

TECHNICAL ISSUE BRIEF

Performance-Based Financing: A Promising Strategy to Improve HIV Service Delivery



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This publication is part of a series of Elizabeth Glaser Pediatric AIDS Foundation technical issue briefs highlighting innovative approaches to HIV/AIDS service delivery in resource-limited settings. Technical issue briefs highlight the work of Foundation-supported programs, as well as examples drawn from the literature, in order to provide a broader perspective on the issue being examined. The intended audience is HIV/AIDS program implementers, policymakers, and funders at all levels of activity.

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EXECUTIVE SUMMARY

Performance-based financing (PBF) is an innovative approach involving the provision of incentives that are conditional upon a contracted party's performance of predetermined, measurable actions. PBF is increasingly capturing the interest of donors and funding mechanisms for its potential to link funding with results and enhance accountability of funding recipients. The Elizabeth Glaser Pediatric AIDS Foundation (the Foundation) deems PBF a compelling approach worthy of further exploration in the context of its HIV programming. To date, there is little conclusive evidence supporting the suggested benefits or negative consequences of PBF; much of the discussion has been based on theoretical assumptions. This issue brief therefore provides an overview of the literature describing both the potential benefits and negative consequences associated with PBF, as well as an in-depth look at how PBF has been implemented as part of the Foundation's HIV/AIDS program implementation efforts in Côte d'Ivoire. It summarizes feedback from sites regarding their experience with PBF at an early stage. This brief will facilitate understanding of PBF based on these initial program experiences and can therefore serve as a resource for HIV-related programs considering implementing PBF.

CONTENTS

1. Background	1
2. Introduction	2
Behavioral/Economic Basis for PBF	2
Perceived Benefits Associated with PBF	3
Rwanda: Health System Strengthening and Expansion of Service Usage and Coverage	3
Cambodia: Increased Utilization of Services, Reduced Family Health Expenditure, and Improvement of Health Facility Management	4
Haiti: Management, Cost-effectiveness, and Coverage of Immunizations and Rehydration	4
Perceived Challenges Associated with PBF	4
3. Implementation of PBF in Côte d'Ivoire	5
Overview of the Foundation's Program in Côte d'Ivoire	5
Roll-out of PBF	6
Selection of Indicators	7
Selection of Sites	7
Formation of Cooperative Agreements	7
The Remuneration Process	8
Data Validation	9
4. Feedback on the PBF Program in Côte d'Ivoire	9
Presentation of 2008–2009 Program Data at International AIDS Conference	9
Feedback from Staff at PBF Sites on Perceived Benefits and Challenges of Implementing PBF	9
Findings from the Foundation's Routine Care and Treatment Program Assessment	10
Feedback from PBF Site Staff on the Management of the PBF Program	10
Recommendations from the Care and Treatment Assessment	11
5. Conclusion	11



1. BACKGROUND

The last two decades have witnessed the emergence of a new era in global health financing, characterized by the channeling of unprecedented amounts of funding into global health development assistance. A recent study published in *The Lancet*, containing a comprehensive assessment of development assistance for health from public and private institutions, found that international development assistance for health grew from US\$5.6 billion in 1990 to US\$21.8 billion in 2007.¹

Whereas United Nations (UN) agencies and national governments have traditionally been the primary source of global development funding, *The Lancet* study found that the proportion of funding from UN agencies and development banks has decreased over this time period. Today, multi billion-dollar funding mechanisms known as global health initiatives, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria; The President's Emergency Plan for AIDS Relief (PEPFAR); the Global Alliance for Vaccines and Immunization (GAVI); and the International Drug Purchase Facility (UNITAID), have transformed the landscape of global health financing and are the major conduit for an increasing majority of this funding.¹

The emergence of these funding mechanisms has been accompanied by a concerted effort to move away from the perceived limitations of traditional development funding—which is concentrated mainly on inputs—to a focus on financing strategies that link funding with performance and with results defined by predetermined targets.²⁻⁴ The impetus for this shift is the perception among international development academics and implementers that this approach is successful in achieving desired outcomes in the private sector, combined with the assumption that the approach can boost efforts to combat specific diseases and improve the overall performance of health systems in low-income countries.³

In the context of this increased focus on accountability and achievement of measurable outcomes in relation to health financing, performance-based financing (PBF) is a nascent approach that has garnered increasing attention as a mechanism to enhance achievement of specific health targets. PBF is based on carefully designed financial incentives that have the potential to increase both the quantity and the quality of the services that health-care providers deliver.²

The Elizabeth Glaser Pediatric AIDS Foundation (the Foundation) has a significant global presence in HIV/AIDS program implementation, working in 17 countries and supporting more than 5,000 sites to provide HIV prevention, care, and treatment services.⁵ As of September 30, 2010, the Foundation's programs had provided services to more than 10.9 million women to prevent vertical (mother-to-child) HIV transmission. More than 1 million individuals, including more than 90,000 children, have been enrolled in the Foundation's HIV care and treatment programs.⁵ In 2009, the Foundation's revenues totaled more than US\$127 million, which represents the continued dedication of individuals, corporations, foundations, and international organizations, as well as ongoing support from the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Agency for International Development (USAID).⁶ The prospect of a mechanism such as PBF, with the potential to link funding with outcomes, is compelling in the context of the Foundation's work and is therefore an approach the Foundation would like to pursue more broadly in the future.

While there is a growing body of literature on PBF, little is known about PBF in the realm of HIV/AIDS program implementation. The existing body of literature on PBF contains limited insight on its implementation in the context of HIV programming, with the exception of literature on Rwanda, where the national government has spearheaded integration of PBF into the entire national health system.^{7,8} Evidence from studies examining PBF and its impact in the context of other services in the health sector is not strong, for

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reasons explained subsequently, but there are substantial qualitative data suggesting that this approach can positively impact program service delivery.

The following sections of this brief will cover

- an overview of PBF, including its theoretical basis and its perceived benefits and challenges;
- a detailed overview of how PBF works in the context of the Foundation's program in Côte d'Ivoire;
- a description of an analysis of program data on uptake of certain elements of prevention of mother-to-child transmission (PMTCT) services at PBF and non-PBF sites, presented at the 2010 International AIDS Conference; and
- a review of staff feedback from Foundation-supported sites implementing PBF in Côte d'Ivoire.

2. INTRODUCTION

Behavioral/Economic Basis for PBF

PBF has its origins in agency theory, from the disciplines of political science and economics, and, more specifically, what is referred to as the "principal-agent problem."⁹⁻¹⁰ This framework can be used to understand and analyze the dynamics that transpire between the different parties involved in the financing and delivery

of health care. A principal is the entity that provides funding, and an agent is the entity hired or contracted to pursue the principal's interest.¹¹ In the case of HIV/AIDS implementation work, the funder of HIV services would be considered the principal, and the agent(s) would be the in-country health facilities to whom the funder provides resources to deliver HIV prevention, care, and treatment services to the beneficiaries, or populations in need of these services (see Figure 1).

In accordance with this theory, the principal (i.e., funder of HIV services) contracts with a local health facility (i.e., the agent) to deliver services. This is done because it is more effective and efficient for the principal to work through in-country facilities' existing capacity rather than provide the services directly.¹¹ The challenge with this contract is that the agent operates in an incentive-based environment, and the interests of the agent are not necessarily in line with the interests of the principal, which are to deliver the most efficient and best health services.² Staff at health facilities are potentially motivated by a range of competing interests, such as caring for patients, financial gain, and having more free time.²

Furthermore, there is a situation of *asymmetrical information*, whereby the funder does not have complete information on the extent to which local health facilities act in accordance with the goals of their agreement with the funder. Assuming that the funder cannot micromanage the activities of local health facilities, it would be in the funder's interest to design a contract that will motivate the staff at local health facilities to pursue the funder's interests.^{2,4} According to the body of literature on the principal-agent problem, various innovative approaches have been designed to address this problem and make the principal's funding conditional on the successful performance of the agent, including profit sharing, commissions, performance measurement, fear of ending the contract, and the mechanism explored in this brief, PBF.⁴



Figure 1. Primary actors in a PBF contract for provision of HIV-related services

PBF is frequently framed as a potential approach to resolve the principal-agent problem that funders confront when they contract with local entities to deliver services. A PBF approach involves funder provision of incentives, such as money, conditional upon contracted agents' performance of predetermined, measurable actions.¹² The approach assumes that people in general, including staff at health facilities, will be motivated by the prospect of financial gain for the health facility and will pursue activities to maximize this gain. Introducing a contract that aligns the motivations of staff at health facilities with the goals of the funder and desired health outcomes is integral to PBF.³ The contract sets conditions so that it is in the best interest of health facilities to adhere to the conditions of the contract.¹¹ The belief is that paying an agent to achieve performance targets can potentially stimulate the development and execution of a plan to make needed changes and achieve the desired results without a need for the principal to engage in micromanagement.

Perceived Benefits Associated with PBF

Since the introduction of PBF into the development sector by the World Bank in 1993, its use to improve health and development outcomes has grown internationally.⁴ Empirical evidence of the benefits of PBF in international health development is varied and often criticized for lack of rigor, yet anecdotal evidence from both the private and public sectors provides examples of several perceived benefits associated with PBF.

Proponents of PBF champion it as a mutually beneficial approach for funders, patients, and health-care facilities alike. For funders and health facilities, PBF has been recognized as a mechanism to focus all parties on the services provided rather than simply counting inputs such as drugs.^{2,13} Funders benefit because PBF reinforces

Funders benefit because PBF reinforces the achievement of desired outcomes, ensures that there is increased accountability on the part of funding recipients, and increases the likelihood that health facilities use funding as intended.

the achievement of desired outcomes, ensures that there is increased accountability on the part of funding recipients, and increases the likelihood that health facilities use funding as intended.⁴ Health facilities benefit from PBF schemes because they receive more money for services and, to some extent, they can control how much money they make: The better they perform, the greater the reward they receive.¹² Where PBF is in use, service coverage tends to increase and, in many cases, the quality of care is higher.⁴

It is important to note that while the case studies presented in this section point to the potential benefits of PBF, there is, as of yet, limited rigorous evidence to substantiate the success and effectiveness of PBF, especially in the long term.¹⁴ Many of the reported benefits of PBF are based on anecdotal evidence, and many questions remain unanswered in relation to case studies that lack controls and do not account for the effect of confounding factors.³ Improvements noted in these studies cannot be attributed solely to PBF because analyses did not distinguish the effects of PBF from the impact of other factors, such as substantial support by outside organizations in strengthening overall processes at health facilities.³ It is also important to note that findings from these analyses have sometimes been drawn from small samples of facilities and providers.¹⁵ In addition, indicators were not tracked for a long enough period to ascertain the trends.

The following are some of the best-known and most frequently cited case studies documenting the successful implementation of the PBF approach.

Rwanda: Health System Strengthening and Expansion of Service Usage and Coverage

Rwanda's experience with PBF is perhaps the most extensively documented, and Rwanda has been recognized as a global innovator in PBF.¹⁶ The Rwandan Ministry of Health scaled up this approach nationally and incorporated it into the Rwanda 2005–2009 Health Sector Strategic Plan.¹⁶ PBF has been credited with strengthening the Rwandan health system and its overall functionality through enhanced monitoring, planning, and supervision in addition to increasing accountability at all levels. Documented outcomes include expanded use and coverage of health care, with data from PBF pilot projects suggesting that this approach has led to improved uptake of various health services, including curative care, infant deliveries, family planning, and vaccinations. In regard to quality of services, provinces employing PBF outperformed non-PBF provinces;

regions. Critics of PBF claim this could exacerbate the existing health worker shortages in these regions.² PBF, it is theorized, could therefore perpetuate the existing inequalities in health-care provision and population health status among different regions.

PBF has the potential to skew the focus of health-care providers by encouraging them to focus on the provision of selected services that may not coincide with the actual needs of the population. For example, a PBF scheme may influence providers to focus on achieving explicit targets that are rewarded through PBF at the expense of other important but unmeasured tasks, such as treatment of basic illnesses. In addition, targets that are difficult to quantify may be neglected because they detract from the ability of providers to deliver on specific targets. More easily quantifiable measures of performance may take precedence over quality care and provision of services.^{2,3}

Another perceived challenge associated with PBF is that it imposes unfair conditions for health-care facilities in resource-limited settings. In such settings, many external factors may impact the achievement of targets, causing health-care workers to be penalized despite their best efforts.^{4,19}

For PBF to function well, it is important to have at least a minimal level of health-care infrastructure and capacity, including strong monitoring and evaluation systems and the ability to design, negotiate, and enforce performance contracts.⁴ Limited infrastructure and other challenges in resource-limited settings could potentially detract from the proper functioning of a PBF system. As PBF intensifies the need for monitoring and evaluation of service delivery, funders need to create additional structures to meet these essential requirements.⁴

3. IMPLEMENTATION OF PBF IN CÔTE D'IVOIRE

Overview of the Foundation's Program in Côte d'Ivoire

The Foundation has been one of the major PEPFAR-funded CDC partners supporting PMTCT and HIV care and treatment programs in Côte d'Ivoire since 2004. To address the HIV burden in the country, the Foundation has rapidly expanded its program geographically and programmatically. The Foundation's



Figure 2. Foundation-supported districts in Côte d'Ivoire (2009)

program in Côte d'Ivoire is currently implementing HIV prevention, care, and treatment programs in 12 of 19 regions and 43 of 83 districts across the country (Figure 2). After civil war in Côte d'Ivoire ended and a cease-fire was signed in 2007, program expansion has focused on the northern, central, and western regions of the country.

As of September 30, 2010, the Foundation's program in Côte d'Ivoire was supporting 139 sites offering care and treatment services, including ART, and 309 sites offering PMTCT. The total cumulative number of persons ever enrolled in HIV care through Foundation-supported programs in Côte d'Ivoire is 172,329, of whom 12,200 (7.0%) are children 14 years or younger. The total cumulative number of people ever started on ART through Foundation-supported programs in Côte d'Ivoire is 81,436, of whom 4,635 (5.7%) are children.⁵ Each quarter, approximately 3,700 clients are newly initiated on ART and 37,556 patients were actively on ART as of September 2010.²⁰

Roll-out of PBF

Motivated to address the disconnect between provision of resources and performance, in 2006 the Foundation's program in Côte d'Ivoire decided to pilot implementation of PBF at four Foundation-supported private clinics. This was based on the idea that PBF could potentially connect provision of resources and performance. This effort was intended to increase service utilization and improve and strengthen capacity in relation to HIV/AIDS service delivery, and was inspired in part by anecdotal evidence of the successful use of PBF in Rwanda. By the end of 2009, the Foundation was supporting 32 sites, including a mixture of private and public sites in 21 districts, through PBF. Thus far there has been very little implementation of PBF at exclusively public sites. The majority of PBF-supported public sites have private management, with the exception of two Ministry of Health-approved demonstration sites at public clinics. This is because public sites, unlike private sites, do not have the legal status to accept funding directly. There are ongoing discussions between the Ministry of Health and the Foundation regarding the feasibility of extending PBF more broadly to public sites.

Table 1. PBF Indicators

PMTCT Indicators	VCT Indicators
<ol style="list-style-type: none"> 1. Initial PMTCT visit 2. Follow-up PMTCT visit 3. Referral to treatment 4. PMTCT childbirth 5. Postpartum visit day 3 6. Postpartum visit week 6 7. Postpartum follow-up visit 8. Postpartum HIV status visit (month 12–18) 	<ol style="list-style-type: none"> 1. HIV testing on index case 2. HIV testing of a partner of an HIV-positive patient 3. HIV testing of children of an HIV-positive parent
Adult HIV Care and Treatment Indicators	Pediatric HIV Care and Treatment Indicators
<ol style="list-style-type: none"> 1. Eligibility screening visit 2. Visit post enrollment day 7 3. Treatment initiation visit 4. Visit day 15 5. Visit month 1 6. Visit month 3 7. Visit month 6 8. Visit month 9 9. Visit month 12 10. Interim visit 11. Visit of non-ART-eligible patients at 3 and 6 months 	<ol style="list-style-type: none"> 1. Eligibility screening visit 2. Visit post enrollment day 7 3. Treatment initiation visit 4. Visit day 15 5. Visit month 1 6. Visit month 3 7. Visit month 6 8. Visit month 9 9. Visit month 12 10. Interim visit 11. Visit of non-ART-eligible patients at 3 and 6 months

The most important factor is a site's potential to demonstrate excellent results supported by both quantitative and qualitative data.

Selection of Indicators

At its inception, the Foundation's PBF program in Côte d'Ivoire had only one indicator to measure results: the number of individuals on ART. In response to the growing necessity to increase the number of indicators to more accurately capture the scope of activities implemented at health sites, the Foundation conducted a review to better understand the scope of services at each site. In addition, the review took into account the broader spectrum of efforts made by each site beyond direct care provision, such as client follow-up. This information, along with existing national indicators, was used to guide the creation of a total of 22 PBF indicators in July 2007. These include 8 PMTCT indicators, 3 indicators for voluntary counseling and testing (VCT), and 11 indicators for HIV care and treatment in both adults and children (see Table 1).

Selection of Sites

Selection of PBF sites is based on several factors. Since 2006, the program has scaled up to 32 sites, which were chosen to implement PBF based on the following criteria:

1. Potential to contribute to improving the Foundation's programmatic results (e.g., uptake of services)
2. Regular provision of programmatic results to the Foundation based on a memorandum of understanding
3. Legal status of the organization that runs the site (Under the current system in Côte d'Ivoire, public sites do not have the legal status to receive money directly from entities other than national government bodies.)

In addition, candidate sites are required to submit proposals including administrative and programmatic plans. The most important factor is a site's potential to demonstrate excellent results supported by both quantitative and qualitative data.

Formation of Cooperative Agreements

Once the decision is made that the Foundation will support a site using the PBF approach, a *cooperative agreement* is developed between the Foundation and the organization that runs the site for a specified period of time. The agreement stipulates the maximum amount for the award and a separate limit for the bonus. In contrast to a typical funding award that is characterized by payment of costs, a PBF agreement enumerates reimbursement for the achievement of specific agreed-upon targets.

Fundamental to the development of the PBF cooperative agreement is a mutual decision between the Foundation's program and grant liaison officer and the recipient site on monthly targets for each of the PBF indicators. These targets indicate the number of services that the site will provide each month as well as the reimbursement amount associated with each indicator. All sites have the same indicators, but different *targets* are set for these indicators according to what is realistic for each site's circumstances. Targets are mutually agreed upon by the program and grant liaison officer and the site. Reimbursement amounts associated with different indicators are the same across all sites and are derived from the cost a site would incur for delivering this service in the normal course of business, as well as a small bonus. However, different reimbursement amounts are associated with different indicators. For example, the reimbursement for HIV services for children is higher than that for adults, in order to provide an incentive for health-care sites to focus on services for children. The reimbursement amount for an ART eligibility assessment visit for an adult is 3,750 francs (about US\$0.72), and the reimbursement amount for the same service for a pediatric patient is 5,625 francs (about US\$0.80). The reimbursement amounts ensure adequate remuneration to sites to cover their costs for services delivered, while the bonus goes beyond this amount and serves as a motivating factor for sites to deliver more services.

All sites have the same indicators, but different targets are set for these indicators according to what is realistic for each site's circumstances.

The Remuneration Process

When a site initiates PBF, its workers participate in training for new PBF sites on how to collect and code data and report performance. At the beginning of their contract periods, sites are given 10 to 25 percent of their funding (with the exact amount determined on a case-by-case basis), excluding the bonus, as an advance to assist in cash flow management. This is particularly useful when a site is in the start-up phase. This funding advance is reconciled during the remaining months of the agreement. An overview of the contracting and remuneration process is provided in Figure 3.

PBF sites submit a monthly invoice reporting their activity on PBF indicators. This information is validated through a process described in the following section of this brief. The payment a site receives each month, upon receipt of a completed monthly invoice, is equal to the number of PBF indicator targets achieved each month multiplied by the predetermined and agreed-upon price for each indicator, minus a prorated amount for the 10 to 25 percent advance provided. Sites are not guaranteed a minimum reimbursement and are paid based on the number of services delivered. A 25 percent bonus is paid for each indicator for which the target has been exceeded every month at the end

of the contract period. The bonus is calculated based on the difference between the established target and the actual number reached. For example, if a site's target for ART eligibility assessment visits for adults is set at 1,000 visits reimbursed at 3,750 francs (about US\$0.72) for each visit, and the site surpasses the target for this indicator by 200 of these visits, the site would be reimbursed 4,500,000 francs (1,200 [number of visits] X 3,750 francs) for the services delivered, plus a bonus of 187,500 francs (25 percent of the amount by which the target is surpassed, 200, multiplied by the reimbursement cost for the indicator). The bonus is, however, subject to a ceiling, and once the ceiling is reached, the payment for the indicator is based on a predetermined price for exceeding the target for a particular indicator.

Sites are required to submit quarterly progress reports to the Foundation, which are reviewed by the Foundation's program and grant liaison officer for indications of programmatic or technical support needs. Periodic retreats are held to review and discuss site progress. Rigorous ongoing monitoring and evaluation is expected, and comments on progress reports from the program and grant liaison officer reinforce the importance of accurate reporting.

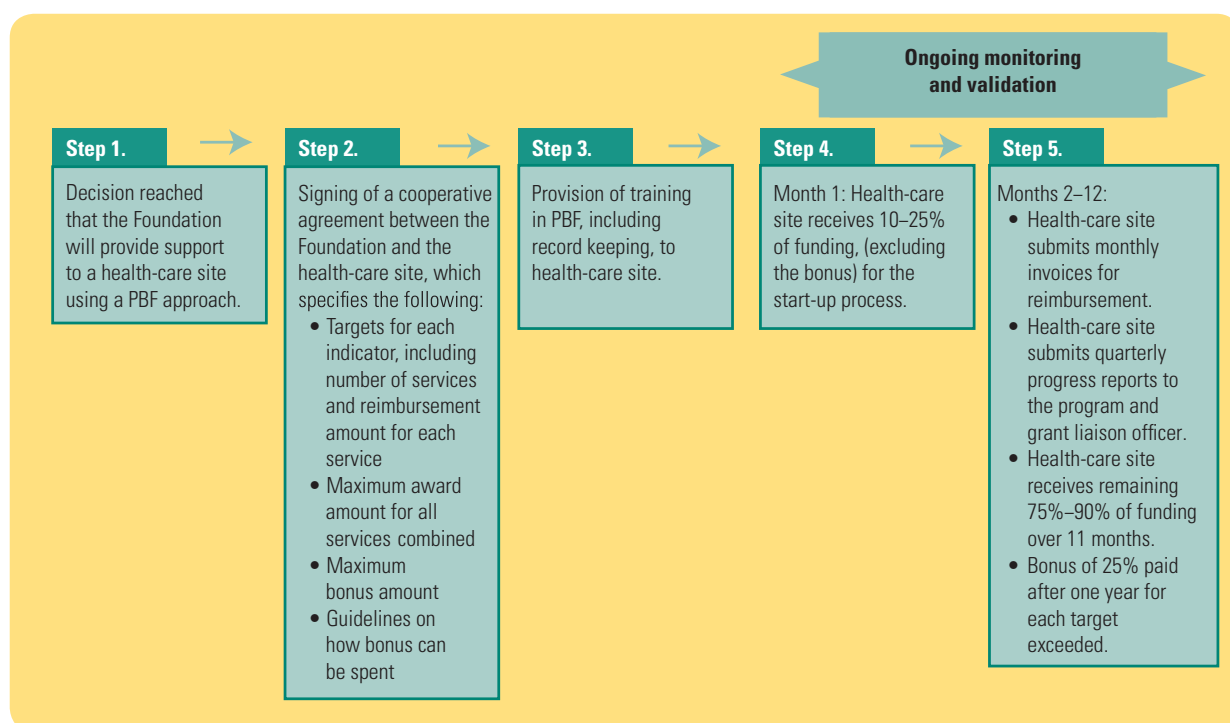


Figure 3. Overview of PBF contracting and remuneration process

Sites are not guaranteed a minimum reimbursement and are paid based on the number of services delivered.

While the existing PBF indicators measure the quantity of HIV services health-care centers provide, they do not explicitly capture information about the quality of services. In order to address the important issue of service quality, a quality score is being introduced into the monitoring process. While the details of the quality score have yet to be determined, it is envisioned that it will evaluate both programmatic quality issues, such as loss to follow-up of children, and administrative quality issues, such as having a management committee and including a broad spectrum of site staff in decisions on how PBF bonus money should be spent to improve the site. Sites with low quality scores will be penalized by having a portion of their bonus subtracted, even if they meet the existing PBF indicator targets for quantity of services delivered.

As a requirement to receive the bonus payments, recipients must submit plans to the Foundation describing how they intend to use the bonus. The Foundation states in all of its existing PBF agreements the preference that the bonus be used to improve the site's infrastructure or purchase a piece of equipment, or that it be split equitably among all employees at the site. However, due to questions about how some sites were spending bonuses, a more stringent follow-up system is being put into place to monitor how PBF bonuses are actually spent, and contracts will be revised specifying that bonuses can be spent only on improvements that will benefit sites, such as salaries, equipment, or training of staff.

Data Validation

There is a procedure in place (established with the initial roll-out of PBF) to validate the programmatic results of organizations participating in PBF on an ongoing quarterly basis. The purpose of monthly validation is to ensure site effectiveness and to confirm the accuracy and consistency of results submitted by PBF sites to the Foundation for payment. More specifically, the validation of results aims to ensure that

- results reported by sub-grantees do indeed exist in the programmatic and administrative records,

- services provided to patients are consistent with certain norms or standards ensuring minimum quality care to patients,
- any deviations at various levels of verification are identified, and
- remedial measures at technical and administrative levels are suggested.

4. FEEDBACK ON THE PBF PROGRAM IN CÔTE D'IVOIRE

Presentation of 2008–2009 Program Data at International AIDS Conference

In July 2010, the Foundation's Côte d'Ivoire team presented an oral abstract at the 18th International AIDS Conference on their experiences with PBF. The observational analysis of routinely collected service data from a sample of 137 Foundation-supported sites included three separate analyses examining uptake of four PMTCT service indicators.²¹ While the data were interpreted to suggest that PBF contributed to improved uptake of antiretroviral prophylaxis among women living with HIV and their infants, these data have limitations characteristic of the current literature on the use of PBF in HIV care settings. For example, the data do not account for confounding factors (e.g., demographics of the patient population, site location) that could have affected the performance of these indicators, nor do they take into account other limitations associated with the data warehouse from which the routine data were sourced.

Feedback from Staff at PBF Sites on Perceived Benefits and Challenges of Implementing PBF

In August 2008, health-care staff from sites implementing PBF as part of the Foundation's program in Côte d'Ivoire participated in an annual review in which they discussed their experiences, including the perceived benefits and challenges of implementing PBF. The following is a summary of their feedback. It is important to note that it is uncertain whether results reported can be specifically attributed to PBF.

The staff of PBF sites collectively credited PBF with improving organizational collaboration, cultivating better working conditions, and positively influencing

staff morale and motivation. According to staff, the positive influence of PBF on their working environments, in combination with the additional funding provided by PBF, enhanced the ability of health-care sites to expand HIV testing, prevention, care, and treatment services, and reach more patients with these services. This resulted in increased quantity and quality of services and overall program improvement. Furthermore, health-care workers reported that PBF provided them with extra funding for services such as mobile activities to reach patients in communities, community follow-up, and support groups. Workers felt that these improvements in services increased patient loyalty and demand for services. Staff members also described a number of infrastructural and operational benefits as a result of PBF, including development and integration of activities (PMTCT-ANC and VCT-ART), improved data collection, and improved overall clinic performance.

PBF site staff also cited challenges associated with implementing PBF. These challenges included the intense capacity requirements associated with PBF and the need for tools, including software, to assist with patient tracking and organizing documents. Staff expressed difficulty in understanding PBF indicators and other elements of PBF and requested more comprehensive technical assistance in relation to PBF.

Staff also described a number of factors that they identified as obstacles to deriving the full benefit of PBF. One factor was the fluctuating currency exchange rate and weakening U.S. dollar, which was resulting in a decrease in the amount of payment sites were receiving compared to the preestablished amount. Other obstacles mentioned related to resource and capacity constraints, including lack of transportation to reach patients in the communities, shortages of qualified staff (especially for pediatric HIV care and treatment), commodity stock-outs, weak logistics, and frequent laboratory equipment breakdowns, all of which limited sites' ability to provide HIV testing and follow-up.

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Findings from the Foundation's Routine Care and Treatment Program Assessment

In July 2008, five years into the Foundation's seven-year CDC-funded HIV care and treatment initiative, Help Expand Antiretroviral Treatment to Children and Families (Project HEART), the Foundation conducted an assessment of implementation models, including PBF, in three countries, including Côte d'Ivoire. As part of this assessment, the Foundation solicited feedback from staff at health facilities implementing PBF. The assessment therefore provided an additional perspective on staff perceptions related to the initiation and implementation of PBF, including the speed and availability of technical assistance provided for program start-up, transparency, communication, and target setting.

Feedback from PBF Site Staff on the Management of the PBF Program

Respondents expressed concerns over a delayed start-up process characterized by confusion and inadequate training for sites initiating PBF. Staff reported that there was a significant delay between when the PBF contract was signed and when they received the technical support necessary to initiate PBF. Challenges associated with the start-up process for which respondents said they needed specific technical support included reconciling existing data systems with the Foundation's PBF reporting system, other coding challenges, and tailoring the new PBF system to their specific clinical procedures and protocols. Respondents at a few sites said they would have liked more up-front guidance regarding how best to spend the initial 25 percent start-up funding. One site ended up using its start-up funding on personnel and did not realize until later that some of this money should have been spent on other, more pressing needs such as infrastructure. Respondents questioned whether the 25 percent was adequate for all sites, depending on the current capacity and needs at each site.

Respondents also reported a need to improve transparency and communication. When they encountered a problem, they often did not know to which Foundation staff member they should direct their inquiries. They suggested disseminating a list of personnel handling each issue.

One site's personnel indicated that they had trouble with initial target setting and would have benefited from more support in this area; they ended up setting their targets too high, which created a dilemma in terms of not having adequate resources to build capacity to reach



the targets and improve their performance. It was felt that improved communication between PBF sites and the Foundation's Côte d'Ivoire program with regard to target setting and use of PBF start-up funds would help to clarify the rationale behind decisions made at the country office that directly affect the work being done at the sites.

In interviews about the unique characteristics of respondents' sites, their funding needs, and reporting criteria for PBF, some issues surfaced that deserve further consideration. One site's staff suggested that a code be built into the PBF model to compensate reference labs for their services. Additionally, it was felt that community-based performance measures, not yet defined, should be included in the PBF model. The Foundation's Côte d'Ivoire program personnel noted that they do intend to incorporate community measures into the model shortly. It was also mentioned that site-specific considerations such as geographic location (rural vs. urban, north vs. south, local political situation, postconflict issues, etc.) influence the capacity and performance of sites. The question arose as to whether these factors should be included in the PBF framework.

Recommendations from the Care and Treatment Assessment

The Project HEART assessment generated two main recommendations. The first was wider scale-up of PBF to public sites in order for the Foundation to have a wider impact on the delivery of HIV care and treatment services in Côte d'Ivoire and to not distort and limit the impact of PBF. The second consisted of points to consider for future scale-up of PBF in Côte d'Ivoire:

- Provide sites with strong technical and programmatic assistance because the PBF model necessitates more specialized and local support.
- Focus on open and transparent communication and more clearly define communication channels.
- Ensure that better mechanisms for communication and ongoing monitoring of programs are built into the implementation of PBF to ensure that sites can provide ongoing feedback to Foundation staff and that they receive a response.
- Institute a control or audit mechanism to monitor how sites are spending their bonus money.

5. CONCLUSION

As interest in linking funding with performance and with achievement of targets continues to grow in the field of global health financing, PBF is increasingly being recognized as a powerful mechanism for enhancing accountability and improving health-care services. Such a mechanism may be particularly useful in the context of the Foundation's HIV program implementation work.

The literature on PBF features various case studies of its implementation in resource-limited settings to improve health outcomes. These case studies are presented as evidence of the potential benefits of PBF, including health system strengthening, increased utilization and coverage of health-care services, improved management, and cost-effectiveness. There is, however, little rigorous evidence to substantiate the benefits of PBF in these case studies because they lack controls and do not account for confounding factors. While the potential negative impacts of PBF documented in the literature are based on theoretical and anticipated, rather than

observed, negative implications, it is nonetheless important to be cognizant of the potential challenges associated with PBF.

Staff feedback from an annual review of PBF sites indicates that PBF is associated with a range of benefits, including improved site management, a more positive work environment, stimulation of innovative strategies to reach patients, and overall program improvement. This suggests that participating sites feel that PBF adds value to their work and supports them in reaching their programmatic goals. PBF site staff members also described certain challenges associated with the implementation of PBF, mainly related to difficulty understanding the complicated processes associated with PBF and the intensive capacity requirements for implementation of PBF. PBF sites have also indicated their desire for more support in the implementation and understanding of PBF. Respondents to the Foundation's

care and treatment assessment in particular expressed the need for more intense site support, especially during the start-up phase. PBF sites also expressed a need for more transparency and communication in relation to all processes associated with PBF.

The Foundation's Côte d'Ivoire PBF program continues to grow, in terms of both the number of sites supported through this mechanism and continuous evaluation and refinement to address lessons learned from experience. In 2011 a quality score will be added to the existing quantity performance measurements included in the current system. The program will also boost its site training and capacity-building efforts. In addition, there will be more transparency regarding how sites spend their bonus funds. As the PBF program expands, the Foundation will continue to incorporate lessons learned from its experience and will share these lessons with others considering this approach.



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