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SmartLessons

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Using Evidence to Scale Up Innovation: Insights from a Results-Based Financing (RBF) Project for Health in Zambia

Several developing countries face the challenge of attaining sufficient population-level impact to meet health-related Millennium Development Goals (MDGs) 1c, 4, 5, and 6.¹ This situation is partly attributable to constraints in their health systems, including: severe shortages in human resources for health; inequalities in service provision and utilization; limited financial resources; and inefficiencies in resource allocation and use. Even in countries with adequate financial resources, health indicators are sometimes poor due to inefficiencies and a lack of performance-related initiatives.

In an attempt to strengthen health systems and improve health-service delivery, several countries in Africa are increasingly using results-based financing (RBF) approaches in their health programs. The premise is that linking financing to results will lead to improvements in health systems and health-outcome indicators. This SmartLesson captures emerging lessons from Zambia's drive to improve service delivery in the public-health sector with support from the World Bank's RBF initiative.

Background

In April 2008, Zambia was awarded a US\$17 million grant from the World Bank's Health Results Innovation Trust Fund (HRITF). The grant was used to launch a pilot results-based financing (RBF) project, which was expected to catalyze efforts to reduce maternal and child mortality in 10 districts in the country.

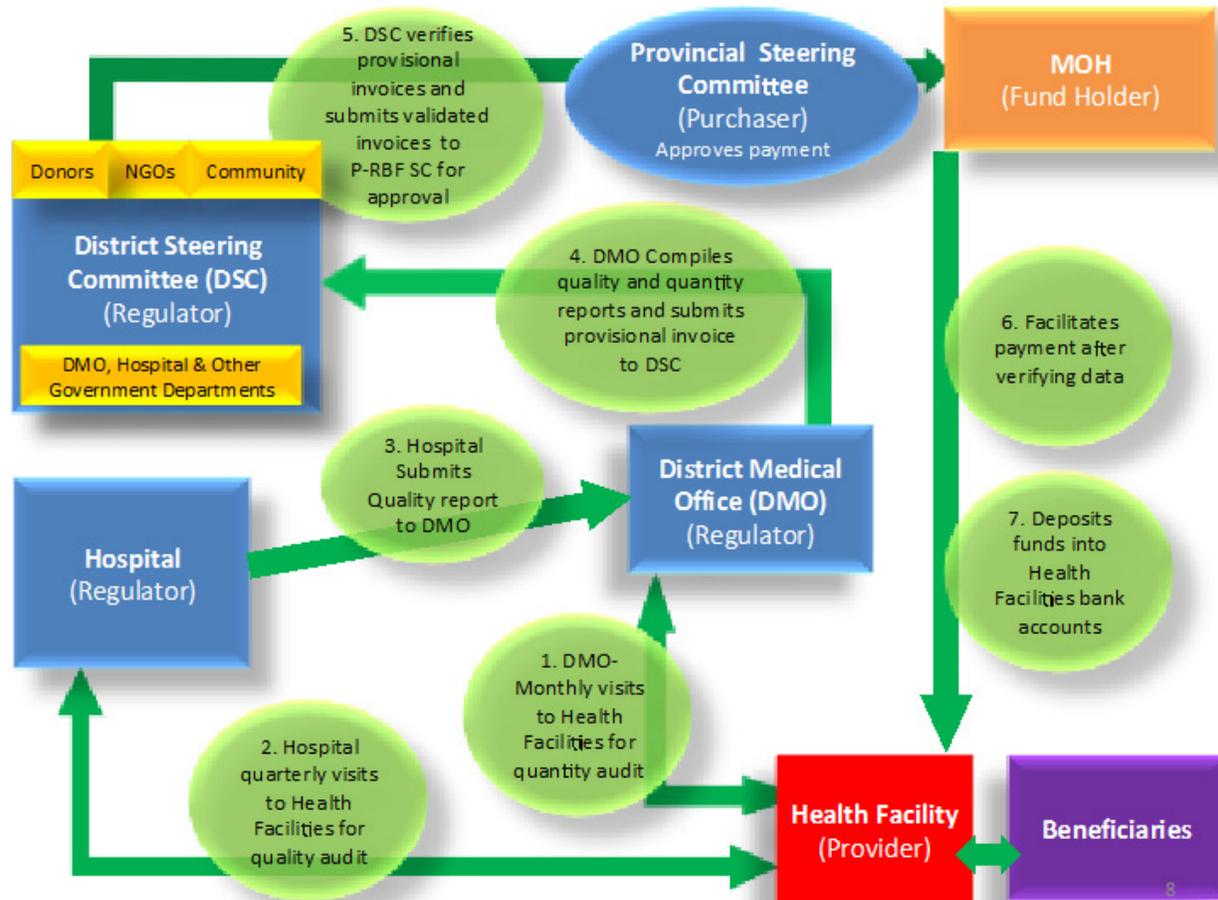
The project commenced with a 24-month pre-pilot implemented in Zambia's Katete District between 2009 and 2011. The pre-pilot provided an opportunity to test and refine the RBF model in a real-world setting, while at the same time helping to strengthen the health system, and improve the quality of health care delivery and health outputs. The project's implementing team was also able to contextualize RBF in Zambia and to draw lessons from the pre-pilot, which were then used to stimulate policy dialogue between the Zambian government and its partners. These lessons also guided the revision of the model's design before roll-out of the pilot.

The Zambian RBF model was designed to address some of the health-system weaknesses identified as preventing better health outcomes, including: an insufficient and poorly motivated human-resource base; an erratic supply of essential medicines and medical supplies; limited autonomy in decision-making at decentralized levels of the health system; weak monitoring and evaluation systems; and poor quality of service delivery.

A fee-for-service model linked performance payments to the delivery of nine facility-based Maternal and Child Health (MCH) and HIV/AIDS indicators. Performance payments were determined by multiplying the volume of services delivered by a specified fee for each indicator, and by a quality score. In addition, the District Medical Office (DMO) was rewarded if it fulfilled a set of supervision and management functions. The

¹ MDG 1c: Halve, between 1990 and 2015, the proportion of people who suffer from hunger; MDG 4: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate; MDG 5: Improve maternal health; MDG 6: Combat HIV/AIDS, malaria, and other diseases (Source: The United Nations).

Figure 1: The Katete District RBF Pre-Pilot Project Model



incentives were aimed at strengthening the DMO's role in supporting health facilities' efforts to increase the delivery of high-quality services.

Evaluations² of the pre-pilot showed a positive impact on service uptake in both incentivized and non-incentivized indicators between 2009 and 2010. The increase in the incentivized indicators ranged from 7 to 54 percent, while the increase in the non-incentivized indicators ranged from 6 to 53 percent (See Tables 1 and 2). Additionally, there were improvements in the accuracy of routinely reported Health Management Information System data. External verification exercises undertaken one year apart showed a significant decline, to almost negligible levels, in misreported data.

Lesson 1: Pre-piloting is a useful approach to embedding evidence into policy and planning.

The pre-pilot was a key element in introducing a systematic learning-by-doing reform, and it provided implementers with an opportunity to test and refine the model at relatively low cost before scale-up. The design of the RBF project

² The evaluations were descriptive studies that all used case-study designs. The surveys relied on a combination of qualitative (semi-structured interviews and group discussions) and quantitative (document reviews, financial, and Health Management Information System data) data-collection methods.

went through a series of adaptations and modifications during this phase. Throughout, joint technical reviews were conducted by the Ministry of Health (MOH), cooperating partners, external consultants, and the World Bank. Based on recommendations from these reviews, improvements were made to the implementation model for the pilot as well as to the design of an impact evaluation covering 30 districts. Specifically, the pre-pilot helped to:

1. establish eligibility criteria for the inclusion of health facilities;
2. streamline the quality tool, a checklist used to assess structural and process aspects of quality of care at health facilities;
3. refine the process of setting fees per indicator;
4. kick-start the process of developing a hospital-level incentive package;
5. incorporate a performance target for the distribution of clinical health workers into the incentive package for the District Medical Offices;
6. develop and test contracts and contracting mechanisms; and
7. improve research tools for the impact evaluation study.

The Zambian government has demonstrated ownership and leadership of the RBF initiative at the policy-development level. Following the success of the pre-pilot,

Table 1: Impact on RBF Indicators: Katete Pre-pilot

Indicator	2009	2010	% change
Outpatient Consultations	522,000	647,000	+24%
Antenatal Care Follow-up Visit	17,600	21,700	+23%
Postnatal Care < 6 days	6,900	7,700	+12%
Intermittent Preventive Treatment (IPT) 3rd dose	4,100	6,300	+54%
Institutional Deliveries by Skilled Personnel	6,000	6,400	+7%
ANC Tested after 1st Visit	11,000	12,100	+10%

the MOH adopted RBF as a strategy in its fifth National Health Strategic Plan, covering the period 2011-2015. The pre-pilot also helped to initiate broader health-sector discussions about RBF among key stakeholders in Zambia at a very early stage. For example, the World Bank and the MOH have been holding discussions with other partners in the health sector, including the UK's Department for International Development, the European Union, the Japan International Cooperation Agency, the Swedish International Development Cooperation Agency, and the Churches Health Association of Zambia on how to scale up RBF initiatives in the country.

Some partners have expressed interest in potentially co-financing the program, and discussions over the modalities are underway. Given the success of the Katete pre-pilot, the HRITF grant is now being regarded as a potential entry point to achieve broader health-sector reforms.

Lesson 2: In designing an RBF approach primarily executed by the public sector, key elements such as the separation of different functions needs to be thought through carefully, which may result in the model taking longer to develop and implement.

The RBF model used in Zambia (and its precursor in Katete) is a fee-for-service, performance-based financing model implemented in the public-health sector. The public-health sector's role as the main contractor is unusual in Africa, where the private sector and NGOs are typically contracted to implement RBF initiatives in public-health facilities. The Katete pre-pilot and the current pilot show that the public-health sector can be used as the primary contractor as long as there is a clear separation of functions to ensure the integrity of the system. This is extremely important, because conflicts of interest may arise over the management of resources in instances where the division of roles and responsibilities is not clearly defined.

From very early in the design phase, the Zambian government was eager to implement RBF primarily through the public-health system as a means to accelerating progress on key health outcomes through addressing key constraints in the health system. In the Zambian model, the MOH is

the central-level fund-holder, while Provincial RBF Steering Committees approve and purchase services. District-level RBF Steering Committees, which draw their membership from the community, government, donors and civil-society organizations, act as external regulators. Their main functions are to verify that services are provided, monitor the quality of service provided, and ensure compliance with standards and the proper functioning of the system. District Medical Offices and second-level hospitals act as internal regulators and conduct quantitative and qualitative assessments, and health centers provide health services. An externally recruited firm independently verifies the accuracy of reported data and confirms through patient tracing that health services have been provided. For the Katete pre-pilot, the University of Zambia was contracted as the external verifier.

Though novel, there have been challenges in implementing a model entirely through the public-health sector. For instance, the design phase lasted much longer than it does in countries where the contractors are international NGOs. That said, there are also clear benefits with the public-sector model in Zambia. Among these are national ownership of the project at all stakeholder levels and integration of the RBF model and concepts into the health system from the initial stages of development. These are critical foundations for building longer-term institutional and financial sustainability for this approach in the country.

Lesson 3: Investment in capacity and regular dissemination of results are useful in enhancing ownership and promoting sustainability.

Prior to tapping the HRITF, Zambia had limited experience with RBF, in part due to low implementing capacity. Building capacity from the start of the pre-pilot's design phase was a critical element in enhancing ownership and creating an environment that would promote longer-term sustainability of the model. The implementers of the Katete pre-pilot and other MOH personnel were guided by a series of learning workshops and evaluations on RBF held at the national, regional, and international levels. These were aimed at developing an understanding of RBF and its role in strengthening health systems. Furthermore, external RBF experts provided technical assistance to the MOH during the design and implementation phase in order to build the necessary capacity. This included a participatory RBF Training of Trainers (ToT) course in which the first national-level RBF training materials were developed by government and NGO representatives.

The ToT produced the first cadre of National RBF Trainers in the country, and was followed by a countrywide roll-out of training in health centers, districts, hospitals and provincial medical offices. Community representatives were also trained so that they could understand and actively participate in the project. In addition, the formation of RBF Steering Committees at all levels (district, provincial, and national) created an opportunity to share knowledge and ideas among stakeholders and communities on all RBF initiatives in the country. Eight RBF intervention specialists were also recruited locally (one per RBF district) to provide support to districts implementing the RBF pilot.

The MOH also disseminated the initial results from the Katete pre-pilot within Zambia and internationally, garnering more inputs to influence the design and implementation. The MOH and the World Bank also intend to publish the results of the pre-pilot in a scientific journal to

Table 2: Positive Impact on Non-RBF Indicators

Indicator	2009	2010	% change
Children < 5 Years Weighed	170,000	215,400	+27%
Vitamin A Supplementation (12-59 months)	50,300	53,100	+6%
HIV Test (excl. ANC)	19,600	29,900	+53%
Inpatient Discharge	24,600	28,000	+14%

further share experiences on best practices for financing and strengthening health systems in developing countries. As a result, considerable national implementation capacity has been built in the country, which will be critical to the broader sustainability of RBF-initiated reforms beyond the pilot.

Lesson 4: RBF can increase flexibility in health facility management, encourage innovation and creativity, and improve accountability in service delivery.

During the pre-pilot, Zambian health facilities received enhanced autonomy over the finances, planning, and management of their centers. Separate bank accounts were opened under the RBF program with a joint signatory from the community, which enhanced community participation and increased accountability and transparency. A qualitative review identified a wide range of innovations, such as: hiring of local staff to fill human-resource gaps; procurement of minor equipment and commodities; and use of demand-side incentives to boost service utilization. In line with the overall project objectives, the pre-pilot also contributed to improved staff motivation and productivity in Katete District.

Lesson 5: Impact evaluations should be designed early and contextualized to the country setting.

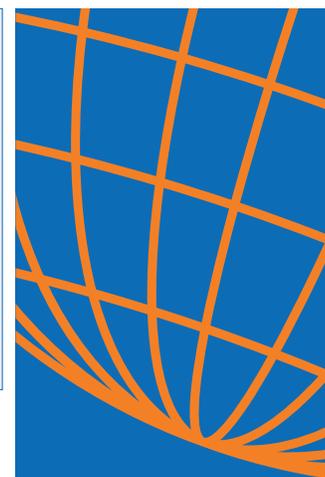
In order to adequately evaluate the impact of RBF, there is a need for more rigorous case studies detailing field experiences, success factors, and potential advantages and disadvantages. The Zambia RBF pilot project combines both an implementation and impact evaluation component, the design of which greatly benefited from the Katete pre-pilot. The current impact evaluation design includes quantitative and qualitative segments aimed at answering key questions about RBF's impact on: i) health outcomes, ii) health systems, and iii) health workers' attitudes and behavior. The conceptualization, setting of the questions for the study, and development of the survey instruments were extensively informed by the Katete pre-pilot.

The results of the Katete pre-pilot also influenced the decision that process evaluations would be included during implementation as a means to monitor and document changes that occur during implementation to inform decision-making. These process evaluations will also complement the impact evaluation, helping to contextualize the results of the RBF in the country.

Conclusion

Pre-piloting in Zambia has been valuable in identifying the key requirements for implementing RBF, as well as for testing and resolving implementation bottlenecks before finalizing the design of the pilot. Pre-piloting has also made it possible to adapt RBF to the Zambian context, to build consensus on its implementation, and to embed evidence into policy and planning. The project is already providing an opportunity for partnerships, knowledge sharing and learning, and discussions of broader health reforms in Zambia. Nonetheless, continuous identification and timely resolution of implementation bottlenecks remain critical to the success of the RBF program in Zambia going forward.

The pilot phase, which commenced in April 2012, is operational in 11 rural districts (including Katete) representing eight provinces out of a total of nine, 204 health facilities, and a total catchment population of 1,691,240. The intended direct beneficiaries are 67,650 children aged 0-11 months, 338,248 children aged between 0-59 months, and 372,073 women of child-bearing age.



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