

# Co-financing for development synergies

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## What is the issue?

Upstream structural barriers undermine the potential of HIV programmes to deliver on ambitious targets to prevent new infections and save lives. Interventions addressing these upstream factors are considered to be beyond the remit of the HIV response and too expensive for the HIV budget. This reflects conventional priority-setting and financing frameworks that consider only HIV outcomes and budgets.

With shrinking international HIV funding on one hand, and the wide range of priorities established by the Sustainable Development Goals (SDGs) on the other hand, development interventions with multiple outcomes provide an opportunity for greater value for money. Yet, opportunities to realise synergies with non-HIV investments tend to be missed due to:

- a lack of data on their multiple outcomes
- the dominance of single outcome costeffectiveness frameworks
- weak incentives for joint financing between sectors.

Several policies in non-health sectors are likely to have HIV impacts and implications for the uptake of HIV services, just as HIV interventions can have downstream socio-economic impacts. Given the institutional frameworks and siloed nature of government sectors and development funders, we cannot assume that non-HIV sectors and funders will consider the spill-over of their policies and programmes on HIV, or vice versa.

### **STRIVE PUBLICATIONS**

Remme M, Vassall A, Watts C, Lutz B. (2012) **Paying girls to stay in school: a good return on HIV investment?** *The Lancet.* <u>www.</u> thelancet.com/journals/ lancet/article/PIIS0140-6736%2812%2960944-1/ fulltext

Remme M, Vassall A, Lutz B, Luna J, Watts C. (2014) Financing structural interventions: going beyond HIV-only value for money assessments. *AIDS*. http://journals.lww. com/aidsonline/Abstract/ publishahead/Financing\_ structural\_interventions\_\_\_\_ going\_beyond.98482.aspx

Vassall A, Remme M, Watts C. et al. (2013) Financing Essential HIV Services: A New Economic Agenda. *PLOS Medicine*. http://journals. plos.org/plosmedicine/ article?id=10.1371/journal. pmed.1001567

Remme M, Watts C, Heise L, Vassall A. (2015) **Secondary** schooling might be as good an HIV investment as male circumcision. *The Lancet Global Health.* 

## What have we learned?

Interventions to address the social determinants of health can yield multiple benefits across sectors. Yet, such structural interventions tend to be underfinanced and under-implemented because their multiple benefits are often under-valued and unaccounted for in investment analyses. Crosssectoral co-financing is an innovative solution that can increase efficiency in the allocation of government, donor and other budget-holders' resources. Indeed, it could provide a new way of financing high-impact interventions that can achieve benefits across the interconnected SDGs and targets.

The STRIVE research consortium therefore recommends that policy-makers:

- support the co-financing of interventions with multiple cross-sector outcomes
- take into account both the costs and benefits of delivery across sectors

As avenues for future research, STRIVE identifies the need for:

- prospective testing and evaluation of co-financing models in low and middle-income countries, from both an efficiency and a political economy perspective
- continued efforts to build this evidence base for HIV and health, by ensuring the inclusion of multisectoral outcome measures in evaluations, and systematic costing of interventions

www.thelancet.com/ journals/langlo/article/ PIIS2214-109X(15)00167-9/ abstract

Remme M, Siapka M, Sterck O, Ncube M, Watts C, Vassall A. (2016) Financing the HIV response in sub-Saharan Africa from domestic sources: Moving beyond a normative approach. Social Science & Medicine. https://www.sciencedirect. com/science/article/pii/ S0277953616305342

Remme M, Martinez-Alvarez M, Vassall A. (2017) **Cost-Effectiveness**  Thresholds in Global Health: Taking a Multisectoral Perspective. Value in Health. www.sciencedirect. com/science/article/pii/ S1098301516341171

Remme M, Siapka M, Kadiyala S, Mukandavire Z, McCoy SI, Terki F, de Pee S, Vassall A. (Submitted May 2018) Economic returns to investing in food-based intervention for people living with HIV initiating ART in East and Southern Africa. Journal of the International AIDS Society

## Interventions to address the social determinants of health can yield multiple benefits across sectors

Compelling evidence suggests that HIV risk and service uptake are associated with poverty, food insecurity, low levels of schooling, gender-based violence, problematic alcohol use and stigma, among other upstream determinants. As has been found with the broader social determinants of health, investments in other non-health sectors that address these structural barriers and drivers can therefore be good HIV investments.<sup>1-5</sup>

### **Existing evidence**

The evidence base on the effectiveness of structural interventions for HIV has been growing in recent years, and includes several promising models.6-17 Conditional cash transfers to keep girls in school and educational reforms that increase secondary schooling have been found to have a significant and sizeable impact on HIV risk in Malawi, Botswana and Uganda.<sup>6, 18-20</sup> There is some evidence that economic empowerment interventions for women, such as microfinance loans, could decrease higher risk sexual behaviours and increase HIV service uptake.<sup>8, 21, 22</sup> Group sessions and community-based models to transform gender norms have reduced intimate partner violence and HIV-related risk behaviour among men.14,15 Social protection programmes and in-kind support that address poor livelihoods, malnutrition and food insecurity can also improve effective ART coverage and levels of viral suppression.<sup>23-27</sup>

## Structural interventions tend to be underfinanced and under-implemented, because their multiple benefits are often under-valued and unaccounted for in investment analyses

### **Existing evidence**

- Evidence suggests that interventions to address the social determinants of health do not tend to be prioritised and receive limited funding, due to a focus on proximal determinants of health.
- Commonly applied economic analyses (including standard cost-effectiveness analyses) do not do justice to interventions with non-health costs or benefits.

Standard economic evaluation methods tend to be confined to a single sector perspective such as the 'HIV-only' domain. The result of such an approach is that increased secondary schooling or a cash transfer to keep girls in school would appear expensive and not good value-for-HIV-money, if their education benefits were not factored into the financing decision. <sup>18, 19</sup>The same is true for public health interventions with multi-sectoral impacts and for health system strengthening interventions with multiple disease impacts.<sup>28-30</sup> This reflects a lack of adequate economic analysis methods to evaluate the value for money of such upstream interventions.

### **STRIVE** findings

- Our analysis of status quo/silo budgeting finds that the Zomba cash transfer would not be funded by any single sector.
- STRIVE developed a multi-sectoral perspective on cost-effectiveness thresholds, or willingness to pay thresholds.

## Example 1: Cash transfers to keep girls in school in Malawi

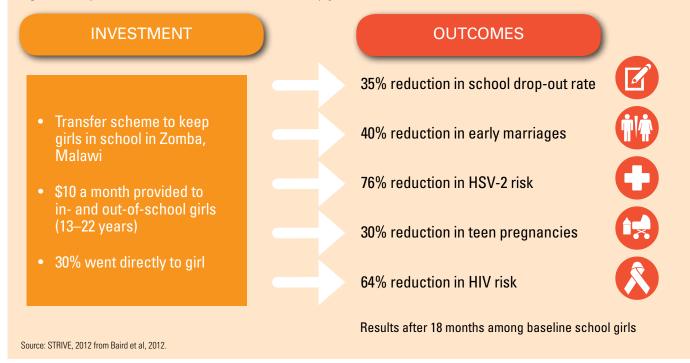
The Zomba cash transfer intervention that was implemented and evaluated in Malawi illustrates the potential and benefits of cross-sectoral co-financing. The intervention consisted of a monthly cash transfer of about USD 10 provided to in- and out-of-school girls with the objective of keeping them in school. About 30% of the cash was given directly to the girls, while the remaining amount went to their guardians. After only 18 months of implementation, the evaluation found a range of educational and health outcomes among the girls who were in school at baseline.<sup>7</sup>

The trial outcomes showed that the cash transfers reduced HIV risk among adolescent girls by 64% while also improving school enrolment, test scores, drop-out rates, teen pregnancy and depression.<sup>7</sup> An evaluation of the trial estimated a cost per HIV infection averted of US\$5,000–12,500 or US\$284–711 per disability-adjusted life-year (DALY) averted.<sup>34</sup> When considering the value for money of this intervention from an HIV perspective, the authors of the study concluded that it was unlikely to be cost-effective, compared to alternative HIV prevention options.

### Example 2: Secondary schooling reform in Botswana

In 1996, Botswana decided to reform the grade structure of secondary schooling, which increased by one year the length of junior secondary school. The completion of junior secondary school was required for further education and vocational training, making it more attractive for pupils to complete this additional year of schooling. By using this policy reform to construct a natural experiment, a study found that the reform had the impact of extending the average years of schooling among the affected cohorts by 0.8 years.<sup>18</sup> In addition, every additional year of schooling reduced HIV risk by 8.1 percentage points and therefore led to a substantial reduction in HIV incidence. Pupils who completed an additional year of schooling saw their risk of being infected with HIV drop dramatically from 25.5% to 17.4%.

The authors of the study compared the costeffectiveness of this policy to other HIV intervention options, such as voluntary medical male circumcision, treatment as prevention and pre-exposure prophylaxis. Again, they took an HIV perspective and only factored in the HIV impact in their assessment of Figure 1: Multiple outcomes of the Zomba cash transfer to keep girls in school



relative value for money. This led them to conclude that investing in secondary school reform was not the best use of the HIV budget, although it may be as cost-effective as investing in pre-exposure prophylaxis in some cases.

Cross-sectoral co-financing is an innovative solution that can increase efficiency in the allocation of government, donor and other budget-holders' resources

### **Existing evidence**

- Various joint budgeting/co-financing mechanisms are being implemented in high-income countries for health promotion and health/social care for specific vulnerable groups (for example, the elderly).
- Limited research is being conducted into the additional (cost-)effectiveness and institutional feasibility of such mechanisms in more resourceconstrained settings.

To overcome the sub-optimal investments in these types of interventions and recognise their mutual benefits across sectors and budgetary authorities, some high-income countries have experimented with joint budgeting or co-financing models. These have involved pooling health and social care budgets, with mixed results and significant institutional challenges.<sup>31, 32</sup> Overall, there is limited and mixed evidence on the effectiveness of such co-financing arrangements on health and other outcomes.<sup>33</sup> In most cases the effect of the implementation of such models on costs is also unclear, and so the cost-effectiveness of these mechanisms remains uncertain. However, there is some evidence of

impact on process measures and greater potential at local levels of government.<sup>32</sup>

It is recognised that resource allocation decisions are political and cross-sectoral investments institutionally challenging; however, there is limited empirical evidence on the incentives and barriers that prevent greater cross-sectoral collaboration, especially in low and middle-income countries and in the context of HIV.

### **STRIVE** findings

- We have shown that the co-financing approach can lead to more efficient financing decisions.
- STRIVE has identified institutional barriers and enablers to co-financing mechanisms according to national policy-makers/ budget holders.

STRIVE has demonstrated through a proof-of-concept example that cross-sectoral co-financing could be a more efficient way of spending HIV resources, as well as other sectors' budgets. An economic evaluation technique developed by STRIVE enables analysts to incorporate development synergies in existing singleoutcome frameworks. This so-called co-financing approach could generate more optimal outcomes than the status quo whereby each sector and payer allocates resources within their own silos without accounting for other sectors' allocations.

We used the Zomba cash transfer trial to illustrate the benefits of co-financing. By re-analysing the economic data this way, we showed that if each sector adopted a siloed approach and assessed the value of the intervention in its sectoral silo, the intervention would not be funded.<sup>35</sup> Neither the HIV, education nor health budget holder would be willing to pay the full Table 1: Financing outcomes following a silo approach and a co-financing approach

(Sub-)Sector	Outcome	Total Zomba impact	Willingness to pay for outcomes (US\$)	Share of intervention costs (US\$110,250)	
HIV	HIV infections averted	6	28,050	25%	
Education	Drop-outs averted	24	4,920		
	Drop-outs re-enrolled	193	42,620	66%	
	Additional years of schooling	77	12,521		
	English test scores 0.1 SD gains	708	2,333		
Sexual and reproductive health	HSV-2 infections averted	16	26,420	36%	
	Teen pregnancies	10	12,855	30%	
Mental health	Cases of depression averted	46	3,292	3%	
Conclusion	Silo approach – single-sector investment: not funded				
	Co-financing approach – multi-sector investment: funded				

Source: Remme et al, 2014.

intervention cost, based on the outcomes they would generate (Table 1). Each sector could have achieved the same outcomes through alternative interventions, at a lower cost.

However, if they considered pooling their resources through a co-financing mechanism to jointly achieve their outcomes,<sup>19</sup> they would be able to cover the full cost of the intervention and even spend less for the same outcomes than they would have each spent in their own sectors (or sub-sectors). As summarised in Table 1, when allocating resources in silos, these sectors would have spent USD 160,747 on other interventions to produce the same outcomes. Yet, following a co-financing approach, they would spend USD 110,250, freeing up USD 50,497 in cost savings that could be spent on additional interventions to generate even more benefits.<sup>35</sup>

In a similar re-analysis of the data from the study of the secondary schooling reform in Botswana, STRIVE showed that it is not realistic to assume that the HIV budget would fully fund an education reform, nor is it a fair assessment of the societal value of the reform.<sup>36</sup> Clearly, the education sector would want to increase average years of schooling, which is the rationale for funding the reform in the first place. However, if the education budget had not been sufficient to cover the full costs of the policy, it would have been in the interest of the HIV response to co-invest HIV resources to generate the HIV impact. How much of the HIV budget holder's scarce resources should have been contributed is determined by the next best intervention it could have funded to prevent new infections. Given that voluntary medical male circumcision has been estimated to cost about USD 1,096 per HIV infection averted, this would have been the maximum amount the HIV budget holder would have paid into the education reform for each infection it averted (or USD 493,440 in total for the study sample).

Although there is a strong economic rationale for co-financing, cross-sectoral coordination and action

Option 1: secondary schooling paid entirely from HIV budget	
Cost per year of secondary school per pupil	
Total cost of education for study sample in Botswana	
Cost per HIV infection averted (% total cost)	
Option 2: secondary schooling co-financed with maximum willingness to pay of HIV sector	Cost (US\$)
HIV sector's maximum willingness to pay for an infection averted (cost per infection averted of medical male circumcision)	
Total HIV contribution for study sample in Botswana	
Cost per HIV infection averted (% total cost)	\$1,096 (4%)

Table 2: Cost-effectiveness of secondary schooling reform with and without co-financing

Source: Remme et al, 2015.

is not common. STRIVE conducted a qualitative study with decision-makers directly involved in planning and budgeting in Tanzania in order to elicit their perceptions on the institutional feasibility of adopting a co-financing framework in resource allocation.<sup>37</sup> Respondents identified several barriers, such as the limited discretionary budgets of each government department, the limited financial autonomy of government and non-government budget holders with earmarked funds, the likely resistance of individuals to their potential loss of budget control, and a concern that co-financing would involve a loss of visibility and ability to justify one's institutional existence for the budget holder paying into another sector's budget.

Despite these barriers and risks, study respondents suggested that, given its efficiency gains, co-financing could be feasible and operationalised. They identified the following contextual enablers that would facilitate its adoption:

- evidence of mutual gains and cost savings
- strong political will and champions/advocates
- inter-sectoral governance mechanisms to facilitate and ensure accountability
- prioritising payers with population focus or strong results focus (potentially decentralised local government authorities and donors)
- strong monitoring and evaluation frameworks (sectors with such capacity being more ready to commit)
- prioritising sectors with a history of working together or which are familiar with each other's institutional frameworks

## What is the impact?

Our work on co-financing has attracted considerable attention in the field and been taken up in practice.

The United Nations Development Programme (UNDP) - a STRIVE affiliate institution who was closely involved in the development of the co-financing approach - has developed a work stream on the operationalisation of cross-sectoral co-financing in seven countries in sub-Saharan Africa, as an innovative financing mechanism to strengthen universal health coverage and human development. This has involved the development of training materials for policy-makers, as well as the training of multi-sectoral government teams from South Africa, Tanzania, Malawi and Ethiopia. Further support is being provided to these countries, as well as Kenya, Zambia and Ghana, in translating co-financing models into high impact, cost-effective innovations in programming and financing structures. These implementation trials are being implemented over a two-year period from 2017 to 2019. The outcomes will provide further information on the barriers and enablers of engaging in co-financing models, along with additional evidence of the gains possible from a co-financing approach in practice.

A co-financing guidance note has been developed by STRIVE with the support of the UNDP's Strategic Planning Unit, with the aim of using it in SDG implementation support to countries.

The co-financing mechanism has been identified as an innovative modality to be used in the implementation of national strategic plans for HIV and social protection (in South Africa and inTanzania).<sup>78,79</sup> For example, South Africa integrated co-financing in its HIV and TB Investment Case and subsequently in its National Strategic Plan for HIV/TB/STIs (2017-2022).

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### More information: http://strive.lshtm.ac.uk/themes/ development-synergies-and-co-financing

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### **STRIVE** research consortium

A DFID-funded research programme consortium, STRIVE is led by the London School of Hygiene & Tropical Medicine, with six key research partners in Tanzania, South Africa, India and the USA. STRIVE provides new insights and evidence into how different structural factors – including gender inequality and violence, poor livelihood options, stigma, and problematic alcohol use – influence HIV vulnerability and undermine the effectiveness of the HIV response.

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