

Preexposure Prophylaxis Indication Criteria Underidentify Black and Latinx Persons and Require Revision

 See also Pyra et al., p. 370.

HIV preexposure prophylaxis (PrEP) provides more than 99% protection against HIV transmission when taken as indicated. Side effects of PrEP are low, but costs of the medication and related clinical care are high. Efforts to end the HIV epidemic hinge on PrEP, with both mathematical models and real-world data suggesting that bringing PrEP to scale among groups with high HIV incidence will substantially affect the HIV epidemic.¹ The US Centers for Disease Control and Prevention (CDC) provides guidance for PrEP indication to assist clinicians in determining who should be provided PrEP.

CLINIC DATA ON PREP

In this issue of *AJPH*, Pyra et al. (p. 370) analyze data on PrEP provision and PrEP indication from a federally qualified health care center in Chicago, Illinois. The authors present data in the form of several ratios: PrEP users divided by incident HIV diagnoses (PrEP:HIV, also termed PrEP-to-need),² PrEP users divided by persons for whom PrEP is indicated (PrEP: Indication), and persons for whom PrEP is indicated divided by HIV diagnoses (Indication: HIV). The goal in using these ratios is to provide information regarding disparities in who is receiving PrEP. Pyra et al. found that Blacks, Latinx, and transwomen had substantially lower

PrEP:HIV and Indication:HIV ratios than did White and cisgender men populations. Relative to their need as determined by incident HIV infection, these groups were less likely to be indicated for PrEP and also less likely to receive it.

OTHER EVIDENCE

Previously, cohort data from two studies found that behavioral- and sexually transmitted infection-based PrEP indication criteria, such as the CDC guidelines, perform poorly in predicting incident HIV infection among Black men who have sex with men (MSM).^{3,4} In fact, one of the cohort studies found that race alone better predicted HIV incidence than did any of the risk screening tools,³ supporting the concept that sexual networks confer risk more than does individual behavior. This aligns with a meta-analysis that found risk behavior of Black MSM to be lower than risk behavior of White MSM,⁵ in stark contrast to HIV incidence, which is substantially higher among Black MSM than White MSM.

When this previous evidence is considered, PrEP screening tools predominantly composed of risk behavior data seem destined to perform poorly for Black MSM. The work of Pyra et al. provides clinic-level data supporting this conclusion. The implications are potentially

enormous: clinicians strictly following CDC guidelines will exclude or deemphasize PrEP for a number of Black and Latinx persons who are at high risk of acquiring HIV, unintentionally increasing racial/ethnic disparities in HIV incidence. This also leads to a potential inefficient allocation of resources: organizations funded by CDC to conduct PrEP outreach to highly affected populations such as Black MSM may then proceed to not recommend PrEP to members of populations that are excellent candidates but lack a guidelines-based indication.

Some have suggested using abbreviated PrEP behavioral guidelines to facilitate clinical use, demonstrating that such criteria performed well for members of the iPrEx study (the Preexposure Prophylaxis Initiative trial).⁶ Yet, as the authors of that study acknowledge, such indications would likely perform poorly for Black MSM. Alternatives include individually tailored indications based on machine-learning models.⁷ This approach has the advantage of a high ability to predict incident infection that could alleviate disparities in indication but also the disadvantage of feasibility of scale-up and complexity of patient communication. Another

possible approach would be to consider prescribing PrEP for all members of high-prevalence or high-incidence groups. Additional thought would be needed on potential cut points and how to approach other groups with greater heterogeneity of outcomes.

METHODOLOGICAL CONSIDERATIONS

Pyra et al. sought to incorporate some of the additional detail in the CDC PrEP indication guidance that notes clinicians should consider the local epidemiological context. They used a criterion that prescribed PrEP for all persons in zip code areas with 2% or more HIV prevalence. This did not resolve observed PrEP ratio disparities. It is important to note that the authors did not use such prevalence thresholds in at-risk populations. For instance, a 2% or even 10% HIV prevalence threshold assessed for MSM or transwomen populations would result in universal indication for all members of each group, resolving PrEP ratio disparities.

The article by Pyra et al. has several limitations. It is from a single health center that serves sexual and gender minority populations, making generalizability challenging. Yet the poor performance of PrEP indication criteria is consistent with both cohort data and our expectations for indication criteria that consist mainly of risk behavior data.

As the authors note, PrEP

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indications in the data set may be underreported because of data limitations of electronic medical records. Last, as the authors acknowledge, the study used an ecological design with cross-sectional data, a design that does not allow direct exploration of whether lower PrEP indication caused lower PrEP prescribing. Self-referral into PrEP has been found to be common in other studies, and some clinicians may not use PrEP indication criteria. Nonetheless, given that many clinicians report being aware of and using CDC PrEP guidance, it seems likely that it has some impact on shaping PrEP discussions between providers and their patients.

CONCLUSIONS

Pyra et al. note that their work extends arguments regarding the insufficiency of current PrEP

indication guidance and emphasize that improving access should not contribute to any further stigmatization. It is noteworthy that the CDC conducted some of the initial PrEP trials and provided some of the earliest guidance regarding PrEP. The US Food and Drug Administration was one of the first bodies to approve a medication for PrEP. This type of leadership is encouraging and merits confidence that current challenges with PrEP indication guidance are likely to be addressed in short order. Recently, the CDC predicted that in the absence of intervention 1 in 2 Black MSM, 1 in 5 Latinx MSM, and 1 in 11 White MSM will acquire HIV in their lifetimes. Given the high safety and efficacy of PrEP, it is hard to justify communication with any member of these groups that would not support PrEP use. *AJPH*

Anticipating and Defeating Preemption Across Public Health

 See also Crosbie and Schmidt, p. 345.

Preemption occurs when a higher level of government withdraws or limits the authority of a lower level of government to enact policy. State legislatures have enacted preemptive legislation to limit local government's ability to enact public health protections across policy domains.¹ Preemption is thus a barrier to public health policymaking and undermines community self-determination and local democracy.

The only context in which public health stakeholders have regularly defeated and repealed preemptive legislation is tobacco control. Yet, the threat of

preemption in tobacco control—as in all of public health—is far from over. To support public health practitioners in anticipating preemption across policy domains, Crosbie and Schmidt (p. 345) explored tobacco industry tactics that further state preemption and identified successful responses by the tobacco control community. Examining methods for public health stakeholders to counter preemption is critical to the field. I provide an example of the nuanced nature of tobacco industry tactics identified by Crosbie and Schmidt, integrate

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Note. The contents are solely the responsibility of the author and do not necessarily represent the official views of the NIH.

CONFLICTS OF INTEREST

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tobacco industry to secure state preemption: promoting preemption through front groups, lobbying policymakers, inserting preemption through various legislative avenues, and issuing legal threats and challenges. The 2019 policy landscape for Tobacco 21 laws, which raise the minimum age of sale for tobacco products to 21 years, provides a useful lens through which to view industry's subtle use of these tactics at the state and federal levels.

Starting in 2015, state and local jurisdictions began enacting Tobacco 21 laws.² Although

their framework for responding to preemption with previous research, and encourage the public health community to adopt additional strategies to counter and repeal preemption.

INDUSTRY TACTICS

Crosbie and Schmidt identified four primary tactics used by the

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