Learning Agenda for Results-Based Financing in the Health Sector: The Health Results Innovation Trust Fund Learning Strategy





# Background

Results-Based Financing (RBF) in the health sector provides financial rewards to medical care providers for improvements in performance measured by specific utilization and quality of care indicators.

The Heath Results Innovation Trust Fund (HRITF) learning portfolio is comprised of impact evaluations, program assessments and enhanced program assessments. It also encompasses additional learning activities, namely (i) learning from RBF implementation (LFRI) case studies which focus on learning from and during program implementation, including the analysis of administrative data, and (ii) analytical products which aim to learn on specific aspects of RBF through knowledge and analytical types of products, on topics such as: (i) Family planning and incentives in RBF, (ii) Verification in RBF, (iii) RBF and human resources for health (HRH), (iv) RBF in hospitals, and (v) Cost-effectiveness and qualitative tools to evaluate RBF (vi) tools for supply chain assessments (v) use of mobile technologies and RBF (vi) strengthening quality of services with RBF.

Concurrent with the growth of Country Pilot Grants (CPGs) financed by the Health Results Innovation Trust Fund (HRITF), the HRITF evaluation portfolio has doubled in the last year. There are currently 33 impact evaluations (29 quantitative and with mixed methods and 4 qualitative), 5 program assessments and 5 enhanced program assessments in the HRITF portfolio focused on Results-Based Financing (RBF).

Evaluations are at different stages from early design to end-line analysis and dissemination. While most country teams are at the early design stage due to the recent increased growth of the portfolio, about a fourth of the country teams are at a stage when results on RBF could be generated and shared in the next 2 years.

There is great interest from the global community to learn more about RBF in a short timeframe. This interest stems not only from academics' or practitioners' interest, which is clearly prevalent, but also from a need to provide evidence on RBF in order to foster donor support and country investment, at a time when several countries have to address sustainability concerns.

# Objective

The overall objective of the learning agenda for results-based financing in the health sector is improving health (particularly of women and children) in low- and middle-income countries by generating and applying best-available evidence on results-based financing.

In particular, this learning agenda aims at:

- 1. Generating new knowledge on results-based financing, in particular how it works and under which conditions.
- Improving the methods and measures used for assessing RBF (and determinants of its success).
- 3. Building capacity to conduct research on RBF.
- 4. Communication and dissemination of knowledge related to RBF.

This is a pivotal time for the HRITF evaluation portfolio: there are several evaluations and learning activities to complete in the short to medium term that will bring a critical mass of results on RBF. In the meantime, there are also many opportunities to drive the learning agenda on RBF by both drawing on the most advanced evaluations and learning products, and fostering further learning amongst the newer evaluations. Finally, the HRITF could firmly position itself as a lead global actor on knowledge creation and dissemination on RBF.

Building on the identification of the current status, strengths and gaps of the learning agenda of the HRITF, this note defines a strategy for pro-actively managing the generation of results within the HRITF portfolio within the long run (5-year time frame) and medium run (12-18 month time frame).

# Stock-Taking

As of now, the HRITF evaluation, and more broadly, learning portfolio has accomplished significant achievements. In the meantime, the HRITF portfolio of evaluations and learning activities has challenges ahead, and learning opportunities to harvest more pro-actively. These need to be considered when refining the HRITF learning strategy.

# 1. Achievements of the HRITF evaluation and learning portfolio

# a. Diversification of topics, methods, and regions

Since the onset of evaluation and learning activities at the HRITF, the design of each impact evaluation has been influenced by the country context as well as by the gaps in the evidence base on the impact of RBF. The design process of an IE starts with a series of consultations between the World Bank country team and the local government and stakeholders to ensure buy-in for the IE, but is also overseen for technical quality by HRITF staff. The final set of research questions and methodological design have to be approved by HRITF before funding is disbursed, thus ensuring a good balance between methodological rigor and local relevance. HRITF has thus been able to develop a portfolio of rigorous impact evaluations that (a) generate a strong evidence base on not only overall impact, but also on specific key aspects of RBF projects, and (b) have been developed with the country teams so that the IE is firmly rooted in the country context and team needs. Over time, this has translated into a greatly diversified scope of activities, from a strong focus on Performance-Based Financing (PBF) programs to broader RBF schemes, such as demand-side RBF (vouchers, conditional cash transfers, etc.), and to a wider range of outcomes of interest, from maternal and child health to out-of-pocket payments. These components have in turn informed the policy-making process and have then translated into more unique and refined PBF programs. As a result, and through the management of the learning agenda, as highlighted in tables 1 and 2 below, the portfolio of evaluations of RBF has also diversified its main outcomes of interest, and interventions evaluated. Appendix 2 presents the detailed research questions asked by each IE with its current status and highlights the depth and diversity of these studies. In addition to generating rigorous evidence on the effect of performance-based financing on maternal and neonatal health outcomes, these impact evaluations should also yield estimates of the impacts of PBF on (1) health care utilization and equity, (2) the quality of care provided, and (3) health systems and human resources. Further, several of these impact evaluations will be able to assess the cost-effectiveness of PBF, particularly in comparison to other health interventions. While none of this is to say that the HRITF IE portfolio seeks to or will be able to fill every gap in

the evidence on RBF, the ultimate goal is to create a solid and well-founded base of studies on the impact of RBF in health, which can then be expanded and enriched by GFF-funded studies and other research.

Intervention evaluated	Countries
Supply-side RBF payments	Afghanistan, Argentina, Armenia, Benin, Burkina Faso, Burundi, Brazil, Cameroon, China, Democratic Republic of Congo (1 and 2), Republic of Congo, Gambia, Ghana, Haiti, India, Kenya, Kyrgyz Republic, Lesotho, Liberia, Mexico, Nigeria, Rwanda, Senegal, Tajikistan, Tanzania, Yemen, Zambia, Zimbabwe
Demand-side RBF payments	Gambia, Nigeria, Rwanda, Senegal, Yemen, Zimbabwe
Community-Based RBF	Gambia, Senegal, Rwanda, Democratic Republic of Gongo 2, Republic of Congo
RBF for quality of care	Afghanistan, Armenia, Argentina, Benin, Brazil, Cameroon, China, Democratic Republic of Gongo 2, Haiti, Kyrgyz Republic, Nigeria, Senegal, Tajikistan, Tanzania, Zambia, Zimbabwe
RBF in hospitals	Afghanistan, Argentina, Burundi, China, Democratic Republic of Gongo 2, India, Kyrgyz Republic, Liberia, Nigeria, Senegal
Health insurance and RBF	Burkina Faso, China, Ghana, Kenya
Additional financing	Benin, Democratic Republic of Congo 2, Nigeria, Zambia, Zimbabwe
Differential incentive levels	China
Enhanced monitoring & supervision	Cameroon, Kyrgyz Republic
RBF and training of providers	Zimbabwe
RBF at higher administrative levels	Argentina, Republic of Congo
Unintended consequences	Afghanistan
Targeting/Subsidies/Equity	Burkina Faso, Benin, Republic of Congo

# Table 1: Interventions evaluated in HRITF impact evaluations

Outcomes of interest	Countries
Maternal Care	Afghanistan, Argentina, Armenia, Benin, Burkina Faso, Burundi, Cameroon,
(Quality/Utilization)	Democratic Republic of Congo (1 and 2), Republic of Congo, Gambia, Ghana, Haiti,
	India, Kenya, Kyrgyz Republic, Lesotho, Liberia, Nigeria, Rwanda, Senegal, Tajikistan,
	Tanzania, Yemen, Zambia, Zimbabwe
Family Planning	Afghanistan, Armenia, Cameroon, Democratic Republic of Congo (1 and 2), Republic
	of Congo, Lesotho, Rwanda, Zambia, Zimbabwe
Child Health Care	Afghanistan, Argentina, Benin, Burkina Faso, Burundi, Cameroon, Democratic
(Quality/Utilization)	Republic of Congo (1 and 2), Republic of Congo, Gambia, Ghana, Haiti, India, Kenya,
	Kyrgyz Republic, Lesotho, Liberia, Nigeria, Rwanda, Senegal, Tajikistan, Tanzania,
	Zambia, Zimbabwe
Child mortality	Argentina
Children and	Burundi, Democratic Republic of Gongo 2, Lesotho
adolescent outcomes	
Nutrition	Burundi, Gambia, Democratic Republic of Gongo 2, Republic of Congo, Senegal
Quality of Care	Afghanistan, Armenia, Benin, Burundi, Cameroon, Democratic Republic of Congo (1
	and 2), Republic of Congo, India, Kyrgyz Republic, Lesotho, Liberia, Nigeria, Senegal,
	Tajikistan, Zimbabwe
Out-of-pocket	Afghanistan, Benin, Burkina Faso, Cameroon, Democratic Republic of Congo (1 and
Payments	2), Republic of Congo, India, Tajikistan, Zimbabwe
Tuberculosis, Malaria,	Afghanistan, Benin, Liberia, Nigeria, Rwanda, Zambia, Zimbabwe
HIV/AIDS	
Staff Motivation	Benin, Democratic Republic of Gongo (1 and 2), Zambia, Zimbabwe
Non-communicable	Armenia (cervical cancer), China, India (tertiary care), Tajikistan (hypertension)
diseases	
Cost-effectiveness	Afghanistan, Argentina, Cameroon, Democratic Republic of Gongo 2, Lesotho,
	Burundi, Tajikistan

# Table 2: Outcomes of interest in HRITF impact evaluations

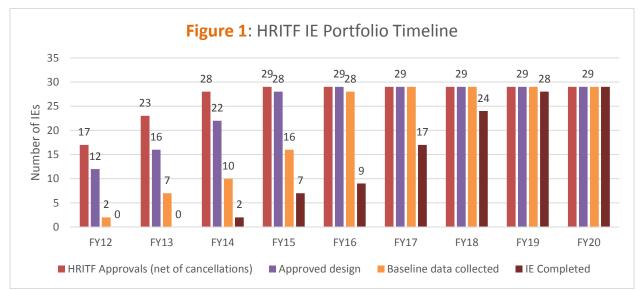
The learning approaches have also evolved from an emphasis on whether RBF or a specific variation of RBF work, to how and why RBF may or may not work in given contexts. The *Learning from RBF Implementation* 

(LFRI) case studies are an illustration of this broadened learning approach and effort to adopt a science of delivery approach, rather than only knowing whether or not RBF works.

Learning methods have also evolved, from a focus on quantitative experimental or quasi experimental impact evaluations only, to the inclusion of qualitative and mixed methods. LFRI typically use quantitative payment data on RBF to identify patterns, bottlenecks or issues, but address these issues using qualitative or mixed methods. Several recently approved impact evaluations also intend to use mixed methods to get a deeper, richer understanding of RBF.

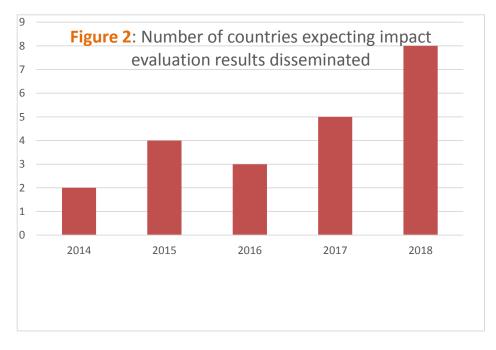
# b. Progress towards results

Over the past five years, the HRITF has built capacity for impact evaluations amongst country teams and teams are progressing towards producing results. **Figure 1** shows how the growth of the IE portfolio. Even as recently as FY12, there were only 17 IEs with approved funding, while the target of 29 IEs has already been achieved by FY15. By FY15, 7 IEs had reached completion, and it is anticipated two more will each completion in FY16, for a total nine completed IEs. Another notable fact that highlights that the IE portfolio is on track to generating a rigorous evidence base on RBF by FY20 is that all but one of the IEs will have completed baseline data collection by the end of this fiscal year, thereby leaving sufficient time for at least 18 months of exposure as well as time for analysis by FY20. This chart also demonstrates how, even though prospective impact evaluations can take several years to completion, the IE portfolio is regularly generating new evidence on the effectiveness of RBF for health.



**Figure 2** highlights the expected timeline of results from the impact evaluations (excluding the program assessment and enhanced program assessments). While new results are expected every year, seven impact evaluations could produce results in an 18-month timeframe. In the next five years, nineteen are expected to produce results. The fifteen remaining impact evaluations are those at early design stage, for which the

timeframe still is to be confirmed, and also for which there are opportunities to drive the learning agenda on RBF more proactively. In addition, many IEs in the HRITF portfolio use a combination of quantitative and qualitative tools to help us understand the mechanisms behind any observed impact, and to unpack the "black Box" of complex RBF projects into the specific program design elements.



## c. Embedding of learning activities into one conceptual framework

The HRITF has achieved the objective to facilitate learning on RBF through the development and use of a conceptual framework (see annex 1) that disentangles the causal chain according to which one would expect RBF to produce positive results on healthcare delivery, quality of care, healthcare utilization and ultimately, health outcomes. This conceptual framework currently pertains to PBF schemes to respond to the immediate demand for learning in the portfolio, however it can easily be adapted to other types of RBF and includes key behavioral and organizational changes that RBF, broadly speaking, is to bring about. The current learning activities of the HRITF are embedded in that framework and the current gaps of the HRITF learning portfolio are mapped out according to that framework.

# d. Initiation of in-depth learning activities

The HRITF has over time identified learning gaps and initiated learning activities focusing on key aspects of RBF. The analytical product on verification in RBF is almost finalized and several case studies highlighting the current verification system of various countries, its strengths and gaps, are to be published in the next quarter. Other analytical products, such as the human resources for health study, are still at initial stages but should in the medium term address key issues related to RBF and health systems.

#### e. Building synergies across evaluations and learning activities

Through those analytical products, impact evaluations, LFRI case studies, the HRITF has built a comprehensive approach to learning, using a variety of methods to learn on the diversity of RBF in a timely manner.

# f. Building team capacity and interest in further learning

Through the compulsory nature of impact evaluations, whereby a rigorous impact evaluation has to accompany each CPG, the HRITF cultivates a culture of evaluation within HRITF teams. Over time, several teams came back to the HRITF with more ideas and topics to learn about. In addition, the HRITF conducted several training and technical assistance activities which helped build team capacity on impact evaluation and LFRI. For instance, regularly-conducted workshops bring together the country teams implementing and evaluating RBF projects to share findings and to learn from each other. In addition, targeted workshops have been held for several country teams, including Benin, Cameroon, Central African Republic, Nigeria and Rwanda. During these workshops, teams have worked with HRITF staff to work on IE design and research question selection, data analysis and report writing and dissemination. By building on this culture of evaluation and creating local ownership of the IE and its results, HRITF views these capacity building activities as a vital component of its efforts to build evidence on RBF programs.

#### 2. Challenges

#### a. External validity or pushing the learning frontier

While the evaluation and learning portfolio shows a varied set of topics, methods, and timeframes for results, there is sometimes overlap between either some of the evaluations, or between evaluations and other types of learning products. While indeed, this overlap creates synergies and improved know-how to learn about RBF, it also guarantees the external validity of the results that will come out of these learning activities. It is expected that through a certain degree of replication, some of the learning frontiers could be pushed further.

## b. Heterogeneity of the portfolio

The commitment to impact evaluations for each country team has had the benefit of avoiding "cherry picking" of what would look like the best projects, or best impact evaluation designs forehand. It has thus helped build a comprehensive and diverse impact evaluation portfolio. As noted above, the HRITF IE portfolio will be unable to answer every gap in the literature on RBF in health; nonetheless, by building a robust literature on the topic it will likely stimulate interest and contributions from outside the HRITF and the World Bank. In addition, the transition to GFF, with its continued push on evidence-based policy-making should engender further evidence on the topic. In the meantime, it also means that each impact evaluation has been given the same importance, no matter the value added of that evaluation to the global learning agenda. In addition, it has also meant that

some country teams embarked on impact evaluations with a lot of enthusiasm, some with less, which ultimately can translate into the quality of the results.

# c. Country team capacity

Evaluating RBF, especially through experimental or quasi-experimental impact evaluations, is a technical task. While the capacity of the country teams who have benefited from HRITF funding and support for several years has been built quite significantly, there are many newer country teams with more limited exposure to impact evaluation, or other learning activities such as process evaluations, cost-effectiveness analyses, etc. Technical assistance, whatever its form, is an important aspect to consider when refining the learning strategy of the HRITF.

#### d. Methodological and measurement issues

On a related point, impact evaluations, and learning about RBF in general, require learning about complex changes in health service delivery, health outcomes, the health system, and behavioral and organizational changes at different levels of the health system, within the community or among policymakers. Measuring these changes can be challenging. In particular, the measurement of quality of care, of the costs of RBF from a cost-effectiveness perspective, of behavior change, motivational and broader human resources for health issues can be challenging. Currently, there is not one universal best practice to measure those aspects, but rather a need to build on existing knowledge, while fostering a creative approach to learn more. As in the previous point, it will be important to consider how to accompany country teams in understanding, refining and testing measurement tools in their evaluation and learning activities. At the same time, this effort to refine and improve measurement tools will benefit the overall health systems research community, beyond the HRITF and PBF community. For example, the contribution of the HRITF learning portfolio to the overall quality of care measurement agenda is already substantial: HRITF evaluations have developed and tested tools including video vignettes, lab-in-the-field experiments, birthing simulator.

### e. The HRITF outside of the World Bank

Due to the initial focus of the HRITF on World Bank funded projects, in the past, communication between the HRITF and other members of the PBF and broader RBF community outside of the World Bank has sometimes been seen as limited. Great efforts have been put in the last years to increase the visibility and communication of the HRITF in the broader RBF community, offering the possibility for a strategic positioning of the HRITF as a major knowledge generating and sharing actor on RBF.

### 3. Potential to harvest

In relation to both the progress made by the HRITF, and challenges faced, there is potential that could be harvested more pro-actively in the next few years.

#### a. Integration of learning activities and synergies

The current overlap and synergies in the HRITF learning and evaluation portfolio could be harvested further. For example, the human resources for health analytical product intends to build on the current ongoing impact evaluations to add or increase the human resources for health focus of those evaluations, and produce results in the medium term on the impact of RBF on human resources issues. Likewise, the LFRI case studies focusing on continued process evaluations constitute an interesting addition to impact evaluations, which for the most part consist in snapshots at separate points in time. However the link between LFRI case studies and impact evaluations for example could be strengthened, both at individual country level, but also from a global learning perspective.

The conceptual framework, currently available for PBF schemes, can constitute that overall umbrella which frames the learning activities in one given country, and across countries. It helps address which topic can be addressed, using which learning approach, and therefore maps out the complementarity of the different learning activities, at the country level, but also once aggregated, at the global level. Developing a conceptual framework for other types of RBF schemes, and using it as a mapping tool, could help build an integrated approach to the HRITF learning activities, while maintaining the importance of country context and avoiding generalizations.

In addition, building on the current learning activities, providing additional hands-on guidance or tools on how to learn about RBF to all HRITF teams could also help build a common approach to learning, while fostering a demand for a variety of learning pieces and an understanding of how the HRITF portfolio as a whole contributes to knowledge on RBF, and where the global learning gaps are.

### b. Strengthen qualitative research and its application

A recent review of all qualitative research conducted with support of the HRITF has been reviewed. Based on this review, the authors identified gaps and opportunities for improving the quality of qualitative work and made recommendations to strengthen the potential for qualitative work to add value in understanding responsiveness of health systems to RBF initiatives and evaluation of their impact. We aspire to do qualitative research in association with many HRITF impact evaluations that adheres to these recommendations.

Strengthening the added value of qualitative inquiry in on-going and future qualitative studies may be enabled by small shifts in thinking and practice, in line with a qualitative research paradigm. First, in order to better ground research in an existing country- and system-specific context, some interrogation of constructs and posited relationships in existing conceptual framework for intervention/evaluation may be required. Second, to enable more in-depth and richer data that documents working practices and relations under RBF schemes, training of local researchers should place stronger emphasis on entry to the field, gaining trust, building rapport, and sustaining a dialogue with key informants. Third, smaller, more intensive and focused studies targeting fewer sites and smaller samples - but addressing a wider range of methods and informants within the health system - are likely to yield richer data that can support the understanding of how health workers and managers are responding to schemes, and what impact schemes have on service volumes and outputs.

It is anticipated that the majority of HRITF impact evaluations will have qualitative research components. We will aim to support more studies prior to the launch of RBF interventions that can be used to tailor their design, as well as studies that capture issues such as civil society engagement, and response of poor and marginalized populations to RBF.

Coordinating and supporting strong qualitative research within the HRITF will continue to require an HRITF team members skilled in qualitative research. And given that this is a field of research that the World Bank is not traditionally strong in, the HRITF will need to continue to grow a network of consultants that can support it in this work.

# c. More innovative and faster learning

On a related point, the HRITF could foster innovative learning techniques. Until now, the HRITF has been making a great effort in supporting country teams to learn about RBF, for example through the impact evaluation toolkit, which provides a standardized set of guidelines and tools for country teams to use in their impact evaluations. However, "learning" in the broad sense is a progressive process, with learning techniques and tools evolving as a result of testing in the field. Updating the currently available guidelines or tools, but also exploring the newest techniques (e.g. "lab experiments", discrete choice experiments, using administrative data in impact evaluation, etc.), would help foster a common vision to learning on the one hand but also a diversity of learning techniques and creative measuring tools on the other hand.

In addition, it may be possible to overlay the current learning and evaluation activities with additional microinterventions related to RBF, or additional learning activities, which are currently not explored. The allocation of funds for these additional learning activities could be based on a competitive process.

Both of these recommendations would help bring deeper and faster learning on RBF, but would indeed require sufficient coordination and technical assistance for country teams to embark on innovative learning approaches.

### d. HRITF Funding stream 3 and Middle Income Countries

The HRITF impact evaluation portfolio has the benefit of providing evaluation funding to countries that are not eligible for International Development Association (IDA) funds, through funding stream 3 HRITF funds. These impact evaluations allow learning from RBF schemes from middle income countries (MICs), which are usually quite sophisticated versions of RBF. For IDA countries, this learning can have greater value added, since RBF schemes from middle income countries (LICs). The impact evaluation of Plan Nacer/Plan Sumar in Argentina, supported by HRITF, is a great example. In general, adjusting the learning to the stage of the health system, and what value added a particular evaluation of RBF in a particular health system could bring about, could bring more diversity and push the knowledge frontiers of the HRITF. The HRITF could more pro-actively build on funding stream 3 evaluations for in-depth learning about the programs and their results. It could also consider offering additional middle income countries the opportunity to evaluate their RBF program, for example on the basis of a competitive process that would help determine which evaluation is more likely to deliver knowledge that could be used as a global public good.

### e. Transition from HRITF to GFF.

Following the strong commitment to rigorous impact evaluation in HRITF, the GFF will continue to encourage and fund rigorous evaluations that will advance global knowledge in health financing and systems. In countries where an RBF impact evaluation already took place and showed positive results, a new impact evaluation might not be necessary. In countries with no previous evaluation of RBF or experiencing substantial changes in their RBF design, an impact evaluation will be recommended.

Further, the GFF knowledge, evaluation and innovation component will aim to encourage the creation and dissemination of cutting-edge global knowledge in the field of health financing by funding a set of rigorous evaluations of innovative approaches and mechanisms. This would be organized as a GFF Innovation and Evaluation Fund, that would allocate innovation and evaluation grants on a competitive basis. There would be regular call for proposals and a formal peer-review mechanism. The budgets of the Innovation and Evaluation grants could vary (but there could be a ceiling) and in order to facilitate the evaluation of truly innovative solutions, they should be allowed to fund not only the research costs (surveys, etc...), but also the implementation of small scale pilot interventions. In order to be able to capture innovations everywhere, it would be advisable for the GFF Innovation and Evaluation Fund not to be limited to the GFF countries.

# 4. Communication and dissemination of knowledge related to RBF.

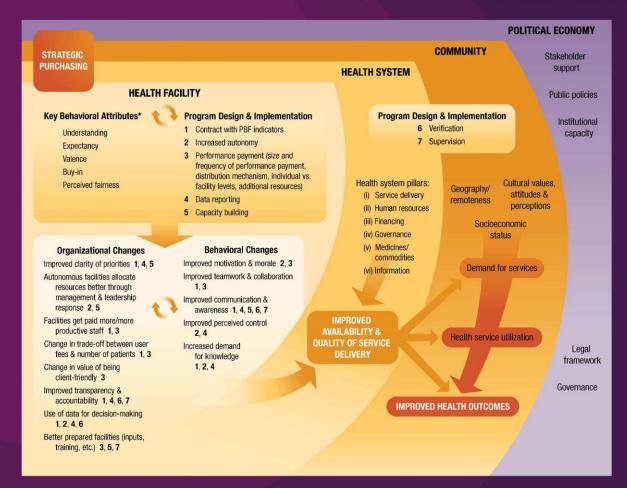
It is crucial to share knowledge gained from the HRITF portfolio on a regular basis. While the publication of results from RBF IEs in peer-reviewed journals helps establish credibility and raise the profile of the knowledge generated by HRITF-funded studies, the peer review process can take months, if not years. Therefore, in addition to in-country dissemination workshops, the communication strategy also includes presenting findings from the IEs at conferences and seminars attended by policy-makers and academic counterparts alike. For instance, HRITF organized panel sessions at the Third Global Symposium on Health Systems Research in September 2014. Similarly, endline results from the Rwanda, Zambia and Zimbabwe IEs as well as early findings on the measurement of quality of maternal and neonatal healthcare from the Burkina Faso and Kyrgyz IEs were presented at the International Health Economics Association Congress (iHEA) in July 2015. We also continue our dissemination activities through RBF seminars and workshops, postings on websites, blogs, etc. It is also important for the HRITF to engage further with the broader RBF community, and gain from their perspective

as well in the course of knowledge creation. Therefore, we propose to hold a **3-day conference on RBF in 2016**, tagged on to the HRITF annual Results and Impact Evaluation Workshop. This conference will be open to the public, and either based on invitations or a call for papers. The objective of the conference will be to disseminate and share results on RBF. It will also position the HRITF as a global knowledge sharing actor on RBF. The conference will be the opportunity for those who generate results on RBF to present their preliminary findings, and thereby get feedback and refine their analysis.

As the evaluation portfolio matures and generates a broader set of results, we will write a report that will aim at presenting a global synthesis of the RBF experience. The report will be widely advertised and shared publicly online. The report will focus not only on World Bank RBF programs and evaluations, but take stock on RBF globally. In addition to this report, it will be important to ensure that its main messages and features are also translated into a medium accessible to a wider, potentially less technical, audience.

# Annex 1: Conceptual framework of a Performance-Based Financing Scheme

# The Performance-Based Financing (PBF) Conceptual Framework



This framework identifies key determinants of PBF program performance and interlinkages between them for consideration in design, implementation and evaluation. We integrate a traditional linear theory of change with a broader consideration of non-linear, multidirectional and indirect relationships between behavioral, organizational and other contextual factors that may influence performance. Since behaviors are influenced by and influence multiple levels of factors, the health facility is imbedded within a multifaceted framework that includes the health system, community and political economy-that is, what happens within the health facility is affected by factors at these other levels. In addition, implementation of the PBF program has consequences at these levels as indicated in part by the arrows.

UNDERSTANDING: The knowledge of criteria by which incentives are awarded, the amount of money at stake, and the additional design features

EXPECTANCY: Health facility staff's belief that they can do things that will achieve the targets.

VALENCE: The belief that the incentives are sufficiently valuable or substantial to inspire responses predicted by the theory of change. BUY-IN: Acceptance of the program and its

criteria.

PERCEIVED FAIRNESS: Staff believe the program features and implementation are fair.

Country	RBF Project Name	Research questions	Milestone on last update
Argentina	AR Provincial Maternal-Child Health Investment APL2 (Plan Nacer) / Provincial Public Health Insurance Development Project	<ul> <li>Impact of incentives on:</li> <li>Utilization of services associated with the performance incentives.</li> <li>Utilization of services not associated with the performance incentives.</li> <li>Health outcomes of children measured by low and very low birth weight, infant mortality, and health for age and weight for height. The cost-effectiveness of Plan Nacer will also be assessed.</li> </ul>	Endline report shared
DRC	Health Sector Rehabilitation and Support Project	<ul> <li>Effect on the production of health services (quantity and quality) <ul> <li>Does the financing mechanism lead to an increase in the quantity of targeted services provided?</li> <li>What is the effect of targeting one set of services on the provision of other services?</li> <li>Does the financing mechanism lead to a change in the quality of care?</li> </ul> </li> <li>Effect on the prices of health services: does the financing mechanism lead to a reduction of user fees for targeted services / increase of user fees for non-targeted services?</li> <li>Effect on the behavior of health staff: <ul> <li>Does the financing mechanism influence the motivation of health personnel?</li> <li>Effect on the behavior of households: <ul> <li>How does the increased performance in the intervention group influence the health-seeking behavior of the population?</li> <li>What is the influence of the financing mechanism on patient satisfaction?</li> <li>What is the influence of the financing mechanism on the morbidity and the mortality of the population?</li> </ul> </li> </ul></li></ul>	Endline report shared

# **Annex 2:** Research Questions of Impact Evaluations in the HRITF IE Portfolio

Country	RBF Project Name	Research questions	Milestone on last update
Rwanda	Community Living Standards Grant Credits, I, II and III Project	<ul> <li>Do Demand and supply side incentives:</li> <li>Increase the % of total prenatal care visits in the first 4 months?</li> <li>Increase the % of total of prenatal care visits?</li> <li>Increase the % of in-facility deliveries?</li> <li>Increase % of total women-child pairs seen for postnatal care follow-up? Is there a multiplicative effect on outcomes when demand and supply side incentives are combined?</li> <li>Do Supply side incentives only:</li> <li>Improve the motivation and behaviors of the CHWs?</li> <li>Improve nutritional status in under-fives?</li> <li>Increase the use of modern contraceptives?</li> <li>Increase the time between births?</li> </ul>	Baseline report shared
India- Karnataka	Karnataka Health Systems Project	<ul> <li>Aim 1: Evaluation of the impact of VAS on tertiary care utilization, health outcomes, household out-of-pocket health expenditures and quality of care;</li> <li>Aim 2: Evaluation of the impact of results-based incentives for village health workers (ASHAs) on take-up of benefits by BPL patients requiring tertiary care; and</li> <li>Aim 3: Evaluation of the impact of results-based incentives for primary health care centers (PHCs) and ASHAs on follow-up care for VAS beneficiaries.</li> </ul>	Baseline report shared
Afghanistan	Strengthening Health Activities for the Rural Poor (SHARP) Project	<ul> <li>What is the impact of the intervention on utilization and quality of priority maternal and child health services (family planning, antenatal care, institutional deliveries and immunization)?</li> <li>What are the un-intended effects, if any, of the RBF intervention?</li> <li>What are the lessons that can be learned from project implementation? How can these lessons be applied to scaling up the intervention in a sustainable manner both financially and institutionally?</li> <li>What is the cost-effectiveness of the RBF intervention?</li> </ul>	Baseline report shared

Country	RBF Project Name	Research questions	Milestone on last update
Benin	Health System Performance Project	<ul> <li>Measuring the impact of RBF on health outcomes and equity</li> <li>Understanding the factors driving this impact: RBF versus lump sum, increased management autonomy</li> <li>Does management autonomy strengthen the impact of RBF?</li> <li>What is the relation between RBF and health workers' motivation?</li> <li>What is the relation between RBF and health workers' corruption?</li> <li>Does RBF have an impact on health care seeking behaviors?</li> </ul>	Baseline report shared
Burkina Faso	Reproductive Health Project	<ul> <li>Does performance-based financing increase utilization and quality of maternal and child health services delivered in Burkina Faso?</li> <li>Does PBF improve financial access to and utilization of quality health services for vulnerable populations without systematic targeting of the poor?</li> <li>Does PBF improve financial access to and utilization of quality health services for vulnerable populations through systematic targeting of the poor for improved health service coverage among vulnerable populations?</li> <li>Does the combination of PBF and community-based health insurance generate added value to improve access to and quality of health services for all populations, including the most vulnerable?</li> <li>Which combination of interventions provides the most value for money?</li> </ul>	Baseline report shared

Country	RBF Project Name	Research questions	Milestone on last update
Cameroon	Cameroon Health Sector Support Investment (SWAP)	<ul> <li>Does the PBF program increase the coverage of MCH services?</li> <li>Does the PBF program increase the quality of MCH services delivered?</li> <li>Is it the enhanced monitoring &amp; evaluation and supervision or the link between payments and results that leads to improvements observed in quality or coverage?</li> <li>What is the contribution of enhanced supervision and monitoring to improving MCH service coverage and quality in the absence of increased autonomy or additional financial resources?</li> <li>Does the PBF program lower informal charges for health services?</li> <li>Does the PBF program lower formal user charges?</li> <li>Does the PBF program increase funds available at the operational (i.e., facility) level?</li> <li>Does the PBF program improve physical and social accessibility of health services? Accessibility of health services will be examined in terms of the convenience of facility opening hours, availability of services through outreach, client perceptions of convenience of accessing health services and client perceptions of health providers' attitudes towards clients?</li> <li>Does the PBF program lower staff absenteeism?</li> <li>Does the PBF program increase demand generation activities by health facilities?</li> <li>What is the effect of the PBF program on access and utilization of MCH services across different socio-economic groups?</li> </ul>	Baseline report shared
Zambia	Malaria Booster Project	<ul> <li>What is the causal effect of the Zambian HRBF on the population health indicators of interest?</li> <li>Do higher incentive payments in rural/remote areas result in increased health outcomes and greater retention of staff?</li> <li>How does the likelihood of audit/external verification of results affect the accuracy of reported data?</li> </ul>	Baseline report shared
Zimbabwe	Health Results Based Financing Project	<ul> <li>What is the causal effect of the simultaneous introduction of results based financing with suspension of user fees on priority population health utilization and outcome measures in RBF districts?</li> <li>What is the effect of skill upgrading and capacity building of primary care nurses on priority health outcomes, utilization of services, and quality of care among the populations served, as well as the effect on health worker motivation in rural health facilities?</li> <li>What is the combined effect of capacity building of primary care nurses, RBF, and suspension of user fees on the aforementioned outcomes in rural health facilities?</li> </ul>	Baseline report shared

<ul> <li>Does varying the level of PBF payments for MCH services delivered lead to variations in MCH service coverage and quality outcomes? Or can similar results be achieved at lower cost?</li> <li>What is the optimal fee schedule (level of PBF payments) for improving MCH service coverage and quality?</li> <li>Does the PBF program lower informal charges for health services?</li> <li>Does the PBF program lower formal user charges?</li> <li>Does the PBF program increase funds available at the operational (i.e., facility) level?</li> <li>Does the PBF program improve physical and social accessibility of health services? Accessibility of health services will be examined in terms of the convenience of facility opening hours, availability of services through outreach, client perceptions of convenience of accessing health services and client perceptions of health providers' attitudes towards clients</li> <li>Does the PBF program lower staff absenteeism?</li> <li>Does the PBF program increase demand generation activities by health facilities?</li> <li>What is the effect of the PBF program on access and utilization of MCH services across different socio-</li> </ul>	3aseline data shared

Country	RBF Project Name	Research questions	Milestone on last update
Burundi II	Health Sector Development Support Project	<ul> <li>The research will be organized in eight work packages (WPs), each package answering to a list of research questions:</li> <li>WP 1: Impact evaluation of the intervention on the nutritional status of children at population level. WP 1 will examine barriers and determinants on the demand side.</li> <li>WP2: Impact evaluation of the intervention on health facilities performance in nutrition activities. WP 2 will look at bottlenecks and determinants on the supply side.</li> <li>WP3: Evaluation of the intervention with secondary data. WP 3 will look at bottlenecks and determinants on the supply side and explore spillover effects at the level of the health facility.</li> <li>WP4 will assess how and why the intervention works (or not).</li> <li>WP5 will assess the efficiency or cost-effectiveness of the intervention, especially compared to an unconditional equivalent payment.</li> <li>WP 6 will assess systemic effects of the 'nutrition-PBF' and of the impact evaluation, including spillovers at national level.</li> <li>WP7 will assess whether PBF can generate a demand for professional trainings by the health facilities (optional).</li> <li>WP8 will assess the PBF system as a whole in Burundi (optional).</li> </ul>	Technical review cleared
Chad		<ul> <li>Does the facility-level PBF intervention increase the coverage and quality of maternal and child health services?</li> <li>Does the combination of facility-level PBF and community-level RBF interventions lead to greater increases in the coverage and quality of maternal and child health services?</li> </ul>	Technical review cleared
China *	Analysis of Provider Payment Reforms on Advancing China's Health (APPROACH)	<ul> <li>What are the impacts of alternative provider payment incentives on efficiency and quality and thus health outcome improvements?</li> <li>How do they impact on cost and therefore affordability and financial burden faced by patients?</li> <li>What are the unintended consequences of alternative PPMs as a result of providers' gaming behavior?</li> <li>Within a broad type of PPM, how do variations in design affect the outcomes of interest differently?</li> <li>What are the institutional conditions necessary for effective design and implementation of different PPMs?</li> </ul>	Technical review cleared

Country	RBF Project Name	Research questions	Milestone on last update
Congo, Rep. of (ROC)	Congo Health Sector Strengthening Project II	<ul> <li>The overall research question of this impact evaluation is, does performance-based financing improve outcomes related to the utilization and quality of maternal and child health services in Republic of Congo?</li> <li>The primary research questions for the impact evaluation will be grouped into two thematic groups: Improved financial access through integrating PBF and social safety nets.</li> <li>Does PBF improve financial access to and utilization of quality health services for vulnerable populations without demand-side interventions that aim to improve financial access for the poor?</li> <li>Does the combination of PBF and pro-poor targeting mechanisms improve financial access to and utilization of quality health services for vulnerable populations more than PBF alone?</li> <li>Behavior change through community-based PBF services</li> <li>Does the introduction of the PBF indicator "household visit according to protocol" lead to improved maternal and child health seeking-behavior, such as use of family planning, reproductive health education for adolescent girls; antenatal and delivery services, vaccination status for pregnant women and babies?</li> <li>Does the introduction of the PBF indicator "household visit according to protocol" lead to improved maternal and child health seeking-behavior, such as use of family planning, reproductive health education for adolescent girls; antenatal and delivery services, vaccination status for pregnant women and babies?</li> <li>Does the introduction of the PBF indicator "household visit according to protocol" lead to improved population knowledge related to maternal and child health, hygiene and sanitation?</li> <li>Finally, what is the combined effect of strengthening the supply-side through PBF, improving financial access through targeting the poor, and improving health behaviors through counseling and coaching during household visits by health care professionals?</li> </ul>	Technical review cleared

Country	RBF Project Name	Research questions	Milestone on last update
DRC 2		<ul> <li>Question 1: What are the effects of the PDSS PBF approach with and without home visits on utilization and quality of primary health services, in comparison to equivalent amount of input-based financing?</li> <li>Question 2: What are the effects of different components of the quality checklist on quality of care?</li> <li>What are the effects of measuring and paying for quality using the Vignettes Quality Checklist in comparison to using the quality checklists that do not incorporate vignettes (Process and Content of Care Checklist and Structural Quality Checklist)? (Q2a)</li> <li>What are the effects of measuring and paying for quality using the Process and Content of Care Checklist in comparison to using the Structural Quality Checklist?(Q2b)</li> <li>Question 3: What are the effects of community engagement approaches complementing PBF program on nutrition, community behavior and service utilization?</li> <li>What are the effects of a PBF approach with household visits in comparison to a PBF approach without any community-level component? (Q3a)</li> <li>What are the effects of a PBF approach with Community behavioral change rewards intervention in comparison to a PBF approach with Community behavioral change rewards intervention in comparison to a PBF approach with household visits? (Q3c)</li> </ul>	Technical review cleared

Country	RBF Project Name	Research questions	Milestone on last update
Ghana		What is the additional effect of CPBF on MCHN access and utilization and, consequently, on health	Technical
		outcomes relative to the base regime ("MCHNP Base")?	review cleared
		<ul> <li>What is the distributional and health equity effect of CPBF, in terms of its effectiveness in reaching the poor and vulnerable with MCHN coverage?</li> </ul>	
		• What is the impact of CPBF on provider behavior knowledge, attitude, practice (KAP) and	
		performance, including volume (effort) and quality?	
		• What is the incremental cost-effectiveness of CPBF as compared to the "MCHNP Base?"	
		• What is the effect of CPBF on system costs, including on monitoring, supervision, and other administrative costs?	
		Does CPBF improve physical accessibility of services?	
		• Does the CPBF increase the activity/effort level of providers and if so, how does this change over time (e.g. volume, absenteeism, attrition rate, etc.)?	
		How does the CPBF affect performance on non-incentivized indicators?	
		• Does CPBF, and particularly its Information Education Communication (IEC)/Behavioral Change	
		Communication (BCC) component, improve the perception of MCHN services?	
		<ul> <li>How does the CPBF affect the relationship between the DHMT and CHTs?</li> </ul>	
		<ul> <li>How does CPBF affect the relationship between the facility and CHTs?</li> </ul>	
		<ul> <li>How does CPBF affect the dynamics within the CHT, between the CHOs and CHVs?</li> </ul>	
		<ul> <li>How does the CPBF affect the relationship between the community and CHTs?</li> </ul>	
		• How does the CPBF affect the relationship between beneficiaries/households and CHOs/CHVs?	
		• How is the introduction of CPBF perceived by the various stakeholders (DHMT, Facility, CHT, CHO, CHV,	
		etc.) and how this perception change over time as the intervention matures?	
		How is the introduction of enhanced monitoring and supervision perceived by various stakeholders?	

Country	RBF Project Name	Research questions	Milestone on last update
Haiti	Improving Maternal and Child Health Through Integrated Social Services	<ul> <li>Does the RBF program improve the coverage and quality of priority health services related to MCH, particularly for vulnerable populations?</li> <li>Does a reinforced equity fund alone improve the coverage and quality of priority health services related to MCH, particularly for vulnerable populations?</li> <li>Does a reinforced equity fund in combination with the RBF program improve the coverage and quality of priority health services related to MCH, particularly for VULNER POPULATION (NOTE) and quality of priority health services related to MCH, particularly for vulnerable populations?</li> <li>What is the relative cost-effectiveness of the RBF program vis-à-vis a reinforced equity fund alone vis-à-vis status quo in terms of the coverage and quality of priority health services related to MCH, particularly for vulnerable populations?</li> </ul>	Technical review cleared
Kenya	Kenya Health Sector Support Project (KHSSP)	<ul> <li>Does providing a health insurance subsidy for the poor significantly improve health care utilization among the poor?</li> <li>Does providing a health insurance subsidy for the poor significantly improve financial risk protection among the poor?</li> <li>Does providing a health insurance subsidy for the poor significantly improve health status of the poor?</li> <li>Does providing a health insurance subsidy for the poor significantly improve health status of the poor?</li> <li>What is the implementation experience of the purchasers (NHIF), providers (facility), beneficiaries (the poor), patients (the poor who actually seek care) and other relevant stakeholders?</li> </ul>	Technical review cleared
Kyrgyz Republic	Kyrgyz Health Results Based Financing	<ul> <li>Does the PBF package (including enhanced supervision) at the rayon hospital level improve quality of care?</li> <li>Does enhanced supervision alone improve quality of care at the rayon hospital level?</li> <li>What is the relative cost-effectiveness of the PBF package (including enhanced supervision) vis-à-vis enhanced supervision alone vis-à-vis business-as-usual in terms of quantifiable quality of care indicators?</li> </ul>	Technical review cleared

Country	RBF Project Name	Research questions	Milestone on last update
Lesotho	Lesotho Maternal & Newborn Health PBF	<ul> <li>Primary research questions are:</li> <li>Utilization: What is the causal effect of the PBF program on the utilization of MNH services in comparison with equivalent levels of additional health financing not tied to the performance-based payments? <ul> <li>What is the causal effect of the PBF program on the utilization of MNH services by adolescent females?</li> <li>What is the causal effect of PBF on the utilization of services which are not incentivized by the PBF scheme?</li> </ul> </li> <li>Quality: What is the causal effect of the PBF program on the quality of MNH services in comparison with equivalent levels of additional health financing not tied to the performance-based payments?</li> <li>Health Outcomes: Do women, adolescents and their newborns served by PBF health facilities enjoy better health outcomes than those served by facilities in which financing is not tied to performance?</li> <li>Cost-effectiveness: What is the cost-effectiveness of PBF in comparison to health financing not tied to performance? That is, by how much do utilization and quality increase with each Loti (dollar) spent under each system?</li> <li>Equity: What is the causal effect of the PBF program on the utilization of MNH services by different groups in comparison with equivalent levels of additional health financing not tied to the performance-based payments?</li> <li>What is the causal effect of the PBF program on the utilization of MNH services by women of different socio-economic backgrounds?</li> <li>What is the causal effect of the PBF program on the utilization of MNH services by women who are HIV-infected?</li> <li>Secondary research questions are:</li> <li>Does the PBF program improve physical and social accessibility of health services? Accessibility of health services will be examined in terms of the convenience of facility opening hours, availability of services, client perceptions of convenience of accessing health services and client perceptions of health providers' attitudes towards clients</li> <li>Does th</li></ul>	Technical review cleared

Country	RBF Project Name	Research questions	Milestone on last update
Liberia	Liberia Health Systems Strengthening	<ul> <li>Did the HSSP achieve its goal of improving the quality of service delivery in target hospitals?</li> <li>How did facilities improve performance and meet the objective of improved quality? In particular, did levels of competence, capacity or performance change as a result of the HSSP? And which of the intervention levers (management, information, structural improvements, incentives or training) made an important contribution to the success of the HSS project?</li> <li>What role did existing human resources in the health sector play in the success/failure of the program? Did existing levels of skills and experience or motivation hinder or facilitate the interventions?</li> </ul>	Technical review cleared
Nigeria	States Health Program Investment Project	<ul> <li>Impact of the program on the availability, utilization and quality of healthcare</li> <li>How cost-effective are the PBF and Decentralized Facility Financing (DFF, i.e. average payments to RBF payments but not based on performance) packages?</li> <li>Do the PBF and DFF packages affect the various segments of the population differentially (i.e. effect disaggregated by socioeconomic status and gender)?</li> <li>In the PBF package, only one facility per ward will receive PBF incentives while the other facilities in that ward will not receive any PBF incentives. Is P1 associated with improvements in the availability, utilization and quality of priority MCH services in health facilities located in project states that do not receive PBF funds?</li> </ul>	Technical review cleared
Senegal	Health & Social Financing	<ul> <li>Do supply-side PBF incentives improve the motivation and behaviors of clinic staff? Are there improvements in absenteeism, motivation, drug stocks, retention of qualified staff, and quality of care provided by clinic staff?</li> <li>Do maternal vouchers to pregnant women, conditional on compliance with maternal health guidelines, lead to increased utilization and improved health?</li> <li>What's the additional impact when both supply and demand incentives are combined?</li> <li>What is the impact of supply and demand side incentives on: o Increasing the total number of prenatal care visits to up to 4?</li> <li>Do program effects vary by different socio-economic groups (e.g. income groups and rural/urban locations, to be achieved by stratification and interaction of income level by other outcome variables)?</li> </ul>	Technical review cleared

Country	RBF Project Name	Research questions	Milestone on last update
Tajikistan	Tajikistan Health Services Improvement Project (HSIP)	<ul> <li>Does the PBF program increase the coverage of MCH and Cardio Vascular Disease (CVD) services ?</li> <li>Does the PBF program increase the quality of MCH and CVD services delivered?</li> <li>Does information on service delivery performance and community involvement increase the coverage of MCH and CVD services?</li> <li>Does information on service delivery performance and community involvement increase the quality of MCH and CVD services?</li> </ul>	Technical review cleared
The Gambia		<ul> <li>Effect on nutrition and health outcomes:</li> <li>Do supply- and/or demand-side interventions improve: <ul> <li>Maternal and child health and nutrition outcomes (e.g. child mortality, stunting, breastfeeding, low birth weight)</li> </ul> </li> <li>Effect on services and adoption of behaviors: <ul> <li>Quantity of service utilization (e.g. skilled birth attendance, ANC, PNC, referrals from community to facilities, VAS, deworming, SAM treatment, OPD visits, uptake of contraception)?</li> </ul> </li> <li>Adoption of healthy behaviors (e.g. hygiene and sanitation practices, knowledge of IYCF)?</li> <li>Quality of service provision</li> <li>Effect on intermediate outcomes along pathways of impact</li> <li>Do supply- and/or demand-side interventions have an effect on: <ul> <li>Perceptions of seeking care?</li> <li>Staff motivation and satisfaction? VSGs and communities?</li> <li>Out of pocket payments for MCH services?</li> <li>Baby Friendly Community Initiative (BFCI) implementation?</li> <li>Health facility infrastructure and village development?</li> <li>Linkage between communities &amp; health facilities?</li> <li>Supervision of facilities &amp; communities by RHTs?</li> <li>Health facility saff availability?</li> <li>Three delays for delivery care?</li> <li>Awareness/knowledge at community level?</li> <li>Data reporting and management?</li> </ul> </li> </ul>	Technical review cleared

Country	RBF Project Name	Research questions	Milestone on last update
Yemen	Maternal and Newborn Voucher Project	<ul> <li>Average program effects on women and newborns:</li> <li>Demand for Health Services: Does MNVP change demand for maternal and newborn health services? Why or why not?</li> <li>Access to Services: Does MNVP change women's ability to access maternal and newborn health services? Why or why not?</li> <li>Quality of Services Available: Does MNVP change the quality of maternal and newborn health services provided to women and newborns? Why or why not?</li> <li>Maternal and Newborn Health Outcomes: Does MNVP impact maternal and newborn health outcomes? Why or why not?</li> <li>Equity: Does MNVP change equity of healthcare outcomes, demand, quality, and access (as evaluated under research questions 1-4) across different types of women defined according to income, education level, geographic location (urban/rural) etc.? Why or why not?</li> <li>Cost: What is the cost of MNVP in relation to its impact on healthcare outcomes, demand, quality, and access (i.e. what is the cost-effectiveness of this intervention in relationship to international cost-effective standards)? What is the impact of MNVP on beneficiaries' out of pocket expenses?</li> </ul>	Technical review cleared
Zimbabwe 2		Process initiated	Process initiated
Argentina - Plan Sumar		Process initiated	Process initiated