GLOBAL HEALTH FINANCING INITIATIVE
WORKING PAPER 3 | SEPTEMBER 2008

BROOKINGS GLOBAL ECONOMY AND DEVELOPMENT

HEALTH SYSTEMS STRENGTHENING VIA PERFORMANCE-BASED AID

CREATING INCENTIVES TO PERFORM AND TO MEASURE RESULTS

Rena Eichler
Amanda Glassman

BROOKINGS GLOBAL ECONOMY AND DEVELOPMENT

The Brookings Global Economy and Development working paper series also includes the following titles:

- Wolfensohn Center for Development Working Papers
- Middle East Youth Initiative Working Papers
- Global Health Financing Initiative Working Papers

Learn more at www.brookings.edu/global

Rena Eichler is a consultant to The Brookings Institution, a health economist and health policy analyst. She is owner of Broad Branch Associates, a consulting firm in international health policy.

Amanda Glassman is a Nonresident Fellow and former Deputy Director of the Global Health Initiative within the Global Economy and Development program at the Brookings Institution. She is now a Senior Social Development Specialist at the Inter-American Development Bank.

Authors' Note:

Sincere thanks to the team of the Health Financing Task Force that include David de Ferranti, Maria-Luisa Escobar, Charles Griffin and Gina Lagomarsino for their comments that guided the questions we asked and the hypotheses we explored. We would like to express deep appreciation to Tristan Blanchard, Loren Becker, and Alexandra Beith for their background research. The paper was strengthened by extremely helpful comments from Maria-Luisa Escobar, Natasha Hsi, Ruth Levine, and Philip Musgrove. Finally, deep thanks to Charlie Griffin for giving the final push to finalize this paper and for his valuable contributions.

CONTENTS

HEALTH SYSTEMS STRENGTHENING VIA PERFORMANCE-BASED AID

CREATING INCENTIVES TO PERFORM AND TO MEASURE RESULTS

Rena Eichler
Amanda Glassman

ABSTRACT

The new global health partnerships, such as the Global Alliance for Vaccines and Immunization (GAVI Alliance), the Global Fund for AIDS, TB, and Malaria (GFATM), and UNITAID have fundamentally changed the landscape and scale of funding for global health initiatives since 2000. As many more billions of dollars flow into these organizations and through traditional bilateral and multilateral funders of health assistance, strengthening the connection between the financial flows and results increases in importance. The experience with performance-based assistance for health projects has increased in recent years, presenting the opportunity for donors to consider some of the lessons and to build them into their own programs. This paper reviews some of the experience and derives lessons for shifting more funding into performance-based instruments.

INTRODUCTION

The new global health partnerships, such as the GAVI Alliance, the Global Fund for AIDS, TB, and Malaria (GFATM), and UNITAID have fundamentally changed the landscape and scale of funding for global health initiatives since 2000. The GAVI Alliance and the Global Fund for AIDS, TB and Malaria are among the pioneers to shift from paying for expenditures on inputs to performance based aid (PBA) that links portions of their funding to progress on pre-agreed performance measures. Global partnerships have been a source of inventive efforts to discover and implement new sources of revenue to finance their operations, including the Innovative Financing Facility for Immunizations (IFFIm), Debt2Heatlh, (PRODUCT)^{RED}, the Advance Market Commitment, the airline tax, and others.[1] Commitments by bilateral donors for global health have also grown significantly during this period, contributing to an increase in estimated disbursements of health assistance to developing countries from $4.6 to $8.5 billion between 2001 and 2005.[2] To transform this unprecedented funding successfully into improved health results for the poor means squarely facing the question of how to assure that more money will bring more results.[3]

Aid givers have for decades tried to improve the connection between outside assistance and the intended results. Essentially four types of performance-based aid are currently used: (1) so-called adjustment lending, more recently called development policy lending, which is funding on a large scale from international financial institutions (IFIs), such as the World Bank, conditional on implementation of agreed changes in government policy; (2) Assistance that is conditioned on performance in achieving the agreed outputs or outcomes, such as through projects or through agreements with national governments that condition payment on results; (3) payments to service providers, individuals, facilities or multi-site institutions, conditional on their achievement of agreed outputs or outcomes;[4] and, (4) assistance to parents or individual patients conditional on their achieving specific results. These approaches are familiar in rich and poor countries alike, between one level of government and another, in programs that finance service provision, in programs that create incentives for changes in behavior, and between donors and recipients. In addition, governments and donors of all types have increasingly tried to improve public sector and grantee accountability through performance measurement and evaluation.[5]

This paper is focused on the second type of performance-based aid, which accounts for most of the assistance provided in the health sector. Development aid reformers have increasingly called for a shift away from input financing to performance-based aid (PBA) that is conditional on development results.[6] Efforts to harmonize aid in poor countries and debt relief efforts to reduce poverty have also led to the increasing use of performance-based aid within policy-based lending and budget support by the European Commission, the multilaterals and, through Sector-Wide Approaches (SWAp), the bilateral donors. Yet in spite of positive reports on the effects of PBA, its use remains the exception rather than the rule in development aid for health.

This paper contrasts PBA with other forms of aid, analyzes why performance-based approaches remain a marginal share of health aid, and suggests ways to modify current and new arrangements to achieve greater impact on health results. Our focus is on funding from a source external to a country, to either a national government or an entity established to implement a strategy that conditions a portion of payment on whether health results are achieved.

We argue that the effectiveness of PBA rests on finding the right balance between predictable funding and a portion at risk for results, and on altering incentives to inspire the system-level changes needed to achieve better health results. Incentives faced by donor agencies and their staff and the constraints they face must also be considered. The limited cases of PBA examined in this paper suggest that the rules linking payment to results should be explicit, recipient reports of performance should be complemented with external validation, and "demand driven" technical assistance should be provided to help countries develop and implement strategies to achieve the rewarded results.

WHAT IS PERFORMANCE-BASED AID FOR HEALTH AND HOW DOES IT DIFFER FROM OTHER FORMS OF AID?

PBA ties at least some portion of donor disbursements to whether recipient countries attain specified results. What gives PBA "teeth" is that payment (part or all) is tied to whether the recipient achieves the targets specified in the terms of the agreement with the donor. Because recipients are accountable for results, and not for enacting policies or documenting what they spent, PBA is expected to catalyze innovation and inspire the efforts needed to improve performance. There are many ways to structure this financial risk. Part of the payment can be transferred as a lump sum, independent of results, and another part tied to attainment of performance indicators. Another approach is to condition successive disbursements on adequate achievement of results in a prior period. Yet another approach is to specify the full potential funding envelope and to hold back a proportion of payment until results can be verified. Many approaches can be considered that vary in their degree of financial risk, implications for changing behavior, and likelihood that donors actually will enforce the terms.

PBA differs considerably from other forms of aid that pay for inputs rather than the results (outputs or outcomes) that the inputs are intended to produce. For example, "investment" loans and grants from the multilateral development banks are structured to finance expenditures on inputs, as are many projects financed by bilateral donors. The financing is released to the recipient based on submission of auditable evidence of expenditure on items agreed to in the loan, grant, or contractual agreement.[7] Although investment loans and grants and other forms of project-based aid may include an evaluation framework with performance indicators that are tracked over the life of the project, barring fiduciary malfeasance or noncompliance with other contractual clauses[8], disbursements are made regardless of whether the intended results are achieved. In the health sector, this implies accountability and management attention to documenting expenditures on purchased items such as buildings, drugs, training, and technical assistance without necessarily demonstrating that these inputs lead to improved health results or systems, such as increased utilization of health services by the poor. It also minimizes managers' flexibility to alter the mix of inputs to achieve health results.

WHAT CAN WE LEARN FROM EXISTING PERFORMANCE-BASED AID INITIATIVES?

PBA is theoretically appealing, there is some evidence that it can work at the global and country level, and global appetite for it is growing. There are also considerable challenges to address when structuring performance agreements that provide incentives that motivate health improving behaviors where they really matter, at the interface between households and service providers. This section draws from real-world experiences to identify the elements of performance-based aid most likely to contribute to success.

The Paris Declaration on Aid Effectiveness[9] calls for increased use of budget support and SWAps to reduce government transaction costs, increase predictable funding for basic health services, and to support government-led sector policy and expenditure programs.[10] Although most SWAps include performance indicators relating to health outputs and outcomes, in practice, there are very few examples where program support has been interrupted outside of extreme conditions relating to corruption or fiduciary issues. In the Bangladesh SWAp, for example, when targets were not met, they were extensively discussed in program reviews, but disbursements were not interrupted.[11] SWAps remain limited in use at only 12 percent of total aid for health in 2005,[12] perhaps surprising given the global commitment to reducing transaction costs and to harmonizing development assistance. Different donors provide varying guidance to their staff on deciding amongst aid instruments, but underlying the low use of SWAps are concerns related to the inability of donors to track and earmark spending on donor priorities and to attribute results to their particular programs.[13] Lessons from the following PBA approaches could inform how to better structure SWAps to address concerns about accountability for results that may contribute to increased uptake.

Table 1 beginning on the next page provides a summary of features of the PBA cases that will be detailed in this section.

GAVI ISS

The GAVI Alliance's Immunization Services Support (ISS) program is an approach to PBA that conditions funding to recipient governments on increases in the number of children who have received at least three doses of the vaccine against diphtheria, tetanus and pertussis (DTP3). GAVI provides $20, which is based on the average estimated cost of immunizing additional children, for each additional child immunized above the baseline count for the country. Governments have the flexibility to use the reward funds in any way they believe will enhance immunization coverage. A recent review of six countries found that over 80 percent of the funds were spent on recurrent costs and the remainder on capital expenses, primarily vehicles and cold chain equipment. Funds were not necessarily spent in the year they were granted. At the margin, flexible cash like this can make a large difference in the capability of program managers to increase the effectiveness of the immunization program.[14]

GAVI ISS payment rules are clear: funding for the first two years of a five-to-seven year program is predictable and fixed to enable governments to invest in expanding immunization coverage. The initial two payments ("ISS Investment Funds") are based on the estimated number of additional children who will be immunized over the pre-ISS baseline. Recipient governments are required to submit annual progress reports, including audited figures of the number of children vaccinated each year.

Table 1: Features of Selected PBA Approaches

Funding Agent	GAVI ISS	GFATM	PRSC	Argentina-World Bank Plan Nacer	EC PBA	Colombia-IDB Performance-Driven Loan
Explicit Payment Formula?	Yes	No	No	Yes	Yes	Yes
Incentive Payment Mechanism	[(# additional children with DPT3 over pre-GAVI baseline)* $20]; Payment conditional on DQA score over 80%.	Subsequent funding is influenced by performance on country specific indicators and targets.	Future credits contingent on meeting triggers specified in the Poverty Reduction Strategy Paper (PRSP). Response can be cancellation, reduction, or delay until terms are met.	Future phases of the loan contingent on meeting triggers. Provinces receive 60% of potential payment for each poor woman and child who enrolls in an insurance program and 40% is tied to attainment of 10 performance targets (4% per target). Potential province budget is $10 per beneficiary.	Economy-wide budget support with a fixed and variable component. Variable component released based on performance on service delivery targets. Scores are assigned.	Future phases of the loan contingent on meeting triggers established and weighted in a performance contract. Structure of loan builds on a performance-based fiscal bonus between national government and municipalities.
Recipient	National Government	Principal Recipient (PR) (national government or civil society group)	National Government	National Government, then from National to Provincial Level	National Government	National Government
Results independently validated?	Yes	Yes	No	Yes	No	Yes

Table 1: Features of Selected PBA Approaches (cont.)

Funding Agent	GAVI ISS	GFATM	PRSC	Argentina-World Bank Plan Nacer	EC PBA	Colombia-IDB Performance-Driven Loan
Performance assessment approach	Data Quality Audit (DQA) by independent entity contracted by GAVI to validate reported DPT3 results.	Rating system comprised of PR-reported progress, verification by Local Fund Agent (LFA), adjusted for mitigating circumstances.	Performance based on reports by national government without external validation that draw on existing information systems and other available sources. World Bank staff supervises.	In APL, performance on triggers "rolled up" from performance of the program at the province level. Provinces report enrollment and progress on targets. Verification by internal and external auditors. Penalty for misreporting enrollment is 20%.	Performance based on reports by national government without external validation that draw on existing information systems and other available sources.	Adapted Data Quality Audit by independent entity contracted by national government to validate reported immunization results and information system performance.
Role of Technical Assistance	TA to implement the RED strategy was provided concurrently. Not provided directly by GAVI, but funds can be used by country to procure TA.	TA from Stop TB Partnership may have contributed to better performance in TB programs than in HIV/AIDS or malaria. GFATM does not provide direct TA, but grant funds can be used to purchase it. Development partners provide TA to implement GFATM programs.	Not directly, but country can use funds to procure assistance.	TA from World Bank staff and local consultants. TA available to provinces from national level. TA is "demand driven" and reported to be an important feature.	Not directly, but TA can be procured with EC funds.	TA programmed within the package of financing provided under the loan.

Financial risk is introduced in the next three to five years when financing switches to "reward funding." A data quality requirement is introduced. ISS funds can be earned as long as an independent data quality audit (DQA) achieves at least a score of 80 percent. If the DQA score is below 80 percent, the program is disqualified but can strengthen data reporting systems and receive ISS reward funds in the future. In practice, many countries have been allowed to continue relying on estimates in the third year because of inadequate reporting systems, but by the fourth year, grants must be based on audited numbers. In the long run, all ISS grants in year x would be based on performance in year x-1 against the increment over year x-2. The reward is for program performance in the previous year. In 2005, 53 countries received ISS support, of which 12 had "graduated" to full PBA or reward payments. While GAVI's support for ISS will eventually evaporate as recipients succeed in getting targeted children vaccinated, GAVI will then be able to shift its focus to expanding coverage of other vaccines.

It is worth noting some of the conditions that make it possible for GAVI-ISS funding to be managed this way. First, ISS would add probably not more than 15 percent to the resources available for an immunization program, and there is good evidence that it has not crowded out other sources of revenue for immunizations. Thus removing ISS funds due to bad performance will not kill an immunization program, and the initial two years' investment can only help. Yet GAVI provides enough money to make the effort worthwhile. Second, funding is based on counting a specific set of immunizations, which is feasible. Performance is thus measurable against a simple metric, notwithstanding caveats surrounding the data. The reward system raises the value of information substantially – including both the incentive to manipulate it and the incentive to assure its accuracy – but the overall result is that these programs will become even more focused than today on knowing what they are doing and why they are succeeding or not.

An evaluation of the ISS published in 2006, based on country-level data from 1995 to 2004 (GAVI started in 1999), found that when controlling for other factors, GAVI's spending had a statistically significant positive impact on DPT3 coverage in countries with baseline coverage 65 percent or less at the start of funding. Higher per capita GDP and greater political stability also contributes to better performance. However, at coverage levels above 65 percent, the statistical model explained improvements poorly.[15] Adding one more year of data and including actual disbursements (rather than the grant amount) as an explanatory variable allowed a subsequent evaluation to show an impact for the over-65 percent coverage group.[16]

It is important to note that as GAVI continues, the ability to evaluate its impact should improve because it will be trying to introduce new vaccines where they are not used today, and its PBA approach generates audited data needed to evaluate its impact, almost on a real time basis. Non-PBA approaches typically do not generate performance data that would allow evaluation.

Some possible lessons are beginning to emerge from the GAVI ISS experience that can inform other PBA approaches, although these are observations by practitioners that would require evaluation: 1) It is important to ensure that recipients from the national to local level understand how the performance payment will be awarded and associated incentives; 2) Linking payment to audited information is a catalyst to strengthen health information systems and their use; and, 3) Technical assistance appears to be an important contributor to success.

An August 2004 study of the impact of ISS on immunization rates[17,18] found that limited understanding at sub-national levels of how reward system worked impeded results. A more recent evaluation[19] suggests that more years of ISS experience has contributed to better understanding of ISS and associated incentives at all levels. In addition, the importance of a strong DQA score provides incentives to countries to strengthen and maintain the information and monitoring system. A number of countries reported using ISS funds to implement the "RED" (Reaching Every District) program of WHO/UNICEF[20] that is being implemented alongside GAVI. RED has five components that are aligned with the goals of GAVI ISS and provides technical support to implement them. Red helps to ensure that incentives provided at the national level trickle down to affect the service-delivery level and is a promising complement to the GAVI incentive structure.

The following design elements of the GAVI ISS model offer lessons to inform the design of other PBA approaches:

- The performance indicator is clear and the performance target is chosen by the recipient at the initial stage.
- The importance of reliable results reporting has caused the funder to go to great lengths to validate results and improve data integrity.
- A combination of reliable funding initially, combined with performance-contingent funding in the future, enables immunization programs to gradually move to a performance-based system and learn the implications.
- Because GAVI-ISS provides funds at the margin for expansion, it does not endanger the entire program – only the expansion is put at risk by poor performance. Often performance-based funding fails because the donor cannot withdraw funding without causing a collapse. In the case of GAVI-ISS, expansion can commence again once problems in the program are corrected.

One of the great attractions of performance-based programs is that numbers are routinely generated that help both donors and recipients understand dimensions of the problem they are trying to solve. GAVI has learned some lessons from its initial experience that may cause it to revise elements of the program. The following points come from the evaluation of GAVI's first five years[21]:

- Because reward payments are based on the number of additional immunizations, countries with fast population growth tend to do better than those with lower rates. GAVI has supplemented its base formula to adjust for countries with declining birth rates.
- Programs have an incentive to over-estimate the number of children to be vaccinated during the first two years, to increase the initial investment payments. Inflating these numbers will result, however, in a lower or no reward payment in year 3 because the performance targets cannot be reached.
- Some of the countries most in need, such as post conflict and some of the poorest countries, have been least successful in meeting the criteria for reward payments.
- Experience in ISS countries suggests that the cost of additional immunized children increases exponentially at 80 percent coverage, where it hits an average of $40 per child, rising to over $80 per child at 90 percent coverage. Cost-effectiveness of the program may drop off quickly as costs rise and herd immunity is achieved. Governments may no longer find the $20 ISS subsidy attractive. Therefore, adjusting the subsidy, targeting it across and within countries, and other narrower factors may make sense as part of the reward formula – all requiring much finer detail in performance mea-

surement and a complication of GAVI's attractively simple and easy-to-understand metric.

The Global Fund

The Global Fund to Fight AIDS, Tuberculosis and Malaria is another global initiative that incorporates a performance-based element into its funding operations. Approved grants include performance indicators and targets, along with the condition that phase two will be approved if performance is adequate. While performance is measured using a rating comprised of: scores on self-reported progress and expenditure reports submitted by Principal Recipients; verification by the Local Fund Agent of results and approved expenditures; and contextual information and mitigating circumstances that may affect performance, rules for how phase two funding decisions are made are not explicit or public.[22,23] In practice, better scoring grants receive a higher proportion of disbursement requests than those with lower scores, though few Global Fund grants have failed to receive any support for their second phase.[24] In addition, concerns that the performance-based funding approach of the Global Fund might penalize poor countries have not been realized; poor countries have had lower budget reductions in phase two than other recipients, largely because performance is assessed relative to country-specific rather than absolute targets.

A 2006 report that examined 140 grants that were at least 18 months old shows that tuberculosis grants met all performance targets, HIV/AIDS grants met 87.5 percent and malaria grants met 60 percent of targets, on average.[25] It is not possible, however, to identify the distinct contribution of the Global Fund to attainment of performance targets because multiple programs and multiple sources of funding often simultaneously exist.

Comparison of grant performance across the three diseases supported by the Global Fund provides some insight into needed complements to implementing performance-based funding that include: 1) effective technical assistance; 2) engaging with stakeholders; and, 3) strong health management information systems. In a 2006 report, the Global Fund suggests that better performance among TB grants is due in part to technical assistance provided by the Stop TB Partnership that includes management, procurement and targeted implementation support to scale-up effective programs. The Global Fund's emphasis on including many stakeholders helps to ensure that funding reaches the level in the system that is the interface between communities and service providers. In contrast, programs that only work with national governments are criticized for failing to reach the service-delivery and use level. To strengthen monitoring and reporting, the Global Fund recommends that recipients spend five to 10 percent of their grant funds to enhance health management information and monitoring systems.

The design of Global Fund program financing agreements offers lessons for other PBA approaches. Customizing performance measures and targets to fit a specific country context appears to motivate both countries that begin with a low baseline as well as the already good performers, as evidenced by the observation that grants in poor countries and fragile states perform as well as in higher income and more stable contexts. The lack of explicit rules about how decisions about future phases of grant funding will be made may be both positive and negative: on the positive side, grant managers have flexibility to consider country specific contexts while, on the negative side, lack of clear rules may send weak signals about how performance will be rewarded resulting in weaker behavior and system changes than might have been

generated by rules that show a clear link between results and future disbursements. Measuring and verifying performance is more challenging in Global Fund grants than in immunization programs supported by GAVI because the diseases are complex and the range of recipients more diverse. Given this complexity, the Global Fund approach to validating performance is a useful model to build on.

Poverty Reduction Support Credit (PRSC)

The Poverty Reduction Support Credit (PRSC) is a lending and granting instrument[26] created by the World Bank to provide budget support to governments to develop policies and implement institutional reforms aimed at achieving goals laid out in a country's Poverty Reduction Strategy Paper (PRSP) and meets the definition of PBA used in this paper. PRSC design reflects the evolution of thinking among donors and academics in the 1990s that aid is more effective if "owned" by countries, geared toward comprehensive, long-term development, focused on measurable performance, and harmonized across all donors working in the country.[27] PRSC outlays are concessional loans or grants, typically taking the form of three annual, single-tranche credits. In a three-credit series, the first disbursement typically supports basic needs such as health, education, and water and sanitation projects. The subsequent disbursements, designed to be triggered by attainment of performance targets in the first credit, are expected to fund rural development, private-sector development, and post-primary education.[28]

Performance indicators, known as prior actions or triggers, vary from program to program, and are negotiated between the government and the Bank. Health targets usually are one section of a larger matrix of PRSP-related conditions and include policy and administrative actions as well as output and outcome targets (i.e. percentage of pregnant women receiving pre-natal care). There is no explicit weighting, although critical conditions are sometimes highlighted in project documents as decisive factors for disbursement, and there has been controversy over measurement of outputs and outcomes. Each successive PRSC comes with its own set of benchmarks, which may or may not be related to the previous credit. Approval of subsequent credits in a series is contingent upon completion of a set of prior actions laid out in a Letter of Development Policy (LDP) and matrix of performance benchmarks.[29] Failure to progress as expected can result in cancellation or suspension of the PRSC. However, a graduated response program also allows for the Bank to choose to adapt the program, reduce funding in the subsequent credit, or delay the subsequent credit until the terms are met.[30]

In the majority of PRSC cases, the conditions for moving forward are met and programs progress as scheduled. Seven countries have had at least two successive tranches released, four have had three, and two have received a fourth disbursement.[31] As of February 2005, only 5 percent of countries failed to meet established benchmarks; in all but one of these the Bank opted to take a graduated approach rather than discontinuing the program entirely. In Guyana, the Bank opted to abandon its existing PRSC program due to political and institutional challenges on the ground and is instead planning to negotiate a new program that is more realistic. The only instance in which the Bank gave less money than it committed initially was in Ethiopia, which failed to complete one of the original prior actions sufficiently and had its first tranche cut accordingly. The Bank also delayed follow-on PRSCs in Tanzania, Nepal, and Sri Lanka due to inadequate performance toward the benchmarks.[32]

While PRSCs are a form of PBA, financial incentives to perform are weak for both the Bank and recipient. Part of the reason is that disbursements and their size are defined and programmed as part of the annual macroeconomic projections agreed upon with the IMF, and non-disbursement would imply fiscal imbalances that are unpalatable. A strength of PRSCs is that they are reported to have increased emphasis on measurement and a focus on performance on agreed benchmarks. [33]

"Plan Nacer" in Argentina

The Government of Argentina, with support from a World Bank Adaptable Program Loan (APL), began implementing a program in 2004 called "Plan Nacer" to reduce the infant and maternal mortality rate, increase efficiency, and enhance the focus on results by providing insurance coverage and access to maternal and child health services for poor women and children.[34,35] Of some interest to effective PBA is the APL itself, which conditions subsequent phases of the loan on meeting triggers established in previous phases. The most innovative aspect of this program, however, is the performance-based transfers from the national to provincial levels of government and the institutional changes, increases in coverage, and utilization by poor women and children that result.

The national Ministry of Health has overall responsibility for meeting performance targets in the APL, while provinces have the operational responsibility for implementing Plan Nacer and reaching province-level performance targets. This structure enables the central government to have influence over health in a decentralized context. This decentralized arrangement relies on the creation of health purchasers at the provincial level to negotiate with and pay providers for a defined list of services. Eligible provinces sign an Umbrella Agreement and Annual Performance Agreement with the national Ministry of Health that specifies enrollment and performance targets for 10 tracer maternal and child health and program indicators.[36] Provinces negotiate quarterly targets for each "tracer," expressed as a function of the total eligible population, with the only restriction being that targets cannot be below those set in the previous period. World Bank officials note that although provinces were encouraged to set targets much lower than the performance they had been reporting to the World Health Organization, many of them still failed to reach these lower targets, revealing that previously reported performance could not be substantiated with robust data verification.[37] In addition, there is a national Project Implementation Unit that provides technical support to build capacity at both the national and provincial levels to implement and manage the process. Included are investments in information systems, financial and human resource management systems, and support to "streamline" the regulatory and planning capacity of the national Ministry of Health. Funding is also included for communication and community outreach to make target populations aware of this new program, understand their rights, and encourage enrollment.

Performance-based transfers to provinces are linked to enrollment and attainment of the 10 performance targets. Of the monthly payment of $10 per person/per month, half is funded with government funds and the other half by the Bank loan. Of the Bank loan portion, 60 percent is transferred based on the numbers of poor women and children enrolled in the scheme and 40 percent is linked to evidence on 10 performance targets, with achievement of each target linked to 4 percent (4 * 10 = 40 percent).[38] To make Provinces accountable for the quality of enrollment information, penalties are imposed that equal the

amount transferred to cover an unauthorized person plus an additional 20 percent. Enrollment is verified by crosschecking registers of other social insurance schemes. Provinces collect output information for each tracer, following explicit guidelines from the national program (and assistance to build the required information, verification, and reporting systems). A sworn statement is signed by the provincial authority that reported tracers have been achieved. Registers of enrollees are used to audit clinical information. An external auditor examines a sample of registrations (enrollment and tracers) for verification. The National Ministry also conducts a concurrent audit using internal staff.

By May 2006, 46 percent of the eligible population in nine provinces (380,000 enrollees) had been enrolled. Structural changes in health financing and health service management had been introduced including: implementation of a health services purchasing unit; establishment of performance-based contracting with service providers that includes an output-based payment mechanism; guaranteed access to a defined list of health care services for the enrolled population; strengthened health information systems; improved population identification and enrollment systems; establishment of a system of billing for health services to social insurers; and implementation of a strategy to extend coverage to identified at-risk populations.[39, 40,41]

Another aspect of the program that is important is that the Ministry of Health maintains information on a public Web site (http://www.nacer.gov.ar/index.asp) showing the performance of provinces and the amount of funds disbursed to providers to cover poor women and children. This has proven to be an impetus to mobilize the process as provinces seen to have a large sum in the purchasing account, but limited spending, are under public scrutiny by journalists and civil society organizations that monitor spending and attainment of targets closely.[42]

This PBA approach enabled the central government to have influence over health in the context of provinces that are decentralized, while still transferring control over resources and local level decisions to the provinces.

Plan Nacer is an innovative PBA program that expands coverage and access to services by poor women and children by subsidizing premiums in a targeted social insurance program, specifying the rules for transfers of funds from the national to the provincial level, and by creating health purchasers at the provincial level who negotiate with and pay providers for a defined list of services. One lesson is that there are many details in the design and implementation and that much attention is needed to each step if this approach is to be replicated in another setting. The details to validate data and hold provinces accountable are critical. This PBA approach enabled the central government to have influence over health in the context of provinces that are decentralized, while still transferring control over resources and local level decisions to the provinces. It also changed the demand for technical assistance from supply driven to more effective demand driven when provinces demanded technical assistance to improve information systems, expand enrollment, and contract and pay providers. The demand for technical help increased when it became clear through concurrent audits that provinces were not fully on track and were at risk for not receiving the full fiscal transfers. This approach is viewed as having catalyzed enduring changes in the health system by profoundly changing the roles of key actors and shifting the focus to results.

European Commission Performance-Based Budget Support

Since 1999, the European Commission has implemented a form of PBA that provides budget support through a mechanism that combines a fixed and conditional tranche of aid.[43] The fixed tranche is structured as "all or nothing" financing and depends on compliance with the IMF program. The conditional tranche is released based on reports by the country that previously agreed annual service-delivery targets have been reached. Portions of the budget support package may be allocated to different sectors, each with their own fixed and variable components. Within each sector-specific tranche, weights may be assigned to each target enabling calculation of a score that determines the share of the variable tranche to be released. Partial credit is given when progress is observed but a target has not been achieved. Guidelines recommend a prior assessment of data quality, but there is no specific guidance and it is not known whether these were conducted.[44] The average program size was 78 million Euros in 2004, with conditional tranches averaging 12 million Euros.[45]

Support is usually three years in duration and is framed within the poverty reduction strategy, relying on indicators and targets from the PRSP whenever possible. The most common indicators used in the health sector are vaccination coverage, assisted deliveries, and health service utilization. As with most national PBA schemes, it is difficult to attribute changes in results fully to the EC PBA scheme because multiple other programs operate simultaneously. Given this caveat, the EC reports that roughly half of the credits studied showed full or partial attainment of health targets in the 1999-2004 period. In Burkina Faso, for example, the EC program reported a modestly improving trend in levels of vaccination but no clear improvement in health services utilization. The EC is reviewing whether technical assistance and policy advice might help governments assess bottlenecks and adjust policies and practices to achieve goals.[46]

The EC relies on government-provided reports of attainment of performance targets, without verification through an audit process. Some indication that reported results are not reliable comes from the observation that inconsistent official statistics are reported to different agencies. For example, official vaccination rates reported to the EC in Burkina Faso do not correspond to those reported to the WHO[47], but this may be attributable to different time periods.

It is also possible that the magnitude of the financial incentive is not sufficient to motivate improved performance. The difference in disbursements between the poorest performers and the best performers is only 20 percent of the already small variable tranche on average or 8 percent of the total amount of the program, implying a fairly small incentive in monetary terms for countries that perform particularly well. This payment is split amongst several sub-sectors making the financial incentive for a specific sector such as health even smaller. The fact that funds are transferred to the Ministry of Finance rather than the line ministry or executor may also weaken incentives to improve performance.

Strengthening EPI through performance-driven lending in Colombia

In 2003, the Inter-American Development Bank launched an experimental program of performance-driven loans (PDL) intended to shift recipient and Bank focus to the production of and accountability for development outcomes.[48] The health sector was the first to pick up the PDL, perhaps due to the perceived "measurability" of health outputs and outcomes in

the medium-term, and operations were approved in Colombia[49], Honduras[50] and Nicaragua[51]. Each operation handled the performance contract differently; this paper will focus on the model used in Colombia.

The Colombian PDL was developed to strengthen the Expanded Program on Immunization (EPI).[52] While still high compared to world averages, Colombia EPI performance had suffered setbacks during a major economic recession and as a result of programmatic fragmentation related to decentralization and the consequent distribution of EPI tasks among different levels of government, health insurers and public hospitals.

The program intended to align incentives to improve vaccination rates in the poorest municipalities in Colombia by disbursing all-or-nothing tranches to the national government if a pre-defined threshold of annual immunization performance was met and verified by an independent audit modeled on the GAVI data quality audit. A performance contract was agreed containing municipality-specific performance indicators and annual goals for the four-year program. Each indicator was weighted, an overall performance score was calculated and disbursement triggers associated with scores identified up front. Further, incentives were to cascade down from the national government to sub-national governments via a fiscal bonus to municipalities nationwide that met the immunization threshold. Technical assistance and information system strengthening is built into the program and provided by the central government or contractors to the central government. The program has been in implementation for two years and is disbursing according to schedule, indicating that threshold performance scores have been met as planned.[53]

A major problem has been the determination of the size of the tranches. The PDL program did not embrace a simple money for results model. Because of a perception that an "investment" means an "investment loan," the IDB Board of Directors sets annual limits on policy-based lending, or money that can be used for budget support or debt servicing. To avoid this limit, the PDL was classified as an "investment loan" and tranche sizes were determined based on actual expenditures during the inter-tranche period, rather than the quality of performance achieved, for example. This requirement forces government to account for actual expenditures to the Bank as they would in a regular investment loan, and reduces the incentives to participate in the experiment since the country must undertake both a new set of evaluation activities and account for and submit receipts to the Bank ex-post.

Another issue relates to the creation of an external audit, while recipients must still build and maintain their own monitoring and evaluation activities in order to understand if the program is on track to meet performance targets. In a resource-constrained environment, governments frequently object to "paying twice" for performance monitoring, since the costs of the audit are built into the loans. One of the recommendations of PDL teams at the IDB is that future external audits be financed by grant monies directly by the IDB.

The Colombia PDL follows best practice on performance contracting by developing an explicit performance contract with financial incentives that cascade through levels of government and executors. Yet PDL design decisions taken by the Board to meet bureaucratic requirements have complicated implementation and made the instrument less responsive than it could be to performance.

DISCUSSION: MAKING PERFORMANCE-BASED AID WORK BETTER

PBA approaches such as GAVI ISS and the Global Fund suggest that linking aid to performance is most effective when viewed as a strategy to strengthen the capacity of national and local institutions to deliver results, as well as a way to hold governments accountable. If thoughtfully designed and implemented, PBA can catalyze changes that enhance the capacity of a health system to deliver results by fundamentally changing the roles and relationships between actors and entities and the incentives that drive them. Altered relationships can occur between national and sub-national government entities, as demonstrated by Plan Nacer in Argentina and EPI in Colombia, as well as between service providers and the communities they serve.

Box 1. Summary of Design Elements of Effective PBA

Terms of Payment

- Majority (more than 75 percent?) reliable and predictable and not linked to performance.
- A smaller portion (less than 25 percent?) at risk and linked to attainment of explicit and predetermined performance targets.
- Explicit payment formula.

Indicators and Targets

- Small number (less than 10?).
- Targets set relative to country's own baselines.
- Outputs (e.g. immunizations, prenatal care visits according to norms, institutional deliveries) that are closely correlated with health outcomes, complemented with equity measures.

Health Information

- Health Information Systems will likely need to be strengthened – from lowest level in the system up to national level.
- Provider level "self" reports should roll up to higher levels.
- A random audit system needed to validate data.
- Considerable penalties for data discrepancies.

Careful attention to incentives from national to sub-national levels of government to interface between service providers and households

- To achieve results, the benefits of potential financial rewards need to trickle down to affect the actions of providers and households on the ground.

Management, payment, monitoring, and evaluation at the country level

- Significant management and administrative systems needed to implement PBA within a country to establish performance targets, measure, monitor, reward, evaluate, and revise.
- Technical Assistance
- Once recipients are paid based on results, they will ask for technical assistance to develop and implement strategies to achieve the results.

Features of the cases described in this paper suggest a number of lessons about how PBA should be structured to be most effective. What follows are a number of design, process and implementation suggestions to strengthen PBA, also summarized in Box 1.

Payment should be part fixed and reliable and a smaller portion conditional on results. The limited evidence presented suggests that terms of payment in PBA schemes should be structured as one part a predictable and reliable stream, with a smaller portion at risk for achieving performance. The fixed stream should be provided for enough time to encourage the efforts and investments needed to strengthen health systems. The portion at risk should provide the incentive to focus on the results that both the donor and the recipient value.

In contrast, an all-or-nothing approach to approval of future disbursements appears to make the performance-based element of the program a challenge to enforce as evidenced by the preference for a graduated response to poor performance in PRSCs. All-or-nothing PBA financing schemes can limit leverage and create a tension between the desire to assure predictable financing for health services and the need to enforce performance requirements.

Experimentation and evaluation is necessary to determine the size of the incentive needed to improve performance cost-effectively, and this is likely to vary depending on the context. However, the model of combining a fixed tranche of financing for predictability with a variable tranche linked to performance, used by GAVI ISS and the EC, seems likely to produce better results than all-or-nothing financing structures.

Explicit rules that specify how payment will be linked to results strengthen the impact of PBA. The rules for how payment will depend on results should be explicitly defined, as in the case of GAVI ISS and Plan Nacer. Making the rules explicit strengthen the value of the incentives as recipients are clear about what they may lose if performance targets aren't reached. Even with explicit rules, as in the case of GAVI ISS, it may take several years for an organization to internalize and understand how the incentive payment works. Performance indicators, baselines and targets should be clear; a mechanism to validate results specified; and penalties for discrepancies considerable.

A small number of indicators is best. Improvement targets should be set relative to a country's own baseline rather than to achieve some absolute performance level. Evidence from cases of performance based incentives between payers and developing country health facilities suggests that recipients find it hard to improve results on more than ten indicators[54]; this guidance may be transferable to PBA agreements. The approach used by both the Global Fund and GAVI ISS, of rewarding improvements against a country's own baseline, provides both low performing countries and those starting from a higher level the incentives to improve.

Improvements in health outcomes such as reductions in child and maternal mortality rates are the ultimate measures of performance. However, since changes in health outcomes take longer than increases in utilization of priority services, and it is difficult to attribute changes in health outcomes purely to health interventions, outputs that are highly correlated with desired outcomes can be a close second best. Examples include: immunization rates, proportion of people sleeping under malaria bed nets, and percentage of TB patients who complete the full course of treatment. Process measures are a distant third best but may be considered in cases where capacity needs to be en-

hanced before improvements in outputs are even possible. Examples of short-term process measures may include: training health workers and posting them in rural areas and strengthening the drug and supply management systems so that the needed inputs are in place. National level indicators that specify broad access and distributional targets such as: "proportion of districts with at least 80 percent of fully immunized children," may also be considered.

Health Information Systems will need to be strengthened – from the lowest level in the system up to the national level. Once payment is linked to results, a robust system to report on and validate results in needed. All the examples discussed in this paper use performance data reported by the recipient, but only GAVI ISS, the Global Fund, and Plan Nacer incorporate an external audit to validate results. A critical component of effective PBA is investment in information systems to enable countries to track performance, use data to guide management interventions, and to monitor unintended consequences.

Because PBA requires independently verifiable measurement of outputs and outcomes, they may not be perceived as "light touch" by donors wishing to reduce the burden on countries of managing international aid. While this element of PBA does conflict with the fears of many in global health about creating new rules and requirements associated with financing, verifying performance may replace other systems of accountability for how money is spent on inputs, resulting in a stronger health system in the longer run. The GAVI DQA, for example, has generated demand for information at the country level, as well as the opportunity for technical assistance to correct management information system shortcomings and improve results. Instead of under-designing PBA, light touch should be achieved by de-linking aid from accountability for spending on every input, investing instead in the information needed for countries to manage for results and financiers to verify that results occurred.

For PBA to work, incentives need to affect actions at all levels – from the national level to the local interface between service providers and households. The experience of GAVI ISS highlights the importance of ensuring that PBA incentives are understood at all levels of the health system and that they trickle down to affect the behavior of implementers. The 2004 evaluation found that the ISS performance incentives were not well understood by most national and district officials. As a result, officials did not introduce incentives to motivate and reward service providers for increasing DTP3 coverage. Such findings argue for a concerted effort to inform staff of incentives and, where possible, to pass those incentives directly to implementers and households. Implementing such schemes would maintain the valued flexibility in the use of ISS funds while assuring that ISS monies stimulate the desired results.

Complex government structures at the national and sub-national levels also present an important challenge for designers and implementers of PBA programs. Rewarding performance at a national government level does not necessarily cascade down to influence the actions of front line providers or the health-related behaviors of the population unless careful attention is paid to incentives at all levels and to the obstacles that prevent the potential benefits of performance-based incentives from influencing actions where they really matter. These incentive effects occur not only within the institutional contexts of government entities and service providers, but also at the household level, where individuals and families decide whether to practice healthy behaviors,

seek treatment, and follow medical advice. Helping governments understand existing incentives, assess constraints, identify bottlenecks, and develop action plans to achieve results may contribute to ensuring that aid tied to results is effective.

Attention needed to management and administrative systems. Existing government processes may be incompatible with performance-based aid. For example, budgeting from national to local levels of governments and to facilities is most often based on the costs of inputs determined at the start of a fiscal year. PBA introduces an element of uncertainty and a budget category that can only be realized after the performance period is over and results are verified. Careful attention to what is feasible within current fiscal structures and to introducing needed changes will be necessarily part of any PBA approach. In addition, systems to transfer funds, manage performance agreements, and monitor information will all need to be established. Governments should be encouraged to incorporate systems to monitor desired impact, identify unintended effects of any systems to alter incentives, and to make revisions to what will continue to be a dynamic and evolving strategy.

Technical assistance is necessary and PBA increases the appetite for it. Our examination of prominent PBA programs supports growing external evidence that for these capacity enhancing benefits to be realized, technical assistance needs to be provided as a complement to the changed incentives to help countries identify constraints to strong performance and strategies to improve it. Radelet suggests that for the Global Fund to be effective, technical assistance is needed in addition to money to combat HIV/AIDS, tuberculosis, and malaria.[55] This observation echoes what is found in all of the cases described in this paper. Argentina's experience with ***Plan Nacer*** demonstrates how the appetite for technical assistance can increase when PBA recipients request help to strengthen the systems needed to achieve rewarded results.

Challenges at the donor level:

Donors often provide aid for political and strategic reasons in addition to humanitarian ones, sometimes making it difficult to condition aid on results and act on threats to withhold aid for poor results. Although disbursements are conditioned on policy reforms or development results, policy-based loans are used to fill a government's fiscal gap, usually as programmed in an IMF agreement, and withholding funding could create undesirable macroeconomic and fiscal side effects. Even looking solely at the health objectives, there is an uneasy balance between assuring predictability of funding for humanitarian and ethical reasons and enforcing the performance mandate. Further, for countries that borrow from the multilateral development banks, it may be problematic to reserve a portion of lending, on which recipients are paying administration fees or interest, pending the achievement of performance.

Beyond the questions of whether and how to withhold funding, donors also face significant administrative hurdles to implementing PBA. For bilaterals, the multi-year commitment required for effective performance-based aid may be in conflict with the one-year planning and budgeting cycles determined by the overall national budget process. Further, the administrative processes (i.e., procurement and contracting) that have been institutionalized to award aid are often in conflict with linking aid to results because a desire for transparency and accountability to financiers has led to systems that follow inputs rather than outputs or outcomes. Shifting from funding inputs to aid that rewards performance may imply a change in the way

donor agencies are organized and staffed, as the new administrative procedures involved may require a change in staff skill mix, and a change in the incentives staff face.

Where donors face administrative or procurement constraints to implementing PBA, they may be able to contribute to pooled programs managed by multilateral development banks or global initiatives. Some implementation constraints may be alleviated if new lending and granting instruments are explicitly designed to deliver PBA and assure accountability for results that bilateral and other donors can adapt and participate in.

CONCLUSION

Through its ability to demonstrate value added (the additional performance generated conditioning part of funding on attainment of results), PBA has the potential to overcome common limitations associated with input-based financing for essential health services in developing countries. Incorporating effective PBA features into SWAps and budget support programs, considered best practice in aid effectiveness by those concerned with the transaction costs imposed on countries by multiple donor programs and the system fragmentation they imply[56], may overcome some of the obstacles donors face by linking aid to verifiable results that can be documented and reported to taxpayers and other stakeholders.

The growing donor interest in using PBA mechanisms provides an exciting opportunity to shift the focus of international health aid from inputs to outputs and outcomes. Many factors affect the likelihood that PBA schemes will be effective at improving health status in developing countries. In particular, inattention to incentive structures and technical capacity appear to be particular stumbling blocks in the achievement of desired results through PBA. Further, impediments at the donor level may prevent many PBA schemes from ever getting off the ground at all.

More work is needed to determine the preconditions that predict a country's ability to succeed under PBA arrangements, as well as when governments or other representative entities should be recipients. Some preconditions might include basic elements of an information system, promise to alter the national to local budget process to allow innovation and the flexibility to respond to incentives, and a commitment to facilitate a strategic planning process to identify dysfunctional incentives and alter them to inspire health-improving actions.

In spite of its promise, the evidence based on PBA requires urgent strengthening. Given current donor staff skill mix, it is likely that specialized capacity in contract design, synthesis of norms and best practices, and testing low-cost solutions for performance verification is needed. Further, PBA would benefit from a dedicated program of policy research on contract and incentive design and evaluation.

ENDNOTES

1. Please see http://www.brookings.edu/projects/global-health/health-snapshot.aspx for brief explanations of each of these innovative financing mechanisms.
2. Lane C, Glassman A. Bigger and better? Scaling up and innovation in development aid for health. Health Affairs July/August 2007.
3. Center for Global Development Evaluation Gap Working Group. When will we ever learn? Improving lives through impact evaluation. Washington, DC: Center for Global Development, May 2006.
4. See http://www.cgdev.org/section/initiatives/_active/ghprn/workinggroups/performance for documents produced by a working group on performance-based incentives.
5. Osborne D, Gaebler T. Reinventing Government. 1992; US Government Performance and Results act of 1993 (P.L. 103-62).
6. Meltzer; Radelet S. Challenging foreign aid: a policy-maker's guide to the Millennium Challenge Account. Washington, DC: Center for Global Development, 2003; Birdsall N, Barder O. their PBA paper.
7. For example, see IDB. New Lending Framework. 2005.
8. Such as required counterpart financing or other administrative requirements.
9. http://www.oecd.org/dataoecd/11/41/34428351.pdf.
10. Definition first used by Foster M, Brown A, Conway T. Sector-wide approaches for health development: a review of experience. Overseas Development Institute and World Health Organization, 2003.
11. Ibid.; Sundewall J, Forsberg BC, Tomson G. Theory and practice – a case study of coordination and ownership in the Bangladesh health SWAp. Health Research Policy and Systems 2006, 4:5.
12. Lane C, Glassman A. Bigger and better? Scaling up and innovation in development aid for health. Health Affairs July/August 2007.
13. Schieber GJ, Gottret P, Fleisher LK, Leive AA. Financing global health: mission unaccomplished. Health Affairs, Volume 26, Number 4, July/August 2007.
14. Chee, Grace, Natasha His, Kenneth Carlson, Slavea Chankova, Patricia Taylor. Evaluation of the first five years of GAVI immunization services support funding. Washington, DC: Abt Associates Inc., September 2007.
15. C. Lu, C. Michaud, E. Gakidou, K. Khan, C. Murray (2006) "Effect of the Global Alliance for Vaccines and Immunisation on diphtheria, tetanus, and pertussis vaccine coverage: an independent assessment." *The Lancet,* Volume 368, Issue 9541, Pages 1088-1095.
16. Chee et al. (2007) *op. cit*.
17. Hsi, Natasha and Rebecca Fields, *Evaluation of GAVI Immunization Services Supporting Funding Case Study: Kenya*. prepared for The Global Alliance for Vaccines and immunizations by Abt Associates Inc. and Academy for Educational Development, June 2004.
18. Chee, Grace, Rebecca Fields, Natasha Hsi, and Whitney Schott. *Evaluation of GAVI Immunization Services Support Funding,* prepared for The Global Alliance for Vaccines and Immunizations by Abt Associates Inc. August 2004.
19. Chee et al. (2007) *op. cit*.
20. http://www.immunizationbasics.jsi.com/Docs/BASICS_REDpresentation.ppt. The five elements of RED are: (1) Re-establishment of outreach services with regular outreach for communities with poor access; (2) Supportive supervision with on site training by supervisors; (3) Community links with service delivery through regular meetings between community and health staff; (4) Monitoring and use of data for action, such as chart doses, map population in each health facility; and (5)

Planning and management of resources for better management of human and financial resources.

21. Chee et al. (2007) *op. cit.*
22. Transparency International Global Corruption Report 2006, Ch 6, p104, accessible online at http://www.transparency.org/global_priorities/health/hiv_aids.
23. http://www.gao.gov/new.items/d05639.pdf
24. Of the 213 grants approved on or before January 1, 2005, 91 percent had had phase 2 funding agreements approved by the Global Fund board within 2 1/2 years. Of the remaining 9 percent, 5 percent had grant scorecards recommending approval or conditional phase 2 approval, 1 percent had been transferred to new implementing agencies (Principal Recipients), 1 percent were still operating but had disbursement delays of up to a year, and only 1 percent appeared to be inoperative with no disbursements for at least a year. Personal communication, Christopher Lane, July 14, 2007.
25. See http://www.theglobalfund.org/en/files/about/replenishment/progress_report_midyear_2006.pdf.
26. In almost 70% of cases, these credits, or subsidized loans, are effectively grants.
27. World Bank. "Poverty Reduction Support Credits: A Stocktaking." (Washington: World Bank, June 24, 2005). Available online at: http://siteresources.worldbank.org/PROJECTS/578280-1120680791169/20573838/PRSC%20Stocktaking%20_06-28-05_.pdf.
28. Nyanzi, Deo. "Introduction to Poverty Reduction Support Credit (PRSC) and Poverty Reduction Growth Facility (PRGF)." Economic Policy Empowerment Programme, European Network on Debt and Development. www.eurodad.org/epep.
29. World Bank. Interim Guidelines for Poverty Reduction Support Credits. (PRSCs), May 29, 2001. This document may be difficult to find. It has been replaced by Operational Policy 8.60 and Bank Procedures 8.60, August 2004. These are available at http://lnweb90.worldbank.org/institutional/manuals/opmanual.nsf/284229c803270fad8525705a00112597/ce3b58ab704d4228525705c001a9e68?OpenDocument.
30. Ibid.
31. Ibid.
32. Ibid.
33. World Bank. "Poverty Reduction Support Credits: A Stocktaking." (Washington: World Bank, June 24, 2005). Available online at: http://siteresources.worldbank.org/PROJECTS/578280-1120680791169/20573838/PRSC%20Stocktaking%20_06-28-05_.pdf.
34. World Bank, Project Appraisal Document (PAD), Report Number 37292-AR, October 23, 2006.
35. World Bank, PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE, Report Number AB2388, May 16, 2006.
36. World Bank, Project Appraisal Document (PAD), Report Number 37292-AR, October 23, 2006, p. 10.
37. Communication with World Bank Task manager, Cristian Baeza.
38. Communication with World Bank Task manager, Cristian Baeza.
39. World Bank, Project Appraisal Document (PAD), Report Number 37292-AR, October 23, 2006.
40. Ministry of Health Argentina, "Informe de la Gestión del Plan Nacer a Diciembre de 2006 Cuadros de detalle por provincia," PowerPoint presentation, February 13, 2007.
41. Porto, Alberto, Walter Valle and Alfredo Perazzo. " Las Transferencias Intergubernamentales del Plan Nacer Como Un Cambio en el Sistema de Gestion," August 15, 2006 draft document.
42. Communication with World Bank task manager, Cristian Baeza.

43. This section is based primarily on: http://www.spa-psa.org/resources/2005/EC_GBS_VT_Review.pdf.

44. http://www.spa-psa.org/resources/2005/EC_GBS_VT_Review.pdf.

45. Ibid.

46. Ibid.

47. http://www.who.int/vaccines/globalsummary/immunization/countryprofileresult.cfm.

48. Inter-American Development Bank. Proposal for an experimental program of performance-driven lending (GN-2278-1/2). Washington, DC: Inter-American Development Bank, December 16, 2003.

49. Inter-American Development Bank. Colombia. Proposal for a loan to strengthen the expanded program of immunization. Performance-driven loan. PR-2928. Washington, DC: IDB, April 19, 2005. This loan was $107 million USD.

50. Inter-American Development Bank. Honduras. Improvement of Health Conditions in Honduras. Performance-Driven Loan. HO-L1002. Washington, DC: IDB, March 6, 2005. The loan was $16,600,000. Document available at http://www.iadb.org/projects/Project.cfm?project=HO-L1002&Language=English.

51. Inter-American Development Bank. Nicaragua. Proposal for a loan for a project to improve maternal and child health. Performance-driven loan. PR-2908. Washington, DC: IDB, November 23, 2004. This loan was 30,000,000 USD.

52. Inter-American Development Bank. Colombia. Proposal for a loan to strengthen the expanded program of immunization. Performance-driven loan. PR-2928. Washington, DC: IDB, April 19, 2005. The description of the program that follows is based on this reference.

53. Personal communication, Leslie Stone, Inter-American Development Bank, November 17, 2007.

54. PBI working group, CGD.

55. Lancet article http://www.thelancet.com/journals/lancet/article/PIIS0140673607611441/fulltext.

56. http://www.oecd.org/dataoecd/11/41/34428351.pdf.

ISSN: 1939-9383

Printed on recycled paper with soy-based inks.

Selected photos courtesy of the World Bank:
cover left to right: (#1) Bill Lyons, (#5) Curt Carnemar

BROOKINGS

1775 Massachusetts Avenue, NW
Washington, DC 20036
202-797-6000
www.brookings.edu/global