Center for Global Development

CGD Brief

May 2009

Performance Incentives for Global Health:

Potential and Pitfalls*

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Global health donors, like national governments, have traditionally paid for inputs such as doctors' salaries or medical equipment in the hope that they would lead to better health. Performance incentives offered to health workers, facility managers, or patients turn the equation on its head: they start with the performance targets and let those most directly affected decide how to achieve them. Funders pay (in money or in kind) when health providers or patients reach specified goals. Evidence shows that such incentives can work in a variety of settings. But making them effective requires careful planning, implementation, and monitoring and evaluation.

The context: despite major new investments, health problems persist

Over the last decade, donors have poured billions of dollars into health programs in low- and middle-income countries, on top of considerable spending by national governments: development assistance for health tripled between 1997 and 2007, according to the Organization for Economic Cooperation and Development.

The financial and political commitments have done a lot of good. More than 3 million people in low- and middle-income countries now have access to life-saving antiretroviral treatment for HIV/AIDS; the percentage of children protected from malaria by insecticide-treated nets has increased almost eightfold in 18 African countries, from 3 percent in 2001 to 23 percent in 2006;[1] and more children than ever are being immunized against life-threatening diseases such as hepatitis B, Haemophilus influenzae type b (Hib), and yellow fever.[2]

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1. World Health Organization, *World Malaria Report 2008*.
2. According to the GAVI Alliance, over 155 million children were immunized against hepatitis B from 2000–2007; 28.2 million against Haemophilus influenzae type b (Hib); and over 26 million against yellow fever.

Despite these gains, many low-income countries are falling short. The World Bank estimates that more than 11 million children under five die annually in developing countries from preventable illnesses such as acute malaria, diarrhea, and respiratory infection. Twenty-seven million infants do not receive all three doses of DTP vaccine even though immunization is one of the most cost-effective ways to prevent life-threatening diseases such as measles and tetanus. The picture is similar for other preventable health problems such as dehydration from diarrhea and complications during pregnancy and childbirth. The problems of underutilization of key interventions, low quality of services, and inefficient delivery persist in large measure because the incentives faced by providers and patients are misaligned with better health outcomes. Efforts to strengthen health services in developing countries will fall short unless additional resources are used in ways that bring about new behaviors in both patients and providers that lead to better health.

What are performance incentives?

Performance incentives are transfers of money or goods conditional on taking a measurable action or achieving a predetermined performance target. Traditionally, governments and their donor partners have funded construction, training, equipment, salaries, and other inputs; health results were assumed to follow. But turning financial commitments into improved health involves the actions of innumerable, widely dispersed individuals: health workers, patients and their families, managers of health facilities, and the policymakers who set the legal, regulatory, and financial rules of the game. Monitoring the behavior of all those people is virtually impossible. Money to purchase insecticide-treated bed nets, for example, will have little effect unless health workers distribute the nets and parents and children use them each night.

That's where incentives come in. Performance incentives offered to patients or providers are designed to encourage behaviors that both increase demand for and use of services, and to improve the quality and availability of those services. They may be paid to households or patients for adhering to a certain regimen or to service providers on the basis of the quantity and quality of their services. Providers paid partially on the basis of performance can decide how to spend the money—empowering them to think creatively about how to reward staff, improve facilities, and reach their community through enhanced outreach efforts.

The benefits of performance incentives can extend beyond their specific interventions to strengthen entire health systems. Because performance incentives require accurate monitoring and evaluation, even programs aimed at specific diseases can help improve overall performance by encouraging health professionals to develop robust information and management systems. Much more than a system of financing, rewarding results can catalyze actions and innovations that increase accountability, enhance service-delivery capacity, strengthen health information systems, and improve the effectiveness of the health workforce.

Evidence shows that performance incentives work

Performance incentives have gained currency in policy discussions and have been implemented in

several countries, including Mexico, Nicaragua, Haiti, Rwanda, and Afghanistan. So how are they working?

Evidence on the demand-side: incentives encourage people to use health services

Essential health services are underused in much of the world. Patients and providers often lack trust in each other, providers have limited ability to reach out to communities, and the costs of health care are often simply too high. Those with access to care often do not adhere to their prescribed treatment. Demand-side incentives are therefore meant to enable access and spur good behaviors.

Conditional cash transfer (CCT) programs, for example, aim to alleviate poverty and encourage families to send their children to school and keep them healthy. Evaluations of large-scale CCT programs in Latin America and the Caribbean show increases in the use of services for children (Honduras, Nicaragua, Colombia) and prenatal care (Mexico, Honduras) and decreases in childhood stunting (Mexico, Nicaragua, Colombia).

Incentives have also been used to diagnose people infected with TB and to ensure that they adhere to treatment. Rigorous evaluations of programs in Russia found that providing a package of incentives (food, travel support, clothing, hygienic kits) to patients for continuing their treatment resulted in a drop in default rates from 15–20 percent to 2–6 percent. In Tajikistan, giving poor patients food in return for adhering to treatment resulted in a success rate of 89 percent compared to 59 percent for the control group.

Evidence from the United States suggests that performance incentives encourage people to take advantage of services that require a small number of visits, such as vaccination, cancer screening, follow-up visits, and adherence to TB treatment. Performance incentives can also reduce addictive behavior, including the use of alcohol, tobacco, and cocaine, at least in the short run.

Evidence on the supply side: incentives can improve the quality and quantity of care

Those who fund health care services in developing countries, including governments and donors, typically do not require guarantees that services are delivered. They tend to pay for inputs by providing lump-sum grants or by reimbursing health service providers for their expenditures. In such a system, providers have to devote energy to securing funds and justifying inputs, even if they would rather put that energy toward improving efficiency and the quality of care.

Large-scale performance incentive programs in Haiti and Rwanda, for example, have improved health outputs, including immunizations, antenatal care, and assisted deliveries. Under a USAID-funded scheme in Haiti, NGO health providers agree to reach certain targets such as the proportion of children fully immunized, the proportion of new mothers with assisted deliveries, and the proportion of pregnant women receiving prenatal care. Ninety percent of the payment to the health providers is fixed, but the remainder is made on the condition of good performance.

In the seven years of operation, the program has achieved remarkable improvements in key health indicators. NGOs now reach about one-third of the population (3 million people), providing essential services in a complicated environment of violence, poverty, and limited government leader-

Performance Incentives Improve Health Coverage in Rwanda

In Rwanda, disappointment with slow increases in the use of health services in the years following the genocide prompted donors to support three pilots of performance-based financing. In 2005, the national government selected features from all three approaches to construct a unified approach to paying public and NGO service providers based on services provided and developed a plan to reach national coverage by 2008. Between 2001 and 2004, the rate of curative care increased from 0.22 to 0.55 visits per person in provinces with performance-based financing compared to an increase from 0.20 to 0.30 in the provinces without. Institutional deliveries almost doubled (from 12 to 23 percent) in pilot provinces, while the same indicator increased from 7 to 10 percent in provinces with traditional input-based payment. These results convinced the government of Rwanda and its donors to roll out an adapted approach nationally.

ship. Full immunization coverage has increased by 13 percent per contract period and assisted deliveries have increased by 19 percent.

Making incentives work: program design and implementation

The concept of incentives is easy to understand, but design and implementation can be complicated. Experience has demonstrated that success depends on an intensive and flexible effort to design incentive programs in a collaborative way and then monitor and fix problems as they occur.

Remember that context (really) matters

All people live within dynamic systems that both enable and constrain their behavior and their repertoire of potential responses to any intervention. Designers of performance incentives must, therefore, consider real-world factors such as political and social realities, the timeliness and quality of information systems, the ability to transfer money securely through banks, and restrictions imposed by donors, governments, and NGO management. New incentives can catalyze innovative solutions in less-than-perfect environments, but programs must be flexible enough to adjust to realities on the ground.

Set goals that can be measured and achieved

Performance incentive systems need specific, measurable goals to be successful. The health services that respond the best are those that require a single intervention (such as immunization); those that target a single disease (TB); those for which the needed quantity can be determined (antenatal care); and those with standardized treatment guidelines (malaria). Campaigns with vague or overly ambitious goals will not respond so well.

Determine indicators and set the targets

Indicators should be measurable and targets attainable within a contract period; in most contexts, progress should be measured against baseline performance data. Poor performers with low baselines can show big improvements relatively easily; better performers, however, can struggle to show big gains. It is often important, therefore, to measure the rate of change in an indicator instead of the absolute level of the indicator.

Verifiable indicators are crucial, but experience suggests that having more than 10 will unduly challenge the ability of recipients to respond to—and the capacity to monitor—supply-side performance incentive programs. Demand-side programs should begin with even fewer.

Choose the incentive type and amount carefully

The type of incentives must be appropriate, and incentives must be the right size. On the demand side, food and income incentives are often more meaningful to poor consumers than they are to those with higher incomes. On the supply side, health workers and service providers may respond more positively to the possibility of additional payments for good performance than to the risk of losing payments for inadequate performance. Relatively small rewards or levels of risk are usually adequate to change behavior. In Haiti, a 10 percent performance-based bonus to NGOs was sufficient to improve service provision. Carefully consulting with partners can help predict their reaction to different funding arrangements.

Monitor and validate performance

Verifying whether targets are met, tracking what is working or what needs to be changed, and evaluating the effects of the chosen approach are essential for any performance incentive program. Monitoring requirements may motivate managers to improve their information systems, but they may also encourage falsification. To ensure that information is accurate, programs can rely on a combination of independent evaluations and provider self-assessments with random audits and penalties for discrepancies.

Monitoring compliance with demand-side incentive programs can be complex, particularly in programs that serve a large population. For programs that condition payment on whether recipients use a service, reports of compliance direct from households might be sufficient when supported by evidence (an immunization card, for example) or reports from service providers. If, however, the goal is more complex, such as cessation of narcotic use, verification through other means, such as biochemical tests, may be required.

Strike clear contracts so that all players know what is expected

Contracts and performance agreements specify targets, how they will be measured, and how payment will be linked to their attainment.

Seven Worst Mistakes in Performance Incentive Design

- Failing to consult with stakeholders on the design of incentives, to maximize support and minimize resistance
- Failing to adequately explain rules (or having rules that are too complex)
- Entailing too much or too little financial risk
- Having too many or imprecise definitions of performance indicators or unreachable targets for improvement
- Tying the hands of managers so that they are not able to respond fully to the new incentives
- Paying too little attention to systems and capacities needed to administer programs
- Failing to monitor unintended consequences, evaluate, learn, and revise

Contracts should specify the payment formula, mechanisms for resolving disputes, reasons for termination of the contract, and responsibilities of the recipient and purchaser.

Potential pitfalls and how to avoid them

Incentives to change behavior can be powerful; program designers must pay close attention to avoid unintended consequences such as misreporting and neglecting services that are not being rewarded. Undermining the intrinsic motivations of health workers is also a serious concern, but well-designed programs can actually enhance motivation. In Haiti, for example, the performance incentive linked to increased immunization rates empowered health providers to ensure that vaccines were available by using their own transportation and pressuring the government to be more responsive. A strong system to monitor outputs that are not being rewarded with incentive payments should be part of any performance incentive intervention. And incentives must be carefully calibrated to avoid perverse spillover effects such as those of the conditional cash transfer program in Honduras, where making payments per child may have contributed to an increase in fertility. Incentives matter, and thinking through and observing how they work and why is an essential part of the design and ongoing management of any performance incentive program.

The learning agenda

To realize the potential of performance incentive programs, practitioners need to know more about what works across different settings. Programs therefore need to be rigorously evaluated and documented, and practitioners need ongoing means to share and learn from one another. Some of the most important lessons will be learned on the ground through the trial and error of implementing programs. A serious global learning agenda should include creating a learning network of funders and researchers and, importantly, south-to-south knowledge exchange among program managers.

Conclusion

Performance incentives are by no means a panacea, but the evidence strongly suggests that they hold potential to improve health outcomes—and strengthen entire health systems—in developing countries. They also permit funders to move away from the micromanagement of accounting for and examining the use of each input and take instead a more hands-off approach in which the results are what count and the service providers can choose the best path to get there. Performance incentives may be a powerful and effective way to invest in the core capacities of those who most directly affect the quality of health care in developing countries.

FOR MORE INFORMATION

To learn more, see *Performance Incentives for Global Health: Potential and Pitfalls*, by Rena Eichler, Ruth Levine, and the Working Group on Performance-Based Incentives (Center for Global Development, 2009). The book includes seven in-depth case studies of performance incentive programs throughout the world:

- Latin America: Cash Transfers to Support Better Household Decisions
  - Rigorous evaluations show impact of conditional cash transfers on health and nutrition, but health conditionalities could be better designed
- United States: Orienting Pay-for-Performance to Patients
  - Controlled trials demonstrate that cash incentives to patients increase uptake of interventions requiring limited, short-duration behavior change; results are more mixed for longer-term behavior change
- Afghanistan: Paying NGOs for Performance in a Postconflict Setting
  - Early results suggest that contracting can work in complex, postconflict environments and that contracts with performance incentives yield better results
- Haiti: Going to Scale with a Performance Incentive Model
  - Quantitative analysis demonstrates significant increases in essential services (e.g., immunization, attended deliveries) when performance incentives are introduced in NGO contracts; information systems and personnel management also improve
- Rwanda: Performance-based Incentives in the Public Sector
  - Donor-funded pilots demonstrate improved performance with introduction of incentives and are used as the basis for a national model
- Nicaragua: Combining Demand- and Supply-side Incentives
  - Two-pronged approach results in greater immunization and growth monitoring and reduced stunting
- Worldwide: Incentives for TB Diagnosis and Treatment
  - Diverse patient and provider incentives improve case detection and completion of treatment

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