

# Retention of daily oral HIV pre-exposure prophylaxis in Vietnam

H.T.T. Nguyen<sup>1</sup>, H. T. Dang<sup>1</sup>, V. T. Nguyen<sup>1</sup>, V. T. Nguyen<sup>1</sup>, H. T. T. Phan<sup>2</sup>, N. M. T. Nguyen<sup>3</sup>, T.A. Vuong<sup>1</sup>, R.S. Coley<sup>1</sup>

<sup>1</sup>FHI 360 Vietnam, <sup>2</sup>Vietnam Administration of HIV/AIDS Control, <sup>3</sup>USAID/Vietnam

EPC321

## BACKGROUND

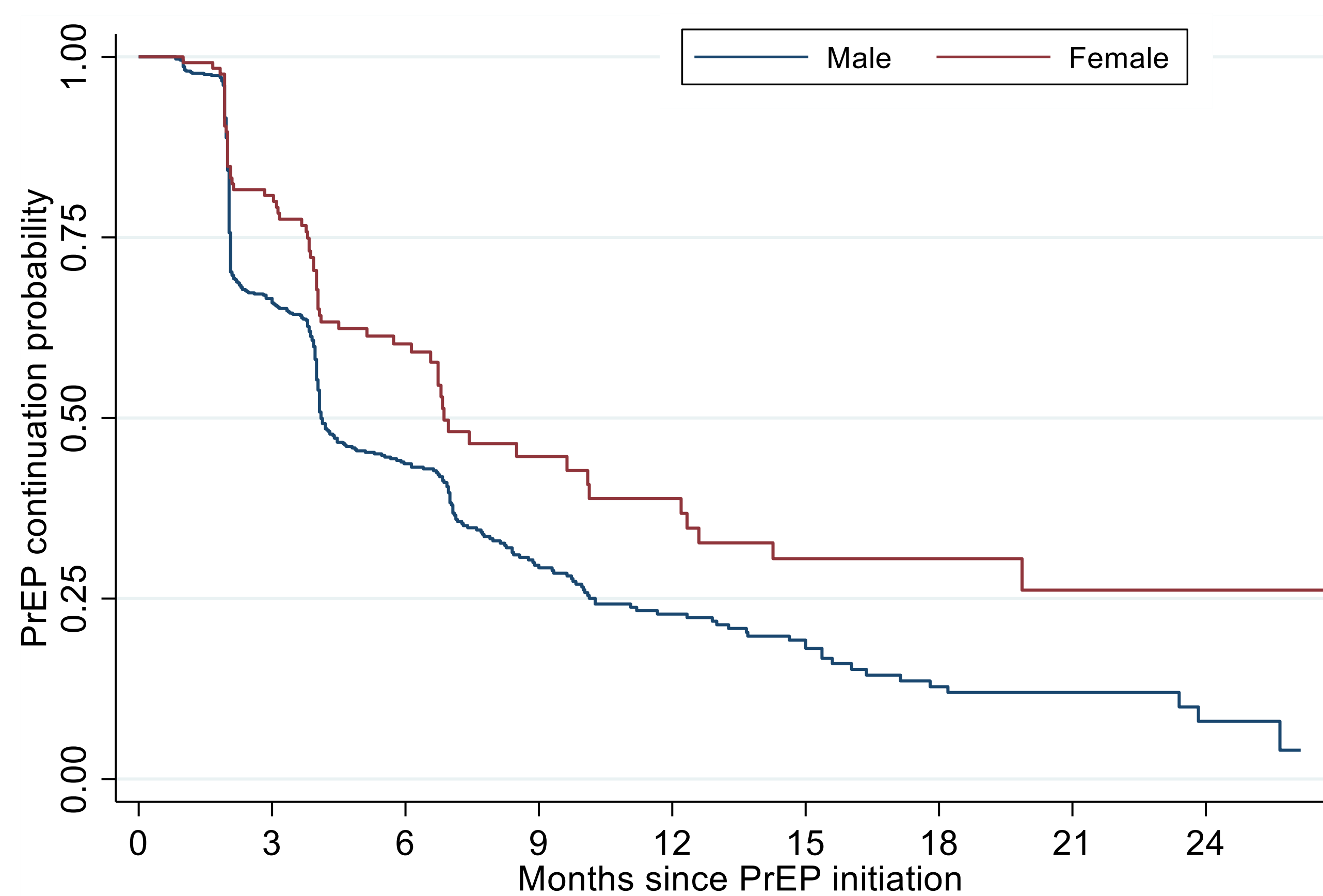
Vietnam launched HIV pre-exposure prophylaxis (PrEP) in 2017 to prevent HIV acquisition among high-risk populations.

Evaluation of PrEP retention among clients in intervention provinces including Ho Chi Minh City, Tay Ninh, and Tien Giang helps build a better understanding of the potential factors that influence discontinuation.

## RESULTS

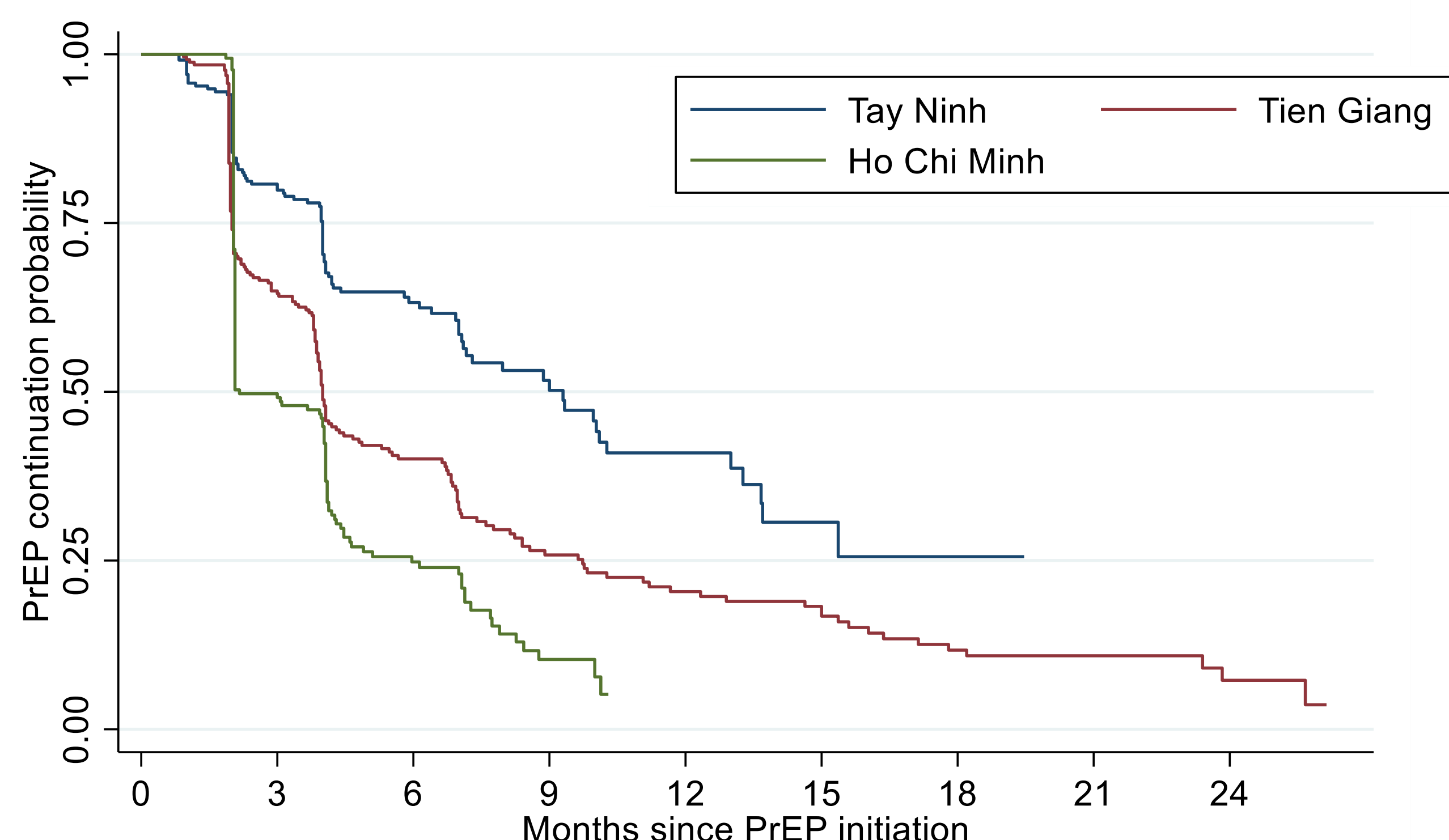
- There were **791 PrEP clients** in the focus provinces between Oct 2020 and Sept 2021: Tien Giang (326, 41.2%), Tay Ninh (282, 35.7%), and Ho Chi Minh City (183, 23.1%).
- **Most clients were male** (665, 84.1%). The majority self-identified as **men who have sex with men** (539, 68.1%), or **HIV-negative partners in serodiscordant couples** (228, 28.8%).
- **Common reasons for discontinuation were loss to follow-up** (259, 51.9%) and **transfers** (123, 24.7%).

FIGURE 1. Kaplan-Meier survival curve for PrEP retention by Sex



- **Female clients were retained longer compared to male clients** (HR=0.6,  $p<0.005$ ) (Figure 1).
- In the multivariable model, **older age is associated with lower PrEP discontinuation**.
- **Male clients from Tien Giang and Ho Chi Minh tended to have lower PrEP continuation rates** compared to those from Tay Ninh (HR=1.95,  $p<0.001$ ) and (HR = 2.41,  $p<0.001$ ), respectively (Figure 2).

FIGURE 2. Kaplan-Meier survival curve for PrEP retention in males by province



## METHODS

- Retention among all new and existing PrEP clients was assessed between **October 2020 and September 2021**.
- Kaplan-Meier was used to analyze the time from **PrEP enrollment to discontinuation stratified by sex, province, age group, and key or priority population**.
- **Multivariable Cox regression** was used to estimate a hazard ratio (HR) and associations between PrEP retention with other covariates.

TABLE 1: Multivariable Cox Proportional Hazard Model for PrEP between Male and Female

VARIABLE	Male			Female			
	HR	95% CI	p-value	HR	95% CI	p-value	
Province	Tay Ninh	Ref		Ref			
	Tien Giang	1.95	1.52 – 2.49	<0.001*	1.27	0.68 – 2.37	0.45
	Ho Chi Minh	2.41	1.85 – 3.15	<0.001*	2.32	0.87 – 6.19	0.09
Age Group	15–19	Ref		Ref			
	20–24	0.88	0.63 – 1.22	0.45	1.01	0.16 – 6.55	0.99
	25–29	0.89	0.63 – 1.24	0.48	0.84	0.15 – 4.77	0.84
	30–34	0.79	0.55 – 1.14	0.21	0.70	0.13 – 3.94	0.69
	>35	0.61	0.41 – 0.92	0.02**	0.70	0.13 – 3.80	0.68
Population	Negative partners in serodiscordant couples	Ref		Ref			
	Other	0.75	0.23 – 2.40	0.63	1.47	0.41 – 5.22	0.56
	Men who have sex with men	1.08	0.80 – 1.44	0.63	2.48	0.27 – 23.15	0.79
	Sex workers	n/r	n/r	n/r	n/r	n/r	n/r
	People who inject drugs	n/r	n/r	n/r	n/r	n/r	n/r

Notes: HR: Hazard Ratio; CI: confidence interval; n/r: not reported due to small numbers

\* $p<0.001$ ; \*\* $p<0.05$

## CONCLUSIONS

More effort is needed to understand the underlying reasons for loss to follow-up among PrEP clients, especially males from different provinces and age groups.

**Targeted interventions specifically designed for men and younger individuals, tailored to provincial contexts, are necessary to address barriers to PrEP retention.**

### FOR QUESTIONS CONTACT:

Nguyen Thi Thu Hoa M&E Officer, EpiC Vietnam  
NHoa@FHI360.org