

# Adherence and other Behavioral / Social Science Research in HPTN

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# HPTN Mission

The HIV Prevention Trials Network (HPTN) is a worldwide collaborative clinical trials network that brings together investigators, ethicists, community and other partners to develop and test the safety and efficacy of interventions designed to prevent the acquisition and transmission of HIV.

## Example behaviors relevant to any HIV prevention strategy

- Early ART requires excellent adherence
- Success of any biomedical prevention product may be affected by “risk compensation”
- Uptake of male circumcision requires motivation to seek it and avoid sexual contact during healing period
- Effectiveness of any biomedical product for HIV prevention (CONDOMS for example) require their use

# HPTN Research Agenda

Behavioral Science is integrated into all new studies and projects.

Priority areas in future projects:

1. To evaluate and optimize integrated strategies to prevent HIV infection

2. To evaluate and optimize the most promising pre-exposure prophylaxis (PrEP) regimens



# Adherence / behavioral components are important in ongoing trials (three examples)

- TLC Plus (065): Evaluating the **feasibility** of an enhanced community-level HIV test, link-to-care plus treat strategy in the U.S.
- POP ART: HPTN 071 (Population effect of universal testing and immediate ART therapy to Reduce HIV Transmission (21 communities in S. Africa and Zambia)
- HPTN 073: Initiation, acceptability, safety, and feasibility of PrEP for Black men who have sex with men in three (LA, DC, Chapel Hill) U.S. cities utilizing client-centered care coordination (C4) models



# Example completed study: HPTN 063: Prevention with Positives Preparedness Study

1. Quantitative: one year observational study of high risk HIV-positive individuals in HIV care
2. Qualitative: Single interview (10 per risk group per site) on cultural factors influencing risk

200 MSM

- Brazil (100)
- Thailand (100)

251 Heterosexual men

- Thailand (100)
- Brazil (64)
- Zambia (87)

299 Heterosexual women

- Thailand (100)
- Brazil (99)
- Zambia (100)



## Lessons from successful PrEP studies: The adherence-efficacy relationship

- CAPRISA (gel):

Adherence	HIV risk reduction
>80%	54%
50-80%	38%
<50%	28%

- iPrEX (MSM: HIV risk reduction was 99% when PrEP is taken 7 days a week (modeling data)
- Partners PrEP (heterosexual serodiscordant couples):
  - HIV risk reduction was 90% if TDF/FTC was detectable
  - Ancillary adherence substudy (AAS) = 0 infections in those on active study drug compared to 14 in placebo 95% CI 83.7-100%, p<0.001)
- Bangkok (IDU): HIV risk reduction was 74% if TDF was detectable