UNAIDS World Bank HIV Economics Reference Group (ERG) progress report 2013-2014

Background to ERG

The UNAIDS/World Bank HIV Economics Reference Group (ERG), established in April 2013, has met twice since and each of its three technical working groups have been formally established and defined scope of work and outputs for their specific areas. The ERG is intended to provide country governments, through the core organizations that constitute the management group of the ERG, with innovative ideas and advice on potential new strategic directions regarding how HIV programme effectiveness could be improved; where resources could be better allocated; how best major efficiencies can be gained; and how programme sustainability could be improved. The ERG members bring a wealth of expertise and experience to the group on a pro-bono basis. The management group of the ERG comprised of the World Bank, UNAIDS, the Bill and Melinda Gates Foundation, the GFATM and PEPFAR serve as an interface between their organizations (and countries they serve) and the independent members of the ERG by putting forward topics and issues related to their organizations scope of work and reflecting ERG advice into their strategies and policies.

Financing

The Technical Working Group on Sustainable Financing studies shifts in HIV and AIDS financing landscape; provides policy leadership by conducting analyses, disseminating evidence; and recommends policy options on issues related to the sustainability of the global response. The group acts as a central forum for sharing ideas, setting priorities, suggesting areas for policy research and experimentation, and reviewing progress and challenges.

Costing the need

The previous global needs assessment showed a global price tag of $22-24 billion per annum for HIV/AIDS by 2015. The current global resource needs exercise to review the global cost estimates, including latest policy changes (including 90% tested, 90% treated) is being finalised by UNAIDS and several representatives of the ERG have assisted in this group. As well as the global estimate, specific estimates have been prepared for 120 countries. An independent estimate is being conducted by the Kirby group and preliminary results suggest a fair degree of consistency in the emerging estimates. In addition a country specific validation process is being undertaken for 36 countries (22 in Sub-Saharan Africa) , most of which have engaged in regional workshops. In its next meeting the ERG will review the global price tag results and methodology with a specific focus on costs, funding and gaps in the top 10 countries. UNAIDS is currently collating the country price tags for these top ten countries with the NASA spending reports to get a practical sense of financing gaps in top 10 countries for review by the ERG. This should assist the Executive Director to engage country leadership.

Spending

Spending trends by country continue to be collected by the country NASA's and coordinated by UNAIDS. Global spending of $16 billion in 2011 has grown to $19 billion by 2013, but is still below the 2015 price tag and is significantly below the new price tag being finalised.

Funding

In the context of the global economic recession, global donor funding for HIV/AIDS has stagnated at around $8 billion per annum. Economic growth rates in developing countries exceeds that of high income countries and middle income and developing countries are progressively funding a greater share of the epidemic through domestic funding sources.

The notion of fair share has been extensively discussed in the group and is well accepted by it. Both the Global Fund and PEPFAR have now introduced fair share metrics into their grants and are working on ways to strengthen measurement and management of this. Currently global spending is still split around 50%:50% between donor and countries.

A previous paper (Resch and Hecht) looked at fair share metric in 14 African countries. An introductory paper was commissioned and produced by Oxford Policy on fiscal space (looking at various measures including the so called DIPI index). An update of this is currently being commissioned to provide reliable estimates of fiscal space in the most of the top 10 countries. Again this will facilitate interaction with country leadership by providing clearer estimates of what countries could reasonably be expected to raise. For example 25 countries in African spend <10% of their national budget on health (Abuja target is 15%) and 14 spend less than 2% of GDP on government health services. A SADC review of fiscal space in 14 countries is close to completion.

Table 1. Government expenditure on health as a proportion of total government expenditure in Africa

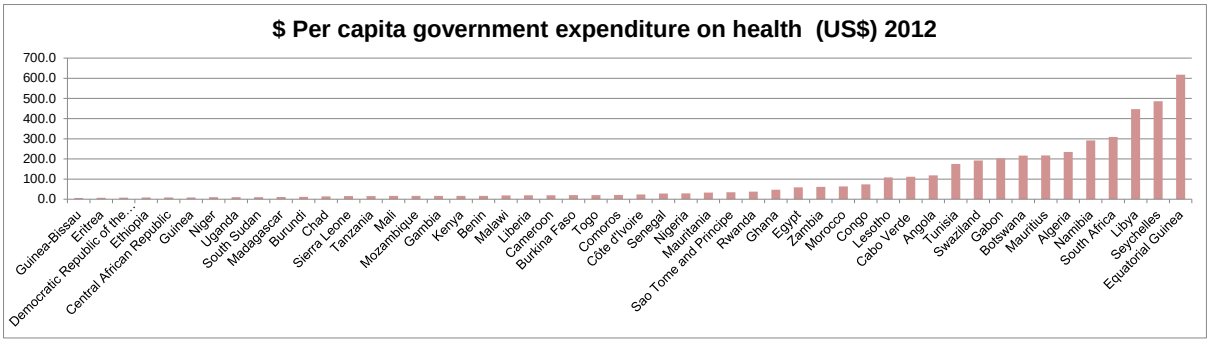
Countries	General government expenditure on health as % of total government expenditure		
	2010	2011	2012
Eritrea	3.6	3.6	3.6
South Sudan	4.0	4.0	4.0
Angola	6.3	5.6	5.6
Sao Tome and Principe	5.6	5.6	5.6
Egypt	5.6	6.3	5.8
Kenya	5.9	5.9	5.9
Chad	3.3	3.3	5.9
Morocco	6.5	6.0	6.0
Congo	6.5	6.5	6.5
Nigeria	5.5	6.7	6.7
Guinea	6.8	6.8	6.8
Libya	4.2	4.5	6.9
Equatorial Guinea	7.0	7.0	7.0
Gabon	7.2	7.2	7.2
Guinea-Bissau	11.1	7.8	7.8
Côte d'Ivoire	8.3	8.5	8.0
Botswana	8.5	8.0	8.0
Cameroon	8.5	8.5	8.5
Mozambique	10.4	7.7	8.8
Cabo Verde Republic of	8.2	8.8	8.8
Senegal	9.6	9.6	9.6
Ghana	12.9	12.5	9.7
Algeria	8.9	9.0	9.8
Mauritania	12.7	10.1	9.9
Comoros	6.2	6.5	9.9
Mauritius	10.8	9.7	10.1
Uganda	10.8	10.1	10.2
United Republic of Tanzania	10.2	10.2	10.2
Benin	10.5	10.8	10.3
Niger	11.1	10.3	10.3
Seychelles	10.2	9.5	10.8
Ethiopia	13.8	11.1	11.1
Central African Republic	10.4	12.5	11.2
Gambia	11.2	11.2	11.2
Burkina Faso	15.7	12.4	11.9
Sierra Leone	11.7	12.3	12.3
Mali	12.3	12.3	12.5
Madagascar	14.4	13.5	12.8
Democratic Republic of the Congo	15.0	11.5	12.8
South Africa	12.5	12.9	12.9
Tunisia	13.3	13.3	13.3
Burundi	13.5	13.6	13.7
Namibia	13.9	13.9	13.9
Lesotho	13.3	14.5	14.5
Togo	15.4	15.4	15.4
Zambia	16.4	16.4	16.4
Malawi	17.8	17.8	17.8
Swaziland	15.4	18.1	18.1
Liberia	11.1	19.1	19.1
Rwanda	23.5	24.0	22.1

*Abuja target was 15%; we define low as <10%

Nevertheless there remain huge shortfalls of funding for health services in Africa. A paper prepared on funding health services in Africa shows an annual shortfall of at least $30 billion in 2012 for general health services in low income countries in Africa. Countries can and must increase their domestic funding commitments for HIV/AIDS and for health care more broadly and estimates have been prepared by country as to how much additional domestic revenue

could be generated through increasing domestic fiscal effort (also through improved national revenue systems) and increased prioritisation of health. In the majority of African countries 64% (32 countries out of 50) government spending on health services is less than $50 per capita per annum and for 28 of these countries is less than $30 per capita (an improvement from the 35 less than $30 in 2005). This is also shown in the long tail of low spenders in Figure 1.

Figure 1. Health expenditure per capita in Africa



The Global Fund has had a remarkably successful funding round, given the state of the global economy. Its new funding model provides far greater certainty for countries on their three year funding envelopes, which allows for greater predictability and better country planning. The increasing alignment of government and country donors around a single national NSP is helping to improve alignment of funders and programmes. The co-funding approach developed allows for greater certainty around sustainability transitions.

The group has finalised an overview of compacts or contracts between donors and countries structured to lay out the responsibilities of each party and manage fair share issues and sustainability transitions. Performance and results should be a key part of any compact and be linked to the finance elements. Developing a compact based on financing elements alone is missing a big part of the picture. If targets for performance are included key achievement indicators related to these targets should be linked to specific data collection tools. PEPFAR in several countries is managing sustainability transitions and its PFIP compact with the South African government is an example of a potential framework for funding transition.

The new global resource needs estimates will increase the funding gap that needs to be addressed. The ERG is well placed to advise on fiscal space in countries which can be used to address the gap.

Universal health care and integration

An important external change is the growing global push for universal health coverage (UHC) and the questions this raises for HIV and AIDS. This is particularly important to the ERG, considering early suggestions that universal health coverage can be an organizing principle for health post-2015. The ERG was of the view that:

- The HIV and AIDS community needs to engage constructively with the UHC community and not be seen as continuously pleading for the uniqueness of HIV and AIDS.
- Concern was raised about the potential for preventative services to be put at risk, as UHC generally focuses on individual, treatment-focused health care.

- There has been broad agreement that monitoring and means of accountability are vital to the success of universal health coverage and advancing HIV and AIDS needs.

A conceptual paper is being commissioned on sustainability in the context of more integrated financing and delivery models. A detailed case of Thailand, Mexico and one African country provide some country specific examples and lessons from integration experience. The examples of Thailand and Mexico highlighted the importance of strong governance, and suggested a cautionary factor for countries with weak governance in the health sector or financing systems. A 13 country overview piece on integration has been completed and some further work is being done in this area. ERG will give consideration to how a set of HV/AIDS benefits could be inserted into the UHC package.

Allocative efficiency and priorisation

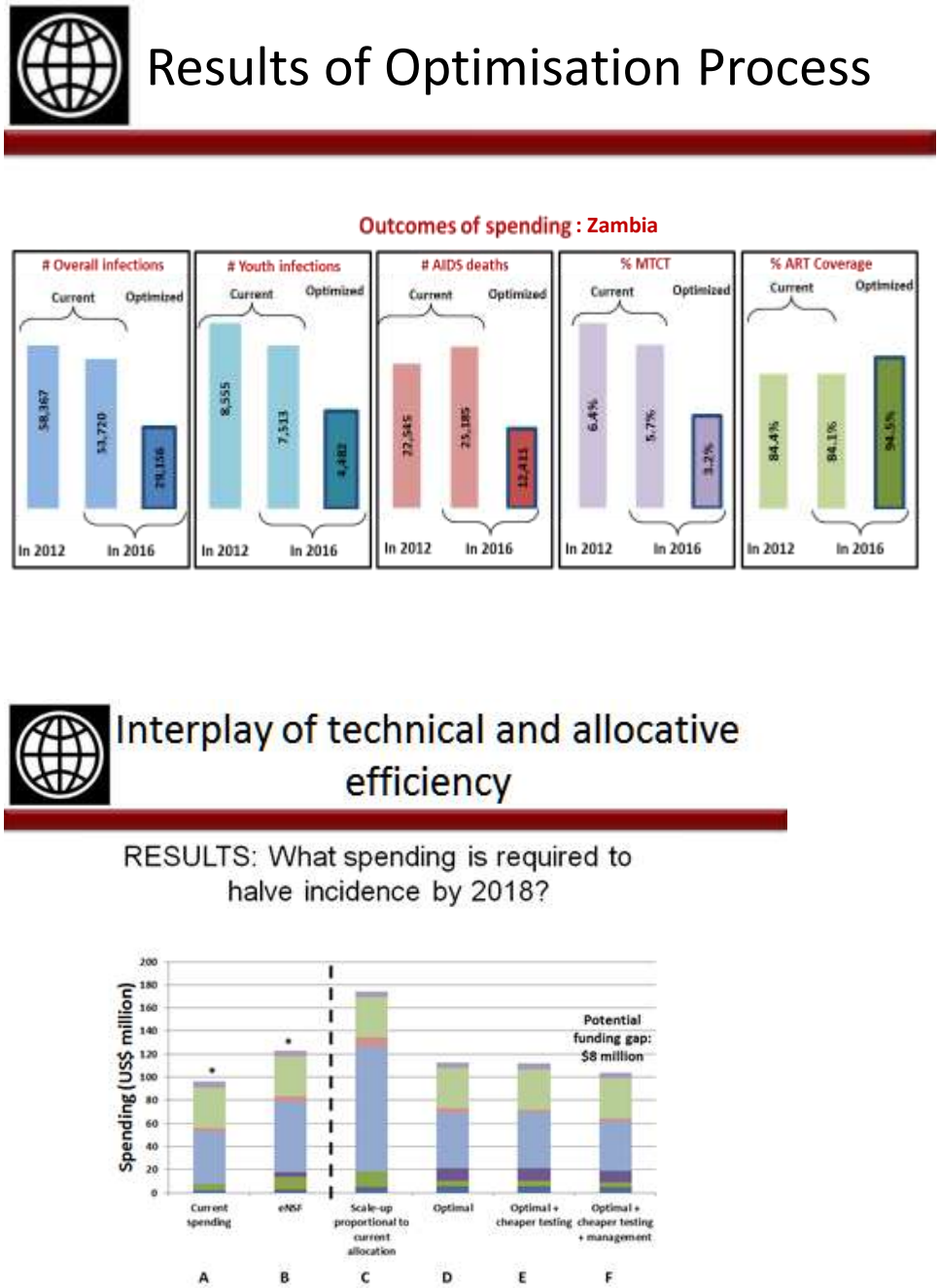
The Technical Working Group on HIV and AIDS Allocative Efficiency and Effectiveness has several functions:

- Mapping allocative efficiency studies and HIV and AIDS effectiveness studies undertaken or planned and the tools used to conduct them.
- Developing and aligning, based on a set of agreed principles between ERG members, methods (including mathematical models) for allocative efficiency.
- Developing principles for econometric modelling as part of HIV-related mathematical modelling efforts.
- Technically reviewing guidance for HIV and AIDS-related impact evaluations with biological and economic end points, and in relation to advisable econometric analyses.
- Providing technical advice on the design of a series of impact evaluations to evaluate efficiency gains through HIV and AIDS service integration, demand creation strategies for HIV prevention interventions, and other areas as identified by the main ERG.

Achieving optimal outcomes requires optimum allocative efficiency to ensure funds are spent in the most cost-effective areas. A review of different technical tools to assess allocative efficiency and prioritisation was prepared by the World Bank. A compendium of different allocative efficiency tools and their pros and cons has been compiled. A day of the last ERG meeting was spent with the Global Fund and PEPFAR looking at practical application of the different allocative efficiency tools and how these can be used by the large funding organisations to push for optimal allocations to priority areas. This will be looked at again in the next ERG meeting in terms of analysing allocative efficiency in the top ten HIV burden countries (also with reference to their funding gaps). A process of getting the Resource needs model and the Optimise modellers together to align the tools is taking place.

Figure 2 shows the results of an optimisation exercise conduced with Zambia. An improved set of allocation choices results in better outcomes on several key variables.

Figure 2. Results of an optimisation exercise: Zambia



Technical efficiency and costing

The Technical Working Group on Costing and Expenditures is focused on micro costing and sources and uses of funds. The terms of reference for the group have four main aspects:

- Reviewing and aligning existing methods, guidelines, and tools.
- Identifying gaps in costing and technical efficiency, including expenditure tracking.
- Mapping and giving guidance to ongoing and planned studies and initiatives.
- Providing strategic direction on the policy implications of studies and initiatives.

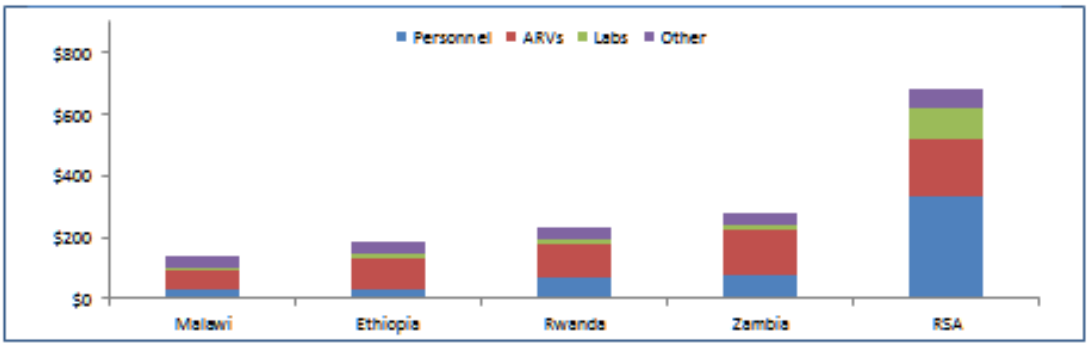
The subgroup on costing and technical efficiency and costing has documented a range of examples where programmes are not operating at levels of optimal efficiency or at unit costs which are too high. In some cases this continues to be due to input costs that are still too high. For example the cost of ARV medicines in Mexico or Russia, although of similar country income levels to South Africa, are massively more expensive (insert specific values). Figure 3 shows variability of ART costs across five African countries (Match study, Over et al.) The costs of ARV medicines are almost three times higher in Zambia than Malawi.

Figure 3. Variability of ART costs across 6 countries

ARVs constitute ~50% of total cost in all LIC/LMICs; ARVs and personnel together constitute over 70% of total cost in all countries

Cost of treatment per ART patient-year by country

US Dollars



Simple average and median cost of treatment per ART patient-year by country

US Dollar

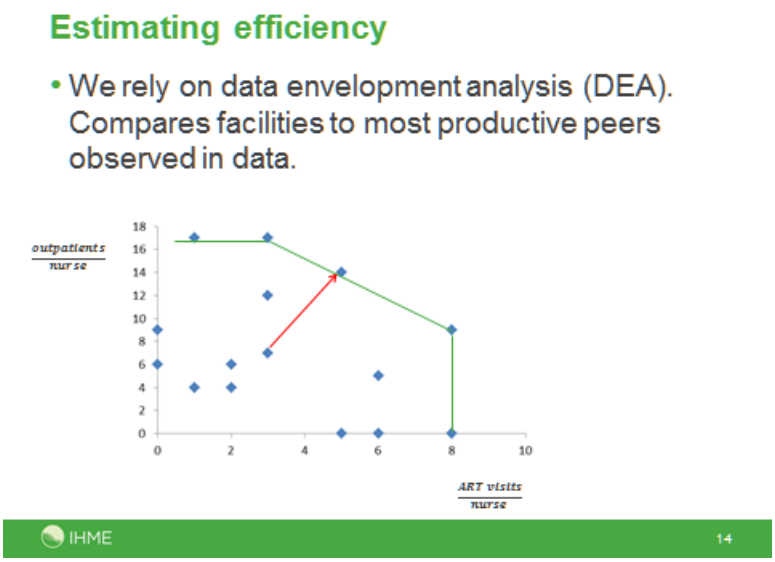
Country	ARVs		Personnel		Labs*		Other		Total Cost	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Malawi	$66	$63	$29	$22	$5	$1	$36	$32	$136	$117
Ethiopia	$103	$101	$28	$22	$16	$15	$39	$35	$186	$184
Rwanda	$114	$112	$67	$56	$15	$16	$37	$30	$232	$210
Zambia	$155	$155	$73	$46	$13	$13	$37	$30	$278	$250
RSA	$181	$179	$334	$284	$102	$102	$65	$56	$682	$615

*Lab category includes consumables only in all countries except SA

** Simple average numbers are not representative of the countries. Weighted average numbers are currently being calculated which will be a better representation of the countries

Figure 4 shows an example of technical efficiency in terms of human resources, using envelopment analysis to develop a production possibility frontier. This can also help to inform optimal facility sizes, since low volumes can be less efficient than scale economies.

Figure 4. Technical efficiency and productivity



A background paper was prepared on where good cost data exist and where the gaps are. Currently, high-quality costing studies are ongoing in at least ten countries. These studies are being used to develop and refine cost and unit cost global benchmarks. The sub-group is in the process of creating and maintaining an enhanced unit cost database for HIV and AIDS. The current resource needs assessment process is beginning to use a tiered process to reference prices, acknowledging the reality that personnel costs for example, are tiered across country income groups.

Additional Thoughts

Politics and political unwillingness are creating obstacles to the optimal implementation of strategies to control the HIV and AIDS epidemic. Treatment guidelines, which are reliant on the CD4 cell count, make it difficult to reach populations at high risk of acquiring HIV and AIDS. These individuals need to be found, tested, and treated. Countries need to adopt broader guidelines more quickly in order to effectively reach these individuals.

Additionally, rigid patent protection laws, little space for price reduction negotiations, and several restrictions on access to low-cost generic medicine, have all led to higher prices in medication than necessary. Ministries of Health and Finance need to consider the benefits of prevention, as opposed to simply the effectiveness of prevention.

Public health officials need to consider moving the Treatment as Prevention (TasP) agenda forward while giving due attention and resources to other HIV prevention activities. In low-resource settings TasP progress will be incremental while working within the capacity and resource constraints of the respective healthcare systems. In the long-term, feasibility will rely on complementary interventions to reduce new HIV infections, such as male circumcision, and demand creation for early treatment uptake as well as adherence. TasP holds the potential for moving closer to the global goal of ending AIDS.

Recommendations

There are a number of recommendations from this briefing that may help direct future HIV and AIDS work both for the ERG and the agencies involved:

- The ERG can offer valuable advice to the UNAIDS Executive Director on funding gaps, fiscal space, optimisation of allocations and examples of key technical inefficiencies in the ten highest prevalence countries.
- The ERG and its working groups is already helping informally to coordinate and share approaches across major donors on issues such as co-funding. The new global resource needs estimates to end AIDS by 2010 will likely indicate increasing funding gap that needs to be addressed. The ERG is well placed to advise on fiscal space in countries which can contribute to address the most part of this gap. Given the large funding gap for health services in low income countries, the role of donors will remain critical and new and possibly more integrated approaches to donor funding will be required
- A thought piece on the link between universal health coverage and HIV and AIDS would be valuable and should be commissioned.
- There is a clear need for a smarter use of limited resources for HIV and AIDS. The ERG should develop and disseminate long term practical guidance for doing so. The country level perspective must always be considered.
- ERG can provide useful guidance on the need and means to working closer with Ministries of Finance to reflect concerns on value for money, technical efficiency and performance monitoring. There is urgent need for greater focus on fiscal space and where and how countries can add additional revenues. Fiscal space analysis It also needs to be broader than AIDS and look at funding of the whole health sector. The ERG should accelerate work in this area
- ERG is looking on issues around results based financing and it's role in HIV response, as well as demand side incentives like cash transfers for prevention in generalized epidemics and can provide advice to concerned agencies and their leadership with this regard.
- WHO and UNAIDS could better align resource tracking processes. They should be carefully analysed according to their objective and scope in order to avoid simplistic conclusions re their interchangeability for the same country purposes. This could be achieved partially as part of the wider standardization through disease specific National Health Accounts provided allowance for adequate level of granularity in disease specific spending reporting. PEPFAR expenditure analysis tools being tested in some countries appear promising and may need to be expanded. Current thinking suggests that the National Health Accounts with disaggregated expenditures for HIV and AIDS could be used by countries to report on tracer components of the total expenditure for annual monitoring purposes, while in depth analyses as produced by National AIDS Spending Assessments might be needed every time there is a National Strategic Plan being developed or at the beginning, mid-term and end- term review of the Global Fund grants.
- Recognize that economics is a discipline which provides tools to make choices, however ultimately these choices need to be advised by human rights, politics and justice

Conclusion

By end of 2014 the group will have good information on cost needs, spending levels funding gaps and key allocative and technical efficiency issues in a set of ten highest burden countries and through the constituent organisations will have begun to engage with these countries on addressing the problems identified. At the same time participation in the group by the major funding organisations such as Global Fund and PEPFAR and technical bodies such as the World Bank and UNAIDS is helping to build common approaches by global partners.