



Janki Tailor, Independent Consultant

Big money and the big picture: Funding and HIV epidemiology

How have policies influenced PrEP uptake?

An analysis of PrEP data in 139 countries



IAS 2025



IAS 2025



Summary

What is your main question?

What global policies related to HIV testing and prevention, structural changes, and health systems enable PrEP uptake and the expansion of options?

What did you find?

- Policies on non-criminalization of same-sex sex and HIV exposure, task shifting, self-testing, prohibition of compulsory testing, and lifting age restrictions on testing and treatment associated with high PrEP uptake.
- Both individual policies and policies that act in concert by overlapping or reinforcing one another enable PrEP access & uptake.
- Context matters: policies that significantly enable PrEP uptake differ by region.
- Policies that make PrEP access easier associated with higher uptake.

Why is it important?

Oral PrEP is at varying stages of scale-up globally, while longer-acting PrEP products and multi-purpose prevention technologies (MPTs) are slowly rolling out in limited supplies. This analysis sheds light on how to leverage policies to efficiently drive access and maximize public health impact.

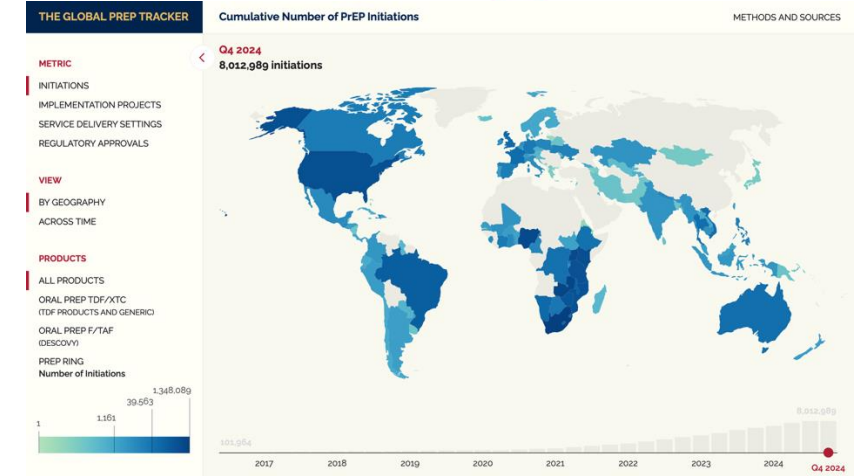
Methodology

Data Collection

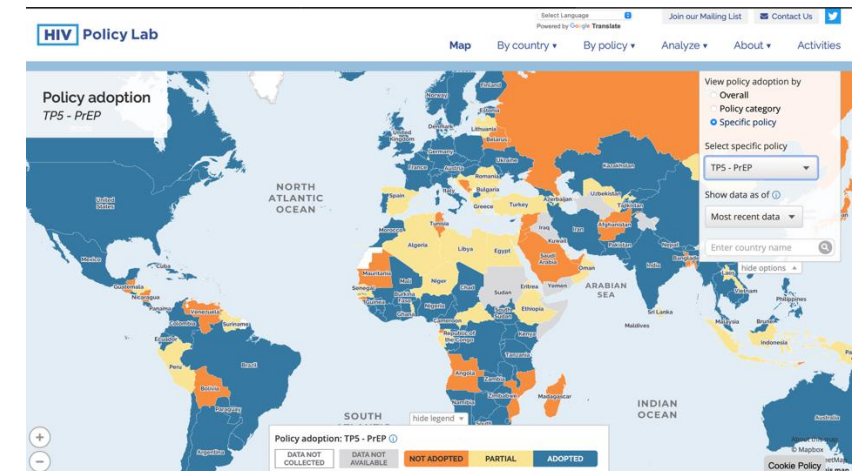
- Data on **cumulative PrEP initiations** for 139 countries, as of Sept. 2024, used from AVAC's [Global PrEP Tracker](#)
- Data on the **status of 54 policies** related to HIV testing & prevention, structural changes, and health systems across 139 countries, as of Jul. 2024, collected from [HIV Policy Lab](#)

Analyses

- **Multiple and individual regressions**, using RStudio, assessed significance of policies altogether and individually ($p=0.05$)
- Separate analysis done for **33 African countries**
- **Correlations**, using the Pearson coefficient, and **variance inflation factors (VIFs)** of independent variables calculated to assess which policies are multicollinear (working together)
- **Ridge regression analysis** assessed if multicollinear variables should be eliminated from the model to remove confounding in multiple regressions.



Global PrEP Tracker

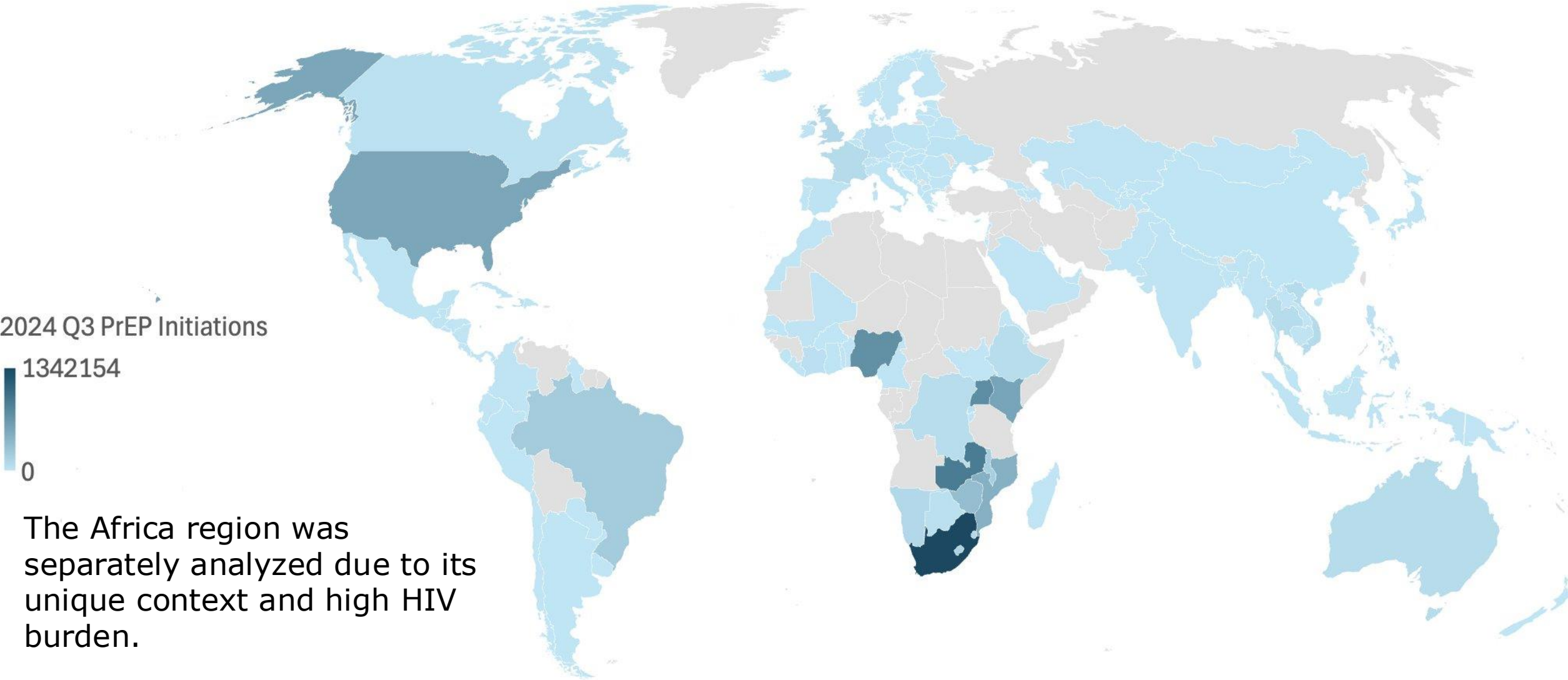


HIV Policy Lab

Countries Analyzed



2024 Q3 Global PrEP Initiations



The Africa region was separately analyzed due to its unique context and high HIV burden.

Results Overview



IAS 2025

	Global	Africa
Individual Regressions	8 policies significantly associated with PrEP uptake	4 policies significantly associated with PrEP uptake
Multiple Regressions	1 of 54 policies significantly associated with PrEP uptake	0 of 54 policies significantly associated with PrEP uptake

- Analyses confirmed 8 policies globally and 4 in the Africa region have similar enough effects on PrEP uptake that the statistical model could not differentiate their individual contributions to the multiple regression results.
 - What this means: **Related policies**, such as those governing the arrest versus the prosecution of those engaging in same-sex sex, each affected PrEP uptake on their own, but when **considered together**, their effects on PrEP uptake were so **similar** that the model **could not separate them**.
- Ridge regression analyses showed that these policies were very strongly contributing to the predictive power of the multiple regression model and cannot be eliminated.
 - What this means: **Individual policies** are important for PrEP uptake, but policies **work together in systems** which drive PrEP uptake as well.

Policies Analyzed (Global)



Health Systems		Structural	Testing & Prevention
Task Shifting		Same-sex sex non-criminalization	Self-testing
Health Financing		Sex work non-criminalization	Partner notification/index testing
Universal Health Coverage		Drug use non-criminalization	Compulsory Testing
User Fees		HIV exposure non-criminalization	Age restrictions on testing and treatment
Access to Medicines (TRIPS)		Non-discrimination protections	PrEP
Unique identifiers w/ data protections		National human rights institutions	Harm Reduction
Data sharing		Constitutional right to health	Comprehensive sexuality education
		Girls Education	Prisoner's Prevention
		Gender based violence	
		Civil Society	

Significant Policies Defined (Global)



IAS 2025

- **Task Shifting** – nurses or other non-physicians are allowed to initiate HIV treatment under national policy
- **Same-sex sex non-criminalization** – national law/policy refrains from criminalizing and prosecuting people for consensual same-sex sexual acts
 - **Laws** – national law refrains from criminalizing consensual same-sex sexual acts
 - **Arrests** – law-enforcement policy avoids prosecution for consensual same-sex acts in recent years
- **HIV exposure non-criminalization** - national law refrains from criminalizing and prosecuting people for non-intentional HIV exposure/ transmission.
 - **Laws** - national law refrain from criminalizing non-intentional HIV exposure/transmission
 - **Arrests** - law-enforcement policy avoided arrests/prosecution for non-intentional HIV transmission/exposure in recent years.
- **Self-testing** – self-testing is approved in national policy.

Policies Analyzed (Africa)



Health Systems	Structural	Testing & Prevention
Task Shifting	Same-sex sex non-criminalization	Self-testing
Health Financing	Sex work non-criminalization	Partner notification/index testing
Universal Health Coverage	Drug use non-criminalization	Compulsory Testing
User Fees	HIV exposure non-criminalization	Age restrictions on testing and treatment
Access to Medicines (TRIPS)	Non-discrimination protections	PrEP
Unique identifiers w/ data protections	National human rights institutions	Harm Reduction
Data sharing	Constitutional right to health	Comprehensive sexuality education
	Girls Education	Prisoner's Prevention
	Gender based violence	
	Civil Society	

Significant Policies Defined



IAS 2025

- **HIV exposure non-criminalization** - national law refrains from criminalizing and prosecuting people for non-intentional HIV exposure/ transmission.
 - **Arrests** - law-enforcement policy avoided arrests/prosecution for non-intentional HIV transmission/exposure in recent years.
- **Compulsory Testing** - compulsory HIV testing is prohibited under national law
- **Age restrictions on testing & treatment** - adolescents (≥ 12 yo) can access HIV testing and treatment without parental consent under national policy.



IAS 2025



Conclusions

- **Policy recommendations:** task shift, decriminalize consensual same-sex sex, decriminalize non-intentional HIV exposure/transmission, approve self-testing, prohibit compulsory testing, loosen age restrictions.
- **Policies found to significantly enable PrEP** uptake make access easier, reduce discrimination, and align with user preferences.
- While individual policies show significant associations with PrEP uptake when analyzed in isolation, they tend to act in **concert, overlapping or reinforcing one another**, making it difficult to isolate the effect of any one policy. This suggests that **both individual policies and overall policy environments**, rather than any single measure, plays a critical role in enabling PrEP uptake.
- Differences in policies that significantly enable PrEP uptake at global and regional levels imply that **context affects which policies should be implemented**.
- **Regional analyses are necessary** to understand systemic policy gaps that hinder PrEP access and uptake.
- Future analyses and policies should be adapted to incorporate **long-acting PrEP and MPT products**.



IAS 2025

Acknowledgements

Thank you to Catherine Verde Hashim, Kate Segal, Mitchell Warren, and Wawira Nyagah of AVAC for co-authoring and supporting this research.

For questions, please email taylor.m.janki@gmail.com

