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## BACKGROUND

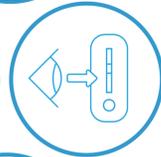
- ✓ Affordable and reliable rapid test kits pave the way for widespread screening
- ✓ But it is crucial that the process be user-friendly, quick, confidential, cost-effective and include medical support when needed
- ✓ It should also save healthcare workers (HCW) time
- ✓ “Napneung” = project working towards efficient HIV screening methods

## METHODS

- ✓ Self-screening for HIV, syphilis and hepatitis B and C at 6 locations in 3 provinces in northern Thailand (Chiang Mai, Chiang Rai and Phayao) to anyone aged ≥15 years
- ✓ Anonymous, free, no incentives offered
- ✓ Advanced web app to automate most processes:



Online appointments to avoid queues and waiting times



Instructions for user-guided self-screening and self-interpretation



Standardized information on HIV and STIs provided while awaiting results

- ✓ 1 HCW can assist multiple users at once
- ✓ Only 2 drops of blood from a finger prick needed to screen for the 4 infections
- ✓ HIV screening test: Alere HIV Combo until Jan 21, 2019; Alere Determine HIV-1/2 from Jan 22, 2019 to Aug 6, 2020; and TriQuik afterwards
- ✓ If positive: perform confirmatory tests, counseling and personalized referral for evaluation and treatment
- ✓ If negative HIV test but at high risk: encourage to use PrEP and re-screen regularly
- ✓ Demand creation: online through social media & search engines, offline through posters & vouchers
- ✓ HIV incidence estimated from Sedia HIV-1 LAg-Avidity EIA results using Kasantjee estimator

## RESULTS

- ✓ 16,753 screenings in 12,175 users between 19 October 2015 and 7 June 2023
- ✓ Self-reported characteristics: 49% born male, median age 26 years (IQR 22-34), 21% in one or more key populations, 65% never screened for HIV before
- ✓ Median time from arrival to reading of screening results: 38 min (IQR 32-46) at first screening and 31 min (26-37) at re-screenings
- ✓ >99% reported being satisfied with the screening process
- ✓ Of 2,357 HIV-negative users at risk (i.e. with recent multiple sex partners and inconsistent condom use and not currently on PrEP), 620 (26%) came for re-screening
- ✓ HIV prevalence (excluding users already aware of their infection): 1.8% (Wilson 95% CI: 1.6%-2.1%) (219 users) overall and >5% in MSM, transgender women, male sex workers and people who inject drugs. 127 (60%) never screened for HIV before.
- ✓ HIV incidence based on recency assay: 0.85/100 PY (95% CI: 0.55-1.15) overall and >2% in MSM, transgender women, male sex workers and men who inject drugs
- ✓ Prevalence of other infections (excluding users already aware of their infection): 2.2% (263 users) for syphilis, 1.6% (193) for hepatitis B and 0.6% (67) for hepatitis C
- ✓ Impact of the project on the HIV epidemic in northern Thailand:

HIV epidemic indicator	Project's population	Adult population in all* provinces where the project is implemented	Subset compared based on publicly available data
Overall HIV incidence	0.85/100 person-years	0.03/100 PY to 0.29/100 PY (est.)	2015-2022, age 15-49 years
Overall HIV prevalence <sup>†</sup>	1.83%	0.04% to 0.49% (est.)	2019-2022, age 15-49 years
HIV prevalence in men <sup>†</sup>	3.21%	0.18% to 0.62% (est.)	2019-2022, age 15-49 years
HIV prevalence in women <sup>†</sup>	0.54%	<0.01% to 0.37% (est.)	2019-2022, age 15-49 years
People with CD4 count ≥200 cells/mm <sup>3</sup> at HIV diagnosis	81%	52%	Chiang Mai, 2018-2022
People initiating ART among those newly diagnosed	95%	80%	2018-2022

\*Unless otherwise specified in last column  
<sup>†</sup>Excluding users already aware of their infection

## ‘Napneung’: advanced methods to streamline testing processes

- 4 infections screened in <1 hour
- Information on HIV and STIs provided while awaiting results
- Collection of behavioral data
- High satisfaction and retention rate in at-risk individuals



## CONCLUSIONS

- ✓ Effective, well-received and affordable system
- ✓ Saves time for HCW and users
- ✓ Associating multiplex tests with IT resources = integrating efforts to fight these 4 chronic infections without additional burden

## ACKNOWLEDGEMENTS

- ✓ Project supported by:



- ✓ We thank all participants and all people who contributed to the successful development and implementation of the Napneung project

## CONTACT INFORMATION

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