# HPTN 071 (PopART) at CROI 2017:



## Mid-Study Successes and Challenges



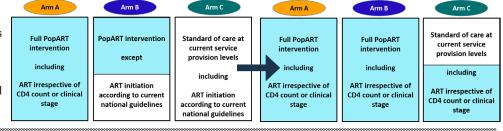


HPTN 071 (PopART) is a community-based, randomized study evaluating the impact of a combination HIV prevention package on HIV incidence. This study is the largest -- total estimated population 1 million -- community-randomized trial testing the universal HIV test and treat strategy and is being conducted across 21 high HIV burden, resource-limited urban settings in the Western Cape of South Africa and Zambia.

Study communities were randomly assigned to one of three study arms. In the original design of the study, Arm A received the household intervention package with the offer of HIV treatment irrespective of CD4 count, Arm B received the household intervention package but with HIV treatment offered according to national guidelines, and in Arm C there was no household intervention and treatment was per national guidelines. The household intervention comprises annual rounds of home-based HIV counseling and testing delivered by Community HIV Care Providers (CHiPs) who also support

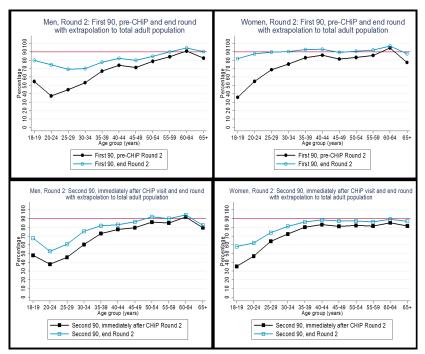
linkage to care, retention on antiretroviral therapy (ART) and other HIV-related services. In late 2015, in response to mounting evidence of clinical benefit, the World Health Organization (WHO) revised its guidelines to recommend ART for all people living with HIV. The PopART study team responded by incorporating this recommendation into the study design, making ART available for all people living with HIV in all study arms. As a result, the offerings in Arms A and B became the same—household intervention package plus offer of HIV treatment irrespective of CD4 count. **3** arm cluster randomized trial with 21 communities

HIV incidence, the study's primary outcome, will be assessed through a research cohort (population cohort) of randomly-selected adults from all study communities, approximately 42,000 individuals, to be followed for three years. Findings from this study will also help inform the scale-up of future HIV programs and identify cost-effective interventions.



### Advancing Towards the First and Second 90 Targets – The Importance of Repeated Home Visits

The HPTN 071 (PopART) study previously reported that one round of household visits to provide HIV testing and linkage to care in study communities substantially increased the percentage of adults who knew their HIV status, and the percentage of HIV-infected clients on ART. The findings from the four Arm A communities in Zambia, after a second round of household visits, show an increase in the estimated percentage of HIV-infected community members who knew their status to 86% (approaching the first 90) and the percentage of those on ART among those aware of their HIV infection to 80% (approaching the second 90). The largest gains were seen among those who did not participate in the prior round (most commonly because they were not previously resident in the community). Older adults achieved consistently higher ART coverage than younger adults although overall coverage increased across all age ranges. The high mobility, especially amongst the young (18-30 year olds), and large number of new individuals accepting testing for the first time in the second round emphasize the need for repeated visits in these high density urban communities if the UNAIDS targets are to be achieved. In addition, there remains a key need for additional strategies to reach young adults.



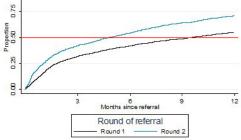
Reaching 90-90-90? Findings After 2 Years of HPTN 071 (PopART) Intervention in Zambia Richard Hayes et al., London School of Hygiene and Tropical Medicine, London, United Kingdom Abstract #1011 (Poster P-W2 INTERVENTIONS TO IMPROVE THE CARE CASCADE Poster Hall - 4 EF, Tuesday, February 14, 2:30 PM - 4:00 PM)

# Repeated Delivery of Intervention Achieves Higher Awareness of HIV-positive Status and ART Initiation with Quicker Initiation of ART

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At the end of a second round of the PopART intervention in four Arm A communities in Zambia, 78% of known HIV-positive men and 79% of known HIV-positive women were on ART. This is compared with 64% and 69%, respectively, at the start of the round. Initiation on ART by six months after referral to HIV care increased from ~40% in the first round of the intervention to ~55% in the second round. The shorter time to ART initiation in the second round was likely attributable to several factors including an increased focus of the community health workers on linkage to care in the second round compared with the first round, an increasing familiarity with and acceptance of the intervention with time, and increased coordination between community health workers and the clinic to facilitate linkage.

Time to start ART after CHiP Referral to care, by round in which referral was given



#### Art Coverage After 2 Years of a UTT Intervention in Zambia: Findings from HPTN071 Sian Floyd et al., London School of Hygiene and Tropical Medicine, London, United Kingdom Abstract #1010 (Poster P-W2 INTERVENTIONS TO IMPROVE THE CARE CASCADE Poster Hall - 4 EF, Tuesday, February 14, 2:30 PM - 4:00 PM)

### Home-Based Testing Enhances Knowledge of HIV Status Among Pregnant Women Who Have Not Yet Accessed ANC Testing



#### Field counseling and testing visit



Household-based rapid HIV testing

During home visits in four study communities in Zambia, nearly 40% of the pregnant women had not yet tested for HIV through ANC services. HIV prevalence among these women was high at 12.3% of those accepting HIV testing, nearly double the rate seen among women in ANC programs (6.3%). Among all pregnant women participating in the intervention, knowledge of HIV status – defined as self-reported HIV-positive, tested by study staff in the household, or tested elsewhere within the past six months – increased from 60% before the PopART household intervention to 95.1%. Community-wide, home-based testing may be an important tool for finding undiagnosed HIV infections among pregnant women, particularly those not yet tested in antenatal care.

HPTN 071 Home-Based Testing Improves Uptake of HCT Among Pregnant Women in Zambia Stable Besa et al., Zambart, Lusaka, Zambia Abstract #959 (Poster P-U1 STRATEGIES TO INCREASE HIV TESTING Poster Hall - 4 EF, Tuesday, February 14, 2:30 PM - 4:00 PM)

### Home-Based Delivery of HIV Counseling and Testing (HCT) is Acceptable Among Adolescents, But Complementary Strategies for Finding Young Men May Be Required

Young people living in high HIV burden communities are particularly vulnerable to HIV acquisition in addition to being the most challenging age group to engage in testing and accessing care. Uptake of the community-wide household based offer of HIV testing with linkage to services for HIV-positive and negative youth through the PopART intervention was very high (97.7%) among adolescents 15-19 years old who were reached in the household of four Arm A communities in Zambia. The acceptance rate of HCT among these young men and women was high, and similar for women and men, at 81.4% and 80.4% respectively. Following the CHiPs' visit, knowledge of HIV status among young men and women found in the households - defined as self-reported HIV-positive, receiving HCT from the CHiPs or reporting an HIV-negative test in the previous 12 months – increased from 26.5% to 88.4% among those who consented to the intervention. However, while uptake of HCT was dramatically enhanced through the household approach for those present, further efforts are needed to reach young men as more males (32.7%) than females (20.2%) were not at home at the time of CHIPs visits to be offered the intervention.

| Indicator   | Baseline               | End of<br>Annual Round |
|---|------------------------|------------------------|
| Self reported HIV positive                          | 62                     | 62                     |
| Tested in last 12 months<br>(Accepted HCT by CHiPs) | 1,803                  | 1,803                  |
| Tested in last 12 months<br>(Declined HCT by CHiPs) | 704                    | 704                    |
| Accepted HCT (not tested in last 12 months)         | *NA                    | 5,987                  |
| TOTAL   | 2,569                  | 8,556                  |
| Known HIV status at different study points (%)      | 26.5%<br>(2,569/9,683) | 88.4%<br>(8,556/9,683) |

#### Community Intervention Improves Adolescent HIV Status Knowledge: HPTN 071 Study, Zambia

Kwame Shanaube et al., Zambart, Lusaka, Zambia

Abstract #834 (Poster P-R6 APPROACHING 90:90:90 IN ADOLESCENTS AND YOUNG ADULTS Poster Hall - 4 EF, Wednesday, February 15, 2:30 PM - 4:00 PM and Themed Discussion TD-12 THE IMPOSSIBLE DREAM: POPULATION PERSPECTIVES ON 90:90:90 IN ADOLESCENTS AND YOUNG ADULTS Room 615-617, Thursday, February 16, 1:30 PM - 2:30 PM)





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