



Health Results-Based Financing

Addressing challenges and harnessing opportunities during the preparation and implementation of data collection

1. Background

Intervention: The approach adopted by the Zambia HRBF is a dual intervention to promote health service utilization, and ultimately improve priority MCH outcomes. On the one hand, the MOH will incentivize service delivery performances at the facility level with a bonus through a fee-for-service model. It is anticipated that many of these additional payments will be spent on locally tailored demand side initiatives and other forms of outreach to the community. On the other hand, the MOH will utilize a share of HRBF funds to invest in facility upgrading to ensure that the increase in demand will be met with service of sufficient quality.

Evaluation Design: The study includes three arms: (i) additional resources and a results-based incentive scheme implemented at the facility level; (ii) additional resources without the results-based incentive regime; and (iii) pure control. With this setup the evaluation aims to estimate the causal effect of the Zambian HRBF on the population health indicators of interest and explore whether higher incentive payments in rural/remote areas result in increased health outcomes and greater retention of staff. The pilot study is implemented in ten districts that are representative of or reflecting median District Health Management Team (DHMT) capacity or performance in the provinces except the urban Lusaka province. The study focuses on non-urban areas in order to enhance the efficient targeting of resources towards the poor.

Data Collection: To answer the research question related to the policy evaluation, in addition to using routine monitoring and Health Management Information Systems (HMIS), the team has been collecting dedicated survey data from 213 health facilities and 3,010 households. These baselines, respectively, started in mid-October and mid-November in 2011. A qualitative baseline survey of the health care providers was conducted in January and February of 2012. The follow up/end-line surveys will be implemented in 2013.

2. Country Experience

Harnessing Knowledge Spillover from Previous Evaluation: The operational and evaluation team for the Zambia HRBF had experience in implementing impact evaluation as the Government of the Republic of Zambia (GRZ) previously signed up to carry out an evaluation of the Malaria Booster Program, which started in 2007 and included large-scale survey data collection. To reduce the costs, including start-up transaction and some monetary costs of the evaluation, the team consciously chose to build on the design and implementation lessons learned during the preparation and fielding of the malaria surveys, and the products developed.

A Procurement Choice Trade-Off: Going Local or Global? A central question during the survey firm procurement stage was the availability of firms with experience in managing large-scale data collection and a good track record of delivering high-quality data, and local knowledge. In the Sub-Saharan African context, supply side constraints make survey contracting challenging as smaller firms with local knowledge may not have the scale and capacity to manage large-scale multi-site surveys. On the other hand, a number of international firms may not have local presence. Following a competitive tender through the Bank's procurement system, the team selected a local survey firm with a good track record. However, because implementing multi-site facility and household surveys simultaneously requires a large field force and substantive excess capacity, the team chose to split the survey implementation into a facility survey, which was delivered by a team at the Department of Economics of the University of Zambia, and a household survey, which was implemented by a local private firm, which had good relations with the Central Statistical Office. The trade-off was between going for more established international firms but with little local knowledge or for a local firm with good local knowledge but less robust capacity relative to the international benchmark.

Survey Management Capacity Building and Collaborative Research: The choice meant that the Zambia team engaged in capacity building of the local survey firm with the objective that if the data quality is adequate then subsequent evaluations could benefit from enhanced technical skills and capacity in the local survey firm market. When the Health Results Based Financing program started, this capacity building approach yielded its benefits. The survey firm won a second competitive tender to implement the household survey, this time for HRBF and now with 2 years of experience working with the Bank and in the field. In sum, strategic thinking by the TTL and the evaluation team enabled drawing on protocols prepared for institutional review boards, survey instruments, field manuals, data entry program, and a large trained field force and technical staff, which have benefited from the capacity building. The engagement also involves joint research to build country ownership of the evaluation, including collaboration with researchers from local survey firms, which can serve as an incentive for data quality.

Survey Product Adaptation: Although the same survey firm was used for the household data collection, as every project is unique the survey-related products required content customization. The HRBF team relied on instruments developed for a malaria project in Zambia for the household survey, and on instruments developed by the Zambia IE team with support from the Bank's evaluation team at the hub for the health facilities. Field testing, which lasted for about six months, allowed identifying significant adjustments to be made. In particular, the questionnaire, initially administered in four hours, was reduced to 1.5 hours by removing redundant or difficult-to-administer sections from the socio-economic and health books, including biometric and physical activity questions. Despite the significant time spent on adaptation, the costs were lower compared to developing a new product.

Built-in Risk Mitigation to Harness the Positive Externalities: While taking a local capacity building approach is expected to lead to positive externalities over time and across programs, it is associated with some risks. To minimize the potential risks, there were built-in quality and fiduciary controls. For example, the Terms of Reference for the firm that implemented the household survey included conditionality on milestones for fund release and data quality for engagement in any follow-up survey. These incentives have been critical during managing the evaluation.

Local-to-Local (L2L) Cross Support: Since the facility and household surveys are implemented by two different entities, this provided an opportunity for cross-survey-firm support during the implementation of the HRBF surveys. The private firm, which has been engaged with the Bank's team for longer and benefited from the capacity building both by the Bank's central evaluation team and Bank contractors on survey management, provided support on data entry program development and management to the survey firm which won the facility survey. In general, the lack of capacity and training in DEP has been a challenge during the malaria program's evaluation. Thus, the HRBF team and the survey firm both recognized this as a critical point to improve the preparation and implementation of data collection.

Cross-Program Improvements - Learning from Challenges: With respect to reporting and supervision, there is no MOU but detailed Terms of References between the Bank and the Government and the survey firm helped delivery, quality assurance, and cross-program knowledge externalities. For example, the TOR with the survey firm stipulated not only survey implementation mid-time and end-line reporting but also reports on challenges when they arise. The need for such just-in-time reporting became clear during the survey work related to the malaria program evaluation when field teams experience hostility from communities because of perceptions and beliefs related to the blood testing within the biomedical component. In addition to the reporting requirements for the firm defined in the TOR, an IE coordinator receives regular updates from the field, about every week, or more if needed. Other instances where challenges during the malaria survey work lead to improvements in the HRBF survey implementation include increased in-field supervision for data quality and data entry program development. For the HRBF surveys questionnaires are checked on a daily basis, and interviewers debrief every evening to reduce discrepancies/missing data, and thus return visits, which also means lower travel costs for the survey. The data entry program has been developed to fit local capacity, reducing the need for technical cross support.

Compliance Challenges: Compliance by program implementation with evaluation design is a central theme to all evaluations. Challenges have been noted during the malaria program evaluation. Yet, this could not prevent compliance challenges experienced during the implementation of the HRBF program. The IE team discovered before baseline that one district in the comparison group had been contaminated. To correct this, the team included one additional district in each of the 3 remaining treatment groups. This led to an increase in the IE budget. While large programs do not take place in a laboratory environment in which we can control for everything, there are some factors that often lead to contamination and would be relatively easy to improve on, including coordination, communication, and reporting.

Facility Survey: As the emphasis during the malaria survey was on the household survey implementation, there was less positive externality over time and between the two programs regarding facility survey implementation. The team faced challenges in identifying the correct number of cases for patient exit interviews, in facilities with a low case load, which required return visits within budget constraints. In facilities with a high case load, the team developed a systematic random sampling of patients in order to reflect usual trends in patient load.

IE Budget: Given Zambia's sparsely populated geography in a number of districts, poor road networks in general and especially during the rainy season, the high cost of gas, and price volatility

due to exchange rate fluctuations, transportation has been an important cost driver within the IE budget. While the knowledge spillover from the malaria to the HRBF survey has contributed to containing costs, such as through reduced costs for product development and training, the variable costs for transportation have not improved as much. This is not fully within the team's control but efforts such as end-of-day data quality checks have helped reducing travel costs. Information regarding case load can help field entry planning to reduce transport costs.

3. Lessons Learned

- Impact evaluation teams, including local partners can capitalize on past experiences in field work preparation, data collection and data entry in order to reduce financial and transactional costs in future impact evaluations.
- Spending time on training and preparatory steps before data collection is critical to ensuring a successful data collection.
- Setting up a strong supervision and reporting system ex-ante is crucial to a successful data collection.
- Teams must be prepared to come up with practical solutions in order to face potential conflicts between logistical constraints and the IE design.