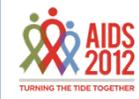


# A sport-based intervention to increase linkage to care



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## Introduction

In Zambia, only 13% of youth report having ever been tested for HIV (NAC, 2009). Numerous barriers inhibit testing uptake, including lack of knowledge of where to get tested, fear of finger pricks, and concern over the stigma attached to HIV. In an attempt to tackle these barriers, Grassroot Soccer (GRS) created an innovative sport-based intervention: the SKILLZ VCT Event (SVE).

SVE's combine an HIV prevention curriculum, community outreach, and soccer to motivate youth to make use of HIV testing and develop healthy behaviors at a critical age.

All youth testing HIV positive at SVE's are referred to a local pediatric HIV clinic where they are followed-up for treatment and care.



Behavioral Interventions use the SKILLZ curriculum to teach HIV prevention and life skills. Testing Events empower participants to know their HIV status. Members of a local HIV+ women's group provide home-based counseling alongside GRS coaches. Any participant that tests HIV+ is referred to our treatment partner, Tiny Tim & Friends.

Figure 1: 'Bridge the Gap' model linking HIV prevention, testing, treatment and care.

## Materials and methods

Process data was collected between June 2010 and November 2011 in Lusaka, Zambia.

Data collected from SVE's included:

- number of individuals tested,
- demographics of those testing,
- enrollment of young people into treatment and care,
- eligibility and adherence,
- loss to follow-up after 6 months

Data analyzed using chi-square for enrollment.

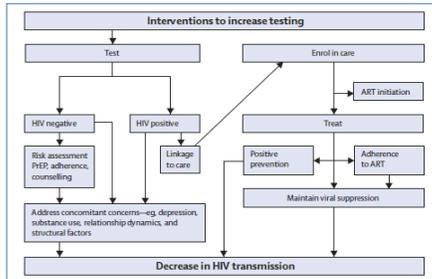


Figure 2: Framework of combination prevention. (K. Mayer, HIMS)

Figure: Combination antiretroviral prevention ART+antiretroviral treatment. PrEP=Pre-exposure prophylaxis.

## Results

In total, 6,859 youth tested at 72 SVE's in 18 months. During this time period, GRSZ worked with just over 11,000 youth, yielding a VCT uptake rate of 62%.

In all, 110 youth under 20 years tested positive (1.6% HIV prevalence).

From the total HIV positive youth, 45 (40.9%) were successfully enrolled into care at pediatric clinic.

Of these, 5 patients (11.1%) were lost to follow-up after 6 months.

In December 2010, in an effort to increase enrollment, GRS peer educators began making home visits to follow-up youth testing HIV positive at SVE's and accompany them to their first clinical visit. After December 2010, enrollment into care increased from 12.3% to 71.7% (p<0.001).



Figure 4: Youth playing football against a backdrop of HIV testing at a Skillz VCT Tournament in Lusaka, Zambia.

	Category	# Tested	# Positive (%)	# enrolled (%)	p value	LTU after 6 mo (%)
Age	<15	3172	49 (1.5%)	25 (51%)		2 (8%)
	15-19	3687	61 (1.7%)	20 (33%)	0.082	3 (15%)
Sex	Male	3376	48 (1.4%)	18 (38%)		4 (22%)
	Female	3483	62 (1.8%)	27 (44%)	0.655	1 (4%)
Time	June-Nov 2010	2680	57 (2.1%)	7 (12%)		1 (14%)
	Dec 2010-Nov 2011	4179	53 (1.3%)	38 (72%)	<0.001	4 (11%)
	<b>Total</b>	<b>6859</b>	<b>110 (1.6%)</b>	<b>45 (41%)</b>		<b>5 (11%)</b>

\*Based on chi-square for enrollment

[Process data for Skillz VCT Events (n=72)]

Table 1: Process data from 18 months of 'Bridge the Gap' project

## Conclusions

This evaluation shows that SVE's can increase youth accessing HIV testing services.

It also shows that accompaniment to the initial clinical visit following a new HIV diagnosis can increase enrollment into treatment and care.

The data further shows that the youth enrolled from the SVE have higher rates of adherence and lower rates of loss to follow-up and mortality as compared to national averages

## Literature Review

Author	Year	Study Title	Journal	Where	Who/What	Methods	Key Findings	GRS Implications
Denison et al	2009	HIV TESTING AMONG YOUNG PEOPLE IN RURAL AND URBAN ZAMBIA	AIDS Education Network	Zambia	426 (18-19)	Cross-sectional survey	62% of individuals sought CD4 care and 62% of those who did not seek CD4 care had HIV test results	Research supports home visit with accompaniment to increase HIV test and CD4 care uptake
Komarov et al	2010	Linkage to HIV Care and ART	PLoS ONE	Cape Town	805 adults	Review of HIV testing records, CD4 count results and ART registers	62% of individuals sought CD4 care and 62% of those who did not seek CD4 care had HIV test results	Research consistent with TTP findings. Home visit at TTP youth not yet eligible for ARTs still affected
Loehle et al	2010	The "ART" of linkage: Pre-Treatment loss to Care (PTLC)	PLoS ONE	Durban	712 adults	Multi-site analysis to identify factors associated with PTLC	Systematic literature review of PTLC	Research TTP enrollment log to include all 8 weeks 2 weeks - 10 days history of TB onset CD4 test dates, rate of referred to treatment and provider return. 2010 data not available
Rosen & Fan	2011	Retention in HIV Care between Testing and Treatment: A Systematic Review	PLoS Med	Sub-Saharan Africa	28 articles	Systematic literature review of HIV care retention	Systematic literature review of HIV care retention	Research consistent with TTP findings. Home visit at TTP youth not yet eligible for ARTs still affected
Gardner et al	2011	HIV Counseling, Testing and ART Uptake in Rural Zambia	AIDS Education Network	Zambia	42 adults	Review of HIV testing records, CD4 count results and ART registers	62% of individuals sought CD4 care and 62% of those who did not seek CD4 care had HIV test results	Research consistent with TTP findings. Home visit at TTP youth not yet eligible for ARTs still affected
Shaw et al	2011	Monitoring & Evaluation of HIV CTX Services: An Introduction	PLoS ONE	Zambia	8 articles in adult population	Programme overview	No findings shared in documentation, programme overview	Lessons learned or successes would be used in programme outcomes
ZPCT	2008	ZPCT VCT Referral and Uptake Project	PLoS ONE	Zambia	Programme overview	Guidelines for effective CTR, testing and referral in the US	Guidelines for effective CTR, testing and referral in the US	NHIA addressing barriers to counsellor referrals as learning opportunity. Potential area of future R&M research
McIntyre et al	2005	Translating youth into care: Linkage to HIV care	Journal of Adolescent Health	USA	107 newly identified HIV positive youth	Group-based HIV testing and linkage to care	9% reported barriers to care, needs identified (70% reported 10% group-based HIV testing and linkage to care)	Research highlights need for individual case management for each youth to address barriers and needs of youth. Supports need for social network (TTP or GRS)
COG	2008	Linkage to Care in non-primary care settings	CDC	USA	5 LTC programs for HIV	Review of 5 major LTC programs for HIV	Key characteristics: low cost, intensive, targeted community-based case management (include behavioral, social, cultural, case management, home visit)	Components of accurate, employed linkage active case management (include behavioral, social, cultural, case management, home visit)
Knox et al	2008	Community-based Follow-up/CD4 Care for HIV patients enrolled in ART	Lusaka	Lusaka	1,343 patients with record of HIV services	Follow-up home visits using ART adherence	55% (41%) were HIV positive, 78% (55%) were HIV negative, 18% were HIV unknown	GRS and TTP carry out similar follow-up home visits. Home visit to reinforce adherence, promote to register, (54%) encouraged to return. Research for methodology with applicability better needed, address the adult
Wilson et al	2012	Identification of HIV-infected youth and linkage to care: Get the major challenges	HIV Clinician	USA	Overview	Summary of Special Issue	30% of new infections among 13-20 year olds, 40% of HIV-infected youth aged 15-24 in 2008	Special issue dedicated to Addressing Challenges and Promoting Research

## Acknowledgments

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