



Investing in our future

# The Global Fund

To Fight AIDS, Tuberculosis and Malaria

**Nineteenth Board Meeting  
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GF/B19/12  
Decision

## THE GLOBAL FUND'S ROLE AS A STRATEGIC AND RESPONSIBLE INVESTOR IN HIV/AIDS

### OUTLINE:

This paper is a follow up to the discussion the Board considered at its Sixteenth Meeting on the issue of ensuring the Global Fund acts as a strategic and responsible investor and is focused on HIV/AIDS. The paper was prepared by the Office of the Chair with support from partners. It includes the following components:

- i. Executive Summary;
- ii. Introduction by the Chair;
- iii. Cost and Quality of Treatment;
- iv. PMTCT and Pediatric Treatment: Critical Strategies to Protect Mothers and Children;
- v. Role of UNAIDS and Partners in Next Steps; and
- vi. Proposed decision point offered by the Chair and Vice-Chair.

## PART 1: EXECUTIVE SUMMARY

1.1 At its Sixteenth Meeting in Kunming, China, the Chair introduced the topic of how the Global Fund could act as a strategic and responsible investor, while remaining true to its founding principles, to ensure its resources have maximum impact. For the final session, this one focused on HIV/AIDS, the Chair requests the Board to consider its role as responsible stewards of the Global Fund's investments on behalf of people living with and at risk of HIV by reviewing the how the Global Fund can act more strategically to encourage best practices and reduce the greatest risks to its portfolio in order to achieve high impact in its investments.

1.2 One of the greatest risks to the portfolio is that the current set of investments is not bringing costs down over time. These issues can be summarized as: 1) the ever increasing costs of meeting the treatment needs of those living with HIV/AIDS juxtaposed with 2) lack of success in preventing new infections.

1.3 To facilitate a focused discussion on this topic and identify ways that the Global Fund, both as a financing instrument and as a partnership, can play a more effective role in supporting a comprehensive approach to HIV, the Board discussion will cover two aspects:

- i. Costs of treatment: Are there ways we can reduce the costs while simultaneously improving quality of care to people living with HIV/AIDS?
- ii. PMTCT+/-pediatrics: How can we improve effectiveness of grants targeting prevention of mother-to-child transmission of HIV and pediatric AIDS treatment through promoting integrated efforts?

1.4 Improving prevention efforts is also critically important for the Board to consider, particularly to determine how the Global Fund can support countries in developing and implementing HIV prevention strategies that deploy the right interventions to those most at risk. Given the time constraints for the session, UNAIDS has taken the leadership to form a small working group with interested Board constituencies to develop a more detailed paper on this topic.

### Cost and Quality of Treatment

1.5 The Global Fund has played a central role in enabling the rapid expansion of access to antiretroviral (ARV) treatment since 2002. As with all support from the Fund, its aim in financing care and treatment is to maximize associated health outcomes – as measured by lives saved, DALYs gained, or similar metrics – and minimize the funding required to achieve that impact. However, both elements of this core efficiency ratio are currently facing substantial challenges that threaten to limit the impact of the Fund's HIV/AIDS portfolio.

1.6 On the spending side, several trends are exerting heavy upward cost pressure on programs including: 1) the number of patients on treatment continues to grow quickly, reflecting both impressive continued rates of scale up and growing need; 2) the increasing proportion of existing patients experiencing first-line treatment failure will expand budget requirements due to the much higher cost of second-line regimens; and 3) a shift towards earlier initiation of treatment may increase overall costs by expanding the pool of eligible patients, thereby accelerating the pace of scale-up.

1.7 On the health outcomes side, there are concerns about the quality of care and treatment. There are early indicators – most notably loss-to-follow-up (LTFU) rates – suggest that many programs have quality shortcomings which need to be addressed. A recent CHAI assessment of loss rates across ten countries estimates that more than 50% of children were not alive and actively enrolled in care or treatment despite being diagnosed HIV-positive. Similarly, one recent review of adult retention rates in non-research treatment programs in sub-Saharan Africa showed that only 60% of adult patients initiated on treatment were alive and on treatment by the end of the second year of treatment<sup>1</sup>.

1.8 The Global Fund has the opportunity to help its beneficiaries meet these challenges in ways that optimize the Global Fund's core efficiency goals, maximizing impact while not spending more than necessary. Without departing from its mandate to act as a flexible and light-touch financing mechanism, the Fund can pursue a targeted set of interventions to minimize risks to its HIV/AIDS treatment portfolio.

1.9 There are four times of opportunities: first, technology choices (within the parameters of existing clinical policies); second, choices and application of clinical policies themselves; third, the design of how services are delivered to provide treatment, i.e., how available resources are used to reach as many patients as possible; fourth, methods to develop new capacity and systems over time.

1.10 Given the Global Fund's mandate as a financing mechanism, it is not positioned to influence all the relevant choices facing implementers. For example, a number of medium-term options associated with clinical policy require normative guidance and are naturally the domain of partners such as WHO and UNAIDS. However, the Global Fund should consider whether any subset of these opportunities warrants more active engagement.

1.11 The Board of the Global Fund should further study these risks and opportunities. HIV/AIDS treatment represents a sizeable share of the Fund's portfolio, and the Fund should have an informed view not only of the magnitude of cost for treatment in the next decade. The Board should take action to increase spending efficiency in its HIV/AIDS treatment portfolio and consider actions including, but not limited to: revisions to proposal/renewal forms and guidelines; adjustments in its performance metrics for implementers (in concert with implementers themselves and with other donors); changes in reprogramming policies to allow Principal Recipients more flexibility to take advantage of efficiency opportunities during the course of a grant; more active coordination with and guidance to partners on pursuing such opportunities; and active portfolio reviews (including if and how to require or support major shifts in the portfolio, e.g. in technology choice).

### **PMTCT and Pediatric Treatment: Critical Strategies to Protect Mothers and Children**

1.12 PMTCT and pediatric AIDS treatment encompass the fields HIV prevention, reproductive and sexual health, maternal and child health and child survival. Success cannot be achieved without effective integration that focuses on providing

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<sup>1</sup> Rosen, Sydney et al. "Patient Retention in Antiretroviral Therapy Programs in Sub-Saharan Africa: A Systematic Review" PLoS Medicine: October 2007.

comprehensive prevention, care and treatment for both mother and child. Full PMTCT should be an entry point to the rest of the family, including prevention, treatment, care and support of other siblings, male involvement, and family health, yet most countries have traditionally only focused on one aspect—prevention of vertical transmission.

1.13 The vast majority of pediatric HIV infections occur through mother-to-child transmission. Most countries have programs to prevent pediatric HIV/AIDS, but only 17 are currently on track to reach the United Nations General Assembly Special Session goal for reducing HIV infections in children. Providing PMTCT and pediatric HIV treatment can reduce maternal and child mortality if they are delivered through the provision of a comprehensive package of services. This requires integration between PMTCT, maternal and child survival interventions, sexual and reproductive health and antiretroviral therapy services. Investing in PMTCT and pediatric HIV care, support and treatment will reduce long term treatment costs overall.

1.14 Though advances in pediatric prevention, treatment, and care have been insufficient, PMTCT and pediatric AIDS treatment are beginning to receive increased attention from national programmes and some countries are starting to register successes. Rounds 6 and 7 of the Global Fund to Fight AIDS, TB and Malaria have contributed to the momentum to eliminate pediatric HIV/AIDS. In Round 6, fourteen countries were granted funding for pediatric treatment programs and fifteen included funding for PMTCT. Eight grants were awarded to proposals that would provide both PMTCT and pediatric treatment in countries such as Burkina Faso, Djibouti, Guinea, Liberia, Mozambique or Senegal.

1.15 As national and global organizations increase their investments in PMTCT and pediatric programmes, key challenges that are threatening forward progress must be addressed including:

- i. **Poor access to testing services:** prevention of vertical transmission first requires that pregnant women are tested and counseled. If they are found to be positive, they need to access CD4 count so that they can receive HAART treatment if needed.
- ii. In most resource-limited settings, PMTCT programs are also impeded by **significant drop-off of mothers and infants**, from the time pregnant women are offered HIV test during ANC visits down to the time of delivery, and uptake of ARVs and cotrimoxazole prophylaxis in the post-partum period.
- iii. **Limited capacity of national programmes to implement global and national guidelines.** The challenges for scaling up PMTCT and pediatric HIV care are likely to increase over the coming years because of several factors: the changes in normative PMTCT and care and treatment guidelines including the introduction of more complex assessment and triaging procedures, monitoring and follow up requirements, and the recommendation to treat all infected infants below 12 months of age regardless of clinical and/or immunological stage, which therefore requires much more aggressive expansion of early infant diagnostics (notably PCR testing), linked to treatment programmes.

- iv. **Limited efforts to scale-up innovative approaches to accelerate expansion of services to the majority of women, their children and families:** Limited investment has been made so far to scale up such innovative approaches, which would benefit from more Global Fund support.
- v. **Weak capacity to track progress:** National programs are struggling to routinely report 'care' processes beyond HIV testing and ARV prophylaxis. These difficulties are linked to slow progress in institutionalizing and organizing chronic care models centered in weak maternal, newborn, and child health delivery systems; non-existence of mechanisms for tracking mothers and infants across services, and from facility to community levels; and the broader failure to 'normalize' HIV testing, care and treatment from a health care providers' and community perspectives.

1.16 A critical risk area is the inadequate adoption of WHO guidelines endorsing highly active antiretroviral therapy (HAART) as best practice for PMTCT. WHO recommends early initiation of HAART for HIV-infected pregnant women who fulfill current eligibility criteria for lifelong ART and more efficacious PMTCT interventions than single dose Nevirapine for the ones who do not. However, about half the high-burden countries with complete data are still using single dose Nevirapine for PMTCT due to factors such as cost and inadequate human resources. Failing to change this regimen would hamper program performance and increase the risk of mothers developing resistance to ART.

1.17 Another critical risk area is inadequate coverage of pediatric HIV antiretroviral prophylaxis. While 33% of pregnant women living with HIV received ARVs to prevent mother-to-child transmission in 2007, only 20% of infants born to these women HIV received their dose of ARVs. This indicates a large maternal-child coverage gap that greatly dilutes programmatic impact. Failing to address this risk would result in more infections in infants and loss of credibility to PMTCT programs.

1.18 The Global Fund Board should, on an urgent need, consider options to recommend countries to rapidly scale-up: 1) Integration of testing services into antenatal, delivery and child care settings with provider-initiated HIV testing for pregnant women in generalized epidemics; 2) Greater capacity to assess the ART needs of HIV-positive mothers, especially access to CD4 cell count equipment. Strengthening the provision of ART to mothers for their own health; 3) Move to more efficacious ARV regimens for PMTCT and ensuring their wide availability; 4) Cotrimoxazole prophylaxis for pregnant women living with HIV, HIV-infected mothers and their infants; and 5) Expansion of early infant diagnosis and paediatric treatment, including nutritional support and family care.

1.19 Finally, the Global Fund Board should send a clear signal encouraging countries to re-intensify efforts on preventing HIV infection in children and improve the health of HIV-infected pregnant women with HIV through scaled up of PMTCT and pediatric HIV care and treatment programs and to use implementation of PMTCT and pediatric HIV care, support and treatment as an opportunity to strengthen existing antenatal, delivery and postnatal care services. To build capacity within these services to include functional linkages with family planning, immunization, nutrition and adult ART centers.

## PART 2: CHAIR'S INTRODUCTION

2.1 At its Sixteenth meeting in Kunming, China, the Global Fund Board engaged in a discussion on its role in shaping the strategic direction for AIDS, tuberculosis, and malaria. The Chair introduced the topic to determine how the Global Fund could act as a strategic and responsible investor, while remaining true to its founding principles, to ensure its resources have maximum impact. As follow-on to the discussion, the Board has been considering the Global Fund's role in each disease area respectively.

2.2 One major theme that has emerged from these discussions is the question of quality of services and value for money. For example, is the Global Fund getting maximum value for its investment? Is the Global Fund funding the right things? Several Board constituencies have raised concerns that the Board does not spend enough time on assessing its portfolio to determine if its resources are being used as effectively or efficiently on quality prevention, care and treatment services. Many have raised that there are critical risks to intended beneficiaries of Global Fund supported programs, as well as inherent risks to the portfolio if best practices and technically sound approaches are not being implemented.

2.3 For the final session, this one focused on HIV/AIDS, the Chair requests the Board to consider its role as responsible stewards of the Global Fund's investments on behalf of people living with and at risk of HIV by reviewing the how the Global Fund can act more strategically to encourage best practices, increase coverage of treatment, care and prevention services, and reduce the greatest risks to its portfolio in order to achieve high impact in its investments.

2.4 In addition to improving the quality of services it supports, the Global Fund will not achieve success as a financing mechanism to support countries in effective and ambitious scale up in the response to addressing HIV/AIDS if there is inadequate attention to reducing the cost of responding to HIV. A major risk to success in countries' achieving universal access to prevention care and treatment, as well as to the portfolio is that the current set of investments is not bringing costs down over time. These issues can be summarized as: 1) the ever increasing costs of meeting the treatment needs of those living with HIV/AIDS juxtaposed with 2) lack of success in preventing new infections.

2.5 To facilitate a focused discussion on this topic and identify ways that the Global Fund, both as a financing instrument and as a partnership, can play a more effective role in supporting a comprehensive approach to HIV, the Board discussion will cover two aspects:

- iii. Costs of treatment: Are there ways we can reduce the costs while simultaneously improving quality of care to people living with HIV/AIDS?
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2.6 Improving prevention efforts is also critically important for the Board to consider, particularly to determine how the Global Fund can support countries in developing and implementing HIV prevention strategies that deploy the right interventions to those most at risk. Given the time constraints for the session, UNAIDS

has taken the leadership to form a small working group with interested Board constituencies to develop a more detailed paper on this topic for consideration by the Portfolio and Implementation Committee.

2.7 Discussants who are experts in these areas have been invited to provide a short summary of the key issues in each area and pose discussion questions for the Board to consider.

## **PART 3: COST AND QUALITY OF TREATMENT<sup>2</sup>**

### **Challenges Facing the Global Fund**

3.1 The Global Fund has played a central role in enabling the rapid expansion of access to antiretroviral (ARV) treatment since 2002. As with all support from the Fund, its aim in financing care and treatment is to maximize associated health outcomes – as measured by lives saved, DALYs gained, or similar metrics – and minimize the funding required to achieve that impact. However, both elements of this core efficiency ratio are currently facing substantial challenges that threaten to limit the impact of the Fund's HIV/AIDS portfolio.

3.2 On the spending side, several trends are exerting heavy upward cost pressure on programs:

- i. First, the number of patients on treatment continues to grow quickly, reflecting both impressive continued rates of scale up and growing need – in addition to the 10 million people in need of treatment today, 23 million are living with HIV and will become eligible over time, as will each person newly infected with the virus.
- ii. Second, the increasing proportion of existing patients experiencing first-line treatment failure will expand budget requirements due to the much higher cost of second-line regimens<sup>3</sup>. In 2010, there will nearly 300,000 patients on second-line treatment; this is likely to represent roughly 5% of all patients but could demand nearly a quarter of total ARV costs based on current prices<sup>4</sup>.
- iii. Third, a shift towards earlier initiation of treatment may increase the resources needed by expanding the pool of eligible patients, thereby accelerating the pace of scale-up. This shift is already beginning with pediatric treatment, following the issuance of guidance on early infant initiation by the WHO in April 2008. Some countries are also considering raising the CD4 count threshold for adult initiation from the current WHO

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<sup>2</sup> The Chair thanks the Clinton HIV/AIDS Initiative (CHAI) for drafting this section.

<sup>3</sup> In 2008, the average price of second-line regimens was roughly \$1,000 based on CHAI analysis of WHO's Global Price Reporting Mechanism (GPRM) ([who.int/hiv/amds/price/hdd/](http://who.int/hiv/amds/price/hdd/)). By comparison, the most dominant first-line regimen is commonly available for less than \$100. (Note: ARV prices in this document are US \$ per patient per year and in FOB terms whenever possible.)

<sup>4</sup> The patients accessing estimate is consistent with WHO and UNAIDS presentations to manufacturers in December 2008. Allocation of costs based on CHAI analysis.

recommendation of 200 cells/ $\mu$ L in response to emerging research that documents improved outcomes among patients who initiate earlier<sup>5</sup>.

3.3 On the health outcomes side, there are concerns about the quality of care and treatment. Given the still early stage of large-scale treatment in developing countries, there is insufficient data on long-term treatment outcomes to draw firm conclusions about overall quality. Yet some early indicators – most notably loss-to-follow-up (LTFU) rates – suggest that many programs have quality shortcomings which need to be addressed. A recent CHAI assessment of loss rates across ten countries estimates that more than 50% of children were not alive and actively enrolled in care or treatment despite being diagnosed HIV-positive. Similarly, one recent review of adult retention rates in non-research treatment programs in sub-Saharan Africa showed that only 60% of adult patients initiated on treatment were alive and on treatment by the end of the second year of treatment<sup>6</sup>.

3.4 Such early warning signs point to the need for investment in quality improvement and system strengthening, coupled with closer longitudinal monitoring of patient outcomes. Higher-quality services can help to control certain costs – for example, better diagnostic monitoring and adherence support can extend the duration of first-line treatment and delay the need for costlier second-line regimens. But enhanced quality can also affect costs in the other direction. Upfront investments in the systems needed to reduce attrition and improve outcomes will be costly, and the success of these investments will also increase budgets by keeping more patients alive and on treatment.

3.5 The Global Fund has the opportunity to help its beneficiaries meet these challenges in ways that optimize the Global Fund's core efficiency goals, maximizing impact while not spending more than necessary. Without departing from its mandate to act as a flexible and light-touch financing mechanism, the Fund can pursue a targeted set of interventions to minimize risks to its HIV/AIDS treatment portfolio. Indeed, the Global Fund has already successfully taken such an approach to its malaria portfolio through actions ranging from proposal guidance (e.g., encouraging recipients to seek greater funding in order to achieve a higher penetration of bed nets) to firmer policy positions (e.g., mandating the use of ACTs).

3.6 This paper explores several opportunities for the Fund to extend the benefit of portfolio management to HIV/AIDS treatment.

### **Opportunities to Manage Cost and Increase Quality of Treatment**

3.7 Against this landscape of challenges, opportunities exist for implementers – and the partners who aim to assist them – to maximize the efficiency with which they put Global Fund resources to work. In the short-term, opportunities exist to decrease costs associated with care and treatment while maintaining or even increasing the quality of care. In the medium to long-term, implementers should consider both sides

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<sup>5</sup> Sax P and Baden L. When to start antiretroviral therapy - ready when you are? *New England Journal of Medicine*. 2009.

<sup>6</sup> Rosen, Sydney et al. "Patient Retention in Antiretroviral Therapy Programs in Sub-Saharan Africa: A Systematic Review" *PLoS Medicine*: October 2007.



of the efficiency ratio; some measures may increase costs, but achieve even greater gains in outcomes.

3.8 For purposes of discussion, presented below are four types of opportunities: first, technology choices (within the parameters of existing clinical policies); second, choices and application of clinical policies themselves; third, the design of how services are delivered to provide treatment, i.e., how available resources are used to reach as many patients as possible; fourth, methods to develop new capacity and systems over time. The first of these categories is explored in depth; brief examples are shared to highlight the others.

#### *Technology choice*

3.9 Normative direction from the WHO often comes in the form of clinical policies with multiple options available to implementers<sup>7</sup>. Ministries of Health sometimes choose among these options to set focused parameters on procurement and clinical practice; in other instances, a fuller range of options is maintained, to provide greater flexibility to caregivers to meet the needs of individual patients. It is not uncommon for the technology choices inherent in these guidelines to have significant implications in terms of the cost and quality of treatment provided under grants from the Global Fund and other donors.

3.10 As noted above, second-line treatment will be a cost driver in coming years, and it is an area in which implementers face a technology choice: four regimens have been prioritized by the WHO<sup>8</sup>. In 2009, the lowest available price for the most expensive second line regimen prioritized by the WHO (ABC+ddl+LPV/r) is expected to be US\$ 500 more than the most affordable prioritized regimen (TDF+3TC+ATV/r), which will become available later this year<sup>9</sup>. This differential becomes significant when applied against expected second-line patient volumes; initiating 200,000 patients on the more affordable regimen once it becomes available could result in US\$100 million in annual cost savings for implementers and donors such as the Global Fund (in low-income countries alone; the price differential and therefore savings opportunity in middle-income countries would be even greater). This cost comparison does not capture additional benefits: the more affordable option has a lower pill

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<sup>7</sup> An early and salient feature of "3 by 5", for example, was streamlined guidance on first-line protocols, but even these offered four distinct three-drug combinations for use in developing countries: (d4T or AZT) + 3TC + (NVP or EFV).

<sup>8</sup> In 2007, WHO issued supplementary guidance on selection of second-line regimens in the working group report, *Prioritizing Second-Line Antiretroviral Drugs for Adults and Adolescents: a Public Health Approach*. The report states: "The working group participants were able to develop consensus on the preferred recommended NRTI background options... These were TDF+3TC and ABC+ddl. For the PI component, based on comparable clinical efficacy safety data the working group ranked LPV/r and ATV/r as the highest priorities. These ARV options are therefore the ones among those recommended in WHO treatment guidelines that... partners... should be encouraged to make available to national programmes."

<sup>9</sup> Based on CHAI analysis of WHO's GPRM, the average price paid in low and middle-income countries for ABC+ddl+LPV/r, was \$1,384 in 2008. The lowest price available for this combination, as announced by UNITAID and CHAI on April 17 2009, is currently \$944. By comparison, the cost TDF+3TC+ATV/r is likely to be \$500 less when ATV/r comes to market later this year. CHAI is working actively with manufacturers to develop a heat-stable co-pack or fixed-dose combination of boosted atazanavir as part of its "second-line" partnership with UNITAID. Because of their comparable production costs on a per unit basis and the 60% lower dosage of boosted ATV when compared to LPV, the former is expected to be 40-60% less expensive than the latter.

burden (three pills once daily versus seven pills twice daily), which may be associated with improved adherence. Despite these benefits, uptake of the more affordable regimen is expected to be limited, in part because of lack of communication to purchasers, corresponding lack of demand, delays associated with product registration, and limited national capacity to review and revise national guidelines to favor one regimen.

3.11 The example above offers a short-term technology choice that is consistent with clinical policy – and which is of comparable quality to alternatives – while offering a significantly lower cost. Other comparable choices are available to implementers in the short-term. Fixed-dose combinations (FDCs), which combine multiple drugs into a single tablet, represent an alternative to single formulations and can both increase treatment durability<sup>10</sup> and decrease cost. For children, FDCs are less than half the price of the alternative; the latter also involves a dozen bottles of three syrups each month, compared to a pack of tablets that fit in the palm on one’s hand. However, based on CHAI’s experience in procuring FDCs in partnership with UNITAID, national supply chains do not always have the capacity to push uptake of these products; and procurement mechanisms do not inform caregivers of the availability or benefits of new technologies to influence their pulling power in order requisitions. In the absence of such systems, there is a significant time gap between when FDCs are available for purchase in the global market and when they start replace syrups in remote health centers.

3.12 In the medium to long-term, donors such as the Global Fund should not be seeking to minimize cost, but instead to maximize the ratio of outcomes to cost. In part, this is because some upfront investments can yield tremendous improvements in long-term patient survival (and therefore financial sustainability, to the extent that survival avoids the high costs of clinical care or treatment failure). In terms of technology, the choice of ARVs is, again, pertinent. For example, clinicians are increasingly opting for the “one pill, once daily” first-line regimen including TDF and EFV; making the switch to this regimen is regarded as cost-effective “with only a modest reduction in [its] price”<sup>11</sup>. In addition, quality improvements associated with the use of TDF in first-line therapy may yield material monetary savings by slowing the rate of migration to second-line therapy. However, the difference in upfront formulation price – rather than a comparison of total cost, including the differences in monitoring tests and clinical care required given the toxicities and durability of the alternatives – discourages procurement partners from making this transition<sup>12</sup>.

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<sup>10</sup> See, for example, Willig J, et al. Increased Regimen Durability in the era of Once-daily Fixed-dose Combination Antiretroviral Therapy. *AIDS*. 2008;22(15):1951-1960.

<sup>11</sup> Rosen S, Long L, Fox M, Sanne I. Cost and cost-effectiveness of switching from stavudine to tenofovir in first-line antiretroviral regimens in South Africa. *JAIDS* 2008. The study concluded that “replacing d4T with TDF at current prices is cost effective (cost/QALY gained <3 X per capita GDP) and would become very cost effective (cost/QALY gained <1 X per capita GDP) with only a modest reduction in the price of TDF.”

<sup>12</sup> In part, this is because of limited transparency into medium-term pricing trends. The price of TDF+3/FTC+EFV is roughly one-third the rate of 24 months ago. At a price of US\$ 210 (announced by UNITAID and CHAI on April 17, 2009), it remains double the cost of the most common d4T-based regimens, however it is possible that over the medium term, as the price continues to fall by an additional one-third or more, that the total cost of the preferred regimen will, in fact, be less than the alternative.

3.13 Another medium-term technology choice reflects the quality criteria applied to medicines used to treat opportunistic infections (OIs). HIV/AIDS morbidity and mortality are often caused by OIs, yet the quality assurance thresholds for procurement of OI medicines are significantly less robust than those for ARVs. Initial analysis suggests that two-thirds of public sector purchases of common OI drugs are from sources without GMP certification or stringent regulatory authority approval<sup>13</sup>. If the associated quality of these products decreases efficacy or increases toxicity, the ratio of outcomes to cost may be improved by investing in standards that modestly increase cost but dramatically improve quality.

3.14 Technology choice in the medium-term also includes a significant opportunity in the form of point-of-care (POC) diagnostics, e.g. the choice between lab-centered, “bench top” CD4 platforms and handheld POC devices that can be used at the point of clinical service (or in patients’ homes) and that return results in minutes, like an HIV rapid test. POC may be more affordable than existing platforms over time; even initial gains in cost, though, could well be outweighed by benefits to quality of care (e.g., reduced rates of loss to follow up).

#### *Clinical policy*<sup>14</sup>

3.15 Technology choice is not the only lever to optimize the ratio of treatment outcomes and cost. As previously noted, technology choices exist within the parameters of existing clinical policies. The choice and application of such policies can likewise improve quality and help to manage costs. These policies, which often dictate when and how products are used, ensure adoption of proven interventions to allow patients access to high-quality, cost-effective services. Yet, just as there is a significant lag time between technology availability and uptake, there is also a lag from when improved clinical policies are recommended at the international level, adopted at a national level, and implemented at local level. For example, in countries with high TB and HIV prevalence, introducing the use of isoniazid preventive therapy (IPT) has been shown to reduce the costs and improve the quality of both TB and HIV treatment<sup>15</sup>. IPT can decrease lifetime incidence of TB by 36% and costs just US\$ 36 per life-year saved for HIV-positive adults. Based on the improved health outcomes of patients receiving it, affordable IPT may be able to actually reduce total medical care costs<sup>16</sup>. Despite these benefits, use of IPT remains limited; only 25,000 people received it in 2005.

3.16 Of course, policies cannot have significant impact on the quality and cost of treatment if not implemented consistently. For example, cotrimoxazole prophylaxis is a proven, low-cost<sup>17</sup> method of prolonging the period before treatment initiation and

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<sup>13</sup> Based on CHAI analysis of cotrimoxazole 400/80mg procurement recorded in WHO’s GPRM.

<sup>14</sup> This section presents brief examples of clinical policy choices made at a national level that are relevant to the quality and cost of treatment. Other examples that are not included here but which are also relevant to such a discussion include use of viral load testing to monitor disease progression, criteria for treatment initiation in children and adults, and the use of HAART for PMTCT.

<sup>15</sup> IPT has been recommended by WHO for more than ten years as a key intervention to reduce the burden of TB in people living with HIV. See [stoptb.org](http://stoptb.org) for additional data and documentation.

<sup>16</sup> For this to be universally true, the cost of IPT would need to be moderately less than that cited at the time of the 1998 study in Uganda. See Sacks H, Bell J, Rose DN, Sacks HS. Cost-effectiveness of isoniazid preventive therapy for HIV-infected people in sub-Saharan Africa. *Int Conf AIDS*. 1998; 12: 141 (abstract no. 450/13278).

<sup>17</sup> Approximately \$0.01 per pill

of lowering morbidity and mortality. However, while most developing countries include cotrimoxazole prophylaxis in national treatment guidelines, coverage rates for cotrimoxazole are not monitored, and it receives less priority relative to ARVs when allocating resources for procurement and for service delivery. Access, therefore, remains limited; among children, only four percent of the four million HIV-exposed and infected in need of cotrimoxazole are receiving it<sup>18</sup>.

### *Service delivery*<sup>19</sup>

3.17 In addition to technology and clinical policy choices, the quality and cost of treatment are affected by the design of service delivery, i.e., how available resources are used to deliver care. Better allocation of resources can help implementers reduce costs while maintaining or even improving quality. For example, task-shifting can reduce demand on more scarce and more expensive cadres of healthcare workers and can free up clinical capacity while maintaining quality (e.g., by allowing physicians to focus on case management rather than initial HIV diagnosis). National modeling of a 30-month pilot by the Government of Rwanda and Family Health International, which shifted certain clinical responsibilities from doctors to nurses, revealed that the demand on physician capacity to reach annual treatment targets could be reduced by 80%<sup>20</sup>.

3.18 Data on community health workers (CHWs) provide a compelling comparison of improved quality with modest additional cost. Parts of Rwanda where CHWs are responsible for conducting daily patient visits and are compensated at an average of less than US\$ 30/month have been associated with treatment default rates of only 0.5%, well below the national average of 5%<sup>21</sup>. While task-shifting programs may require initial investments in recruitment and training as well as ongoing investments in supervision and remuneration, they can improve the quality of care and reduce overall costs.

### *Systems strengthening*<sup>22</sup>

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<sup>18</sup> A 2006 study in Cote d'Ivoire concluded that "none of the strategies that used antiretroviral therapy alone were as cost-effective as those that also used trimethoprim-sulfamethoxazole prophylaxis." (Goldie S, et al. Cost-Effectiveness of HIV Treatment in Resource-Poor Settings – The Case of Cote d'Ivoire. NEJM 2006.) See also Zachariah R, et al. Scaling-up co-trimoxazole prophylaxis in HIV-exposed and HIV-infected children in high HIV-prevalence countries. Lancet Infectious Diseases 2007.

<sup>19</sup> This section presents one brief example of service delivery design relevant to the quality and cost of treatment. Other examples not included here but relevant to such a discussion include strengthening supply chain management, choosing between pre-service and in-service training for healthcare workers, improving procurement modalities, and optimizing laboratory systems. For lab systems, design is, in fact, particularly relevant. An implementer may, for example, opt for a low throughput CD4 platform with a lower unit cost over a high throughput machine with a higher unit cost because the network costs of the former have been underestimated when, in practice, the lower throughput model ultimately demands more machines and costlier sample transport.

<sup>20</sup> From 52% to 11% of national capacity. See O'Brien ME, Chung J, Binagwaho A, et al. 2009. Nurse delivery of HIV care: Modeling the impact of task-shifting on physician demand. (under review).

<sup>21</sup> Based on data from districts where the Ministry of Health is delivering services with support from Partners In Health and CHAI.

<sup>22</sup> This section presents one brief example of a systems strengthening approach relevant to the long-term quality and cost of treatment. Other examples not included here but relevant to such a discussion include adapting donor funding to be "on plan and on budget," strengthening Health Management Information Systems, and proactive quality management. The latter of these is worth a brief overview, based on experiences proving the power of good management in other disease areas. In Guinea-Bissau, in-hospital and 30-day post admission mortality for malaria was 50% and 61% lower than control sites

3.19 The previous example focuses on increasing output given fixed capacity constraints. In the medium to long-term, however, governments and donors will need to invest in significant additional capacity to expand access and maintain, much less improve the quality of care. The methods used to strengthen healthcare systems can themselves be optimized relative to cost and quality.

3.20 Zambia is currently operating at a 50% healthcare worker vacancy rate, which is reducing quality of care, slowing patient enrollment and closing clinics<sup>23</sup>. By building a forecasting model to project future staffing levels, the Ministry of Health realized that target staffing levels would never be reached if it retained its previous focus on reducing voluntary attrition. This upfront exercise revealed that pre-service training was the major bottleneck and needed to be expanded significantly in order to reach target staffing levels. This allowed the government to focus its resources on higher impact strategies (developing scale-up plans for pre-service training and re-allocating funds to finance these plans). Donors to Zambia, including the Global Fund, will receive a higher return on investment, and patients will benefit from greater healthcare worker capacity more quickly.

3.21 Given the high global costs associated with systems strengthening, better planning and resource allocation, i.e., more focus on *how* to build capacity, can be useful in the medium to long-term.

#### Recommendations for the Global Fund

3.22 The examples above illustrate the considerable variability which exists in the efficiency with which resources are used to provide HIV/AIDS care and treatment. The output of each dollar invested is not fixed. Choices by implementers determine the efficiency ratio of investment – whether outcomes are maximized and costs minimized. Optimizing this ratio should be a priority for the Global Fund and its partners given their goal to increase access and health outcomes in a resource-constrained environment.

3.23 Given the Global Fund's mandate as a financing mechanism, it is not positioned to influence all the relevant choices facing implementers. For example, a number of medium-term options associated with clinical policy require normative guidance and are naturally the domain of partners such as WHO and UNAIDS. However, the Global Fund should consider whether any subset of these opportunities warrants more active engagement.

3.24 In part, the Global Fund cannot help but exert influence on implementers, e.g. in the form of proposal guidelines, monitoring and evaluation frameworks and

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where improved management techniques were implemented (Biai S, Rodrigues A, Gomes M, et al., Reduced in-hospital mortality after improved management of children under 5 years admitted to hospital with malaria: randomized trial. *BMJ* 2009 online doi 10.1136). In Laos, with comprehensive improvements in management of the primary and hospital-based delivery system, health center utilization tripled, maternal mortality dropped by 20%, and child mortality dropped by one third in seven years (Perks C, Toole MJ, Phouthonsy K. District health programs and health-sector reform: case study in the Lao People's democratic Republic. *Bull WHO* 2006; 84:132-138). The financial investment for these outcomes in Laos was \$4 million, which was calculated to be equivalent to about \$1 per person year, suggesting that good management is an extremely cost-effective intervention.

<sup>23</sup> Zambian Ministry of Health MOHHRIS database 2004/2005.

reprogramming policies, and at a minimum it should assess how to leverage this influence effectively relative to efficiency opportunities. There is also precedent for the Global Fund taking more proactive steps to manage its portfolio, and it should consider whether this is appropriate given the risks and opportunities facing the care and treatment component of HIV/AIDS grants.

3.25 First, the Board of the Global Fund should further study these risks and opportunities. HIV/AIDS treatment represents a sizeable share of the Fund's portfolio, and the Fund should have an informed view not only of the magnitude of cost for treatment in the next decade (e.g., by projecting forward current scale up rates and by assuming that the Fund will finance a given market share of global treatment) but also the impact of each of a variety of alternatives associated with technology choice, clinical policy, service delivery design, and methods to strengthen systems. The Board, together with the Fund's partners, should use such an analysis to quantify the effect of efficiency opportunities and prioritize among them.

3.26 Second, the Board should allocate roles and responsibilities – and ensure adequate capacity exists – among the Secretariat and its committees to consider on an ongoing basis the efficiency with which its resources are being used and related opportunities for it and/or its partners to optimize spending efficiency.

3.27 Third, on the basis of due analysis and acknowledging that the mechanisms of the Global Fund have an impact on spending efficiency (even when it chooses not to play a proactive role), the Board should take action at its next meeting to increase spending efficiency in its HIV/AIDS treatment portfolio. The Board should consider actions including, but not limited to: revisions to proposal/renewal forms and guidelines; adjustments in its performance metrics for implementers (in concert with implementers themselves and with other donors); changes in reprogramming policies to allow Principal Recipients more flexibility to take advantage of efficiency opportunities during the course of a grant; more active coordination with and guidance to partners on pursuing such opportunities; and active portfolio reviews (including if and how to require or support major shifts in the portfolio, e.g. in technology choice).

## **PART 4: PMTCT AND PEDIATRIC TREATMENT: CRITICAL STRATEGIES TO PROTECT MOTHERS AND CHILDREN<sup>24</sup>**

### **Introduction**

4.1 PMTCT and pediatric AIDS treatment encompass the fields HIV prevention, reproductive and sexual health, maternal and child health and child survival. Success cannot be achieved without effective integration that focuses on providing comprehensive prevention, care and treatment for both mother and child. The international community has agreed that the four prongs of a comprehensive approach to PMTCT are:

- i. Prong 1: Primary prevention of HIV among women of childbearing age

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<sup>24</sup> UNICEF, WHO, UNAIDS, and the Campaign to End Pediatric AIDS/Global AIDS Alliance, provided support in the drafting of this section.

- ii. Prong 2: Prevention of unintended pregnancies in women living with HIV who do not currently wish to become pregnant
- iii. Prong 3: Prevention of vertical transmission through safer delivery, antiretroviral drugs, and safer infant feeding, and
- iv. Prong 4: Treatment care and support for women living with HIV, their infants, and families.

4.2 Many countries have traditionally focused on Prong 3, the prevention of vertical transmission. They have paid scant attention to Prongs 1 and 2, two areas of opportunity that could reap considerable benefit were they strategically articulated in the Global Fund portfolios. Full PMTCT should also be an entry point to the rest of the family, including prevention, treatment, care and support of other siblings, male involvement, and family health. In this paper however, we focus on the traditionally-accepted definition of PMTCT, as articulated in Prongs 1 to IV.

### **Prevention of mother-to-child transmission of HIV and paediatric HIV care, support and treatment are central to reaching the goal of Universal Access**

4.3 The vast majority of pediatric HIV infections occur through mother-to-child transmission. While combination ARV regimens can reduce the incidence of mother-to-child transmission to as low as 2%, an estimated 370,000 children were infected with HIV in 2007 alone although ARV prevention regimens can reduce the incidence of vertical transmission to 2%. These 370,000 infants represent approximately 17% of all new HIV infections. Today, about 2 million children under the age of 15 live with HIV/AIDS worldwide; 1.8 million reside in sub-Saharan Africa. Most countries have programs to prevent pediatric HIV/AIDS, but only 17 are currently on track to reach the United Nations General Assembly Special Session goal for reducing HIV infections in children.

4.4 Providing PMTCT and paediatric HIV treatment can reduce maternal and child mortality if they are delivered through the provision of a comprehensive package of services. This requires integration between PMTCT, maternal and child survival interventions, sexual and reproductive health and antiretroviral therapy services. Investing in PMTCT and pediatric HIV care, support and treatment will reduce long term treatment costs overall.

### **Progress made in scaling up PMTCT and pediatric HIV care, support and treatment**

4.5 The overall Universal Access goal is to reach 80 percent coverage for pediatric treatment and PMTCT services. However, progress has been slow in resource-limited settings. In 2007, only 33% of positive pregnant women received ARV prophylaxis for PMTCT in low- and middle-income countries and although this treatment has to be administered to mother and newborn child, only 20% of infants received ARV prophylaxis. Most children in need of ART are still not accessing treatment and treatment coverage for children lags behind that of adults: only 14% of the 780,000 children in need of ART are receiving it, compared to 31% of adults. Of the nearly 3 million people on treatment globally, about 6.7%, are children. Revised WHO guidelines calling for treatment of all infected infants will only increase the need for national governments to scale up national capacity for early diagnosis and initiation of

treatment in infants and young children. Because of limited capacity to treat so far this is resulting in 270,000 HIV-related deaths in children, or 14% of all AIDS deaths in 2007.

4.6 Though advances in pediatric prevention, treatment, and care have been insufficient, PMTCT and pediatric AIDS treatment are beginning to receive increased attention from national programmes and some countries are starting to register successes. For example, between 2004 and 2007, coverage of antiretrovirals for preventing mother-to-child transmission increased from 3% to 46% in Mozambique, from 25% to 69% in Kenya, and from 15% to 57% in South Africa. The estimated mother-to-child transmission declined from 30.5% in 2001 to 11.4% in 2007 in Cambodia, and from 30.5% to 8.9% in Rwanda during the same time period.

4.7 There are now several opportunities to make a difference in reaching the goal of HIV-free and AIDS-free generation. In 2005, UNICEF and the UN community launched "*Unite for Children, Unite Against AIDS*", a campaign to urge the international community to protect children against the impacts of HIV/AIDS and eliminate AIDS among children. Scale-up of PMTCT in countries supported by PEPFAR has reached more than 40% of positive pregnant women in several countries. Access to PMTCT and pediatric treatment has reached Universal Access goals in countries such as Namibia, Botswana and Thailand.

4.8 Rounds 6 and 7 of the Global Fund to Fight AIDS, TB and Malaria have contributed to the momentum to eliminate pediatric HIV/AIDS. In Round 6, fourteen countries were granted funding for pediatric treatment programs and fifteen included funding for PMTCT. Eight grants were awarded to proposals that would provide both PMTCT and pediatric treatment in countries such as Burkina Faso, Djibouti, Guinea, Liberia, Mozambique or Senegal.

4.9 Innovative funding mechanisms such as UNITAID support the fight against pediatric HIV/AIDS. In 2007, UNITAID started to finance the purchase of pediatric HIV commodities with a budget of US\$ 35.9 million. This budget was raised to US\$ 58.6 million for 2008. UNITAID is also providing support for the scale-up of PMTCT programs: in March 2007, UNITAID awarded UNICEF and WHO US\$ 21 million over two years to support the acceleration of PMTCT programs in eight high-burden countries in Africa and Asia and an additional grant of US\$ 50 million was provided in 2008 to expand PMTCT support to 9 additional countries in Africa, Asia and Latin America.

#### **Key challenges and bottlenecks to national programme scale-up**

4.10 As national and global organizations increase their investments in PMTCT and pediatric programmes, key challenges that are threatening forward progress must be addressed. Resource constraints continue to hamper scale-up and their sustainability remains uncertain. However, policy and implementation issues can be addressed by Global Fund support. The key challenges are as follows:

- vi. **Poor access to testing services:** prevention of vertical transmission first requires that pregnant women are tested and counseled. If they are found to be positive, they need to access CD4 count so that they can receive HAART treatment if needed. In 2007, it was found in low and middle-income countries that less than half of facilities providing antenatal care also provided HIV



- testing and counseling and only 18% of pregnant women were tested. Better access to testing, notably provider-initiated testing in countries with high prevalence, is a prerequisite for scale-up. This requires that all facilities that provide antenatal services - in the public and private sectors - be strengthened to provide counseling and testing services and get easy access to CD4 testing.
- vii. In most resource-limited settings, PMTCT programs are also impeded by **significant drop-off of mothers and infants**, from the time pregnant women are offered HIV test during ANC visits down to the time of delivery, and uptake of ARVs and cotrimoxazole prophylaxis in the post-partum period. In these settings, existing maternal, newborn and child health services often do not have the necessary capacity for counseling, support, cotrimoxazole prophylaxis and initiation of ART if needed. Integration with appropriate referral to laboratory facilities and ART clinics is necessary for and appropriate access.
  - viii. **Limited capacity of national programmes to implement global and national guidelines.** The challenges for scaling up PMTCT and pediatric HIV care are likely to increase over the coming years because of several factors: the changes in normative PMTCT and care and treatment guidelines including the introduction of more complex assessment and triaging procedures, monitoring and follow up requirements, and the recommendation to treat all infected infants below 12 months of age regardless of clinical and/or immunological stage, which therefore requires much more aggressive expansion of early infant diagnostics (notably PCR testing), linked to treatment programmes.
  - ix. **Limited efforts to scale-up innovative approaches to accelerate expansion of services to the majority of women, their children and families:** Over the years, national programmes have developed and implemented various creative approaches on policy and service delivery that have proved effective in addressing some of the key bottlenecks to PMTCT and paediatric HIV care. These include financial incentives, more user-friendly packaging of PMTCT-related drugs, organization of family-centered care, use of cell phones to improve nutrition surveillance, engaging individuals and families through peer support, and mentoring mothers at facility or community levels. However, limited investment has been made so far to scale up such innovative approaches, which would benefit from more Global Fund support.
  - x. **Weak capacity to track progress:** National programs are struggling to routinely report 'care' processes beyond HIV testing and ARV prophylaxis. These difficulties are linked to slow progress in institutionalizing and organizing chronic care models centered in weak maternal, newborn, and child health delivery systems; non-existence of mechanisms for tracking mothers and infants across services, and from facility to community levels; and the broader failure to 'normalize' HIV testing, care and treatment from a health care providers' and community perspectives. Recent country experience in scaling up early infant diagnosis from the Clinton Foundation's initiative in sub-Saharan Africa (Cameroon, Swaziland, Zambia, Ethiopia, Kenya) has shown that 37 to 80 percent (about 50 percent on the average) of infants are being lost after being tested HIV positive.

## Critical Risk Areas

4.11 A critical risk area is the inadequate adoption of WHO guidelines endorsing highly active antiretroviral therapy (HAART) as best practice for PMTCT. WHO recommends early initiation of HAART for HIV-infected pregnant women who fulfill current eligibility criteria for lifelong ART and more efficacious PMTCT interventions than single dose Nevirapine for the ones who do not. However, about half the high-burden countries with complete data are still using single dose Nevirapine for PMTCT due to factors such as cost and inadequate human resources. Failing to change this regimen would hamper program performance and increase the risk of mothers developing resistance to ART.

4.12 Another critical risk area is inadequate coverage of pediatric HIV antiretroviral prophylaxis. While 33% of pregnant women living with HIV received ARVs to prevent mother-to-child transmission in 2007, only 20% of infants born to these women HIV received their dose of ARVs. This indicates a large maternal-child coverage gap that greatly dilutes programmatic impact. Failing to address this risk would result in more infections in infants and loss of credibility to PMTCT programs.

## Potential areas for priority actions

4.13 **Using PMTCT and pediatric HIV care, support and treatment as an opportunity to strengthen existing health systems:** Special attention should be paid to human resources, decentralization, financing mechanisms of sub-national levels, PSM and M&E. Given that the ultimate goal of PMTCT and paediatric HIV care, support and treatment, is to improve maternal and child health and survival, it is clear that success cannot be achieved without effective integration that focuses on providing comprehensive care and treatment for both mother and child.

4.14 **Supporting scaling-up of more efficacious ARV regimens for PMTCT, including ART for eligible pregnant women, by facilitating implementation of WHO guidelines.**

4.15 **Building capacity within maternal, newborn and child health (MNCH) services for chronic, life-long disease management:** These efforts should focus on increasing access to CD4 testing to assess eligibility of pregnant women for ART, access to ART, CPT for pregnant women, mothers and their infants, early infant diagnosis (EID) and linkages to ART for HIV-infected infants.

4.16 **Strengthening integrated and family-centered care:** A family-centered care approach to HIV that includes the provision of prevention, treatment, and care services to the entire family in one location is the best means to identify those in need, ensure services reach vulnerable groups such as women and children, and ultimately eliminate pediatric AIDS. Family-focused programs have been shown to increase service uptake, make AIDS service delivery more complementary to horizontal improvements in health systems, and have higher chances of reaching populations in need and ensuring long-term treatment adherence. However, they require structural changes and staff capacity building to make them family-oriented. But they pay off:

for instance for the same cost, family planning can prevent about 30 percent more infections in infants than the provision of single-dose nevirapine<sup>25</sup>.

4.17 **Strengthening the evidence base and program monitoring and evaluation** to track progress and inform advocacy, policies, programming and scale-up. This includes defining appropriate national indicators in line with global guidance; building in-country M&E capacity for data management, analysis and use; developing and introducing appropriate tools; tracking key indicators and routine management of data at facility level.

#### **Recommendations for the Global Fund**

4.18 The Global Fund Board should, on an urgent need, consider options to recommend countries to rapidly scale-up:

- i. Integration of testing services into antenatal, delivery and child care settings with provider-initiated HIV testing for pregnant women in generalized epidemics;
- ii. Greater capacity to assess the ART needs of HIV-positive mothers, especially access to CD4 cell count equipment. Strengthening the provision of ART to mothers for their own health;
- iii. Move to more efficacious ARV regimens for PMTCT and ensuring their wide availability;
- iv. Cotrimoxazole prophylaxis for pregnant women living with HIV, HIV-infected mothers and their infants
- v. Expansion of early infant diagnosis and paediatric treatment, including nutritional support and family care.

4.19 The Global Fund Board should send a clear signal encouraging countries:

- i. To re-intensify efforts on preventing HIV infection in children and improve the health of HIV-infected pregnant women with HIV through scaled up of PMTCT and pediatric HIV care and treatment programs
- ii. To strengthen primary prevention of HIV infection among women of reproductive age and prevention of unwanted pregnancy among HIV positive women
- iii. To promote and support innovations to scale up service delivery, including the use of improved packaging of PMTCT-related commodities and new technologies

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<sup>25</sup> Reynolds HW, Janowitz B, Homan R, Johnson L.; The value of contraception to prevent perinatal HIV transmission; Sex Transm Dis., 2006 Jun; 33(6): 350-6

- iv. To use implementation of PMTCT and paediatric HIV care, support and treatment as an opportunity to strengthen existing antenatal, delivery and postnatal care services. To build capacity within these services to include functional linkages with family planning, immunization, nutrition and adult ART centers
- v. To strengthen family centered care approach to respond effectively to the family clustering nature of HIV

## PART 5: ROLE OF UNAIDS AND PARTNERS IN NEXT STEPS

5.1 Advocate strongly for the elimination of HIV in children by establishing numerical targets at country level and supporting a unifying campaign around them.

5.2 Develop clear operational guidance and tools on proposed approaches such as family-centered care.

5.3 Undertake review of constraints/challenges to scaling up services for women and children with the aim of recommending practical solutions to overcoming those barriers.

5.4 Improving prevention efforts is also critically important for the Board to consider, particularly to determine how the Global Fund can support countries in developing and implementing HIV prevention strategies that deploy the right interventions to those most at risk. UNAIDS will form a small working group with interested Board constituencies to develop a more detailed paper on this topic for consideration by the Portfolio and Implementation Committee.

## PART 6: PROPOSED DECISION

### *Decision Point 1: Enhancing the Global Fund's Response to HIV/AIDS*

*1. As a leading multi-lateral financier of HIV/AIDS programs globally, the Board recognizes its role as responsible stewards of the Global Fund's investments on behalf of people living with and at risk of HIV and the need to ensure high impact of programs supported by the grants that it approves while achieving maximum value for money.*

*2. The Board recognizes that improving prevention efforts is critically important to the fight against HIV/AIDS and that the Global Fund should support countries in implementing HIV prevention strategies that deploy the right interventions to those most at risk. The Board welcomes the initiative by UNAIDS to form, in an expedited manner, a working group on assessing evidence and developing practical actions on increasing country adoption of 'combination prevention' strategies with interested Board constituencies to determine relevant actions and the appropriate role for the Global Fund.*

*3. The Board recognizes that, despite important progress made, there are significant gaps in scaling up coverage of effective HIV treatment. In addition, there is an urgent need to improve the quality of care for people living with HIV, reduce the costs of treatment in the long term, and to increase the number of*

people served through funds used by Global Fund grant implementers. Therefore, the Board:

- iv. *Recognizes the urgent need to increase resource mobilization efforts, given the need to increase overall HIV treatment coverage to achieve the goal of universal access. In addition, acknowledges that increased uptake of innovations in HIV treatment may result in initial cost increases, but encourage the pursuit of these investments, as they will be followed by long term savings, e.g., due to increased durability and decreased toxicity of alternative first line treatment.*
- v. *Requests the Secretariat to work with technical partners to project the long term financial costs of existing commitments and future demand on the Global Fund as a major funder of HIV/AIDS treatment, including the potential impact of strategies to improve outcomes and reduce treatment costs. This study should include but not be limited to possible protocol changes. Findings should be presented to the Portfolio and Implementation Committee to determine relevant Board action.*
- vi. *Recognizing the value of new technologies to improving quality and cost-efficacy of HIV/AIDS care and treatment, requests the ad-hoc Market Dynamics committee to consider how the Global Fund, its partners, Principal Recipients, and sub-recipients can accelerate access to and uptake of new technologies, to more quickly benefit from their impact on quality and cost.*
- vii. *Requests the Secretariat to work urgently with technical partners to adopt measures to improve the quality of Global Fund supported treatment programs (including, for example, identification of mechanisms to more effectively monitor indicators and relating to treatment program quality and adherence) and to propose suggestions for how these measures can be included in Global Fund proposal and evaluation processes. These measures should be reviewed by the Portfolio and Implementation Committee during its review of the Round 10 proposal form and guidelines.*
- viii. *Requests the Secretariat to work with technical partners to identify significant gaps in quality of care in the HIV/AIDS portfolio, e.g., limited access to cotrimoxazole prophylaxis and effective IPT and TB treatment; further, requests these gaps be reported to the Portfolio and Implementation Committee to determine mechanisms to improve coverage of these interventions.*

4. *The Board recognizes that preventing HIV-positive mothers from dying and babies from being infected with HIV is crucial to the goals of universal access of achieving an AIDS-free generation. Scaling up access to effective PMTCT and pediatrics treatment services - which are integrated with maternal and child health services and comprehensive sexual and reproductive health programs - is a critical component of the Global Fund's Gender Equality Strategy. Therefore, the Board:*

- i. Requests the Secretariat to conduct a portfolio review of countries with low PMTCT coverage rates and/or high rates of pediatric transmission and prepare options for the Portfolio and Implementation Committee to use available mechanisms (including but not limited to reprogramming parameters and guidelines for renewals or new grants) to accelerate transitions to more efficacious ARV regimens for effective strategies for PMTCT.*

*5. The Board additionally urges CCMs to submit future proposals and consider reprogramming of existing grants which are aimed at re-intensifying efforts to prevent HIV infection in children and to improve the health of HIV-infected pregnant women and children through effective PMTCT and pediatric HIV care and treatment programs - including necessary services that address the full cascade of interventions for PMTCT, from prior to delivery to 18 months post; that ensure improved responses to high pediatric loss-to-follow-up rates; and that strengthen a family centered care approach to respond effectively to the family clustering nature of HIV.*

*This decision does not have material budgetary implications*