CONTROLLING THE HIV EPIDEMIC WITH ANTIRETROVIRALS

Having the Courage of Our Convictions

1-2 October 2015 • Paris

Community-Based TasP Trials: Updates and Projected Contributions

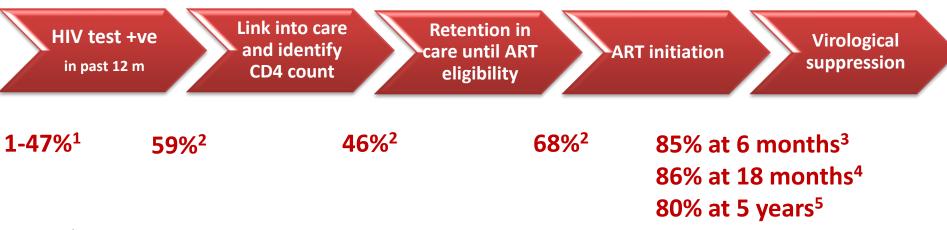
Reaching the 90-90-90 target: Lessons from HPTN 071 (PopART)



Sarah Fidler

CONTROLLING THE HIV EPIDEMIC WITH ANTIRETROVIRALS Having the Courage of Our Convictions

Cascade of Care: Sub-Saharan Africa



Caution:

Estimates from a meta-analysis of studies or studies which examined individual stages in the cascade. Extrapolation to obtain an overall proportion could lead to inaccuracies.

- 1. UNAIDS report on the global AIDS epidemic 2013
- 2. Rosen & Fox 2011

3. De Luca et al 2011

4. Elul et al, 2013

5. De Beaudrap, 2012

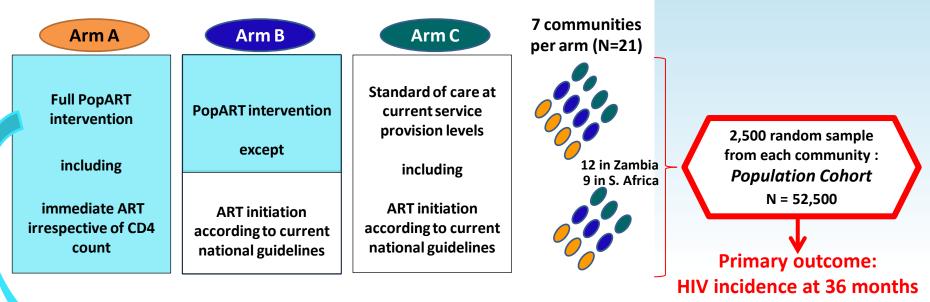
What research do we need?

- Implementation science
 - Learning by doing
 - Practical experience and data from UTT programmes on the ground
 - Demonstration projects
 - Routine programme monitoring (data improvement)
- Randomised trials
 - Rigorous data on impact on HIV incidence at population level
 - Direct comparison of benefits and harms
 - Evidence-based data on cost-effectiveness





3 arm cluster-randomised trial with 21 communities



PopART intervention package

- > Annual rounds of Home Based Voluntary HIV Testing by Community HIV-care Providers (CHiPs)
- > Health promotion, Active Referral and/or Retention in Care support by CHiPs for the following:
 - Voluntary Medical Male Circumcision (VMMC) for HIV negative men
 - Prevention of Mother to Child Transmission (PMCT) for HIV positive women
 - HIV treatment and care for all HIV positive individuals
 - Promotion of sexual health and TB services
 - Condom provision

> ART irrespective of CD4-count or immune-status provided at the local health centre in Arm A





Questions from HPTN 071 (PopART)

- Can the 90-90-90 targets be achieved?
- What coverage was achieved by PopART intervention during the first annual round?
- How much closer did we get to the 90-90-90 targets as a result of the intervention?
- What were the main challenges during the first round?
- Using CHiPs data from the four Arm A communities in Zambia to address these questions

Getting to the first 90% uptake of HIV testing across entire community

Home-based HIV testing: Coverage

Author	Year			Proportion (95% CI)	Number offered HBT	Number accepting HBT	
Kenya Negin Kimaiyo	2009 2010		• •	97.57 (96.85, 98.19) 89.02 (88.83, 89.21)		1984 90062	
Malawi Helleringer Angotti 1 Angotti 2 Molesworth Choko Kranzer	2009 2009 2009 2010 2011 2008	+ • • •	-	77.86 (74.82, 80.75) 79.08 (77.75, 80.39) 79.44 (78.07, 80.77) 64.04 (63.31, 64.76) 91.48 (87.41, 94.81) 70.48 (68.49, 72.44)	3659 3459 16894 216	585 2894 2748 10819 198 1443	
South Africa Shisana Welz 2 Welz 1 Maheswaran	2004 2007 2007 2012	÷	•	88.72 (88.10, 89.34) 60.14 (56.95, 63.29) 58.14 (57.45, 58.83) 91.81 (90.47, 93.05)	916 19867	8840 551 11551 1585	
Uganda Matovu Were Wolff Were Menzies Tumwesigye Lugada Sekandi	2002 2003 2005 2006 2009 2010 2010 2011	+	•	89.50 (88.94, 90.05) 99.54 (99.28, 99.74) 67.74 (65.43, 70.02) 98.93 (98.47, 99.30) 99.72 (99.67, 99.76) 93.67 (93.58, 93.76) 88.99 (88.09, 89.86) 69.35 (65.57, 73.01)	3338 1591 2373 49470 282857 4798	10480 3323 1078 2348 49331 264966 4270 408	
Zambia Michelo Overall (I-sq	2006 juared = 100.0%, p = 0.000)	<	•	90.22 (89.42, 91.00) 83.25 (80.42, 86.08)		4913 udies (N offere	ed = 524,867)
NOTE: Weig	hts are from random effects	analysis I I 80	10 Percer		-		

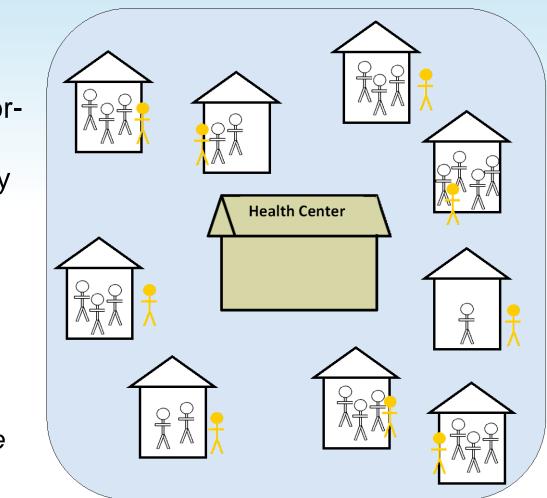
Sabapathy et al, 2012



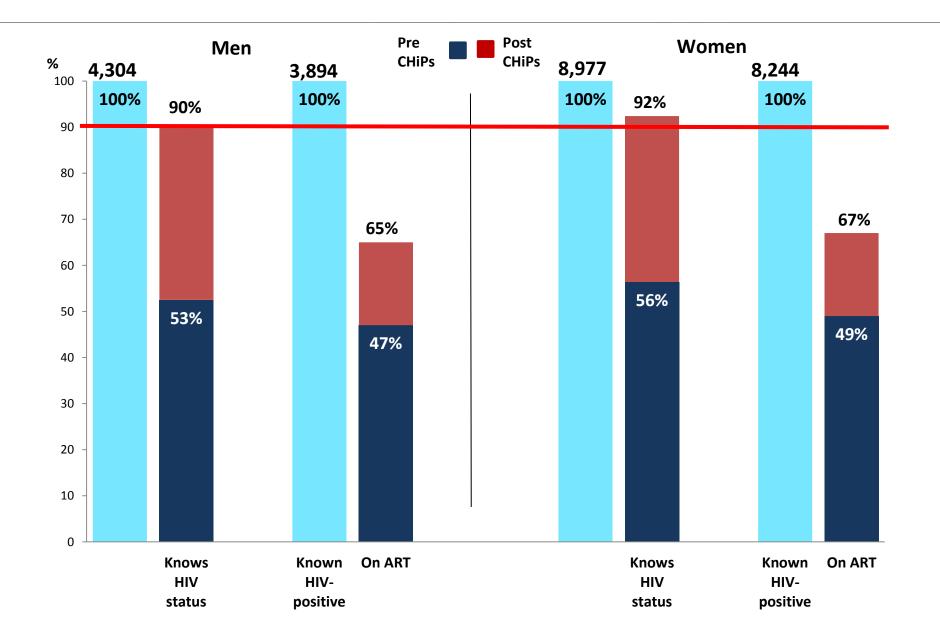


The PopART Intervention Package

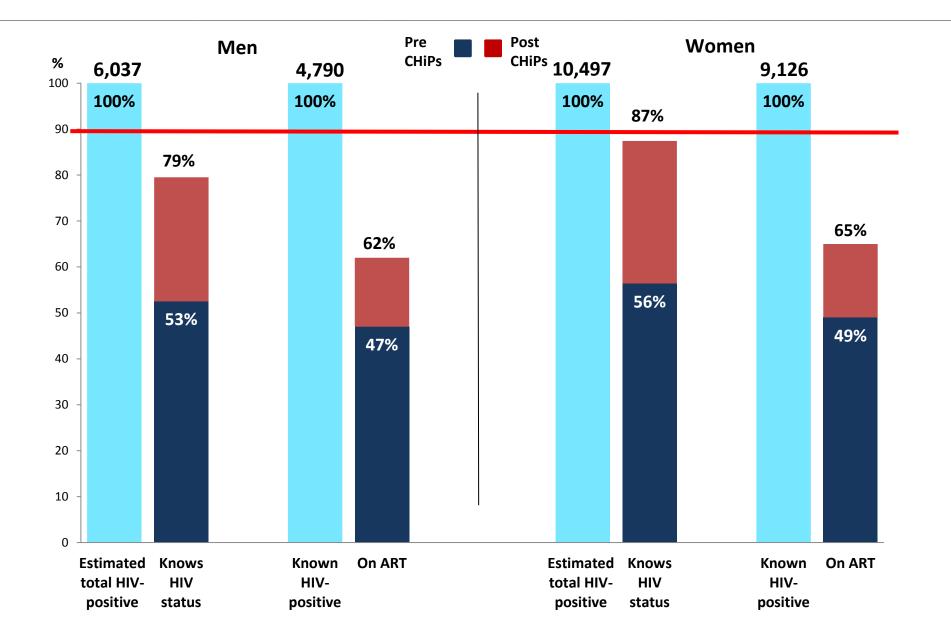
 Universal voluntary HIV testing delivered annually through doorto-door, home-based testing by Community HIV Prevention (CHiPS) teams



Estimated uptake of testing in those consenting



90-90: Estimated uptake in total adult population







Getting to the second 90% uptake of ART for across entire community of people living with HIV within a community









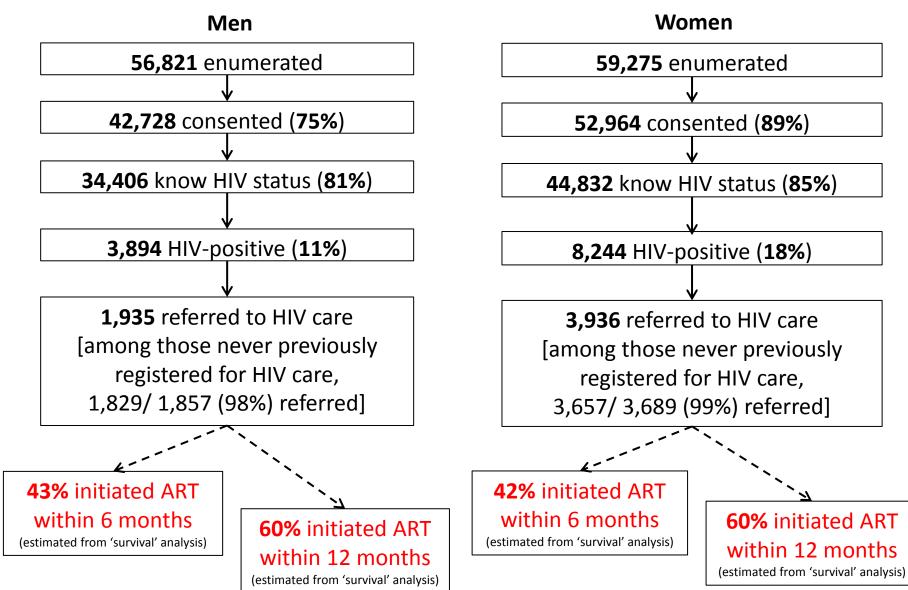
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National Institutes of Health

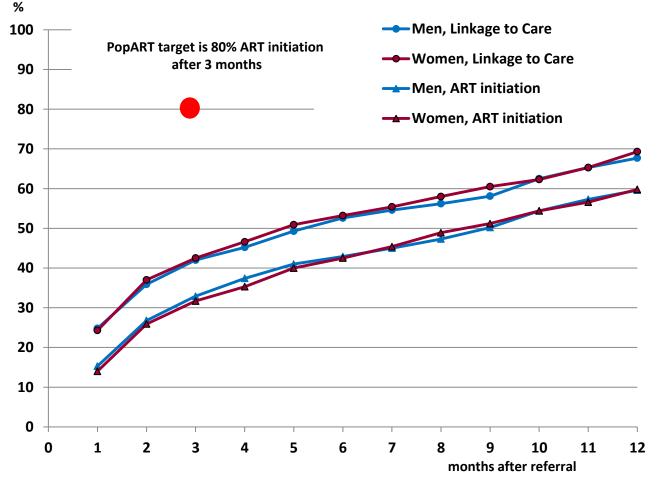
Cascade of care from enumeration through ART initiation: First round



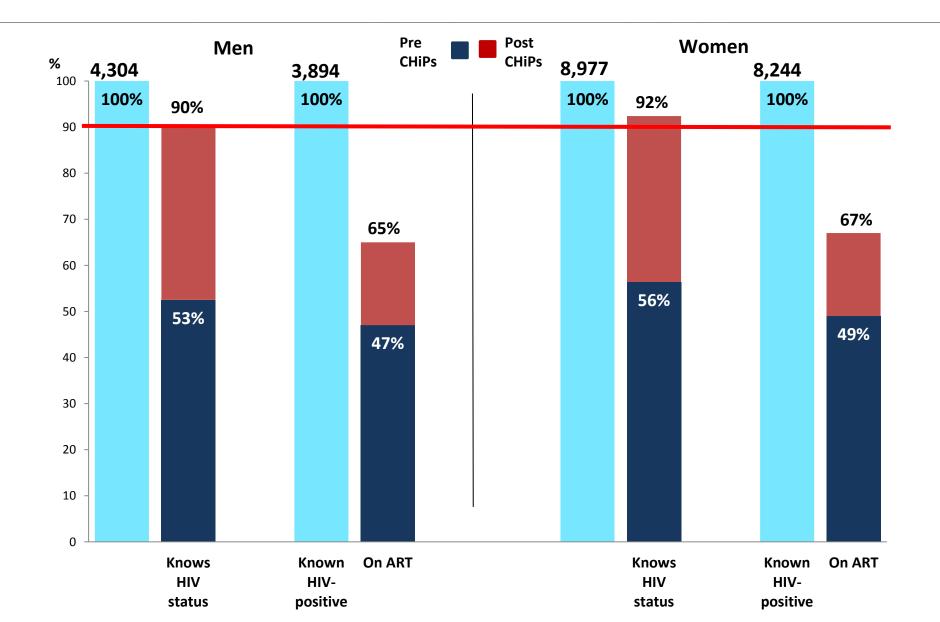




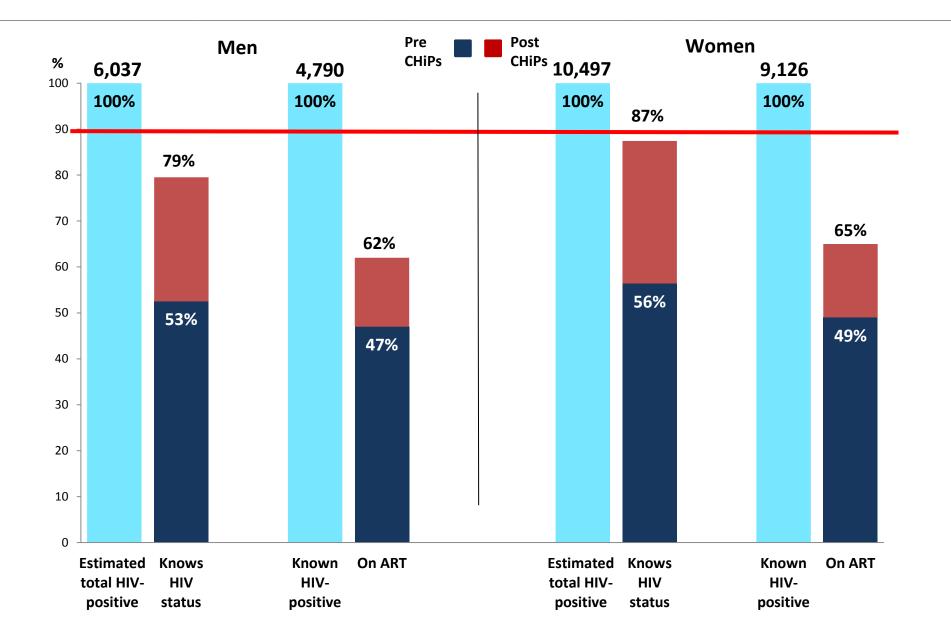
Time from referral to linkage to care and ART initiation: First round



90-90: Estimated uptake in those consenting



90-90: Estimated uptake in total adult population



INNOVATIONS TO ENHANCE COVERAGE

HIV Testing

Self testing Opt out testing in clinics Work place testing Out of hours HH visits Weekend HH visits Male campaigns Targeted adolescent programs



ART initiation

Expedite ART "readiness" visits Community ART delivery for stable patients Possible HH ART delivery for stable patients by CHiPs teams







Limitations

- Estimates based on adults who are enumerated and consent to intervention
- These represent approximately 72% of men and 85% of women in these communities
- Assumptions needed to estimate knowledge of HIV+ status and proportion on ART in total adult population
- In longer term will have data on uptake from Population Cohort (random sample of adults in population)





Conclusions

- Substantial increase in uptake during first annual round
- Knowledge of HIV+ status close to 90% target in women and around 80% in men
- Proportion of known HIV+ on ART 65% and increasing
- Main challenges during first round
 - Uptake of intervention and testing among men
 - Rapid linkage to HIV care and ART initiation
- These will be prioritised during second round CHiPs approach allows for continuous improvement in uptake
- Data on the third 90 retention and viral suppression next year!

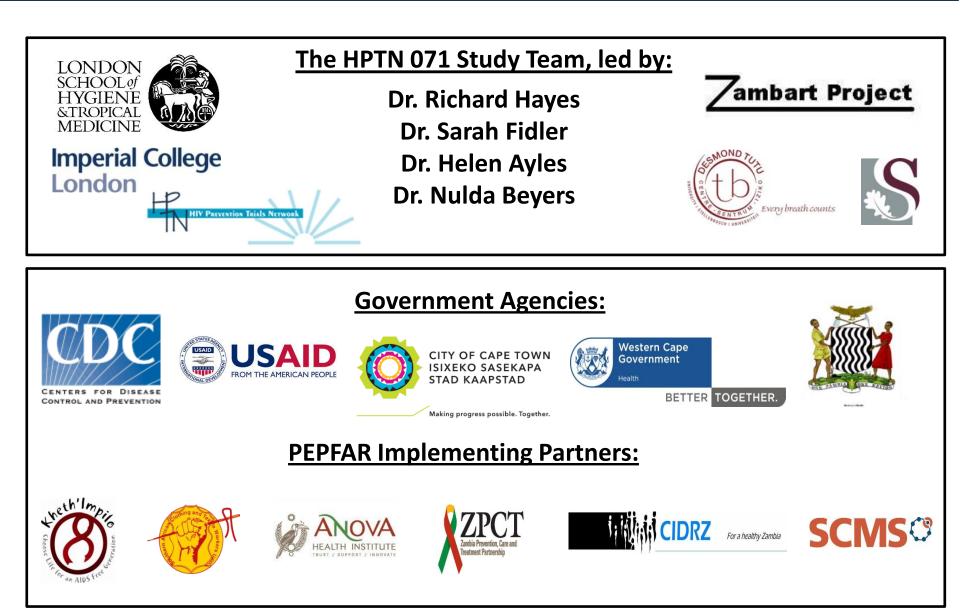
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Assumptions made to estimate overall knowledge of HIV status and on ART

- HIV prevalence in those who "do not know status" after CHiPs visit same as in those who accept HCT
- Among those consenting to intervention, all HIV+ who knew their status self-reported this to the CHiP
- HIV prevalence in those not consenting to intervention same as in those consenting
- Proportion of HIV+ who knew their status same in those not consenting as in those consenting (at time of CHiP visit)
- Proportion of known HIV+ on ART same in those not consenting as in those consenting (at time of CHiP visit)





What difference did we make? First round

		Men		Women	
	Pre- or Post- Round 1 CHiP visit	n/ N	%	n/ N	%
(1) Knows HIV status /	Pre	8,106 / 42,728	19%	13,943 / 52,964	26%
all who consented	Post	34,406 / 42,278	81%	44,832 / 52,964	85%
(2) Known HIV-positive /	Pre	2,272 / 42,728	5.3%	5,035 / 52,964	9.5%
all who consented	Post	3,894 / 42,728	9.1%	8,244 / 52,964	15.6%
(3) In HIV care /	Pre	2,015 / 3,894	52%	4,520 / 8,244	55%
all known HIV-positive	Post	2,484 / 3,454	72%	5,503 / 7,457	74%
(4) On ART /	Pre	1,826 / 3,894	47%	4,070 / 8,244	49%
all known HIV-positive who were still resident March 31 2015	Post	2,257 / 3,454	65%	5,036 / 7,457	67%





