PrEP Chicago

A pragmatic randomized controlled trial to accelerate diffusion of pre-exposure prophylaxis for HIV prevention

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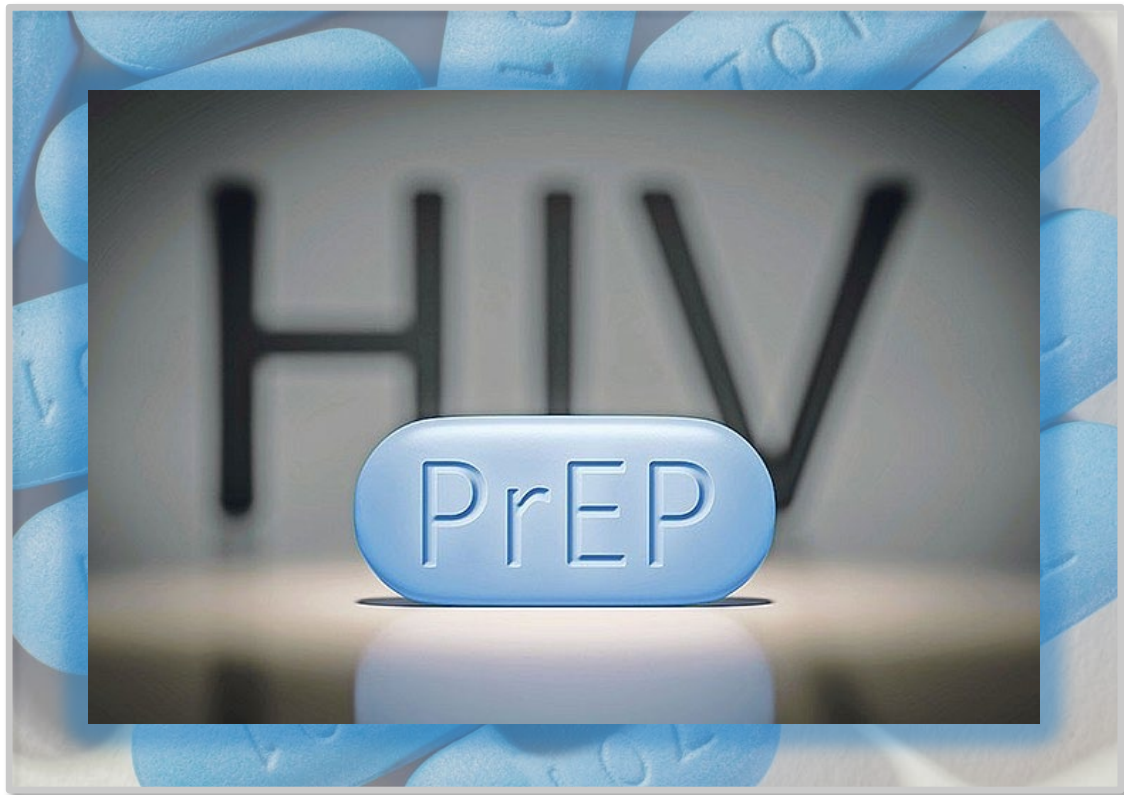
Chicago Center for HIV Elimination

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PrEP has been a game changer in HIV prevention...

... yet uptake is low in populations at greatest risk.

The Intervention Study

PrEP CHICAGO

LiFE

March 2016 - August 2019

PrEP Chicago is…

▸ a social network intervention that aims to…

▸ increase PrEP awareness and access in…

▸ the personal networks of young Black MSM and transwomen living in Chicago.

The Peer Change Agent (PCA)

▸ **Peer Change Agents** are members of the target population who are recruited and trained to inform and motivate their peers around PrEP.

Study Design

Intervention Treatment

Group 1 (Yr1)

Group 2 (Yr2)

Intervention Cohort

- ▸ Baseline intake + survey
- ▸ PCA training workshop
- ▸ Facebook Download
- ▸ HIV/STI testing
- ▸ Monthly booster calls
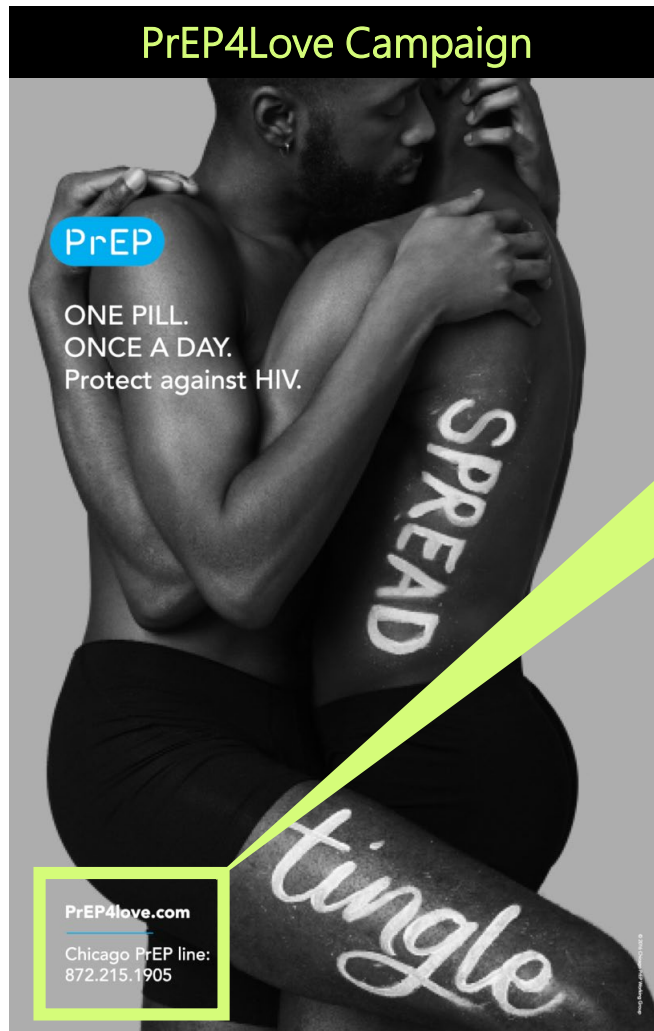- ▸ 12M and 24M follow-ups

Control Treatment

Group 1 (Yr2)

Group 2 (Yr1)

Control Cohort

- ▸ Baseline intake + survey
- ▸ Sexual risk workshop
- ▸ Facebook Download
- ▸ HIV/STI testing
- ▸ 12M and 24M follow-ups

Switch occurs automatically at 12-month visitation

Method 1

Linking study participants to PrEPline callers/clinic visitors

PrEP4Love Campaign

PrEP

ONE PILL.
ONCE A DAY.
Protect against HIV.

SPREAD

tingle

PrEP4love.com
Chicago PrEP line:
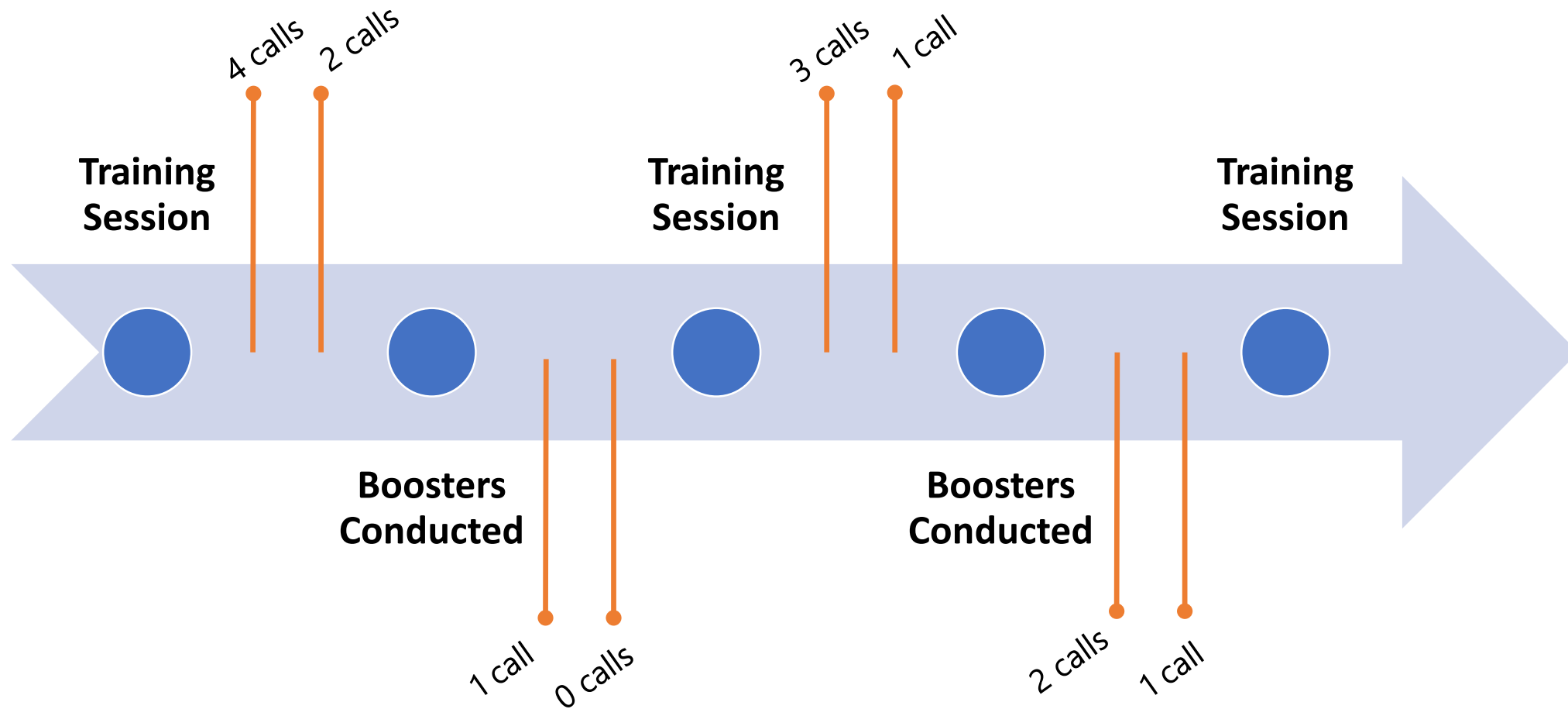872.215.1905

Chicago PrEP line
872-215-1905

Connecting PrEP clients to study participants

1. Link PrEP clients to a FB username (using Facebook's people search function)
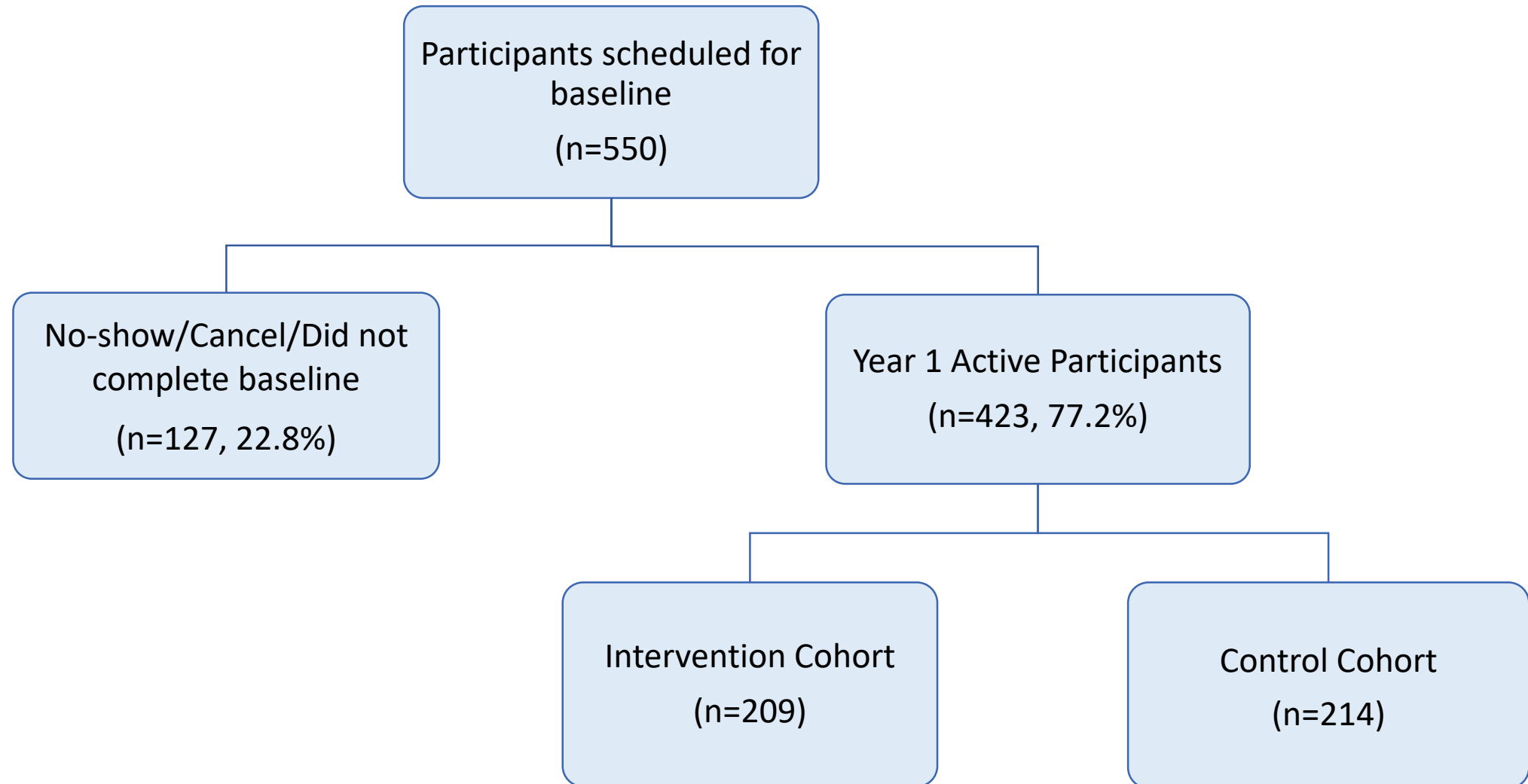
2. Identify which participants are FB friends with PrEP clients with a Facebook username

3. Determine eligible connections (PrEP client initiated linkage after a participant's baseline training)

Method 2

Linking intervention events to PrEPline calls/clinic visits

Results of Recruitment (Yr1)

Linking study participants to PrEPline callers

Data Descriptives

- 65 eligible ties (i.e., the PrEP client initiated linkage after a participant's treatment)
- PrEP clients had on average 8.6 ties to study participants (median=2, range=1-58)
- 216 study participants were tied to at least one PrEP clients (median=2, range=1-10)

Table 1. Likelihood of a Facebook tie between PrEPline referral or first PrEP clinic appointment (n = 65) and study participant.

	Covariate	OR	95% CI	p-value
Possible ties involving PrEP clients who initiated linkage within 3 months of the study participant's baseline visit	Intervention vs. control	1.50	(1.09, 2.06)	0.012
	Seed vs. recruit	0.71	(0.46, 1.11)	0.133
	No. of FB friends (thousands)	1.53	(1.38, 1.70)	< 0.001

Intervention Impact (Method 2)

Linking intervention events to PrEPline calls

	Estimate (95% CI)	p-value
Daily workshops		
Same day	0.08 (0.02, 0.13)	0.009
1 day lag	0.10 (0.04, 0.15)	0.001
2 day lag	0.06 (0.00, 0.12)	0.044
3 day lag	0.01 (-0.05, 0.08)	0.663
Daily boosters		
Same day	-0.07 (-0.14, 0.00)	0.054
1 day lag	0.05 (-0.03, 0.13)	0.251
2 day lag	-0.01 (-0.07, 0.05)	0.719
3 day lag	0.00 (-0.10, 0.11)	0.953
Day of week (vs. Mon-Fri)		
Saturday	-1.80 (-2.55, -1.05)	< 0.001
Sunday	-2.50 (-3.53, -1.46)	< 0.001
Constant	-0.14 (-0.38, 0.10)	0.249
Log(α)	-1.43 (-2.34, -0.52)	
σ^2	0.24 (0.09, 0.64)	

Table 3. Negative binomial mixed-effects regression of daily number of PrEPline calls on the number of intervention workshops and boosters, adjusting for day of week and weekly variation over study period.

Strengths

▸ **PrEP Chicago is pragmatic** -- it aims to leverage the naturally occurring networks of YBMSM and is designed to work within real-world constraints.

▸ **PrEP Chicago's use of Facebook is novel** – we use Facebook to draw connections between study participants and peers who initiate PrEP linkage, thereby allowing us to trace the impact of the intervention.

Limitations

▸ We lack a mechanism for tracing direct interactions between study participants and specific callers and clinic visitors.

▸ Some PrEP clients were not locatable on Facebook, resulting in a small n for deriving our PrEP linkage outcome.

▸ Referrals are likely to be made in social contexts not reflected on Facebook.

Looming questions and future directions

▸ Can we develop more reliable empirical measures of peer influence?

▸ What determines PCA engagement and effectiveness? Can we use these factors a priori to select more effective peer leaders in future interventions?

▸ What amount/type of staff interaction is most effective in keeping PCAs engaged and motivated? (i.e., dosage studies)

The PrEP Chicago Intervention Team:

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