**Rwanda: Performance-Based Financing in Health**

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- Performance based financing in Rwanda can serve as a guide for other countries that want to apply similar schemes.
- Essential elements for success were the ‘roll-out plan’ and strong and consistent leadership at the highest level in the Ministry of Health.

**Introduction:**

Rwanda is one of the poorest countries in the world and has a typical epidemiological profile for sub-Saharan Africa. The average Rwandan lives on less than US$0.70 per day. Per capita annual health spending averages about US$14, with donors funding over 40%, government about one-third, and beneficiaries contributing roughly one-quarter. ¹

Performance Based Financing (PBF) is an approach to health financing that shifts attention from inputs to outputs, and eventually outcomes, in health services. Whilst inputs are necessary to finance health services, a predominant focus on inputs has failed to deliver the results that are necessary, if the country is to achieve its Millennium Development Goals.

The key premise in Output-based aid is that it “seeks to address weaknesses by delegating service delivery to a third party under contracts that link payment to the outputs or results delivered. It thus has the potential to improve incentives and accountability, while also expanding opportunities for mobilizing private financing. The focus shifts not only from inputs to outputs, but also toward the Holy Grail of development outcomes.”²

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¹ 2003 National Health Accounts
² “Contracting for public services; Output-based aid and its applications”, WB/IMF 2001, page 91
Rwanda has scaled-up community health insurance, from 7 to 51 percent of the population between 2003 and 2006, leading to increased access to health services. One of the key challenges facing policy makers is how to ensure sufficient supply of services of reasonable quality to meet this increased demand. Universal characteristics of health services in poor countries are inefficiency, wasteful use of resources, low quality of services, and an unmotivated workforce. Financing instruments available to donors and Governments seem unable to address these core causes in an efficient manner; proof of which is that from sizeable resources made available to the health sector in a country such as Rwanda, only a small portion reaches the health centers.³

Performance based financing, or ‘pay-4-performance’ or ‘output based aid’ as it is generally referred to, consists of a family of various methods and approaches that all aim, through differing levels of intervention, at linking incentives to performance.⁴ For instance, in a health program in Haiti, MSH converted 10% of the historical budget of NGO grantees into a performance bonus, if they would reach certain predetermined performance targets;⁵ in Afghanistan, Performance Based Partnership agreements, written between the Ministry of Health and Non-Governmental Organizations, covered 10 provinces and NGOs could receive up to 11% of the contract amount if they performed exceptionally well.

Contracting and performance based financing are linked. Contracting is the ‘tool’ which is used to operationalize

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⁵ “Promoting preventive health care, Paying for performance in Haiti”, Rena Eichler, Paul Auxila and John Pollock, in “Contracting for public services, Output-based aid and its applications” page 65
performance-based financing; the literature on performance based financing is therefore closely linked to the literature on contracting, ‘contract theory’ or ‘incentive theory.’

Performance Based Financing started in Rwanda as early as 2001. Several factors led to this -- NGOs working in Rwanda at the time felt that, although they paid health workers a ‘bonus’ salary supplement, the outputs of the health services were stagnating and in some cases even deteriorating. Another reason was that experiences from other contexts, such as an innovative pilot scheme contracting health services in Cambodia, were replicated. ⁶ Various organizations, including NGOs, that had been working in the pilot schemes found new and innovative ways to increase performance of health services. This experience was applied to Rwanda.

In the South-west of Rwanda, the NGO Memisa/Cordaid started a PBF scheme in Cyangugu province in 2001,⁷ and the NGO HealthNet International (HNI) started a similar scheme in the Southern province of Butare in 2002.⁸ In 2005, the Belgian Technical Cooperation (BTC) also started a PBF scheme. The ‘Cyangugu model’ and the ‘Butare model’, although with a different set-up, proved successful to the extent that the Ministry of Health, when both NGOs had funding problems, decided to fund the purchase of the outputs (2004-2006). The Ministry of Health decided to roll out performance based financing in all health facilities in Rwanda.⁹ A review comparing both schemes to a

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⁹ ‘Health Sector Policy’ Government of Rwanda, February 2005
traditional (input based) financing scheme found the output-based scheme to be superior. A recent paper provides an excellent description of the Rwandan PBF model.11

Application:

The Ministry of Health’s strong political will and support moved Performance-based Financing into the implementation phase. The Ministry saw output-based financing as a way to enhance quality, as a method to counteract some of the negative effects of the obligatory pre-payment schemes on provider behavior, and as a way to motivate the underpaid health workforce. Due to the enormous pressure for results, time was simply lacking to embark on long and thorough planning cycles with clear results frameworks. In fact, the overarching objective was crystal clear: to implement PBF, as soon as possible, at all levels in the Rwandan Health System; at the community level, at the health center level and at the district hospital level. A rigorous intervention study, or ‘roll-out plan’ provided a road-map, including timelines, for implementation.12

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10 “Comparison of two output based schemes in Butare and Cyangugu provinces with two control provinces in Rwanda” Global Partnership on Output- Based Aid (GPOBA), the World Bank, Robert Soeters, Laurent Musango, Bruno Meesen, September 2005.
USAID, the BTC, the WB, HNI and Cordaid provided technical assistance to the Ministry to implement PBF. A collaborative approach, involving all actors was initiated. The following milestones in the implementation phase were followed:

1. The design, during 2005, of a national roll-out plan, that would allow for a thorough evaluation of the impact of PBF on health services in Rwanda;

2. A period of 1.5 months of review and comparison of the existing pilot PBF pilot schemes;

3. Two national workshops in January 2006, one, a two-day workshop in the capital and the second, a one-week retreat with all key partners with as purpose to discuss results, teambuilding and to plan for next steps;

**Figure 1: the three Phases; Phase 0 the existing PBF schemes, Phase 1, the districts in which PBF will be introduced, and Phase 2, the seven control districts.**
4. A national three day workshop mid-February 2006 in Kigali, in which all key stakeholders participated, to design a common PBF model. Seeking common ground and consensus building between partners with different models was the ultimate aim; consensus was built using techniques such as Delphi\textsuperscript{13} and the Six Thinking Hats\textsuperscript{TM,14} Design of a national PBF model for health centers with a choice for a separation of functions, an ‘internal market’ or ‘quasi market’ design and decentralized governance through district level steering committees. The national model is a mix between the two oldest PBF models; predominantly based on the ‘Butare model’, but with some crucial elements of the ‘Cyangugu model’;

5. The design, shortly after the February workshop, of contract models that would be used by the Ministry and the local Government;

6. Division of the 23 Phase 0 and Phase 1 Districts in areas where partners would provide TA to the Ministry for the roll-out plan;

7. A ‘phase of uncertainty and transition’: between end-February and mid-May 2006, in which partners had to change their existing PBF models and make operational plans for the new PBF districts.


9. Mid-May to mid-July 2006: a technical working group drafted a national PBF model for District Hospitals, field testing, modification and adaptation of the new DH PBF model during a two-day workshop in mid July.

\textsuperscript{13} From ‘Prioritization Process Using Delphi Technique’ White paper by Alan Cline, Carolla Development \texttt{http://www.carolla.com/wp-delph.htm}

\textsuperscript{14} ‘Six Thinking Hats’ Edward De Bono, First Back Bay paperback edition, revised and updated, 1999.

**Problem Solving:**

Problems that arose during the design and implementation phases were:

1. Diverging views on different models and the best model: existing Health Center PBF models had proponents and opponents, varying designs were rooted in personal preferences rather than in, admittedly, the scarce or even absent evidence base. Path-dependency seemed to determine preferences rather than sound logic or reference to the published peer-reviewed literature. Mitigation Strategies: attempt consensus building techniques, emphasize common points rather than differences; aiming at a common District Hospital PBF model to work towards standardization of all models in the near future;

2. Coordination is a challenge in a hectic implementation phase: whereas in the second quarter of 2006, 12 technical working group meetings had been held, only two meetings were held in the third quarter due to the intense implementation phase. Mitigation Strategies: attempt to keep regular, well-documented, meetings. Shift attention to areas of common interest such as Monitoring and Evaluation, analysis of results and creating a national PBF database.

3. Technical assistance to the district health authorities and to the central PBF department: understaffing at all MOH departments due to recent administrative reforms; only 3 technical staff at the central PBF department responsible for maintaining the payment function, in addition to the policy setting, oversight, coordination and regulatory roles and functions. No staff at the district health departments
with ‘verification/control’ in their job descriptions. Mitigation Strategies: work through an extended team approach: use staff from all agencies involved in PBF for filling gaps. Training of a group of master trainers, from all concerned agencies, in knowledge on modern facilitation techniques and the new national PBF model. Creation of a national PBF database, using the recently (June 2006) developed 3G network which has a 90% coverage in Rwanda. Finding additional funds for paying for the additional human and other resources necessary for the ‘verification/control’ function.

4. PBF roll-out parallel to the introduction of far-reaching administrative reforms: Parallel administrative reforms, leading to health facilities being made responsible to the Mayor’s office instead of the central MOH, decentralization of staff management and the creation of a new ‘district health office’ with a political rather than a medical technical function lead to role confusion and conflict. Mitigation Strategies: design of the new national PBF model for health centers take into account these administrative reforms; separation of functions: separating the audit function (new district health office) from the quality regulatory function (Hospital). Start Virtual Leadership Development and team building exercises between district health and hospital teams.

**Results:**

Essential elements for success were the ‘roll-out plan’ and strong and consistent leadership at the top level of the Ministry of Health. Performance improvements that have been documented in Rwanda after the introduction of performance incentives for primary health care and HIV/AIDS service products have been impressive. For instance:
For the ‘Cyangugu model’: results on primary health care indicators include increasing the number of new users from 0.31 consultations/capita/year in 2002 to 0.75 consultations/capita/yr in 2005; increasing the number of institutional deliveries from 27% in 2002 to 40% in 2005; increasing the percentage of fully vaccinated children from 70% in 2002 to 77% in 2005 and increasing the contraceptive prevalence rate from 0.44% in 2002 to 7% in 2005.

For the ‘Butare model’: Results include – from two different districts- an increase of new consultations from 0.36 and 0.47 in 2001 to 0.65 and 0.85 consultations/inhabitant/yr respectively, institutional deliveries from 7% and 13% in 2001 to 24% and 39% in 2005 respectively, and increasing the percentage of women with between 2 and 5 tetanus vaccinations from 32% and 47% in 2001 to 51% and 78% in 2005 respectively.

Such performance improvements have not come by themselves. Frequently one refers to a so-called ‘black box’ of managerial entrepreneurship, which, guided by an ‘invisible hand’ of financial incentives, would lead to the right managerial decisions and devise the right managerial interventions to maximize benefits. However, this has not led to a ‘laissez faire’ approach in the successful PBF pilot programs in Rwanda. In Rwanda, supporting agencies assisted the service providers in devising successful strategies to boost health center productivity, either through in-built program components such as the ‘business plan’ or through facilitating regular exchange between service providers where providers could learn from each other and emulate successful interventions.

A nationwide roll-out could be replicated, as was shown by the introduction of PBF in the Democratic Republic of Congo and Burundi. Essential tools used were: (i) study visits; (ii) consulting relevant literature; and (iii) mounting of a national workshop, or a
A series of workshops at the national level, facilitated for decision-makers (it brought buy-in from politicians and technicians alike).

Conclusion:

The national roll-out of PBF in Rwanda has been impressive. This is an ongoing process of implementing what is known to work, examine results, and adapt the system accordingly. The decentralization in the near future of the PBF budgets to the districts will introduce a new element that could be vital in the successful nationwide introduction of PBF. ‘Managerial entrepreneurship’ cannot be managed centrally.

Important next steps for the national roll-out include the introduction of a national PBF database that will assist the district steering committees and the national level in managing the national PBF model. The basic idea is to have the district health department and district hospital staffs do data entry through internet, in one central database managed by a professional service provider. This technical solution has been made possible by the introduction of third generation technology (GPRS) by one mobile phone provider. An excellent coverage of about 90% of Rwanda by the mobile phone provider, allows internet access at a slow but reasonable speed with a fairly stable connection.

This database will allow users to input data (the results of the quantity verification by the USF, the results of the quality supervision by the district hospital), and to print their quarterly invoices for discussion in the quarterly PBF steering committee meetings. Furthermore, the database will have the possibility for district staff to analyze their own PBF results by an in-built pivot chart function.

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15 http://www.pbfrwanda.org.rw, expected to be operational by the end of December 2006.
In addition to the above features, which will assist the district in managing PBF results and decision making around payments, and the national level in compiling and communicating results, the following modules will be added:

- A Geographic Information System interface, which will allow presenting and analyzing data using maps, for use at the national level.

- A module which will allow users at the national level to model indicators based on a given budget, using baselines from the previous year. Such a module can be invaluable for district level users also, when the PBF budget will be decentralized, which is planned to happen in the near future. District level users could then decide to use different unit values for indicators, depending on local decisions, rather than, which is the case currently, centralized decisions.

- A module that will enable users to automate the writing of contracts, and their amendments, using data stored in the database to model future growth.

Sustainability of the new Rwandan PBF system has so far been good; first, it is embedded in the new national health policy, second, political support is strong, third, the government purchases, financed from the budget, a basic package of health indicators nationwide, fourth, various donors (USAID, WB/MAP, GF, national malaria control program, national tuberculosis control program, etc.) are purchasing performance indicators specific to HIV/AIDS, malaria and TB, using the same administrative model. The Government as a show of commitment, has recently increased considerably the budget allocated to purchasing basic health indicators.