

Learning Lessons for Education from the Use of Results-Based Financing (RBF) in Health

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The Results in Education for All Children (REACH) Trust Fund builds evidence on results-based financing in education and aims to fill research gaps. In the RESEARCH series, findings from analytical work commissioned by REACH is featured in summary form. For access to the full-length papers, please visit: www.worldbank.org/reach.

INTRODUCTION

Results-based financing (RBF) is a funding model for programs in which funding is directly linked to pre-agreed targets and disbursed once results are achieved. In doing so, RBF schemes intend to deliver improved development outcomes, raise accountability, and promote efficiency and innovation in achieving outcomes.

There are several similarities between health and education provision, and the experience of one sector can be valuable to the other. In education, much progress has been made over the last 10 years to expand access in low- and middle-income countries (LMICs). However, it is still necessary to improve equity (boys still outnumber girls in many countries) and quality (learning). Poor quality of healthcare has also been identified as a key driver of poor health outcomes in LMICs, yet, as in education, quality is often overlooked in favor of access to care. Until now, more RBF is being applied in health than in education, which makes the health sector an important knowledge base to draw on, both from the perspective of using RBF and the challenges it faces in ensuring quality service provision.



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In addition to the equity and quality challenges, other parallels between health and education are:

1. **Both are considered public goods**, as society benefits from having a healthier and more well-educated population.
2. **Health and education interventions become more expansive as they become more complex** (such as hospitalization and higher education), and the public sector tends to limit their financial support to higher-level services, limiting access for those who cannot afford private services.
3. **Socioeconomic factors are significant determinants** of outcomes. Income, access to adequate nutrition, and physical and social environment strongly influence education and health outcomes. At the same time, limiting access through paid services impacts population health and economic growth.
4. Both sectors have **strong unions** or professional associations that can be hostile towards the use of incentives and any new accountability mechanism.
5. They also face **common incentive problems** that RBF might address. Some examples are:
 - Supply limitations for key infrastructure and/or consumable resources may decrease staff motivation due to the frustration of being unable to provide adequate services with the available tools (structural quality).
 - Insufficient/inappropriate performance incentives for personnel. As salaries tend to be fixed and predictable in government jobs, incentivizing efficient behaviors is hard (process quality).
 - Structures and/or cultures may prohibit adaptation and innovation that could improve outcomes at a facility/individual level (autonomy).



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At the same time, before looking into the findings of this study, it is important to delineate key differences between sectors that may influence relative effect sizes and appropriate incentive mechanisms:

1. **Education is a more predictable** service to run than health: the number of learners each year is more predictable than acute healthcare needs. Engagement with healthcare also tends to be more episodic throughout individuals' lifespan than education, which tends to be discrete and has a defined start and endpoint.
2. **The healthcare system has a hierarchical organizational structure**, in which the patient is referred up or down from one level of care to another as needed. In education, the structure is sequential and cumulative, as learners need to pass primary education to progress to secondary and tertiary levels.
3. **Structural quality** (infrastructure and consumable resources) is **more critical to achieving an effective service delivery in the health sector**. In education, the quality of classroom pedagogy is more important than the physical environment and resources.

4. Health relies heavier on **donors**, particularly in LMICs and for RBF programs, while national government budgets largely fund education provision.

5. Health services in fee-for-service models tend to be over-provided, particularly in the private sector. **Education services, in turn, cannot be disaggregated and charged in the same itemized way as healthcare** and faces a challenge of under-provision.

These similarities and differences were taken into account when analyzing the data collected and identifying key lessons, as presented in the following sections.

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METHODOLOGY

The study conducted a literature review of peer-reviewed scientific publications (qualitative, quantitative, and mixed methods) and literature published by practitioners (grey literature). Accredited search engines, such as PUBMED and Google Scholar, were used to identify relevant literature, guided by the PICO (Population, Intervention, Comparison, and Outcomes) search framework. It identified 28 individual peer reviewed studies and grey literature on health RBF interventions in LMICs, including two meta-analyses and four systematic reviews.

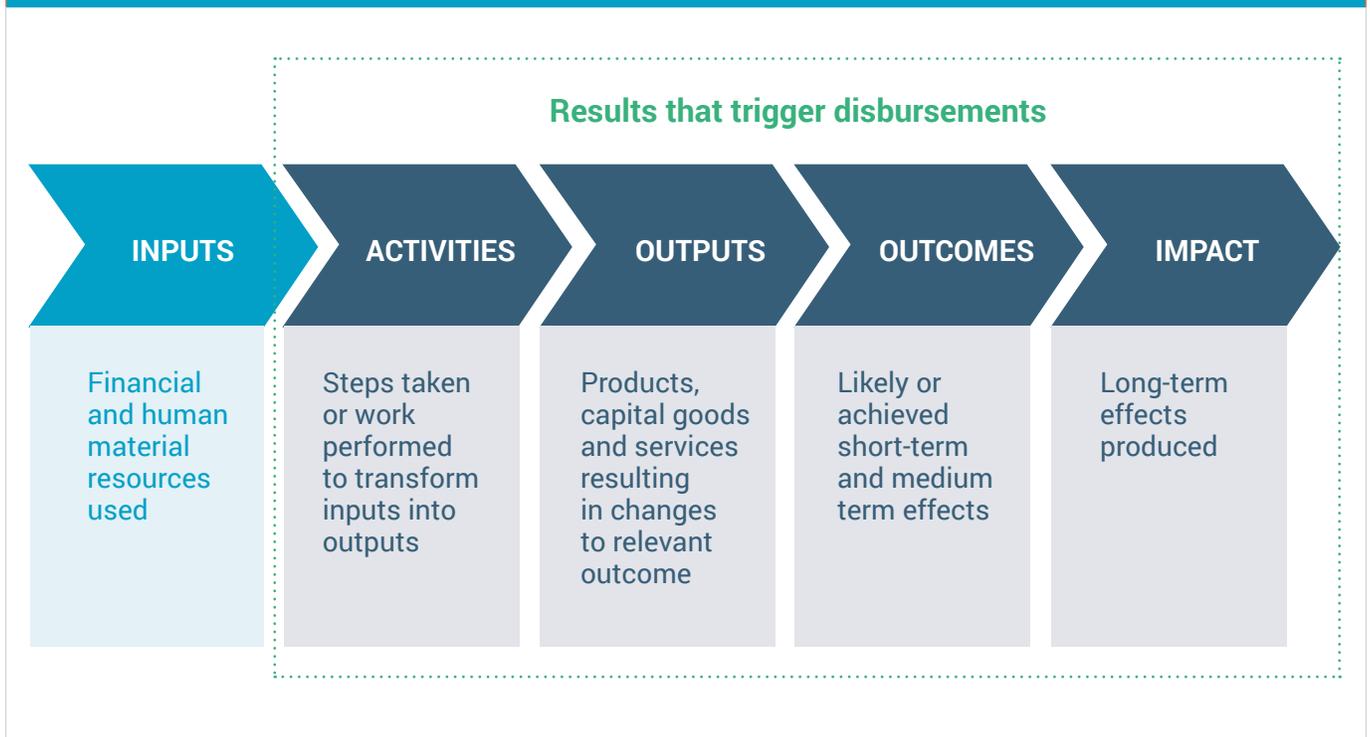
The conceptual framework guiding the review was derived from OECD with some adding. It considered four categories of results that can trigger disbursements: activities, outputs, outcomes, and impact. Impact accounts mainly for disbursements in social and development impact bonds.

After collecting papers, the analysis tried to sort interventions targeting structural versus process quality indicators. Structural quality relates to the quantity and quality of health inputs such as drugs, equipment, and available staff. Process quality relates to how health services are provided, such as health procedures and diagnostic screening.

According to the conceptual framework, a further step was identifying what type of results have been incentivized in the health sector and how these differed from those in education. Finally, the review identified key lessons, organized them into common themes, and assessed what aspects could be helpful for education.

Four categories of results can trigger disbursements: activities, outputs, outcomes, and impact.

FIGURE 1: Conceptual Framework¹



FINDINGS

The study identified twelve insights from RBF in health that can be valuable for education.

Insight 1:

Understand the context.

It is critical to consider contextual aspects—for example, socioeconomic determinants, the source and availability of funding (government vs. donor funding), and the organization of the health/education system—when diagnosing the problem and articulating how RBF can help solve it. For example, an RBF scheme in the Ivory Coast had limited improvements in quality and outcome measures, possibly because the incentive mechanism did not consider that health facilities lacked the autonomy to manage budget and staff, which were decisive factors to improve outcomes.²

Insight 2:

Be clear about what is being incentivized and the expected quality improvement process.

RBF in health has shown the importance of keeping incentives clear and simple and allowing sufficient time for the incentive program to be understood and to materialize results. Studies showed that, in the implementation of health RBFs, it is important to explain to incentivized actors the purpose of the intervention, how incentives are paid, and the intervention's coherence with national policy objectives need to be explained. Obtaining the buy-in of the health workers at the facilities whose performance is being evaluated is essential to the success of interventions.

Insight 3:

Ensure those who are incentivized have control over the targeted actions or outcomes.

If a particular result depends on different actors, it would be worth setting incentives throughout the

value chain to avoid supply constraints and ensure relevant stakeholders are aligned in their activities and priorities. A study that used a pay-for-performance scheme to improve medication availability and reduce stock-outs of essential medicines in Tanzania found that incentivizing the district *and* facility management assured all relevant drug procurement actors were working toward the same goal.³

Insight 4:

Ensure strong alignment around who is incentivized and how incentives are measured and paid.

If funds do not reach those whose actions are incentivized, success may be limited or unsustainable. Evidence from health studies shows that incentives at the institutional level may promote teamwork (mainly where co-workers' actions are observable to others), and individual bonuses are conditional on achieving institutional targets.

Insight 5:

The functions of purchasing and providing services should be split.

RBF schemes require intentional separation of functions to verify achievements. The accountability of providers is improved because they do not reimburse themselves. Likewise, the verification of results is also separated from those who stand to gain from incentive payments. In Bolivia, a municipality entered into agreements with a non-governmental organization (NGO) to manage one of the health services networks. The management contract was based on achieving process and outcome indicators. Preliminary results indicated improvements in outcome indicators, which were attributed to the changes in organizational management that separated the purchaser (the NGOs) and the providers of services, in combination with the results-based management and the improved participation of the community.⁴

Insight 6:

Consider the size, timing, and form of payments.

The size, timing, and relationship of payments to marginal effort all matter. Most health studies reviewed made RBF payments monthly or quarterly, with payment on time and generally with strict processes to ensure verification. This suggests that the more frequent the payments, the higher the saliency of the incentive. Individual incentives also seem to be more influential when received as bonuses rather than basic salary payments. Moreover, higher and/or easier to achieve payments increase the likelihood of incentives influencing behaviors. In Rwanda, a program that was designed to incentivize prenatal care visits and the quality of prenatal care found that the highest payment rates that needed the least effort from the service provider were the most effective.⁵ In Mozambique,⁶ indicators incentivized were not sensitive to price, but a preference was given to those that were easy to achieve.

Insight 7:

Adjust for equity and reward using absolute rather than relative performance.

Providing higher incentive payments for facilities with lower resources can help offset differences in initial starting points across facilities. Additionally, a common feature in the health studies reviewed was that RBF payments were based on units of care or continuous quality checks instead of only being paid when a particular target was attained. Absolute targets rather than relative targets that foster competition may be preferable and are generally used in health RBF. The certainty and transparency of absolute targets are considered more acceptable as long as the goal remains achievable. Relative targets (in relation to other facilities) can lead to continual improvements. However, this competition may harm collaboration and result in performance gaps between different regions.⁷

Insight 8:

Enhance support and supervision to frontline staff.

Several studies identified that enhanced, regular supervision and structured feedback are essential for improving outcomes. Detailed checklists, which sometimes also form part of assessing whether the disbursement linked indicators have been achieved, present a valuable and structured opportunity to assess the performance of individuals and facilities and provide timely feedback on how to improve it.

Insight 9:

Enhanced supervision and financial support are reinforcing.

Supervision and monitoring are necessary but not sufficient for improving service delivery. An RBF program in Cameroon included regular supervision visits (guided by a structured checklist) and provided immediate feedback. Though the impact evaluation



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found that supervision was important, additional financing (whether traditionally or in the form of RBF) acted as an enabler and accelerator.⁸

Insight 10:

Recognize the need for delivery autonomy and support adaptive service delivery.

RBF is most effective where facility managers have the autonomy to adapt services to improve outcomes. In Argentina, an evaluation of an incentive to increase enrollments in Plan Nacer found that the financial independence provided to facilities allowed for improved allocation of resources, which also had a positive impact on the health outcomes of patients.⁹ However, such approaches can be new to facility managers, who may need (a) support to enable adaptive decision-making and (b) improved human and physical resource management to ensure that bottlenecks are effectively identified and cleared.

Insight 11:

Embed process to monitor for and correct potential unintended consequences.

Throughout all the design features mentioned, the health literature recommends taking care to avoid any unintended consequences. An independent audit process should be built in and potentially include financial penalties for inaccurate reporting of program results. It is important to adjust for demand-side or supply-side impediments that may not be within the control of incentivized facilities.

Insight 12:

Adequately fund impact and process evaluations.

Well-powered, independent process and impact evaluations help to strengthen the knowledge base around what works in RBF programs. Recent meta-analyses of RBF in health highlight that evidence, although extensive, is often relatively

weak because studies are usually not designed to elicit accurately attributable results nor to identify the exact mechanism by which RBF works. As part of the evaluation process, RBF interventions must be observed over a sufficient period of time to understand their true impact. A combination of experimental studies and qualitative observational studies is needed to reveal the impact and understand the mechanisms of change.

An independent audit process should be built in and potentially include financial penalties for inaccurate reporting of results.

CONCLUSION

The study identified seven aspects to be explored in future research, which would benefit both the health and education sectors:

1. Further descriptions of interventions' most important design features for improving outcomes.
2. Given the complexity of certain composite measures of quality, more qualitative analysis can help understand why interventions work in some contexts and not others.
3. Understanding the design features that work best also begs how RBF compares to other non-RBF interventions that aim to strengthen health systems.
4. A deeper understanding of the amount, type, and timing of support needed to enable adaptive delivery of services by those on the ground. It would be helpful if more studies provided information on the type of support needed on the ground (for example, by facility managers) at different times and how this informs program and study designs, both initially and iteratively.

5. Applying RBF funding models in interventions whose effectiveness is already known to understand if RBF can boost effects. For example, structured pedagogy programs consist of interventions with robust evidence of their impact on student learning. There seems to be no reason, in principle, at least, as to why such interventions should not be as, or more, effective as those which use non-RBF approaches to funding.
6. Understanding the conditions under which programs with proof of concept are scaled-up can help other interventions. Scaling up a program is a multi-faceted task, as it involves political economy issues, governments' capacity and commitment to the implementation, and budget allocation. Thus, more evidence on these aspects can help policy-making.
7. Certain programs run by NGOs are effective under conditions of weak government accountability systems.¹⁰ Understanding the specific circumstances under which they are successful holds much promise for expanding RBF schemes beyond public sector provision and, therefore, reaching more beneficiaries and improving services' provision.

Endnotes

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worldbank.org/reach
reach@worldbank.org

