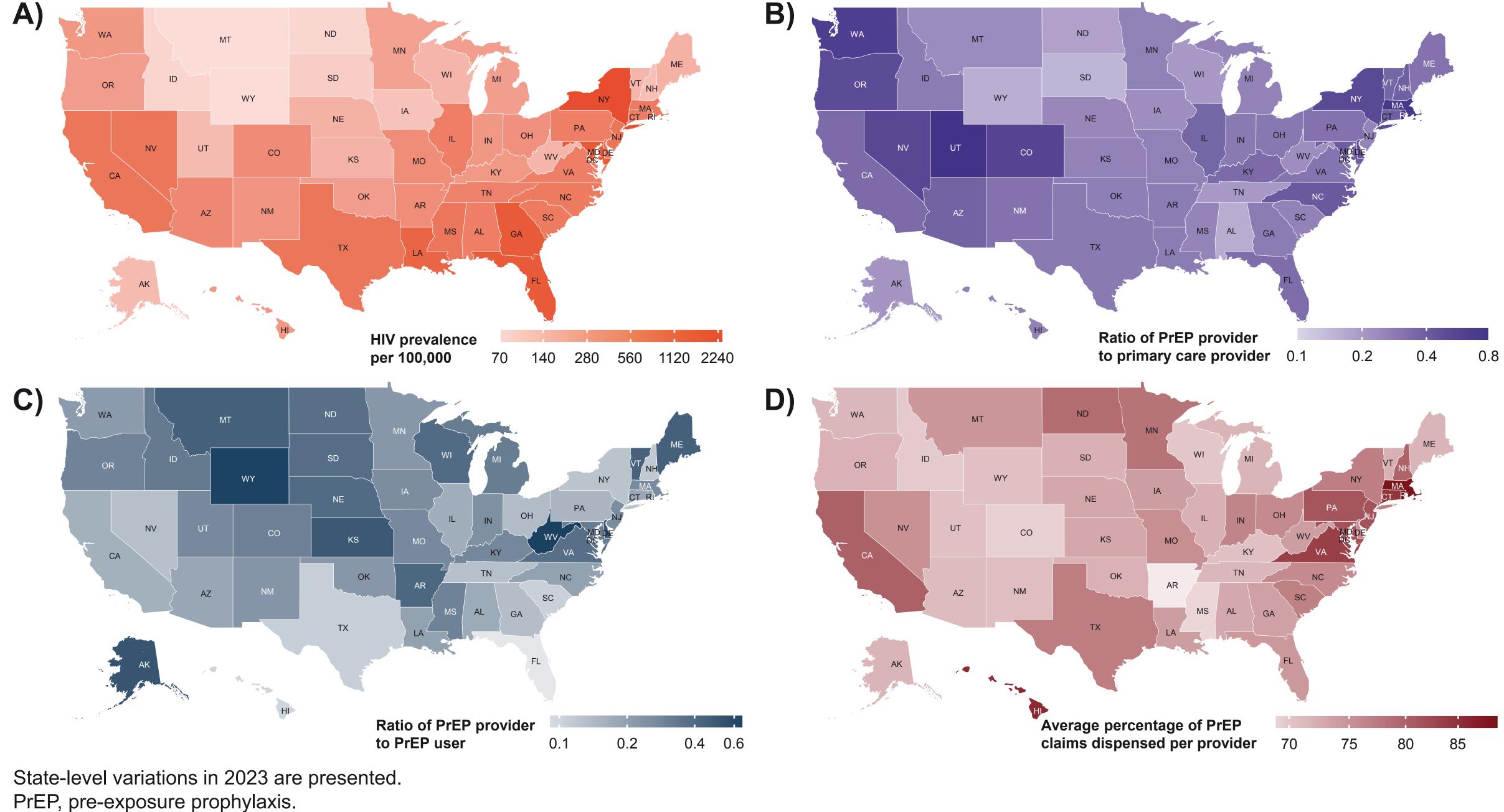


PrEP, pre-exposure prophylaxis.

Ratio of PrEP Providers to PrEP Users and Primary Care Providers by Region

Figure 3. USA Geographic Variations in (A) HIV-1 Prevalence, (B) the Ratio of PrEP **Providers to All Primary Care Providers, (C) the Ratio of PrEP Providers to PrEP** Users, and (D) Average Percentage of PrEP Claims Dispensed Per Provider





• EHE regions had a lower ratio of PrEP providers to users (0.16) versus non-EHE jurisdictions (0.31) in 2023 • Southern states, where HIV prevalence is high (Figure 3A), had low PrEP provider availability; in particular, Alabama had a very low ratio of PrEP providers to primary care providers (Figure 3B), and Florida and Texas had very low ratios of PrEP providers to PrEP users (Figures 3C)

• Rates of dispensed PrEP claims were generally higher for providers in the Northeast (83%) than in other regions (77–79%) (Figure 3D)