Efficiency considerations of donor fatigue, universal access to ARTs and health systems

Karen A Grépin

ABSTRACT

Objectives To investigate trends in official development assistance for health, HIV and non-HIV activities over time and to discuss the efficiency implications of these trends in the context of achieving universal access to treatment and health systems.

Methods Official development assistance for health, HIV programmes and non-HIV programmes were tracked using data from 2000 to 2009. A review of the literature on efficiency, treatment and health systems was conducted.

Findings The rate of growth of donor funding to HIV programmes has slowed in recent years at levels below those required to sustain programmes and to move towards universal access to treatment. These trends are likely due to increased pressure on foreign aid budgets and donor fatigue for HIV programmes.

Conclusions There is great need to consider how the limited resources available can be used most efficiently to increase the number of lives saved and to ensure that these resources also benefit health systems. Improving efficiency is much more than just improving the productive efficiency and also about ensuring that resources are going to where they will be the most beneficial and making investments that are the most efficient over time. These choices may be essential to achieving the goal of universal access to treatment as well as the sustainability of these programmes.

INTRODUCTION

Comprehensive HIV programmes have been rapidly scaled-up in developing countries over the past decade. This remarkable success is due in a large part to the dramatic increases in development assistance for health that has helped to finance these programmes. An estimated 6.6 million people are now receiving antiretroviral therapy (ART) in developing countries and millions more are accessing other important health and non-health services, which may help to reduce the spread and mitigate the impact of this deadly epidemic.

While the international community has committed to universal access to treatment, a large portion of those who currently need treatment today are still not accessing it, and given that incidence rates remain high, an increased number of people will also require treatment in the future. The increased need for second-line treatments, which are more expensive than first-line treatments, is also likely to increase overall treatment costs, even if there is little expansion in the number of people accessing treatment. Ambitious treatment targets were set with little regard to financial considerations, without sufficient commitments from donors to finance these programmes, and donors have not always lived up to their commitments. With future funding flows for HIV programmes highly uncertain, there is great concern about whether there will be sufficient resources available to achieve universal access to HIV treatment.

The purpose of this article is to discuss evidence of the slow down in development assistance funding for HIV programmes and the ways in which efficiency concerns might be built into the design of future programmes. In addition, it will also discuss the importance of also considering the ways in which these decisions might more broadly influence health systems.

OVERVIEW OF TRENDS IN DEVELOPMENT ASSISTANCE FOR HEALTH FOR HIV/AIDS: EVIDENCE OF DECLINING FUNDING FOR HIV

Official Development Assistance (ODA) for health is the term used to describe donor commitments to health programmes as monitored by the Organization for Economic Cooperation and Development Assistance Committee (OECD-DAC). It is the most commonly used measure of development assistance and it includes aid from most bilateral and multilateral donors. Using data from the OECD-DAC’s online Creditor Reporting System commitments for: (1) all health-related activities or Official Development Assistance for Health (ODAH), including HIV, (2) HIV programmes alone and (3) non-HIV programmes are compared from 2000 to 2009, the most recently available figures available as of September 2011 (see figure 1). Here,
ODAH is calculated as the sum of sector codes 120 (health), 150 (population including HIV) and 16064 (social mitigation of HIV). HIV ODA is the sum of 15 040 (STI control including HIV) and 16 064 while non-HIV-related activities is the difference between ODAH and HIV ODA.

In Figure 1, we can see that following nearly a decade of large increases, the rate of growth of ODAH has slowed in recent years. From 2001 to 2003, the average annual rate of growth of ODAH was 23.4%, 2004 to 2006 it was 22.8%, but it was only 8.6% from 2007 to 2009. Funding for HIV programmes has been even more variable: the average annual growth rate for HIV programmes was 59.7% from 2001 to 2003, 34.5% from 2004 to 2006 and only 6.1% from 2007 to 2009. While still increasing, the rates of growth for both HIV and non-HIV programmatic areas are lower than they were during most of the past decade.

Though there is no evidence of actual declines in funding through 2009 for either HIV and non-HIV programmes, the rate of growth of ODAH has declined substantially since 2007 and has been steepest for HIV programmes. While it is too soon to tell if this represents a permanent shift, it is certainly lower than historical rates and impossible to reach universal access to ARTs. This analysis shows that while the overall level of funding for HIV programmes has not actually declined in recent years, the rate of growth has slowed or even stagnated and that HIV programmes are capturing a smaller share of total ODAH. HIV appears to becoming a lower a priority for global health donors—perhaps as a result of donor fatigue. If these trends continue, and without substantial increases in domestic financing of HIV programmes, it will become challenging for HIV treatment programmes to continue to expand at or near historical rates and impossible to reach universal access to ARTs. HIV programme managers, health system planners and donors will need to carefully consider the implications of tighter budget constraints and increasing demands for treatment resources while continuing to strive towards the ambitious goal of universal treatment access. Given these financial pressures, it is more important than ever to consider how limited resources can be used most efficiently to continue to scale-up treatment while also considering more broadly how these resources are also affecting health systems.

**EFFICIENCY CONCEPTS AND CONSIDERATIONS: HOW TO DO MORE WITH LESS**

For this discussion, it is useful to distinguish between different concepts of efficiency. First, there is the concept of **productive efficiency**, which is the idea that at any time we are maximising outputs for a given level of inputs. In this context, this concept is frequently interpreted as maximising the number of people on HIV treatment or lives saved through treatment per level of investment. Second, there is also the concept of **allocative efficiency**, which can be interpreted as the allocation of resources that maximises outcomes per level of investment among HIV activities but could also be viewed as the allocation of resources within a health sector that maximises total health output. There is also the concept of **distributional efficiency**, which considers which groups or individuals are receiving the resources as we may wish to ensure that the resources are given to those that would benefit the most. Finally, we might also be concerned about efficiency over time, an alternative concept known as **dynamic efficiency**. While the first of these concepts has received some attention in past, the other three concepts have received much less and it is possible that programmatic decisions that try to maximise one might actually be at odds with the others. It may also be the case that bigger gains in efficiency might be possible by focusing on the latter forms of efficiency.

Despite the success of the scale-up of treatment programmes globally, there has been a paucity of good and reliable data on...
the true costs of delivering treatment services. Recently, however, some new studies have shed light on the overall costs of these programmes in terms of both their drug and non-drug costs.\textsuperscript{10} We should expect great variation in costs and outcomes, both due to variation in the prices paid for inputs and also due to variation in epidemiology, health system contextual factors and the design of the programmes. But if we use funding patterns of PEPFAR-funded programmes as an illustrative guide to inform this discussion (despite the fact that there are good reasons to believe that these programmes are not representative of other programmes), mean treatment costs per person are approximately $880 per ART patient, of which $382 were for non-drug expenses and the remaining $514 were for drugs.\textsuperscript{10}

A great deal of effort has been made in trying to increase the productive efficiency of treatment programmes through lowering of the costs of delivering these programmes. An obvious candidate has been in drug-related costs. However, the prices paid for drugs have dramatically declined over the past few years, thanks in a large part to the efforts of drug companies, the Clinton Foundation and from donors themselves. While further reductions might still be possible—and would most certainly be welcome in particular with regard to second-line drug therapies—there is likely to be a limit on additional efficiency savings that could be achieved by focusing on this strategy alone.

Another option might be to consider lowering the human resource component of treatment, for example, by shifting the delivery of services from physicians to lower cadre health workers, a strategy known as task-shifting. However, while some studies have shown success with this approach, others have been less successful\textsuperscript{11} and little is known about the cost-effectiveness of these approaches. In addition, it might even be the case that attempting to improve the productive efficiency of HIV treatment might be at odds with improving the overall efficiency of health systems by reallocating health workers away from other parts of the health sector where they might be more efficiently deployed.\textsuperscript{12} Few task-shifting studies have been rigorously evaluated,\textsuperscript{13} and studies tend to only evaluate the impact of the policy on HIV outcomes and ignore non-HIV outcomes, but from a health systems perspective, these must also be considered.

There is also increasing interest in the integration of vertical HIV programmes into primary healthcare infrastructure or the integration of other health services into HIV infrastructure with the hopes of using economies of scale and leveraging existing infrastructure for efficiency gains.\textsuperscript{14, 15} While at face value these strategies seem quite logical, the impact of these approaches on effectiveness of both HIV and non-HIV programmes needs to be carefully considered, as both risk to suffer, as well as the overall impact on health systems and further exacerbating donor fatigue, before such strategies are adopted at a more widespread level.\textsuperscript{16}

Providing ARTs is only a small part of the comprehensive set of services that are currently being provided by HIV programmes. Prevention, community mobilisation, mass media awareness campaigns, stigma reduction and efforts to influence the legal and political environments also capture large shares of total HIV investments. Recent estimates suggest that <30% of global investments in HIV are currently allocated to HIV treatment, care and support (including provider-initiated counselling and testing).\textsuperscript{17} Although likely important, many of these additional efforts have not been as rigorously evaluated and the cost-effectiveness of these approaches is not well established. Given that resources are highly constrained, donors and others may wish to demand more evidence on the effectiveness and cost-effectiveness of these approaches before continue to support these efforts.

A valid criticism against the use of efficiency considerations in making programmatic decisions is that it might be in conflict with other criterion for resource allocation, for example, the rule of rescue or with concepts of fairness and equity. However, as others have argued, ethical considerations should also take into consideration efficiency considerations when in resources limited (as they always are).\textsuperscript{18} If resources are not allocated where they are most needed, then it represents a missed opportunity to save more lives or achieve other outcomes. Therefore, it is also important to consider the distributional efficiency of HIV investments to ensure that they are going to the groups or individuals who would most benefit from these resources. At the individual level, these kinds of decisions might be extremely difficult to make but might dramatically help improve the overall efficiency of HIV investments by ensuring that resources are constantly being reallocated to where they are most needed.

This might, for example, entail revising treatment protocols in countries to provide treatments to less sick patients in hopes of improving survival outcomes. It might also entail discontinuing treatment to patients that fail treatments regimens, rather than inefficiently allocating these resources when there is less hope of clinical improvements.

The global nature of the HIV epidemic warranted a global effort to combat the problem. However, resources that were mobilised were not always distributed in a way that might be optimal from a distributional efficiency perspective. The eligibility criterion for eligibility for funding from the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM) only excludes the richest countries of the world. PEPFAR, the other major donor to HIV programmes globally, initially targeted a set of countries that had very different prevalence rates. Figure 3 demonstrates that some countries that receive a great deal of ODA for HIV per capita or per infected individual relative to domestic resources. In this new era of global health financing, donors may need to seriously consider whether or not the poorest countries should be prioritised for continued HIV support (figures 3 and 4).

Finally, although there are well-defined global targets for HIV treatment and significant progress has been made towards these

![Figure 3 Allocation of ODA for HIV programmes per capita relative to Gross Domestic Product per capita, countries with HIV% >0.5.](image-url)
efficiency of these programmes will be crucial to this process, but to be truly successful, it must be about a lot more than just improving the productive efficiency of programmes and also about ensuring allocative efficiency from a health systems perspective, ensuring that resources are going to where they will be the most beneficial and that we are making investments that make the most sense dynamically. Making these kinds of decisions is likely to involve many difficult tradeoffs but are likely to be essential to help achieve the noble goal of universal access to treatment as well as the sustainability of these programmes in the long run.

Competing interests None.

Contributors KG was responsible for conceptualising article, conducted the research and authored the manuscript.

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REFERENCES

Figure 4  Allocation of ODA for HIV programmes per HIV-infected adult relative to Gross Domestic Product per capita, countries with HIV% >0.5%.

Key messages
- Donor support to HIV programmes has stagnated in recent years threatening their sustainability and the ability to achieve the goal of universal treatment access.
- Funding constraints increases the need to focus on improving the efficiency of HIV programmes and to get more value for money from health systems.
- Most efforts to improve efficiency have focused on productive efficiency, but managers should also address allocative, distributional and dynamic efficiency concerns as well.

CONCLUSIONS
This year, the global response to the HIV epidemic will enter into its fourth decade. The first decade was largely about understanding the scope of the problem, the second was learning about how to respond and advocating for global action and the third was about increasing and mobilising these resources. The fourth decade might be about learning about how to do more with less and how to make these programmes successful in the long run, even if donor resources decline for HIV. Improving the
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