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Making Payment for Performance Work

The question is not whether performance incentives can—under the right circumstances—change behavior and improve service outcomes. It is "What are the right circumstances?" The answers to the questions of "how" determine the ultimate success, failure, and unintended consequences of performance incentive approaches, yet too often new programs are undertaken without a clear look at the challenges of implementing them.

Here we discuss key issues to consider when designing and the steps to implementing a performance incentives program. Among our examples are those that went wrong as well as those that went right, because valuable lessons can be learned from each. While some of the issues may seem complicated, it is not necessary to get all the details right at the outset: refinements can and should be introduced along the way. Fundamentally different from many traditional approaches to improving the delivery of health services, performance incentives are about establishing what the results should be and then letting the key actors—the patients, the providers—figure out how to achieve them. Along the way, learning and fine-tuning are part and parcel of the process.

The first step is a diagnostic: to understand and determine the major problems affecting performance and to identify incentives that have the potential to inspire the changes in behavior and systems needed to generate positive results. The

second is to select service providers and beneficiaries, the results to be rewarded, and the mechanisms to monitor performance. Terms of contractual arrangements, including how recipients will be monitored and performance rewarded, need to be clearly specified. Staff and systems to administer performance-based payments need to be organized, and both technical and financial resources need to be dedicated to assessing, learning, and revising the approach.

Any discussion of how to accomplish all this should emphasize the practical. The decision to introduce a program and the details of design and implementation must balance what might be conceptually desirable with what is actually feasible in a given context. For example, although it may be desirable to foster competition among nongovernmental organizations (NGOs) for performance-based contracts and to have the ultimate penalty of terminating a contract as an option, in some settings only one service provider is present and termination is not an option. Because performance incentive programs are about transferring money and information to change behavior, other factors to consider include the ability to transfer money, the features of existing information systems, political and social realities, and restrictions imposed by donors, governments, and NGO management. Each step in the process must be informed by what is feasible, and making incentives work is iterative rather than linear. Each step is affected by and affects decisions in previous and subsequent steps.

Deciding on the core aims is fundamental; clarifying aims can guide design and implementation and help to persuade decisionmakers that the benefits of introducing incentives outweigh the effort, expense, and possible risks.

In the short term, demand-side interventions, such as conditional cash transfers or the provision of food to tuberculosis (TB) patients, may increase the use of services, improve adherence to treatment, and target resources. On the supply side, performance incentives can generate rapid improvements in the quantity and quality of services, particularly when the starting point is low.

Over the long term, benefits are harder to trace but likely to be real. Nutritious food, more schooling, and income gains within poor households receiving cash transfers can contribute to better health and income potential over a lifetime. Stimulating service providers to improve their productivity and service quality can catalyze changes that strengthen institutional capacity over many years. This dynamic is set in motion when providers start to assess critically whether current delivery approaches will be effective at reaching the selective targets—something they are inclined to do if their income depends in part on reaching those targets. In response, service providers identify system weaknesses and experiment with

innovative strategies, such as ways to reach marginalized populations. They may strengthen information and other operational systems to support more effective management.

When multiple objectives are at play, setting priorities is all about trade-offs. For example, if increasing both the use of services and access for the poor is a priority, a program may need to sacrifice some increases in use if the hardest to reach are to be served. The challenge in setting priorities comes when several objectives coincide. Decisionmakers then need to determine the value of each objective. Tools that may be helpful include burden-of-disease analysis, cost-effectiveness analysis, equity analysis, and evidence-based medicine. Because each approach concentrates on only a single criterion, decisionmakers, who must take all criteria into account, need to use a combination of art and science to set priorities (Baltussen and Niessen 2006).[1]

The next challenge is to sort out the problems with performance and what is causing them. If they are the result of provider or patient behavior, then performance incentives can affect results. If they are tied to organization and management, incentives can motivate institutions to change the approaches to care management and the systems and structures that support service delivery. If they are not related to behavior or systems, however, performance-based payments will not help. For example, providers will not be able to increase immunization coverage if they have no access to vaccines and no way to influence that supply. Demand-side incentives will contribute to results only if the supply exists or can be influenced by demand.

Moving Forward

There is no need to wait until everything is lined up perfectly before putting performance incentives in place. Because they bring about behavior as well as systemic changes, incentives can be the catalyst that inspires providers and consumers

1. For example, cost-effectiveness analysis is not an effective priority-setting approach if higher value is placed on serving the poor than on serving the general population. In addition, the dynamic responses of providers and consumers to new incentives that result in altered costs are not incorporated. For example, if providers exert additional effort in response to performance awards, their productivity increases, resulting in lower unit costs. Costs may also change if service-providing institutions change the way they organize and deliver care by substituting lower-cost health workers for doctors and working more effectively with communities. Measures of effectiveness do not include contributions to development in areas such as reducing the intergenerational transmission of poverty or strengthening the health care system.

to find solutions in the imperfect environment that is the reality of most developing (and developed) countries.

Identify Stumbling Blocks

Behavior-related causes of poor health system performance fall into two broad categories, which overlap to some extent. The first is having too few resources to enable effective actions. The second is having incentives that work against effective actions. An example from TB control may help to illustrate these distinctions.

Dropout from TB treatment is attributable to a number of factors. On the patient side, low-income patients may not be able to afford transportation to obtain medicines (even when the drugs are free) and may be sensitive to the opportunity cost of lost work. If so, performance incentives can compensate for transportation and lost wages. They overcome the financial obstacle and thus enable low-income patients to get care (*enablers* is the term of art in the tuberculosis community). They also encourage continued patient adherence by compensating for both out-of-pocket outlays and lost income. If the problem is that providers are not motivated to follow up on those who fail to complete treatment, a performance award tied to rates of treatment completion may be effective. Often, a combination of interventions may be appropriate.

New incentives are introduced on top of existing ones, and the interaction is what matters. To build incentives that address poor performance, designers must understand what behaviors the existing incentives are rewarding. On the supply side, the issue is often how individual health workers and institutions are paid. A performance award for providers paid a fixed salary has different implications than one for providers paid through out-of-pocket fees. The proportion of funding that a specific payer represents is an indicator of the likely impact that potential performance awards will have. Providers will consider the effort required, the probability of receiving the award if effort is expended, and the opportunity cost. On the demand side, households and patients will also compare the direct and opportunity costs against the benefits of the incentive. If the expected benefits outweigh the costs, providers, household decisionmakers, and patients will likely be motivated. We discuss how to design the structure of awards later.

Engage Stakeholders

Like any major change in financing, organizing, or managing health services, introducing performance incentives affects many: those who receive the rewards, those who do not, those who benefit or do not benefit from the services provided, and those who administer the programs. All are stakeholders who should be

engaged to maximize the effectiveness of a scheme and to minimize possible resistance that may interfere with implementation. Examples to consider include health workers and the unions representing them, umbrella NGOs, consumers, public health workers, managers of health organizations, social and private insurers, employers, policymakers, health department staff, political representatives, and international donors.

Consulting with the recipients of incentives can help considerably in determining the best approach. In Russia, for example, speaking with prisoners to learn what would motivate them to complete tuberculosis treatment after their release led to a program that rewarded completion of treatment with help in obtaining identity cards, which are highly valued because they are needed to secure jobs and housing (see chapter 12).

Stakeholders who are beneficiaries can provide valuable feedback about how the approach is working and how providers are performing. In Rwanda, for example, community organizations interviewed randomly selected households to learn what community members thought about service quality and whether fees to health facilities seemed appropriate (see chapter 10). Subsequent provider contracts were renegotiated on the basis of interview feedback.[2]

Conditional cash transfer programs (CCT) in Mexico, Nicaragua, Panama, and El Salvador have used quantitative surveys and interviews to understand obstacles to service use and to design effective transfers. One question, for example, was whether it is possible and culturally acceptable for women to be primary beneficiaries in indigenous communities. Consultations and focus groups complemented quantitative data to help to determine whether supply or demand constraints, or both, inhibit the use of essential health services.[3]

Effective extrinsic incentives enhance what intrinsically drives people. Health care workers, for example, will react positively to receiving financial rewards for what they already value. Well-designed new incentives can counteract ineffective ones precisely because they help to align behavior with what people instinctively value. A performance-based incentive is also more likely to be consistent with people's values if it is considered fair by those who will or might be affected. Consulting with stakeholders helps planners to understand stakeholder motivations, the incentives that might inspire desired actions, and the potential effects of newly introduced incentives.

2. Description from Robert Soeters, January 8, 2007.

3. Communication with Ferdinando Regalía and Amanda Glassman of the Inter-American Development Bank, October 2007.

Consulting with stakeholders also helps to minimize resistance. In contexts with well-organized health workers, for example, failing to consult with provider associations might generate opposition that could block what would otherwise be viewed favorably (see box 4-1). This is especially important in environments with a history of mistrust between the government or dominant payer and program recipients. Public payers may also object to a change in payment from covering costs to rewarding results because of concerns that providers may earn profits. To overcome such an objection, describing the inefficiencies of the current system and the social gains in paying for results, and discussing how the benefits outweigh the perceived losses, might be helpful.

Market conditions matter. In environments with a dominant payer and many competing providers, the potential for outright resistance is minimized, making it possible essentially to impose a different payment system. In this context, however, consulting with stakeholders is still recommended. A prominent example is the 2006 decision of the U.S. Congress to pay based on performance for services covered by Medicare. Most health care providers feel forced either to play by these rules or to risk losing a large portion of their income. Provider groups have formed in an effort to construct evidence-based indicators and the means to measure performance. In environments with only a few or one provider, the provider has more negotiating power and could refuse new payment terms if it believes that the

Box 4-1. *Finding Support among Stakeholders in Kenya*

Managers of a faith-based NGO in Kenya—the Protestant Church of East Africa Chogoria—consulted with their nurses association and local community health committees before introducing performance incentives. The proposed approach was to pay performance awards to rural clinic staff if monthly targets for increased preventive and curative care visits were reached. Concern that paying bonuses to nurses in rural clinics might cause hospital nurses employed by the same NGO to go on strike prompted management to consult with the nurses association. To managers' surprise, the association supported the bonuses because it recognized the hardships associated with living in rural locations as well as how important it was to stimulate stronger preventive and curative care within the community. Community health committees were consulted to identify potential obstacles, explain the scheme, and generate buy-in. Communities were also given a small increase in the proportion of fees collected to maintain or renovate the facility once the clinic had generated enough revenue to cover staff salaries and the costs of medicines.

Source: Eichler (2001).

payer would not want to deny access to services. In this context, consulting with stakeholders helps to generate buy-in and contribute to effective design.

Identify Champions

In most cases, performance-based incentive programs need to be driven by leaders inside a national or provincial health system who are committed to the process. Such individuals are best positioned not only to identify likely proponents and mobilize their support but also to recognize and address potential opponents. For example, in some contexts public sector ministries may see cash payments to providers or individuals as budget cuts and thus argue against the programs. Because change can generate resistance, politically savvy champions can in many environments be critical to success.

Set Funding

The funding for incentive payments may come from existing financial flows—for example, when input-based funding of NGOs by donors is changed to performance-based funding—or it may come from new money as a funding increment on top of existing financing flows. For demand-side transfers, the resources may simply be a new way of using existing social protection funding or may constitute new money for social programs. A situation in which new resources are being added is likely to be the least disruptive, but the incentives will have to be large enough to overcome existing incentives that are embedded within current reimbursement arrangements.

Development assistance for health has expanded dramatically since 1990, from $2 billion to close to $12 billion in 2004 (Schieber, Fleisher, and Gottret 2006). Although not without strings, this increase opens up possibilities to experiment with paying for health. On the supply side, donor programs that provide external funding offer flexibility at the outset. Additional funding could also come from reallocation of public spending, taxes, or donors. Examples include loans from development banks, such as the World Bank–financed program in Afghanistan; funds from bilateral donors, such as the U.S. Agency for International Development (USAID) in Haiti; and funds from external donors, such as the Swedish International Development Cooperation Agency in Rwanda, to support pilot activities.

When providers are offered the possibility of earning performance awards, the total resources required will be affected by the supply response. If performance bonuses are designed as a fee for each additional service provided, for example, the performance-incentive program will require funding for both the incentive and

the incremental service provision. If performance bonuses are determined by reaching a predetermined target, the maximum financial outlay can be projected more accurately.

Initiating a new program to contract NGOs and pay based on performance will likely involve negotiations about payment. This will occur in situations when NGOs are selected through competitive bidding and when they are chosen by other, noncompetitive methods. The agreed-on payment charts the course of future financial obligations by the financier for several reasons. The primary one is that reimbursement will be based on demonstrating results rather than documenting expenditures on inputs, which means that the agreed-on bid price becomes the fixed component of the reimbursement providers receive. The bid price may also become the basis on which the performance payment is determined. For example, NGOs in Afghanistan competed to win performance-based payment contracts funded by the World Bank. The bid price became the predictable fixed component of payment and the basis for calculating the maximum performance payment, equivalent to up to an additional 10 percent of the bid price. Changing payment terms dramatically in midcourse can become difficult because of the desire to ensure that the population has uninterrupted access to providers found to be strong performers.

Because few programs are fully new, designing and implementing performance-based payment may need to incorporate rigidities that may have been imposed by history. That is, the ideal approach may need to be tempered by what is feasible given existing constraints. It is often the case, for example, that NGOs and other providers have been delivering services in complex environments for many years, operating with rigid cost structures driven by their current staff mix and other service delivery practices. An adjustment period may be required to allow them to adapt to new payment arrangements. In addition, NGOs that are part of international networks may face externally imposed constraints that may require compromises and departures from what is ideal. Understanding realities of the existing environment through consultations with key stakeholders will contribute to crafting a performance-based payment approach that is feasible to implement.

In addition to the funds needed to reward recipients, the ongoing budget required to run a performance incentive program includes the costs of negotiating, managing, and monitoring performance agreements. It is also likely that additional investments will be needed in the early phases of implementation to strengthen information systems, develop procedures, and communicate the changed incentives to recipients in a way they can understand and act on. In addition to likely new costs resulting from new required capabilities, other costs of running

an existing reimbursement system will likely be eliminated. For example, with a change from expenditure-based reimbursement to performance-based payment, there would be a reduction in the costs of auditing financial reports and an increase in the costs of monitoring results.

Select Recipients

The recipient of the incentive, whether individual or collective, should be chosen based on the behaviors that need to change. Acknowledging the reality that trade-offs may need to be considered is critical to an effective program. On the supply side, paying a health worker based on results determined by his or her actions is the most direct way to encourage additional or reoriented effort. However, if what is needed involves teams or a change to the system that delivers the services, a collective approach would be more effective. The choice of recipient should take into account the costs of monitoring performance, and managing payment to different levels of recipients should also be considered.

In some settings there may be no choice of provider. Some regions, for example, may have only one operating provider, and the potential for others to serve that population may be limited. In other cases, performance payments will be provided to public sector workers who are civil servants or to public facilities that are a given. In other settings, the potential gains in terms of lower costs that may result from competition may be offset by the losses associated with communities having to obtain care from unfamiliar providers and establish new relationships and systems with the payer. For example, settings with long-standing relationships between payers and providers—such as the mission sector in much of Africa, which goes back almost a century—may be one case where competition to select recipients may offer few advantages. In other settings, a competitive process to select providers may lead not only to the best results but also to lower program costs. In addition, the possibility that a competitor may apply for a contract to serve a region previously served by a monopoly may impose discipline on a provider that may otherwise have little incentive to change. The decision to use a competitive process to select providers in the beginning of a program is discussed at length in the literature on contracts and is not reviewed here.[4]

Changing providers after a performance-based program is off the ground can present a challenge, or at least entail additional costs, because the new provider

4. The decision to use a competitive process to select providers in the beginning of a program is discussed at length in the literature on contracts (see, for example, England 2001; Mintz, La Forgia, and Savedoff 2001; Liu and others 2004; Loevinsohn 2006).

needs both to understand performance-based payment and to build the systems to implement it. In addition, consumers grow to trust and rely on specific service providers, making it difficult to change those providers frequently. Such realities mean that once a provider is included in a performance-based scheme, the right strategy may be to help a poor performer improve rather than to switch to a potentially better one.

Some demand-side incentives are targeted to the household. Others focus on the individual. In conditional cash transfer programs, payment usually is made to the mother because evidence indicates that mothers are most likely to consider the welfare of all family members when allocating resources (see chapter 6). The mother is also often responsible for ensuring that the family meets the performance targets on which payment is conditioned. Some TB programs provide food to households when a family member is sick to compensate for lost income or agricultural production (see chapter 12). Motivating this design choice is the belief that the person afflicted with tuberculosis may abandon treatment to contribute to subsistence of the family when he or she feels better but is not fully cured—an issue especially significant for the poor.

Demand-side incentives are targeted to the individual when individual action or behavioral change is central to attaining the health outcome. Examples include stopping smoking (see chapter 7) and adhering to TB medications (see chapters 7 and 12). If the program targets low-income households or individuals, approaches to identifying the poor include geographic targeting and individual means testing (see, for example, Castañeda and Lindert 2006; Coady, Grosh, and Hoddinott 2004; Lindert, Skoufias, and Shapiro 2006).

Determine Indicators

Indicators and targets for improvement are the backbone of any performance-based incentive system and pose special challenges in settings where information systems are weak and recipients have limited understanding of performance-based payment. The principles are that performance indicators should be relevant, understandable, attributable, measurable, and verifiable.

Relevance speaks for itself: indicators should be related as directly as possible to the objectives and priorities determined by the payer. As far as understanding goes, indicators should be both relatively simple and clearly communicated. If recipients do not understand the performance on which they are being evaluated or how payment is linked to measures of performance, they will not be motivated. Demand-side indicators are usually either actions that households must take, such as bringing a child in for a well-child visit, or proof that a behavioral change has

occurred, such as biomedical testing that verifies no use of drugs or nicotine. One supply-side indicator that is relatively easy for programs that seek to improve maternal health to understand is the proportion of deliveries that occur with the assistance of a trained attendant. More complex is a composite index of diabetes care that awards achievement scores for a package of critical targets, both output (such as eye screening) and outcome (such as blood sugar levels below a threshold).[5] Although the latter approach is clearly associated with high-quality diabetes care, it may be difficult to implement.

Changes in performance should, of course, be attributable to recipient actions. If an objective is to reduce child mortality, for example, payment in a supply-side incentive approach should not be based on the outcome measure of reduced child mortality because health service providers do not influence many of the factors that affect child survival. Providers do, however, have a direct influence over whether children are vaccinated and whether the quality of curative care for infectious diseases is high—both clearly and directly related to child health. Thus indicators for these can be constructed. For demand-side incentives, income transfers can be conditional on whether children are fully immunized and receive micronutrient supplements on schedule. These indicators are closely correlated to better child health, yet are under the influence of recipients.

Performance indicators must be measurable and verifiable to avoid disputes between the recipient and payer at the end of a contract period. A clear process should be outlined in the agreement or contract. Indicators that reflect services provided to a large number of people will, of course, show more change and improvement than those that reflect benefits to only a few. Once indicators are chosen, baseline measures need to be established so that targets for improvement can be identified. Results for one period become the baseline for those that follow.

In the early stages, keeping the number of indicators small makes the approach understandable and enables recipients to focus on important changes. Limited experience suggests that more than ten indicators are too many for supply-side programs. Demand-side programs should begin with fewer, although here evidence is even more limited.

The risk to using a small number of indicators is that recipients may focus efforts only on what is being measured and rewarded. The NGO project in Haiti (see chapter 9) implemented a refinement to address this concern. To determine the performance payment, one of two packages of indicators (each including four technical indicators and targets) was randomly selected. This increased the

5. Tom Foels, conversation, October 2007.

number of services that might be rewarded from five to eight and reduced the costs of measurement, because only four indicators were audited and verified. At the same time, uncertainty about rewards caused the expected value of achieving a performance target to fall: to achieve a given effect, the reward has to be higher than it would be without this uncertainty.

From a public health perspective, the best indicators are those that measure whether a desired proportion of the target population is reached. When only one provider serves an area, population-based indicators can be used to establish baselines and targets for improvement in terms of the proportion of a population that should receive a given service—for example, the proportion of pregnant women who give birth with the assistance of a trained attendant. Another option is to establish a target quantity of services—for example, the number of assisted deliveries for a given number of pregnant women. Because providers are not paid unless they reach the target, both approaches encourage providers to develop outreach strategies and to adapt their systems to reach the targets. Approaches that pay for each additional service provided, by contrast, do not provide the same incentive.

Service provider targets can be constructed relative to a provider's baseline or to attain a benchmark of excellence applied uniformly to all. If the goal is to stimulate improved performance of all providers—those beginning with a low baseline as well as the better performers—customized targets may be more motivating to all. A potential disadvantage of this approach is that it may not be perceived as fair if better performers fail to earn bonuses and low performers receive bonuses as they improve.

Schemes that aim to reward only top performance establish a threshold measure of excellence and reward only providers that meet or exceed it. The threshold can be established in advance (immunization coverage must be 80 percent, for example) or calculated relative to the performance of all providers in a network at the end of the performance period (such as only providers in the seventy-fifth percentile of performance measures receive rewards). Given such conditions, poor performers may perceive the probability of success as so remote that they may be unwilling to try to improve, and strong performers may not be motivated to improve. The advantage of this approach is that providers are not rewarded for mediocre performance.

Is there a role for management or process indicators that are several steps removed from health results? The programs in both Afghanistan and Haiti (see chapters 8 and 9) link part of payment to achievement of management targets, such as the presence of a financial management system with specific characteristics (Haiti) or

facilities with a tuberculosis register (Afghanistan). One argument for this approach is that part of the objective is to strengthen capacity to deliver health services and that incentives linked to building capacity contribute to this goal. An opposing argument holds that the systems needed to provide improved health outcomes should arise out of innovative responses of the providers rather than a mandated plan. The experience in Haiti suggests that management capacity may increase as part of the institutional response to a reward system focused on health outcomes alone.

Potential positive spillover effects merit attention. Programs that reward delivery of specific services to a target population may lead to delivery of additional valued services that are not monitored. For example, when household cash transfers are tied to child growth-monitoring visits, other problems may be detected during routine visits. Kenya is a useful case in point. Its program providing free bed nets to pregnant women who sign up for prenatal care has documented increased HIV testing, which has prevented the transmission of HIV from mother to child (Dupas 2005).

Determining targets for improved performance is an art as well as a skill, perfected as managers gain experience and programs evolve. Again, indicators should be measurable, and associated targets should be attainable within a contract period.

Monitor and Evaluate

Tracking and validating performance are essential. Information is used to verify whether targets are reached, to monitor what is working, to assess whether changes are needed, and to evaluate the impact of the approach on program goals. Improving the quality and availability of information will likely involve investments in systems to monitor at the level of the payer and service provider. Because performance incentives are introduced when the usual input-based approach does not yield the desired outcomes, the costs of upgrading the information system should be compared to the costs of adopting an alternative approach to improving performance, not to continuing with business as usual.

Linking payment to performance may be a mixed blessing with respect to information systems and how information is used. Managers may be motivated to strengthen the system to track progress toward targets and to identify problems early. However, an incentive may lead to falsifying data to earn the reward, which implies that all systems need a process to validate data as well as to provide sanctions for misreporting.

To ensure that information on supply-side performance is valid, programs rely either on independent verification through population-based surveys, facility

surveys, extraction from medical records, and assessments from stakeholders' or providers' self-reported statistics combined with random audits and penalties for identified discrepancies. Independent verification has the merit of not being influenced by the provider incentive and is especially useful in the early stages of a program, when independent assessments of impact can contribute to a decision about whether to scale up and institutionalize the approach.

Basing verification on surveys that collect information from a sample has disadvantages, however, especially as part of a large-scale and institutionalized long-term approach. One disadvantage of a statistical approach is that basing performance on samples implies that the true measure of performance lies within a confidence interval range. It may be difficult to determine whether the measured result is statistically significantly different from the baseline. Another negative is that basing performance assessment on independent surveys does not stimulate the development of information systems in provider organizations to support ongoing management decisions. If one of the goals is to strengthen institutional capacity, payment that is based on provider-reported data with random audits provides a stronger incentive to develop and use information systems than an independent verification approach does. Surveys and other independent approaches to verification can also be expensive.

An alternative is to have providers report their performance and then to subject those results to random audits. In Haiti (see chapter 9), after the initial pilot period, service providers self-reported performance, and an independent firm verified what was reported. This verification included choosing cases randomly, verifying reported summary performance data by checking medical records, and consulting with households to verify that reported services were delivered. The approach encouraged service providers to strengthen their information systems and to monitor progress toward performance targets. This enabled NGO management to identify underperforming service delivery sites early in the process and to introduce interventions to enhance their performance. A disadvantage of this approach is that it captures only those services directly provided and reported on and may not fully capture changes in the delivery of services to priority populations.

Community-based organizations can be tapped to monitor performance in some settings. In the Cyangugu region of Rwanda, for example, local organizations were paid a small fee to conduct interviews with a sample of households. The goal was in part to validate whether the services reported were actually received.[6]

6. Robert Soeters, conversation, January 8, 2007.

Monitoring compliance with demand-side incentive programs is complex, particularly in programs that serve large populations. If the payment is conditioned on whether a service was used, tracking use through household reports carries some risks. Among them is falsified information, which is most likely when household income transfers are tied to it. A more cost-effective option is to rely on provider reports complemented with random checks of evidence from the households. Any verification system should be linked to an effective system of sanctions for evidence of false reporting.

In Mexico, for example, where 25 million people benefit from cash transfers, the national office tracks household compliance and determines who receives payment. Information to determine compliance comes from health providers and flows to local and regional Oportunidades offices, which then transmit reports to the national office. A process to dispute what was reported is also in place to ensure that households are not denied payment in error.

Programs aimed at reducing highly addictive behaviors, such as the use of narcotics or tobacco, have used biochemical confirmation to ensure compliance. For example, as discussed in chapter 7, substance abusers may have their urine tested, and smokers their saliva, as frequently as three times a week. A similar approach used in developing countries uses laboratory tests to verify conversion from infectious to noninfectious tuberculosis. Although intensive biochemical verification is not likely to be feasible in most developing countries, self-reports on behavior could be complemented with random checks.

Define Payment Terms

Any system that conditions some payment on performance targets entails financial risk: payment comes only if targets are reached. It is not clear, however, how much risk is enough to motivate a change in behavior and how much is so high that providers stop providing services.

Experience suggests that risk can be relatively small and still have an impact. In Haiti, 10 percent of payments to NGOs were tied to performance targets until 2005, when the figure increased to 12 percent (see chapter 9). In Afghanistan, nonprofit service providers could earn an additional 10 percent of their negotiated budget if they reached performance targets. In both cases, NGOs had alternative sources of funding, however, making it unclear exactly what proportion of the total came from the performance-based payment program (see chapter 8).

Important design questions involve the terms of the incentive: penalty or reward. Health workers and service-providing institutions tend to respond more positively to receiving additional payments than to losing expected payments. Careful stake-

holder consultation can help to predict the likely reaction to different funding arrangements. In Haiti, for example, participating NGOs viewed a combination of withholding and then paying a potential additional bonus as both fair and motivating (see chapter 9).

Performance incentives for service providers can be structured to reward improvement relative to providers' baseline or some absolute benchmark of excellence. The objective may be to improve the performance of all providers or to reward only those that perform adequately and eliminate payment to low performers. These decisions depend on the objectives of the program as well as an assessment of what is feasible, which may include a market analysis of whether it is possible to eliminate low-performing providers in regions where there is only one service provider and others are unlikely to fill the gap.

In environments where there are few service providers—rural areas, for example—improving the performance of existing providers will likely bring more benefits. A hybrid arrangement is also feasible. Combining rewards for improvement with an additional reward for an absolute level of performance may prove worthwhile.

In the developing world, some performance-based schemes have begun by paying additional fees for priority services with the expectation that the additional incentive will stimulate more service delivery. Health workers may understand this approach relatively easily, which facilitates the desired behavioral response. Early pilot schemes in Rwanda, for example, paid a fee for each curative care service and for each vaccination (see chapter 10), fees that augmented other sources of funding.

On the demand side, rewards are often linked to some action taken or evidence of a behavior that has changed. The risk is that the payment is made if the action is taken or behavior is changed, but not if conditions are not met. The ultimate risk is that demand-side recipients, either households or individuals, may be eliminated if the terms of performance are not met. CCT programs, for example, specify a maximum number of allowable absences before income transfers are taken away.

Performance incentives may also motivate unanticipated reactions and have unanticipated spillover effects. Some are likely to be positive, and others are likely to be unwelcome. Careful consideration of all unintended consequences, both negative and positive, should be both part of the design process and incorporated into ongoing monitoring and evaluation. For example, a scheme that rewards only 100 percent completion of treatment may have the adverse effect of causing TB service providers to be unwilling to treat traditionally challenging population groups such as the homeless or substance abusers. Conditional cash transfer programs that

base the amount of income transfers on family size may result in families having more children.

Specify Contracts and Agreements

In general, contracts and performance agreements are the instruments used to specify results, how they will be measured, and how payment will be linked to them. Contracts should specify responsibilities, reasons for termination, and mechanisms for resolving disputes.

Many features of performance-based contracts or agreements are similar to those that pay for expenditures or inputs and are not discussed here. Recipient responsibilities include providing the services, reporting, and details such as financial requirements. Payer responsibilities include payment, monitoring, and verification. All contracts should include a process for resolving disputes and give the reasons for termination.[7]

Elements specific to performance-based agreements include performance targets and how they will be measured and validated, payment terms that link payment to results, reasons for termination, and specific reporting requirements. In all these elements, clarity counts and will reduce the likelihood of disputes (see appendix 4-1).

Design Administrative Structure

Performance-based incentive programs break down if not enough attention is paid to how they are managed. Compared to more traditional input-based or fee-for-service approaches, performance incentives require more monitoring and data quality assurance but less attention to accounting for spending on inputs.

The large numbers of transactions in a conditional cash transfer program require attention to the administrative structure and processes that enroll households, inform them of the terms of the program, collect information about compliance with conditions, match what is reported with what is expected, determine whether conditions are met, transfer cash to large numbers of people, and ensure that fraud and misreporting are minimized. Good communication about eligibility criteria and conditions is critical, as are information systems to track enrolled beneficiaries, collect information, compare it with what is required, and issue and reconcile payments (see box 4-2).

7. For information not specific to performance-based agreements, see Mintz, La Forgia, and Savedoff 2001; England 2001; Liu and others 2004; Loevinsohn 2006. See also the World Bank repository of contracts in developing countries (http://go.worldbank.org/O2DGFLOYY0 [October 2008]).

Box 4-2. *Managing CCT Distribution in Mexico*

In its conditional cash transfer program, the Mexican government must verify whether each of about one-quarter of households in the country (about 25 million people) meets the eligibility criteria, and it must transfer funds if conditions are met. Every two months, payments are generated for the households that meet program requirements. The lag between verifying compliance and paying the transfers is four months: requirements are monitored in the first month, information is consolidated in the next two months, and households are paid in the fourth month.

To distribute payments to a large number of households, many of which are in remote areas, the government contracted the telecommunications company TELECOMM, which had the required administrative infrastructure and was able to establish local payment points. TELECOMM agents travel to communities on a scheduled rotation, distributing the income transfers. To control potential fraud, TELECOMM receives a beneficiary list from the program with unique holograms that must be matched with an identical hologram in the coupon booklet carried by each household. A local program representative is present when the income transfers are made to resolve disputes. As of 2002, payments were made through a state-owned bank and commercial banks to beneficiaries' savings accounts. By 2005, more than 25 percent of all beneficiary households were receiving transfers directly into their savings accounts. As the volume of transactions grew, other banks expressed interest and new ones were contracted to manage household payments.

Source: Discussions with Carola Alvarez and Ferdinando Regalía, Inter-American Development Bank, February 2008.

Administering demand-side programs that provide food and other material goods faces additional challenges. The difficulties of transporting, storing, and distributing food and other goods are considerable. The tuberculosis program in Cambodia, for example, provides food to encourage patients to complete treatment. As the provision of treatment through outpatient facilities increases, the number of distribution points increases and the number of patients at each facility decreases, posing additional stresses onto an already complicated food distribution system (see chapter 12).

In a program that pays on results, one entity can perform all administrative functions. Alternatively, some (even all) functions can be contracted to a third party. If so, the lead entity will need to manage the contract. For example, in Rwanda, the National School of Public Health is contracted to evaluate provider performance, and in Afghanistan, the Johns Hopkins Bloomberg School of Public Health and the Indian Institute of Management are contracted to assess performance.

Consider Donor and Government Restrictions

Pay-for-performance schemes will be feasible only if they fit within a donor or government framework. Most of these tend to reimburse for documented expenditures and may mandate accounting for how funds are used rather than for results. In addition, governments may prohibit bonuses or supplements to civil servants and may base fiscal transfers on budgets derived from input costs (such as salaries, supplies, and utilities). The rules of the game may need to change for performance incentives to work.

World Bank procurement rules to award contracts to NGOs require competitive bidding, and its procedures do not fit perfectly the typical objectives in a developing-country context, which include strengthening organizations as well as "buying" results.[8] The usual approach is to prequalify a short list of suppliers based on quality and then base competition solely on cost. Another approach uses the model usually reserved for consulting services: competition is based on quality and cost, so that the best value can be selected rather than simply the lowest bid. This approach, called quality- and cost-based selection, was implemented in Afghanistan. In that program, a fixed quarterly payment was made based on the agreed-on price in winning bids plus the possibility of earning up to an additional 10 percent if performance targets were reached.

USAID offers two mechanisms for paying NGOs to deliver services: contracts and grants. Contracts procure services. Linking payment to results is therefore straightforward: fixed-price contracts with an additional award fee that applies when performance targets are met, such as in Haiti. Grants are assistance provided to a recipient with the goal of strengthening capacity or encouraging innovation. Only small grants can be structured to pay based on the attainment of benchmarks.

Government regulations and procedures also pose challenges when pay is based on results. As mentioned, paying bonuses or salary supplements to civil servants is often not an option. One workaround is to establish teams that are eligible for bonus payments. The teams determine jointly how to use the bonus funds, part of which can go to team members. Teams can include all workers in a health facility or hospital ward, for example. Recipients may be required to have a specific legal status to be eligible to receive payments linked to results. For example, in Honduras under the CCT program, implementation was delayed considerably because recipient schools and health posts were not registered legal entities.

8. These guidelines were current in 2006, but they may change over time, as donor policies and practices are modified.

Existing national budgeting procedures may pose challenges as well. Line item budgets limit flexibility and autonomy, and uncertainty about the proportion of the bonus pool that will eventually be awarded implies that some money may be left on the table. Adding a line item for performance awards that are conditional on verified results opens the door to an underspent budget, a reality that public officials typically do not favor. An additional challenge arises when results are verified in a period other than that in which the funds were budgeted.

To be able to pay for results, donors, governments, and other payers may need to revise current procurement, budget, and payment procedures. Underlying this change will be a shift from accountability for spending on inputs to accountability for results.

Evaluating Impact

Performance-based payment programs evolve and change as lessons are learned about what works and what does not. The only way to learn is through a well-managed monitoring system that includes ongoing evaluation. This system must go beyond collecting useful, timely, and accurate data: it needs to inform evolving program design.

Performance indicators provide a clear view of progress toward results and offer insight into how the program functions. Also included should be priority services not included in the list of awarded indicators with which to assess possible spillover effects, whether negative, neutral, or positive. In terms of evaluating overall impact, however, a system consisting of routine monitoring will fall short unless data collection is designed in such a way as to attribute the changes in performance solely to the program. Chapter 5 addresses the importance of evaluating impact.

Avoiding Mistakes

Much of this book draws lessons from success stories flavored with a bit of common sense to inform programs in other contexts. There are, though, many valuable lessons to be learned from approaches that did not work. We have identified seven mistakes to avoid when designing and implementing a performance incentive program (see box 4-3).

The first is to forge ahead without consulting key stakeholders. The risks of ignoring this lesson are a program that does not motivate the changed behavior and resistance that derails what might otherwise be an effective strategy. One pro-

Box 4-3. *Seven Worst Mistakes in Performance Incentives*

—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),
—Introducing too much or too little financial risk,
—Having a fuzzy definition of performance indicators and targets, too many performance indicators and targets, and 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, and
—Failing to monitor unintended consequences, evaluate, learn, and revise.

gram in Zambia did not work because those to be motivated were not consulted (see box 4-4). The second mistake is a related pitfall: failing to explain adequately the rules of the game to those whose behavior is expected to change.

The third involves financial risk: both too little and too much can fail. Even if the rules had been well understood, it is very likely that the design of the incentive scheme in Zambia would not have changed behavior because the potential rewards were not significant enough to inspire added effort and innovation. The other end

Box 4-4. *Using Performance Incentives to Motivate Health Workers in Zambia*

A scheme to provide performance bonuses to teams working at Zambian health centers was introduced as a pilot program in the mid-1990s. The program distributed quarterly performance awards to the best performing and the most improved of twenty-three centers in the Chongwe District, where 10 percent of fee income remains at the facility level. The other centers received no awards and lost their 10 percent share of the user fees collected. This approach generated no change in staff motivation or health impact. The failure was attributed partly to the relatively short period and partly to design problems.

Among these problems were the size of award (less than $1 per worker per month), the tournament-style competition, and poorly communicated rules. A critical stakeholder group—health center staff—had not been consulted in the design process.

Source: Furth (2006).

of the spectrum—too much financial risk—is also a mistake. One NGO in Haiti reduced the fixed portion of the salaries of community health agents by half and offered the other half as a performance award, a level that was too high to be motivating.

Fourth, poorly defined and unreachable indicators and targets are not likely to produce the desired results. Again, in Haiti, all NGOs in 2005 were provided the same performance targets regardless of their baseline, demonstrating that those at the bottom did not improve as much as expected given previous experience with customized targets.[9]

Fifth, approaches that try both to reward results and to specify the inputs to be used to achieve them tie the hands of managers and may thwart performance. Allowing recipients the autonomy to respond to these incentives by using inputs in ways they deem most effective is important for effective implementation (Soeters, Habineza, and Peerenboom 2006).

The sixth mistake is to fail to devote ample attention to the capacity and systems needed to implement performance incentive programs. This includes the details of contracting, establishing indicators and targets and measuring them, transferring funds, and monitoring the successes and aspects that need revision. Failure to pay attention to these details, the seventh mistake, will surely derail what may otherwise be a successful approach.

Conclusions

The decision to pay for results comes when payers are not satisfied and part of the problem is attributable to household or provider behavior or action. Design must be informed both by what is feasible as well as by what is most likely on purely technical grounds to achieve results.

Consulting with stakeholders to identify obstacles to good performance, identify solutions, and generate buy-in is a critical element of successful programs. If stakeholders are not consulted, the chosen design may not change behaviors and thus lead to failure.

The steps outlined—from consulting stakeholders to deciding on recipients, payment methods, indicators, targets, and how to verify results—all take considerable effort. However, they may take no more effort than the alternative approach of prespecifying the inputs and actions required for the delivery of health services, which

9. The Haiti case study illustrates many lessons because of six years of experience with changes, innovations, mistakes, and successes (see chapter 9).

are likely best known by those on the front line. Perhaps most important, the design of performance incentives can and should be an iterative process, because participants learn what works well and what does not, which targets are too easy to achieve and which are too hard, which rewards motivate and which fail to catalyze action. Through trial and error, given good communication with the individuals affected by the incentive program, significant improvements can be made over time.

Appendix 4-1. Sample Contract Provisions for Performance-Based Payment

The following provisions are from a subcontract with a health services organization to deliver a basic package of services with payment determined partly by achievement of results.

Article I: Purpose

The purpose of this subcontract is to introduce performance-based contracting through issuance of a fixed-price, award-fee type of contract. This pilot project is being implemented as a transition from the general, input-based, grant type of agreement to an output-based, fixed-price type of subcontract. After issuing an input-based grant in year one of Project Y, the project awarded two progressively results-oriented, cost-reimbursement types of subcontracts to the subcontractor. The final phase of the output-based strategy is to arrive at a fixed-price, performance-based type of subcontract that motivates the subcontractor to increase its impact in the communes of A, B, C, and D in the areas of reproductive health, nutrition, childhood immunization, and child health.

The contractor shall pay the subcontractor an incentive (award fee) in accordance with the award-fee plan, the objective of which is to increase impact through the subcontractor's technical performance, increase its quality of services (user satisfaction), and improve capacity building in an effort to increase sustainability.

Article II: Period of Performance

The period of performance of this subcontract is June 1, 1999, through March 31, 2000.

Article III: Subcontract Type and Amount of Subcontract

This is a fixed-price type of subcontract with award fees. The fixed price is XX U.S. dollars and is payable for satisfactory contract performance, defined as providing the minimum package of services as further described in Article V: Deliverables. The award fee is YY U.S. dollars and will be paid in addition to the fixed price, provided that the subcontractor's performance accords with the award-fee plan in Article VI.

Article IV: Payment Schedule

Each of the first three payments under this subcontract shall represent 20 percent of the fixed price. They are scheduled for June 1, August 1, and October 1, 1999. Each of the next two payments shall represent 15 percent of the fixed price. They are scheduled for December 1, 1999, and February 1, 2000. The final payment shall represent 10 percent of the fixed price and is scheduled for April 1, 2000. The payment schedule applies only to the fixed price of XX U.S. dollars. An award-fee board shall be established to determine the award amount that the subcontractor may earn in whole or in part at the end of the period of performance. The award-fee board shall be composed of at least three members of the contractor's staff. The contractor shall evaluate the subcontractor's technical performance against the performance indicators specified in the award-fee plan in Article VI. The amount of the award fee to be paid to the subcontractor shall be a determination unilaterally made by the award-fee board and is not subject to the disputes clause. Payment of the award fee shall be made after the expiration date of this subcontract and as soon as the results of local impact surveys are received.

Article V: Deliverables

Under the project, the subcontractor shall provide to a population of approximately 160,560 residents in the communes of A, B, C, and D the minimal package of services as described in the strategy document for 1998–2000. The subcontractor agrees to provide the staff necessary to prepare and conduct biannual, joint assessments of service delivery with the contractor. The subcontractor's staff shall participate in discussions with the contractor regarding the results of the assessments, programmatic changes, plans for sustainability of revenue generation, and related management issues during the pilot phase of this performance-based contract.

During this pilot phase, the subcontractor agrees to participate in the performance-based cluster group to review strategies and document the experience. If the volume of services at any time during this period falls below 80 percent of the expected trend (based on historical data), the subcontractor agrees to meet with the contractor to discuss the situation and define corrective measures. If the downward trend continues, the contractor reserves the right to reverse this subcontract to the previous cost-reimbursement type of contract. In any case, the total amount of this subcontract for the period February 1999–March 2000 will be no more than the total approved in January 1999. The subcontractor agrees to participate in the technical assistance activities organized under the project for this pilot phase.

Article VI: Award-Fee Plan

At the end of the contract period (March 31, 2000), the achievement of indicators described in the following list will be assessed. A yes or no decision will be made for each indicator in the list.

The total award fee will be calculated based on the relative weight of indicators for which the subcontractor has met the agreed targets.

Selected Indicators and Targets for Performance-Based Financing

The following list includes the selected indicators, expected results, and their relative weights that form the basis for assessing the performance of the subcontractor under this subcontract. Although estimated levels of those indicators exist, it is considered convenient to validate the actual baseline measurement of each of the indicators during the first month of execution of this contract. The project is directly responsible for financing that validation activity.

1. *Percentage of women using oral rehydration solution (ORS) for children with diarrhea.* The expected result is a 15 percent increase in use of ORS. Full achievement of the target will earn 10 percent of the total additional award in this contract. The current baseline value for this indicator is estimated at 65 percent in the area being covered.

2. *Full vaccination coverage for children twelve to twenty-three months. The expected result is a 10 percent increase in vaccination coverage.* Full achievement of the target will earn 20 percent of the total additional award in this contract. The current baseline value for this indicator is estimated at 63 percent in the area being covered.

3. Coverage of pregnant women with three or more prenatal visits; includes home visits in cases of women missing visits (if the indicated service is provided during the visit). The expected result is a 20 percent increase. Full achievement of the target will earn 10 percent of the total additional award in this contract. The current baseline value for this indicator is estimated at 45 percent in the area being covered.

4. Number of institutional service delivery points (ISDPs) that provide four or more modern methods of contraception, and number of outreach points that provide three or more modern methods, at a significant level (5 percent or more of method mix). The expected result is to have all ISDPs providing four or more methods and 50 percent of outreach points having at least three modern methods. Full achievement of the target will earn 20 percent of the total additional award in this contract. The current baseline values for this indicator are estimated in two of five ISDPs that are already providing expected family planning services; ten of sixty-five outreach points for delivering services are already providing the expected program performance in the area covered.

5. Level of discontinuation rate for injectable and oral contraceptives. The expected result is a 25 percent reduction in the level of discontinuation. Full achievement of the target will earn 20 percent of the total additional award in this contract. The current baseline value for this indicator is estimated at 35 percent in the area being covered.

6. Average duration of waiting time before providing appropriate attention to a child (in hours and minutes from arrival to beginning of attention). The expected result is a 50 percent reduction. Full achievement of this target will represent 10 percent of the total additional award in this contract. The current baseline value for this indicator is estimated at forty minutes (as an average) in the area covered.

7. An effective system for supervision. The expected results are (a) existence and use of a protocol for supervision; (b) development of a supervision calendar at the institutional and community levels, with the results reported quarterly; (c) records documenting supervision visits to 100 percent of staff. Full achievement of this target will earn 10 percent of the total additional award in this contract. The current baseline value for this indicator is a supervision system that is not clearly defined, consistently implemented, or used to manage or improve performance.

At the beginning of the pilot program, Agency Z will measure baseline values in collaboration with the subcontractor to validate the baseline estimates. If the study indicates significant differences between these measurements and the initial baseline estimate, the contractor and the subcontractor agree to immediately revise these targets. Once the contractor and the subcontractor agree on the actual base-

line measurement, any change in those indicators must be made by issuance of an amendment under this subcontract.

Article VII: Technical Direction

Performance of the work herein shall be subject to the technical directions of the chief of party or his delegate. As used herein, "technical directions" are directions to the subcontractor that amplify project descriptions, inputs, activities, and objectives; suggest project directions; or otherwise inform and complete the general scope of work. "Technical directions" must be within the terms of this subcontract and shall not change or modify them in any way.

Article VIII: Technical Reports

Monthly statistical reports are to be submitted to the project offices within fifteen days after the end of the month and shall follow the standardized format set forth by the contractor. Three quarterly management reports and one final report shall be submitted within fifteen days of the end of the quarter. The reports shall focus on management decisions made to address cost efficiency, strategies in program sustainability, and an indication of the amount of program income generated and the activities supported by the program income. The quarterly management reports should also illustrate how the overall project budget has been utilized by the subcontractor to incorporate efficiency in management performance.

Source: Eichler and Aitken (2001).

References

Baltussen, Bob, and Louis Niessen. 2006. "Priority Setting of Health Interventions: The Need for Multi-criteria Decision Analysis." *Cost Effectiveness and Resource Allocation* 4 (14): doi:10.1186/1478-7547-4-14.

Castañeda, Tarsicio, and Kathy Lindert, with Benedicte de la Briere, Luisa Fernandez, Celia Hubert, Osvaldo Larranaga, Monic Orozco, and Roxana Viquez. 2006. "Designing and Implementing Household Targeting Systems: Lessons from Latin America and the United States." Paper presented at the Third International Conference on Conditional Cash Transfers, Istanbul, June.

Coady, David, Margaret Grosh, and John Hoddinott. 2004. *The Targeting of Transfers in Developing Countries: Review of Experience and Lessons.* Washington: World Bank.

Dupas, Pascaline. 2005. "The Impact of Conditional In-Kind Subsidies on Preventive Health Behaviors: Evidence from Western Kenya." Working Paper. New York University.

Eichler, Rena. 2001. "Performance-Based Reimbursement of Rural Primary Health Care Providers: Evidence from Kenya." Presented at the Third International Health Economics Association World Congress, York, U.K., July.

Eichler, Rena, and Riita-Liisa Kohlemainen Aitken. 2001. "Using Performance-Based Payments to Improve Health Programs." *The Manager: Management Sciences for Health* 10 (2): 1–22. (erc.msh.org/TheManager/English/V10_N2_En_Issue.pdf [October 2008].)

England, Roger. 2001. *Contracting and Performance Management in the Health Sector: A Guide for Low- and Middle-Income Countries.* DFID Health Systems Resource Centre. London: DFID.

Furth, Rebecca. 2006. *Zambia Performance-Based Incentives Pilot Study Final Report.* Washington: USAID and the Quality Assurance Project. (www.qaproject.org/news/PDFs/ZambiaPerformancePilotStudyInitiatives.pdf [October 2008].)

Lindert, Kathy, Emmanuel Skoufias, and Joseph Shapiro. 2006. *Redistributing Income to the Poor and the Rich: Public Transfers in Latin America and the Caribbean.* SP Discussion Paper 0605. Washington: World Bank.

Liu, Xingzhu, David R. Hotchkiss, Sujata Bose, Ricardo Bitran, and Ursula Giedion. 2004. *Contracting for Primary Health Services: Evidence on Its Effects and a Framework for Evaluation.* Bethesda, Md.: Partners for Health Reform*Plus,* Abt Associates.

Loevinsohn, Benjamin. 2006. *A Toolkit on Contracting for Health Services in Developing Countries.* Discussion draft. Washington: World Bank.

Mintz, Patricia, Gerard La Forgia, and William D. Savedoff. 2001. *Contracting Health Services: Getting from Here to There.* Washington: World Bank.

Soeters, Robert, Christian Habineza, and Peter Peerenboom. 2006. "Performance-Based Financing and Changing the District Health System: Experience from Rwanda." *Bulletin of the World Health Organization* 84 (11): 884–89.

Schieber, George, Lisa Fleisher, and Pablo Gottret. 2006. "Getting Real on Health Financing." *Finance and Development* 43 (4): 46–50.

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