



A Costing Analysis of B-Gap

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Cost of HIV Testing – Southern Africa



Source: Mwenge et al. 2017

B-Gap Costing Methods

- **Approach:** Estimated the *full cost* of **Standard of Care (SoC) HIV Testing** & *incremental cost* of **Index-Linked HIV Testing**

Where?	What?	How?
<ul style="list-style-type: none"> • 2 clinics in Bulawayo • 1 clinic in Mangwe • SoC: May – Aug 2018 • Index-Linked: Sep – Dec 2018 	<ul style="list-style-type: none"> • Personnel • Consumables • Overheads • Building • Equipment • Training • Start-Up • Transaction 	<p>Resource Estimation</p> <ul style="list-style-type: none"> • Direction Observation • Face-to-Face Interviews • Time-Tracking Diaries <p>Cost-Data Acquisition</p> <ul style="list-style-type: none"> • B-Gap Project Accounts • MatSouth Pharm System • District and Provincial Med Offices MatSouth • BCC Offices

Cost of HIV testing via Standard of Care

Age	Cost Per Test (USD)	Cost Per Diagnosis (USD)
Clinic A - Bulawayo		
All ages	\$5.90	\$61.61
2-18 Years	\$5.90	\$166.69
Clinic B - Bulawayo		
All ages	\$5.91	\$35.92
2-18 Years	\$5.91	\$139.76
Clinic C - Mangwe		
All ages	\$7.15	\$61.37
2-18 Years	\$7.15	\$197.80

Index-Linked HIV Testing – Clinic

No. Tested	No. Positive	Cost Per Test (USD)	Cost Per Diagnosis (USD)
Clinic A – Bulawayo			
212	2	\$7.41	\$799.90
Clinic B – Bulawayo			
48	1	\$31.08	\$1,517.22
Clinic C - Mangwe			
263	4	\$5.36	\$381.39

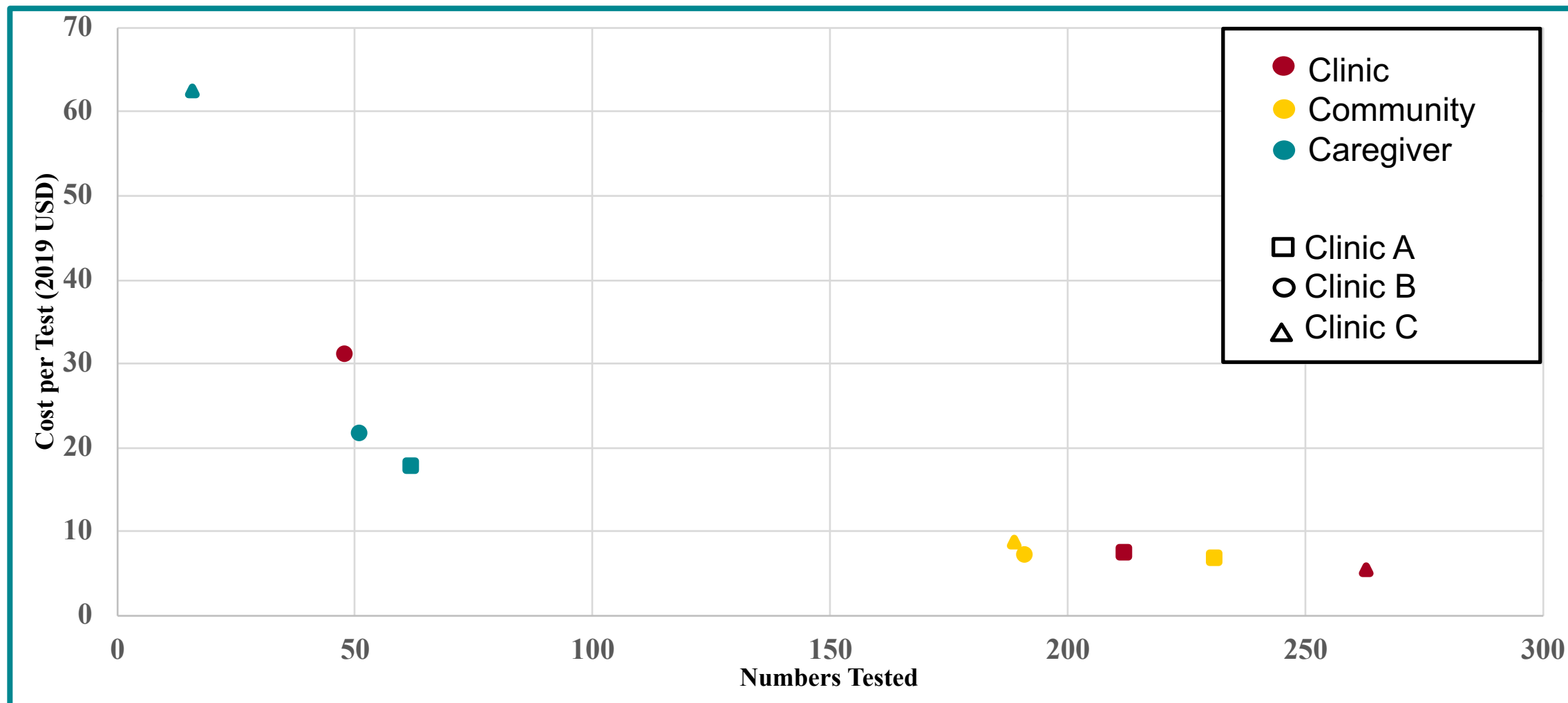
Index-Linked HIV Testing – Community

No. Tested	No. Positive	Cost Per Test (USD)	Cost Per Diagnosis (USD)
Clinic A - Bulawayo			
231	1	\$6.69	\$1,590.41
Clinic B - Bulawayo			
191	0	\$7.18	N/A
Clinic C - Mangwe			
189	2	\$8.65	\$840.16

Index-Linked HIV Testing – Caregiver Assisted

No. Tested	No. Positive	Cost Per Test (USD)	Cost Per Diagnosis (USD)
Clinic A – Bulawayo			
62	0	\$17.59	N/A
Clinic B – Bulawayo			
51	0	\$21.63	N/A
Clinic C - Mangwe			
16	1	\$62.40	\$1,018.23

Testing Uptake vs Cost per HIV Test



Prevalence vs Cost per HIV Diagnosis

STAR Estimate: Zimbabwe

Prevalence:

- 6%

Cost per Positive Test:

- US\$178.92 (2016)

B-Gap: Standard of Care

All Ages

Prevalence:

- 13%

Cost per Positive Test:

- Avg: US\$52.97 (2019)

2-18 Years

Prevalence:

- 4%

Cost per Positive Test:

- Avg: US\$168.08 (2019)

B-Gap: Index-Linked

Prevalence:

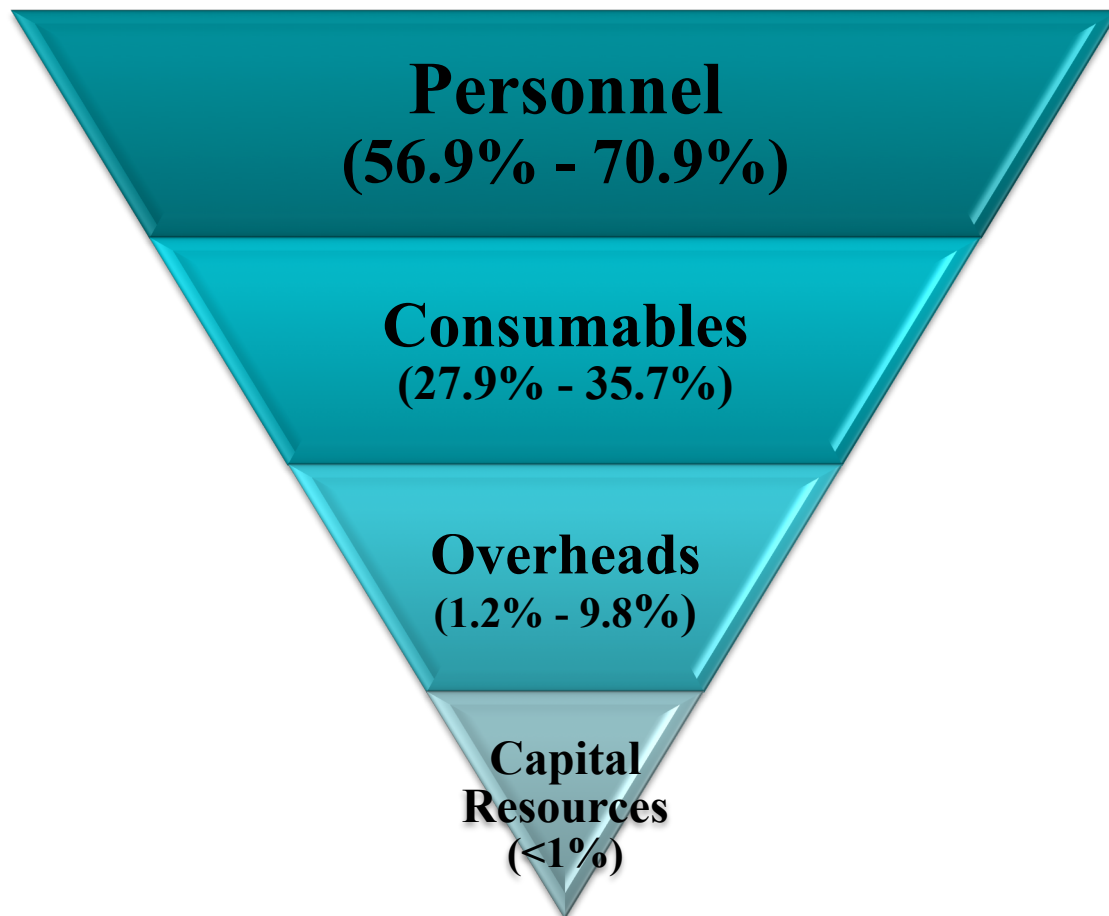
- 0.9%

Cost per Positive Test:

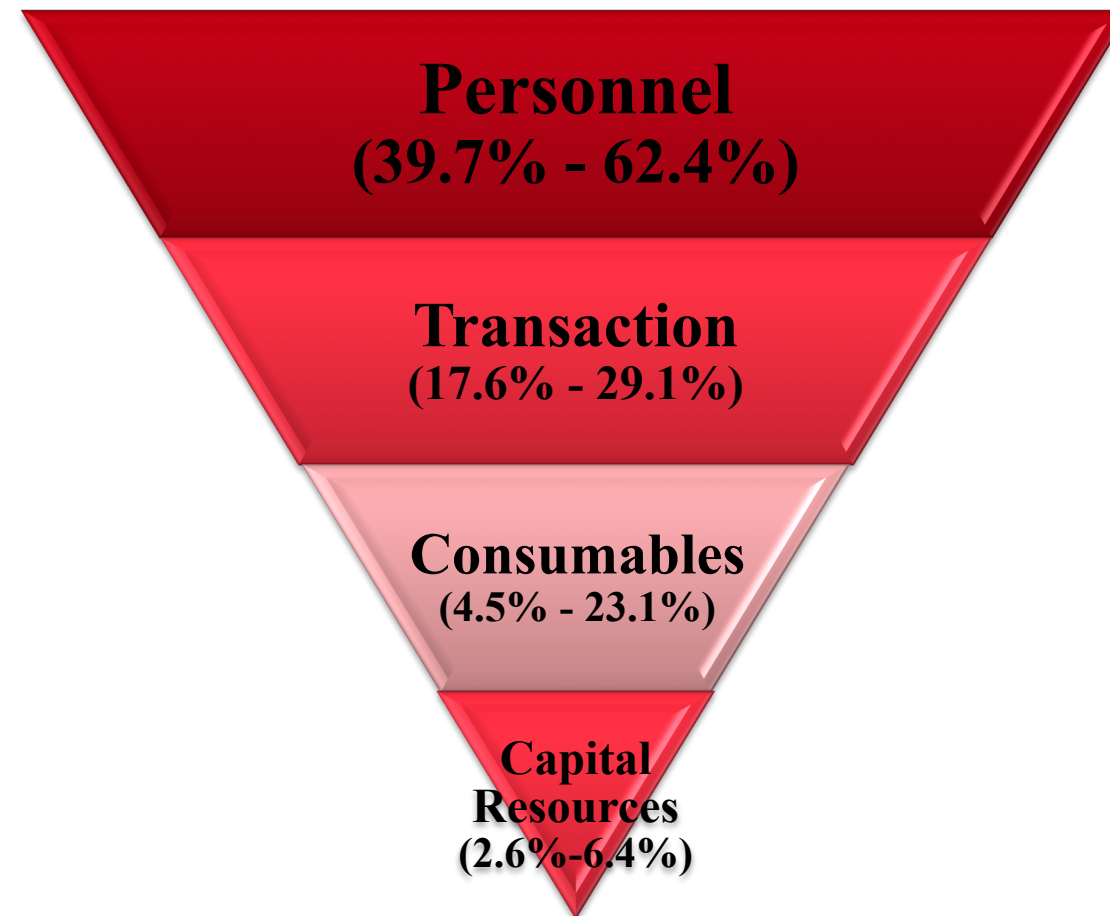
- Avg: US\$1024.55 (2019)

Components of HIV Testing – Cost Drivers

(Full) Standard of Care Unit HIV Testing



(Incremental) Index-Linked HIV Testing



Summary



1

The cost of SoC HIV testing was lower in urban than rural settings: higher uptake

2

Costs of SoC testing were primarily driven by personnel followed by consumables

3


Index-Linked Testing: Clinic testing modality had the lowest individual unit cost; Community testing modality had the lowest avg. unit cost

4

Index linked testing costs were driven by personnel followed by transaction costs

Next Steps

What We Know

- 
- Uptake is a key driver of the cost per test
 - Uptake varies, therefore cost varies
 - Alternative index-linked testing solutions that increase yield need to be explored

***This is the first costing-analysis of index-linked HIV testing strategies**

What We Need to Know

- **Cost-Effectiveness Analysis**
- **Budget Impact Analysis**