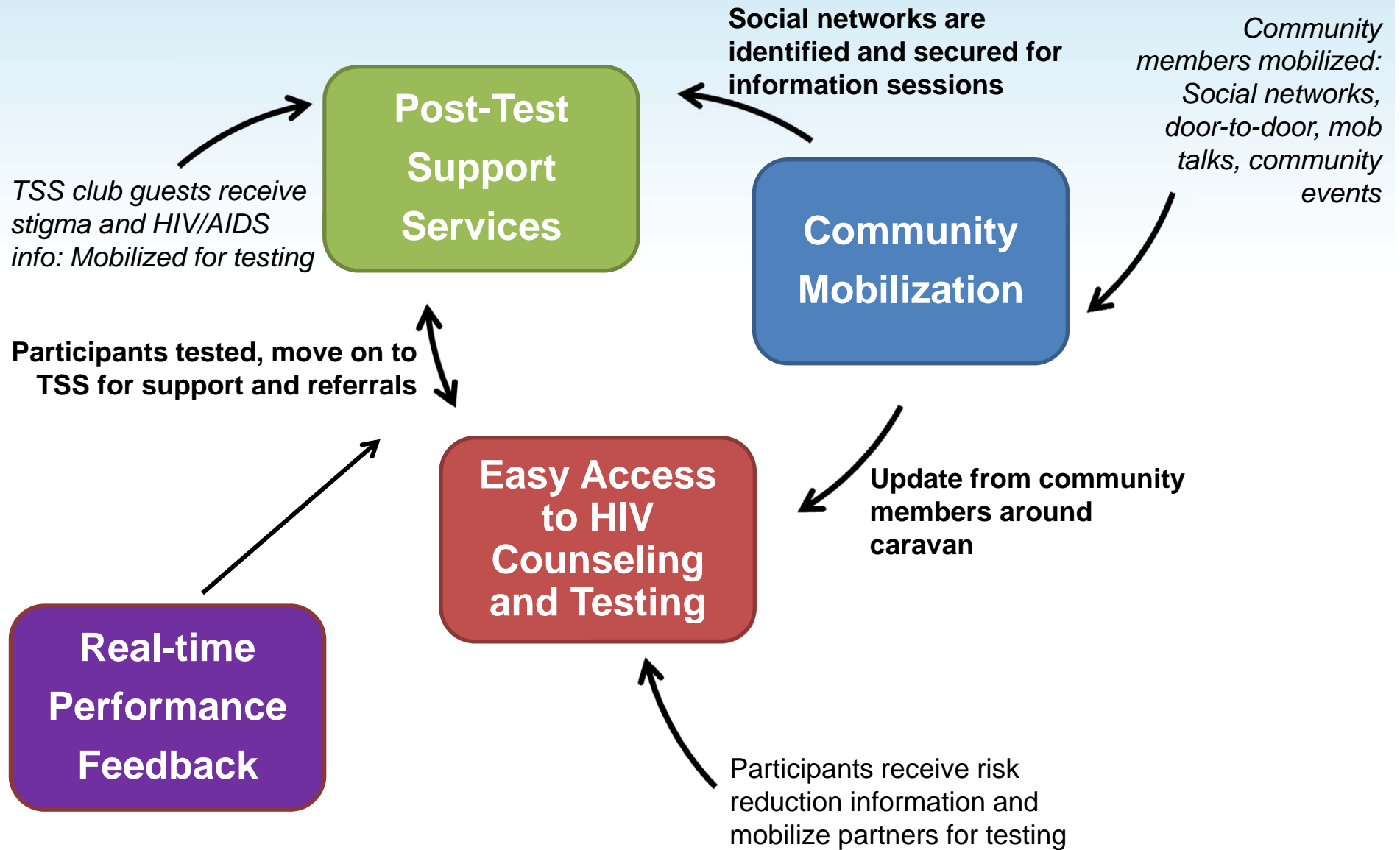


Supplementary appendix

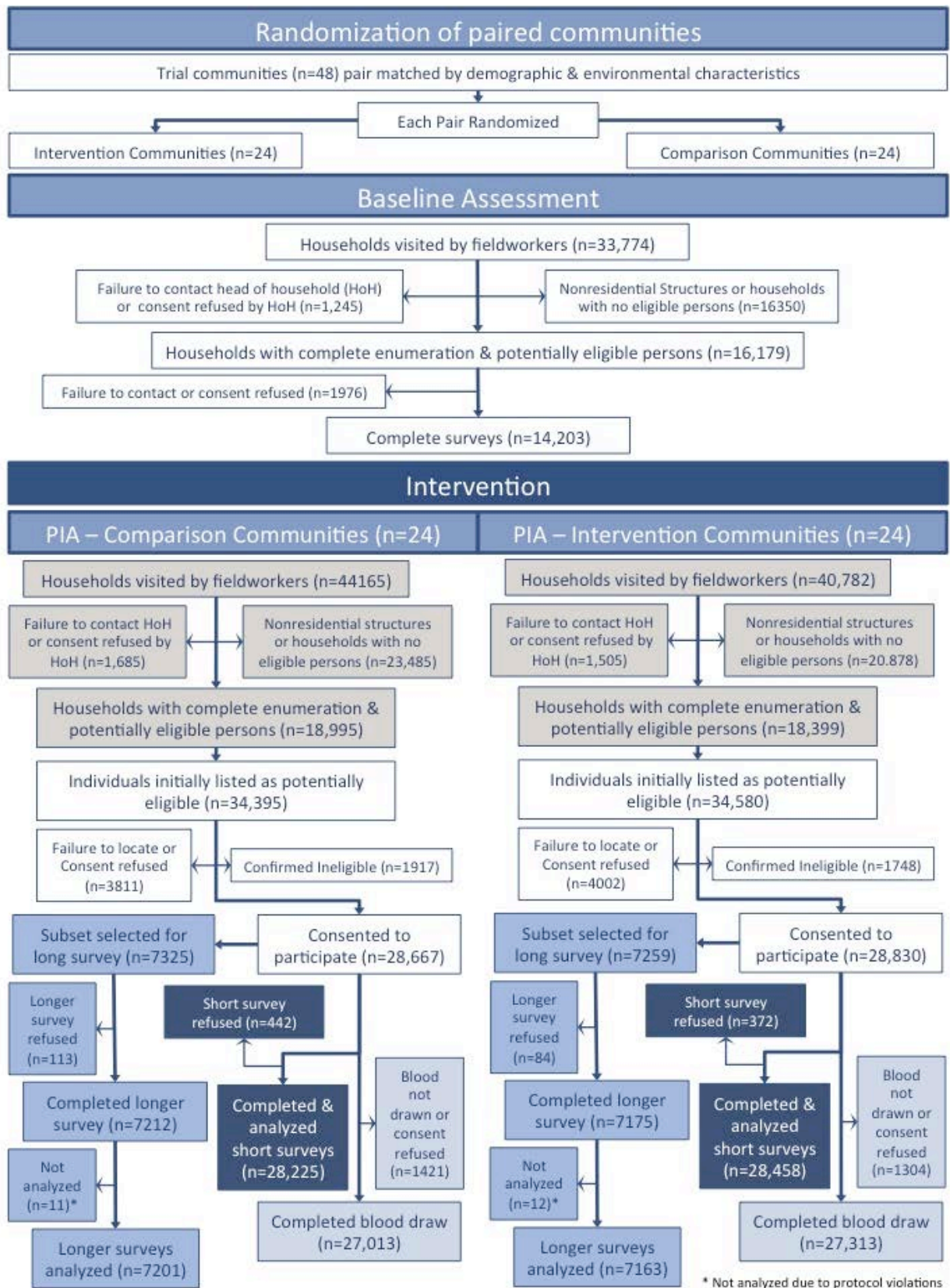
This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Coates TJ, Kulich M, Celentano DC, et al, and the NIMH Project Accept (HPTN 043) study team. Effect of community-based voluntary counselling and testing on HIV incidence and social and behavioural outcomes (NIMH Project Accept; HPTN 043): a cluster-randomised trial. *Lancet Glob Health* 2014; published online April 9. [http://dx.doi.org/10.1016/S2214-109X\(14\)70032-4](http://dx.doi.org/10.1016/S2214-109X(14)70032-4).

Online Supplement Figure S1. Study Intervention Diagram



Online Supplement Figure S2. Participant Flow Diagram



Online Supplement Table S1. Summary of blood sample collection at the post-intervention assessment

	Thailand		Zimbabwe		Tanzania		KwaZulu-Natal		Soweto		African sites	
	CBVCT	SVCT	CBVCT	SVCT	CBVCT	SVCT	CBVCT	SVCT	CBVCT	SVCT	CBVCT	SVCT
Post-intervention assessment participants												
All subjects	4,607	4,639	8,061	7,975	5,856	5,631	6,789	6,797	9,267	9,360	29,973	29,763
Failure to contact	347 (7•5%)	316 (6•8%)	653 (8•1%)	479 (6•0%)	168 (2•9%)	177 (3•1%)	175 (2•6%)	122 (1•8%)	1,425 (15•4%)	1,515 (16•2%)	2,421 (8•1%)	2,293 (7•7%)
Refused to participate	125 (2•7%)	117 (2•5%)	753 (9•3%)	725 (9•1%)	61 (1•0%)	80 (1•4%)	61 (0•9%)	55 (0•8%)	234 (2•5%)	227 (2•4%)	1,109 (3•7%)	1,087 (3•7%)
Ineligible	146 (3•2%)	154 (3•3%)	373 (4•6%)	387 (4•9%)	485 (8•3%)	542 (9•6%)	474 (7•0%)	560 (8•2%)	270 (2•9%)	274 (2•9%)	1,602 (5•3%)	1,763 (5•9%)
No blood collection consent	198 (4•3%)	217 (4•7%)	344 (4•3%)	414 (5•2%)	455 (7•8%)	465 (8•3%)	120 (1•8%)	93 (1•4%)	187 (2•0%)	232 (2•5%)	1,106 (3•7%)	1,204 (4•0%)
Blood sample unavailable	4 (0•1%)	3 (0•1%)	15 (0•2%)	13 (0•2%)	3 (0•1%)	10 (0•2%)	46 (0•7%)	37 (0•5%)	153 (1•6%)	181 (1•9%)	217 (0•7%)	241 (0•8%)
Blood sample available	3,787 (82•2%)	3,832 (82•6%)	5,923 (73•5%)	5,957 (74•7%)	4,684 (80•0%)	4,357 (77•4%)	5,913 (87•1%)	5,930 (87•2%)	6,998 (75•5%)	6,931 (74•0%)	23,518 (78•5%)	23,175 (77•9%)
Response rates												
Stepwise ^a	95•0%	94•6%	94•3%	93•4%	90•1%	89•1%	97•3%	97•9%	95•5%	94•6%	94•3%	93•8%
Cumulative ^b	83•3%	84•5%	73•4%	75•3%	84•8%	83•1%	93•5%	94•8%	74•9%	72•4%	81•6%	81•4%

^a Response rate for obtaining a sufficient blood sample from successfully contacted eligible subjects

^b Cumulative response rate takes into account failure to contact the selected household or individual and confirm eligibility.

Online Supplement Table S2. Intervention effect on HIV testing. HIV testing uptake was measured by the proportion of participants who reported at least one HIV test in the past 12 months and 36 months (post-intervention assessment only). RR: relative risk of being tested for CBVCT arm vs. SVCT arm. The intervention effect is expressed as post-intervention relative risk, unadjusted for baseline (sparse data on testing at baseline).

<i>12 month testing uptake</i>	Baseline Assessment			Post-Intervention Assessment				
	CBVCT	SVCT	RR	CBVCT	SVCT	RR	95% CI	P-value
	<i>n=7145</i>	<i>n=7013</i>		<i>n=7000</i>	<i>n=7019</i>			
All sites	0.14	0.16	0.87	0.32	0.26	1.25	1.12 – 1.39	0.0003
<i>Thailand</i>	0.17	0.17	1.05	0.24	0.15	1.56	1.34 – 1.83	
<i>Zimbabwe</i>	0.03	0.07	0.43	0.32	0.26	1.20	0.83 – 1.72	
<i>Tanzania</i>	0.16	0.15	1.05	0.37	0.32	1.13	1.04 – 1.23	
<i>KwaZulu-Natal</i>	0.19	0.20	0.94	0.40	0.35	1.14	0.61 – 2.13	
<i>Soweto</i>	0.31	0.33	0.93	0.41	0.37	1.10	0.76 – 1.61	
<i>36 month testing uptake</i>	Baseline Assessment			Post-Intervention Assessment				
				CBVCT	SVCT	RR	95% CI	P-value
				<i>n=7017</i>	<i>n=7034</i>			
All sites	<i>Data not available</i>			0.49	0.39	1.27	1.15 – 1.41	<0.0001
<i>Thailand</i>				0.51	0.32	1.59	1.31 – 1.94	
<i>Zimbabwe</i>				0.42	0.35	1.20	0.96 – 1.51	
<i>Tanzania</i>				0.51	0.43	1.18	1.06 – 1.32	
<i>KwaZulu-Natal</i>				0.48	0.41	1.18	0.73 – 1.91	
<i>Soweto</i>				0.54	0.50	1.08	0.80 – 1.44	

Online Supplement Table S3. Intervention effect on HIV testing by gender. HIV testing uptake was measured by the proportion of participants who reported at least one HIV test in the past 12 months. RR: relative risk of being tested for CBVCT arm vs. SVCT arm. The intervention effect is expressed as post-intervention relative risk, unadjusted for baseline (sparse data on testing at baseline).

	Baseline Assessment			Post-Intervention Assessment				
	CBVCT	SVCT	RR	CBVCT	SVCT	RR	95% CI	P-value
All sites								
<i>Men</i>	0.09	0.08	1.13	0.24	0.16	1.45	1.25 – 1.69	< 0.0001
<i>Women</i>	0.19	0.22	0.86	0.39	0.34	1.15	1.03 – 1.28	0.0134
Thailand								
<i>Men</i>	0.13	0.11	1.21	0.19	0.11	1.82	1.36 – 2.42	
<i>Women</i>	0.21	0.21	1.00	0.28	0.20	1.40	1.14 – 1.73	
Zimbabwe								
<i>Men</i>	0.03	0.03	1.00	0.25	0.16	1.56	1.08 – 2.27	
<i>Women</i>	0.04	0.10	0.43	0.37	0.36	1.02	0.69 – 1.53	
Tanzania								
<i>Men</i>	0.05	0.06	0.79	0.26	0.18	1.42	1.10 – 1.84	
<i>Women</i>	0.26	0.23	1.14	0.45	0.44	1.03	0.93 – 1.14	
KwaZulu-Natal								
<i>Men</i>	0.11	0.09	1.19	0.30	0.21	1.41	0.68 – 2.95	
<i>Women</i>	0.25	0.28	0.89	0.47	0.46	1.03	0.57 – 1.86	
Soweto								
<i>Men</i>	0.19	0.18	1.05	0.25	0.25	0.96	0.60 – 1.54	
<i>Women</i>	0.42	0.45	0.93	0.54	0.46	1.17	0.85 – 1.61	

Online Supplement Table S4. Intervention effect on social norms regarding HIV testing. Social norms were measured by scores ranging from 0 to 3, higher values corresponding to more favorable social norms. Mean social norms scores are shown in CBVCT/SVCT columns. The intervention effect is expressed as the relative change in post-intervention vs. baseline ratio.

	Baseline Assessment			Post-Intervention Assessment			Intervention effect adjusted for baseline		
	CBVCT	SVCT	Ratio	CBVCT	SVCT	Ratio	Effect	95% CI	P-value
	<i>n=7146</i>	<i>n=7019</i>		<i>n=7044</i>	<i>n=7067</i>				
All sites	1.26	1.25	1.01	1.38	1.29	1.07	1.06	1.03 – 1.09	0.0001
<i>Thailand</i>	1.47	1.47	1.00	1.66	1.53	1.09	1.09	1.02 – 1.16	
<i>Zimbabwe</i>	1.16	1.13	1.02	1.39	1.28	1.09	1.07	1.00 – 1.13	
<i>Tanzania</i>	1.33	1.35	0.98	1.38	1.34	1.03	1.05	1.01 – 1.09	
<i>KwaZulu-Natal</i>	1.08	1.11	0.98	1.20	1.13	1.05	1.07	0.97 – 1.18	
<i>Soweto</i>	1.15	1.07	1.08	1.17	1.07	1.09	1.01	0.88 – 1.15	

Online Supplement Table S5. Intervention effect on sexual risk behavior. Sexual risk of HIV acquisition was measured by the monthly number of unprotected sexual acts averaged over the past 6 months. Mean monthly number of unprotected sexual acts is shown in CBVCT/SVCT columns. The intervention effect is expressed as the relative change in post-intervention vs. baseline ratio.

	Baseline Assessment			Post-Intervention Assessment			Intervention effect adjusted for baseline		
	CBVCT	SVCT	Ratio	CBVCT	SVCT	Ratio	Effect	95% CI	P-value
	<i>n=7093</i>	<i>n=6935</i>		<i>n=28,170</i>	<i>n=27,877</i>				
All sites	3.97	3.76	1.06	4.39	4.27	1.03	0.97	0.89 – 1.06	0.5333
<i>Thailand</i>	5.42	4.62	1.18	5.56	4.98	1.12	0.95	0.86 – 1.05	
<i>Zimbabwe</i>	5.11	5.86	0.87	7.10	7.57	0.94	1.08	0.88 – 1.31	
<i>Tanzania</i>	3.65	3.78	0.96	4.34	4.49	0.97	1.00	0.74 – 1.36	
<i>KwaZulu-Natal</i>	2.43	2.28	1.06	2.27	2.16	1.05	0.99	0.66 – 1.48	
<i>Soweto</i>	3.25	2.75	1.18	3.53	3.42	1.03	0.88	0.54 – 1.43	

Online Supplement: Search Terms for Panel: Research in Context

Search terms for primary outcomes (from Suthar et al*)	
Search number	Search term
1.	HIV
2.	human immunodeficiency virus
3.	1 or 2
4.	counsel
5.	test
6.	testing
7.	tested
8.	5 or 6 or 7
9.	community
10.	home
11.	house
12.	door
13.	mobile
14.	campaign
15.	bar
16.	workplace
17.	business
18.	church
19.	temple
20.	active
21.	school
22.	highway
23.	brothel
24.	bathhouse
25.	festival
26.	outreach
27.	van
28.	bicycle
29.	9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28
30.	3 and 4 and 8 and 29

* Suthar AB, Ford N, Bachanas PJ, et al. Towards universal voluntary HIV testing and counselling: a systematic review and meta-analysis of community-based approaches. *PLoS Med.* 2013 Aug;10(8):e1001496.

Online Supplement: *Panel: Research in context* – Interpretation (additional information)

Mobile HIV testing and counselling uptake in key populations (men who have sex with men, people who inject drugs, female sex workers, and adolescents) ranged from 9% to 100% (in 41 110 participants across studies), with heterogeneity related to how HIV testing was offered. Community-based approaches increased HIV testing and counselling uptake (relative risk [RR] 10.65, 95% confidence interval [CI] 6.27-18.08), the proportion of first-time testers (RR 1.23, 95% CI 1.06-1.42), and the proportion of participants with CD4 counts above 350 cells/ μ l (RR 1.42, 95% CI 1.16-1.74), and obtained a lower positivity rate (RR 0.59, 95% CI 0.37-0.96), relative to facility-based approaches. They found that 80% (95% CI 75%-85%) of 5,832 community-based HTC participants obtained a CD4+ T-cell measurement following diagnosis of HIV, and 73% (95% CI 61%-85%) of 527 community-based HTC participants started antiretroviral therapy following a CD4+ T-cell measurement signifying eligibility. Few data were available for linkage of HIV-negative participants to prevention services. No studies reported harm as a result of having been tested. In these studies, community-based HTC achieved high rates of HTC uptake, reached people with high CD4 T-cell counts, and linked people to care. It also obtained a lower HIV positivity rate relative to facility-based approaches.