

Development synergies and opportunities for co-financing: Insights from Malawi

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Background

❁ Structural interventions tackle the social drivers of HIV, but also have other health and development primary objectives

❁ In the context of shrinking HIV funding and pressure for sustainable financing, structural and development interventions with multiple outcomes are an opportunity

❁ UNAIDS Investment Framework:

HIV funding can be *“a catalyst to achieve synergies within the broader health and development programmes and to promote intelligent investment across several sectors”* (Schwartländer et al., 2011)

UNAIDS investment framework

CRITICAL ENABLERS

Social enablers

- Political commitment and advocacy
- Laws, legal policies and practices
- Community mobilization
- Stigma reduction
- Mass media
- Local responses to change risk environment

Programme enablers

- Community centered design and delivery
- Programme communication
- Management and incentives
- Procurement and distribution
- Research and innovation

BASIC PROGRAMME ACTIVITIES

Key populations at higher risk
(particularly sex workers and their clients, men who have sex with men, and people who inject drugs)

Eliminate new HIV infections among children

Behaviour change programmes

Condom promotion and distribution

Treatment, care and support for people living with HIV

Voluntary medical male circumcision
(in countries with high HIV prevalence and low rates of circumcision)

OBJECTIVES

Stopping new infections



Keeping people alive

SYNERGIES WITH DEVELOPMENT SECTORS

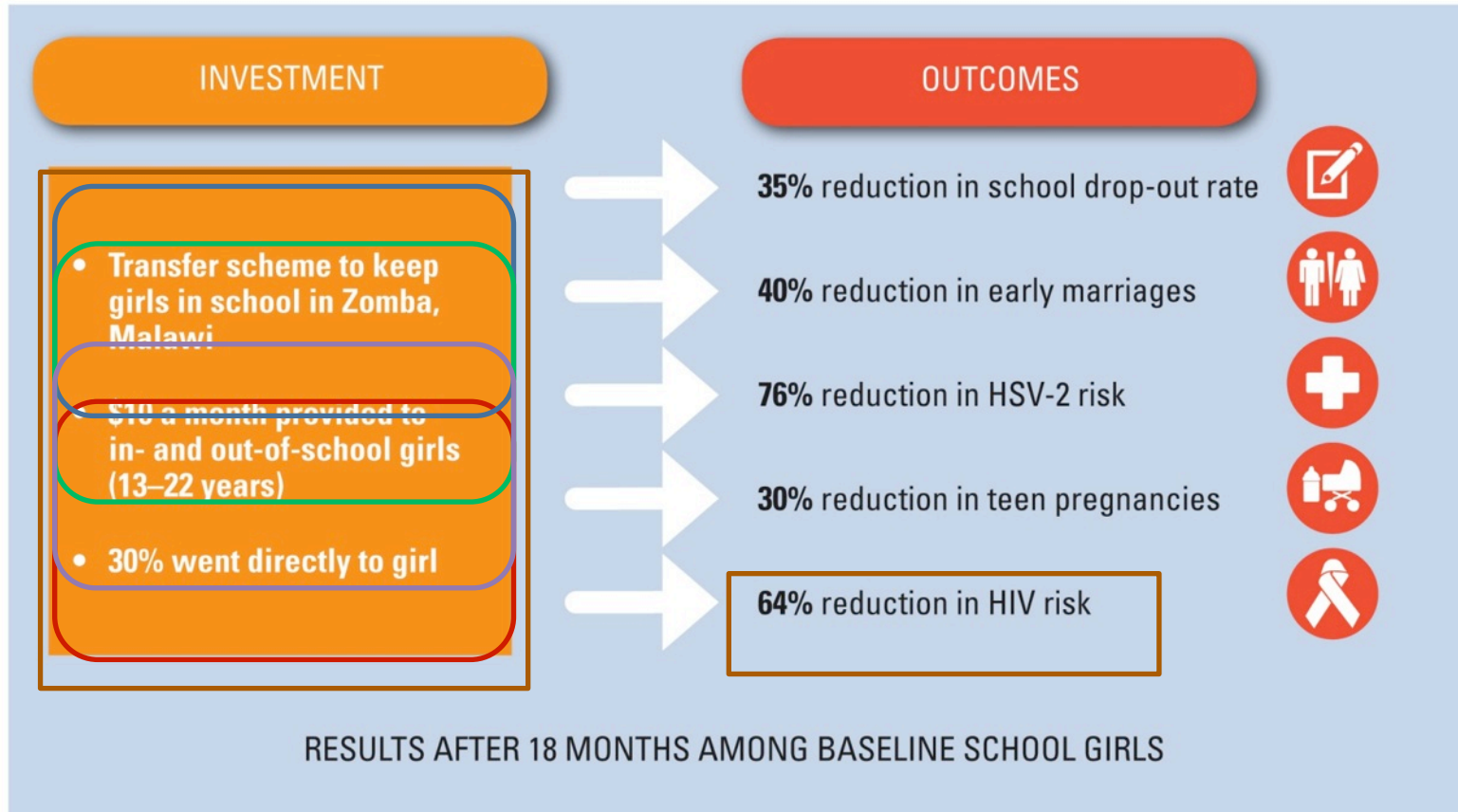
Social protection, Education, Legal reform, Gender equality, Poverty reduction, Gender-based violence, Health systems (incl. STI treatment, Blood safety), Community systems, and Employer practices.

Background (2)

- ❁ Despite their importance, development synergies interventions could be undervalued and potentially underfinanced
- ❁ HIV sector is reluctant to take on such development synergies interventions as they are expected to have low HIV-specific cost-effectiveness and accrue more benefits to other sectors
 - Result of methodological approach, since typical value for money assessments compare the HIV value *only* to the *full* programme cost, due to the indivisibility/lumpiness of such investments
- ❁ Relevance for STRIVE: after demonstrating effectiveness of structural interventions, how to get them funded?



Transactional sex and HIV:
Conditional cash transfer trial in Zomba, Malawi



→ **Cost per HIV infection averted = \$ 5,000 – 12,500**

Premise

- ⊗ HIV resources could be used to co-finance structural interventions with other benefiting (sub-) sectors
- ⊗ Value for HIV-money of structural interventions could then be assessed, based on the HIV sector's contribution

Objectives

- ⊗ To explore to what extent maintaining the status quo – the use of HIV focused cost-effectiveness decision rules – could lead to sub-optimal HIV financing decisions
- ⊗ To explore whether there may be different ways in which the HIV sector could consider co-financing structural interventions

Financing approaches modelled

1. Multi-sectoral Cost-benefit Analysis

Societal perspective use to compare long-term benefits across sectors to costs

2. Silo Approach

Sectors use their thresholds to decide whether to finance the intervention

3. Co-financing approach

Sectors agree to co-finance intervention using thresholds to determine how much to contribute

How much should HIV pay?

At most...

- Worth funding structural interventions up to the point at which they are considered HIV cost-effective (and affordable)
- Equal to WHO's threshold of GDP per capita per HIV DALY averted

$$\frac{\text{GDP/cap}}{\text{Cost/DALY}} \times \text{Total Costs}$$

At least...

- Residual programme costs that would not be funded by other sectors, but would correspond CER < GDP/capita threshold

$$\text{Total Costs} - \sum \text{WTP}_{\text{other sectors}}$$

Its Fair Share...

- Another approach is to apportion the total programme benefits between (sub-) sectors based on CBA and then HIV paying its share
- Provided that BCR > 1 and HIV contribution < WHO threshold

$$\frac{\text{Benefits}_{\text{HIV}}}{\text{Total Benefits}} \times \text{Total Costs}$$

Methods



Costs and Impact:

- Unit costs were obtained from Baird et al (2012) and total costs calculated based on 1,225 beneficiaries
- Absolute impact from the trial calculated based on published figures in the natural units of interest to each sector
- DALYs averted estimated from standard DALY formulae and/or DCP2 estimates of DALYs per health outcome



CBA calculations:

- DALY monetised at GDP per capita
- Other benefits modelled = higher earnings, reduced child mortality (*King et al., 2007*)



Co-financing calculations:

- Maximum WTP for each health outcome = total DALYs averted x GDP per capita
- Maximum WTP for education outcomes = total impact x highest CER in literature



Sensitivity analyses:

- Varied total programme costs based on actual trial costs and estimated costs at scale
- Varied WTP for health outcomes to WHO CE threshold of 3x GDP per capita
- Varied WTP for education outcomes to lowest CERs in the literature

Results: Multi-sectoral CBA

Net intervention costs	US\$ 77,187
Implementation costs	US\$ 110,250
HIV treatment savings	US\$ 33,063
Net intervention benefits	US\$ 467,510
HIV infections and DALYs averted	US\$ 82,737
Long-term benefits to education and health (excl. HIV)	US\$ 384,773
Benefit-cost ratio (overall)	6.1
HIV only	1.1
Health and education only	3.5
Net Benefit	US\$ 390,323

 **Financing decision: Worth funding**

Silo and Co-financing approaches

(Sub-) Sector	Outcome	Total Zomba impact	Total DALYs averted	Willingness to pay (WTP) per unit (US\$)	Total WTP (US\$)	Share of prog. costs (US\$110,250)
HIV	HIV infections averted	6	83	339	28,050	25%
Education	Drop-outs averted	24	n.a.	204	4,920	4%
	Drop-outs re-enrolled	193		220	42,620	39%
	Additional years of schooling	77		163	12,521	11%
	English test scores 0.1 SD gains	708		3.30	2,333	12%
Sexual & Reproductive Health	HSV-2 infections averted	16	78	339	26,420	24%
	Teen pregnancies averted	10	38	339	12,855	12%
Mental Health	Cases of depression averted	46	20	339	3,292	3%
All sectors		Silo approach (highest sector contribution)			62,393	66% Not funded
		Co-financing (total contributions)			133,010	130% Funded

Results: HIV shares in Co-financing

- ⊗ **Maximum** (up to GDP/cap threshold) = **25%** of intervention costs
→ Cost per HIV DALY averted = GDP per capita = US\$ 339
- ⊗ **Minimum** (residual from other sectors) = **5%** of intervention costs
→ Cost per HIV DALY averted = US\$ 64
- ⊗ **Fair share** (share of benefits) = **23%** of intervention costs
→ Cost per HIV DALY averted = US\$ 308
- ⊗ In all cases, with co-financing, the intervention is highly cost-effective in Malawi

Affordability in Malawi

(Sub-) Sector	National scale (million US\$)	National sector budget (million US\$) 2011/12	Donor disbursements (million US\$) 2010/11	Average size of donor projects (million US\$) 2010/11
HIV	0.16	78	298.2	2.6
Health	0.93	222		
Education	2.11	312	167.7	4.1
Total	3.2 (national programme)	1,980 (national budget)	1,022 (overall)	2.3 (overall)

Relative contributions for a national-scale scheme appear quite affordable (0.2% HIV, 0.4% health, 0.7% education national budgets)

Methodological implications

- ❁ Count the cost and capture multiple outcomes
 - Use standard costing methods
 - Measure standard outcomes that are considered by decision-makers in different (sub-)sectors
- ❁ Design matters for the viability of co-financing

E.g. Conditionality of cash transfer
- ❁ Explore local willingness to pay thresholds
- ❁ Knowledge into action: promote co-financing discussions
- ❁ Resource: UNDP/UNAIDS Guidance document on Critical Enablers and Development Synergies

Conclusion

- ❁ With silo approach, certain structural interventions with potential could be underfinanced or go unfunded
- ❁ Co-financing provides an opportunity to realise development synergies, but will require multi-sectoral coordination/negotiation mechanisms
- ❁ Cost-effectiveness is only one criterion in resource allocation, which is a political process – other considerations include equity, acceptability, affordability, foregone programmes, etc.
- ❁ Nonetheless, only considering HIV outcomes in the economic evaluation of structural interventions would provide incomplete evidence for policy-makers and could lead to undesirable decisions from an HIV and societal perspective

Thank you

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