

**DRAFT FOR COMMENTS AND DISCUSSION:  
NOT TO BE CITED WITHOUT AUTHORS' PERMISSION**

**Overview of Contracting for the Provision of Primary Health Care Services in  
Developing Countries:**

**Lessons for the Philippines for the Use of Contracting in  
the Provision of Reproductive Health Services and Contraceptive Coverage**

**Anna Heard  
Thomas Bossert  
Andrew Mitchell**  
Harvard School of Public Health

Draft January 17, 2006

## **Executive Summary**

Performance-based contracting with the private sector has been used successfully to improve primary health care services, including reproductive health care and contraceptive coverage. Contracting is a mechanism to clarify roles and create accountability as well as align goals between the government and workers in the health sector through appropriate incentives. It has been used as an attempt to meet a variety of aims, including lowering costs, increasing coverage of and access to services, improving service quality, and improving efficiency of resource utilization. These rationales are based on the theory that competition encourages efficiency as contractors exhibit greater flexibility and ability than employees to adjust to changes. On the flip side, however, the high transaction costs involved in contracting may diminish gains from competition, and poorly written contracts can lead to perverse incentives. Additionally, pressure to control costs can result in decreasing quality or reductions in access to services.

This report describes a framework by which to analyze and evaluate the design and implementation of contracts. Applying this framework several international experiences in contracting, the literature review identifies several factors which can exploit the strengths of contracting while avoiding or mitigating its weaknesses. These key factors include:

1. clearly defining the rationale for contracting and the goals of the project
2. ensuring sufficient government capacity to create, negotiate, and monitor contracts, supplying technical assistance when necessary
3. ensuring a transparent and legitimate bidding process by using outside advisors and committees involving key stakeholders
4. creating appropriate and objectively measurable targets that accurately measure the contractor's performance
5. implementing a systematic monitoring system that provides sufficient information to guide management without being too burdensome
6. evaluating contractor performance and having consequences for poor and good performance
7. differentiating between contractor performance and impacts of a contracting project.

The cases of Cambodia and Costa Rica—which have the most relevant recent information to the Philippines on contracting experiences in developing countries—highlight several of these important points.

## Table of contents

Executive Summary .....	i
Table of contents	
Background .....	1
What is contracting? .....	1
Why contract? .....	2
How does it work? .....	3
Strengths .....	3
Weaknesses .....	3
How do you make sure it works?.....	5
Methodology .....	6
Analytic Framework .....	6
Limitations .....	8
Findings.....	9
Rationale .....	9
Transparency and competitiveness in the bidding process .....	10
Target-setting .....	10
Monitoring and Evaluation .....	11
Incentives and Enforcement.....	11
Effectiveness in achieving objectives .....	12
Case Study: Cambodia.....	15
Case Study: Costa Rica.....	20
Conclusions and Recommendations .....	25
Summary of main findings.....	25
Recommendations.....	27
References.....	29
Annex .....	33

## **Background**

There have been growing concerns about public sector provision of social services in developing countries. These concerns have resulted in calls for more efficient and effectively delivered services than those provided by the state, but using mechanisms which either preserve or enhance equity as well. Because the private sector has often been viewed as a model of market efficiency, some governments in the developed world have partnered with the private sector to deliver health-related services. Indeed, public perceptions of low government service quality have also been pushing a growing trend in low- and middle-income countries to utilize private providers, especially at the primary care level (Palmer 2000). Initially, many contracts between public and private entities covered simple tasks such as provision of food service in hospitals. More recently, a growing number of contracts with the private sector or non-governmental organizations (NGOs) now cover more complex services such as primary health care services, which includes many reproductive health services. For example, the governments of Tanzania (Rypkema 2002), Zimbabwe (McPake and Hongoro 1995), and South Africa (McCoy, Buch and Palmer 2000) have recently tried contracting with the private sector to provide various parts of health service delivery.

### *What is contracting?*

Contracts are a way of defining the range, quantity, and quality of services to be provided in a (more or less) specific time frame and for a (more or less) specific price. The contracting mechanism's system of rewards and punishments creates accountability between buyer and contractor. The contours of contracts often depend on three factors: who is involved in the contract, who is allowed to bid for the contract (internal or external candidates or both), and whether the bidding is competitive (sole sourcing versus competitive bidding). In the health sector, for instance, contracts for the provision of primary health care services, including reproductive health and contraceptive coverage, are often between a government (the buyer) and a private provider such as an NGO (the contractor). In some cases, a government hires a private contractor to manage a contract. In this case, the sub-contract is usually between two private organizations, but can also be between the private organization and a lower government division. In other cases, agreements can be formed between two levels of government that are not legally binding but contain many of the same qualities as legal contracts by providing methods for adjusting budget allocations based on performance (England 2000, Mills and Broomberg 1998). While the advantages of contracting and the nature of contracting can depend on the type of provider, the goal of any contracts is to clarify roles and responsibilities and create accountability.

There are two main styles of contracts, classical and relational. In the classical model, contracts govern exchanges of a well-defined and specific nature. Here, monitoring of the contract is relatively straightforward and all relevant/important aspects of the service is contained within the contract (McCoy, Buch and Palmer 2000). An example of a classical contract is a written contract between a government and medical device company to purchase a set number of devices of a defined quality and receive them on a particular date for a specified price.

By contrast, relational contracts are often inherently “incomplete” as many of details are omitted from the written contract. Such contracts are common in a number of situations, including when services or goods to be provided are numerous or complex, relationships are long-term or highly interdependent, future contingencies are unpredictable, and/or the need to avoid conflict and/or permit flexibility dominate the requirements of the contract. If problems arise, factors such as trust, mutual respect, common visions and shared values will likely be more important in coming to a resolution than anything written in the contract (McCoy, Buch and Palmer 2000).

There has often been a tension between relational and classical contracting in the health sector. Healthcare services are generally extremely complex and difficult to monitor, and are therefore likely candidates for relational contracts. Indeed until relatively recently, health service delivery contracts have tended to be drawn up following a relational model (Palmer 2000) due to their need to form long-term, cooperative relationships. However, the underlying *rationale* for contracting of these health sector services is often more in line with theories underlying classical contracts (Palmer 2000) which holds the contractor responsible for the terms of the contract. So, while the advantages of contracting that are cited generally derive from classical contract that create accountability, health contracts are more often relational in nature. Recently, performance-based contracting in health service delivery has emerged as a new strategy that follows the classical model. In a competitive-bid, performance-based contract, the contract is awarded to the bidder with the best rating, usually based on a combination of cost and qualifications criteria. Payment of the contract is based on the successful achievement of specified measures. Therefore, using performance-based contracting is more likely than relational contracting to achieve efficiency objectives.

*Key points:*

- *Classical contracts define precisely and specifically expectations of both parties.*
- *Performance-based contracts (a type of classical contract) provide payment for successful achievement of specified measures.*
- *Relational contracts define the expectations but allow for flexibility in attaining targets and the relationship is more important than the exact completion of each target. It is used to maintain or forge long term relationships.*
- *While classical contracts have been less common in the health sector than relational contracts, use of performance-based contracts is growing.*

*Why contract?*

Many countries consider contracting with private providers for health care services as a quick fix to gaps in government coverage, especially in areas where private providers are already practicing (Palmer 2000). Reducing costs, improving quality, providing services to constituents that are difficult to reach, or improving equity of care are also reasons for contracting with the private sector. Although contracting can also be politically undesirable as it often involves relinquishing power over employees and money, the growing influence of consumers, skyrocketing costs, increasing demands on the health

care system, and diminishing or limited resources are pushing the public sector to seek higher efficiency.

#### *How does it work?*

Contracting permits inclusion of outcome-related payments as incentives to improve services and lower costs. By attaching output targets to funding, performance-based contracts are arguably able to create actionable accountability.

Contracts may involve a variety of different payment mechanisms. In a block grant contract, which functions similarly to a global budget, an annual fee for specified services is provided. Under cost and volume contracts, there is a set payment for a given number of services, with additional services paid on a per case basis. Capitation grant contracts are paid on a per person per visit or service basis (Mills and Broomberg 1998). Performance-based contracts can create added incentives to improve services by basing some portion of the budget allocation, grant, or payment on achievement of specified targets agreed upon in the contract, although often the performance only determines whether the contract will continue or be renewed (Abramson 2001, Mills and Broomberg 1998).

#### Strengths

Supporters argue that contracting increases in efficiency in delivery of services, basing their claims in the theory that the private sector can more efficiently and/or effectively provide services than the public sector. Efficiency gains may stem from several mechanisms, including: increased transparency of prices, increased quantities and quality in trading, and managerial decentralization (Mills and Broomberg 1998) which increases flexibility to adjust to changes in the situation. Better information (transparency) on both sides of the contract increases efficiency of market functioning. Managerial decentralization allows a local response to market changes and consumer demands and can lead to better services that are more targeted to consumer needs. Without managerial autonomy, providers will not have the flexibility needed to respond to new requirements and changes in circumstances.

Another argument is that competition among providers enhances supply-side efficiency (Mills and Broomberg 1998), as it pushes providers to become efficient so they can bid at the lowest price. Finally, because services are contracted out, the government can shift its focus to responsibilities that the government is uniquely situated to perform, such as planning, standard setting, financing, and regulation (Mills and Broomberg 1998).

#### Weaknesses

Supply-side efficiency assumes that a sufficient number of potential providers exists to create competition. However, this assumption may not apply in many resource-poor settings which have an underdeveloped private sector and few NGOs. That there will be supply-side gains through competition assumes that supply-side efficiency is independent of purchaser functioning and that purchaser inefficiencies or lack of capacity do not affect the supplier's ability to operate efficiently. When managers are hired to manage

service delivery but use government employees and government resources for procurement, this may not be the case. In this situation, efficiency can be more difficult to achieve because managers are still required to function under government control (Palmer 2000). Thus there is a need for sufficient provider autonomy. Once under contract, the provider must have sufficient autonomy to control their resources and manage their staff (England 2000).

If contractors place undue emphasis on profits, both equity and quality can suffer. Equity can be defined as freedom from bias (e.g., geographic, market, income-related bias) in the provision of services, and it can be

**Summary of Contracting Strengths and Weaknesses**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>▪ Increased local responsiveness to health services needs</li> <li>▪ Heightened efficiency of service provision through competition</li> <li>▪ Increased availability and quality of health services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inability to effectively administer locally-responsive contracts in many developing countries</li> <li>▪ High transaction costs may decrease efficiency</li> <li>▪ Decreased equity and quality of health services</li> </ul>

compromised through either total or partial loss of local service provision (access) or reduction in consumer choice. Poorly written contracts can create incentives to cut costs in ways that reduce services, encourage inappropriate treatment to increase revenue, or bias service towards those who can pay. Examples of such inappropriate incentives include overly long hospital stays and treatment with an expensive treatment despite availability of equally effective, cheaper technique (England 2000). Cream-skimming of low-risk or low-expense patients and services over high-risk or high-expense/low profit patients by service providers is also a risk. Attempts to increase profits through cost-cutting measures can disproportionately affect the poor. For example, efforts to increase efficiency by closing more remote facilities could severely affect access for vulnerable rural populations.<sup>1</sup>

While cost-saving is generally presented as a benefit of contracting, transaction costs and increased supply costs through loss of purchasing power can override cost savings of efficiency. Some governments with state-run health care gain purchasing power by virtue of their high demand compared to non-state demand (this is called a “monopsony” in which the purchaser controls the market). Loss of monopsony purchasing power can sometimes be mitigated by retaining some purchasing functions through the state. However, purchasing may be one of the functions that are inefficient, and although there may be a loss of monopsony purchasing power, the efficiency gains from contracting may outweigh the cost increases from loss of purchasing power (England 2000).

---

<sup>1</sup> Risks to equity may be at least partially mitigated by including equity as a measurable target in the contract. Contracting as a means to increase equity is a relatively new concept, but of particular interest to developing countries. There is beginning to be some evidence that, given the right structure and incentives, contracting with NGOs can increase coverage to the poor (Mercer 2004). However, it is difficult to find literature on projects where equity was explicitly included as a part of contractual targets.

Transaction costs associated with negotiating the contract, monitoring the contractors and evaluating performance can also exceed cost savings of efficiency (Palmer 2000, Mills and Broomberg 1998). While transaction costs are a concern, the greater the availability of local resources, the lower the transaction costs will generally be. On the other hand, while there are traditional expenditure costs associated with negotiating, implementing and monitoring contracts, many costs are less obvious. Selective contracting may have a larger impact on the health system as a whole. If contracted providers lack coordination and competition, it could push salaries up instead of prices down, or cause high turn-over (Mills 1995) and even the loss of flexibility in the allocation of scarce resources (Mills and Broomberg 1998). Transitioning from government management to private contracts can also take time, leading to opportunity costs.

*How do you make sure it works?*

First and foremost, governments or buyers must have the technical and administrative capacity to enter into and monitor contractual relationships. Many governments have little experience in negotiating, creating and monitoring contracts. However, with outside technical assistance, lack of capacity can often be overcome (England 2000).

Additionally, a system of quality assurance and auditing must be implemented. Performance measures upon which payment is determined can themselves become incentives to over-report statistics or cut costs at the expense of quality. Without careful monitoring of progress, clear targets are pointless. Quality Assurance Project, an organization that supports the United States Agency for International Development (USAID) “to strengthen the quality of healthcare in developing and middle income countries” (QAP website 2005), lists three steps in a quality monitoring system: deciding what information you need, collecting the information, and using the information. Enforcement of the contract is not possible without information on making progress or meeting targets. These steps, in turn, are predicated on setting clear standards. Quality monitoring therefore evaluates adherence to the standards. Measures of quality may include the type of staff that is hired, time spent with patients, how often treatment given follows the standard of care or best practice, and customer satisfaction (Quality Assurance Project 2005). Monitoring should be done regularly and differences between expected outcomes and actual results should be discussed and analyzed to determine why expectations are not being met and what can be done to improve results in the future (England 2000). Monitoring must also be backed by consequences: without incentives tied to attaining target outcomes or disincentives to failure that are enforced, explicit wording in a contract is useless (England 2000).

It is also important to point out that effective contracting requires knowing specifics about local needs, beyond the general information that can be obtained through national statistics. Surveys and other sampling studies should be done to accurately establish the local needs (England 2000). Care should be given to contract the services that are needed by the people, most suited to the contractor (and least suited to the government), so that the services being contracted are the ones that are most appropriate. And though successful monitoring and enforcement to create accountability is based on objective and measurable outcomes, establishing realistic but aggressive targets cannot be



accomplished without an understanding of current conditions, both at the target indicator level and in socio-political feasibility.

Finally, an added challenge is that objectively measurable performance targets—for which providers can be held legally responsible—often differ from indicators used for impact assessments. Even with well-designed outcome targets specified, impact evaluation of health sector programs is difficult. Determining efficiency or efficacy implies a before and after evaluation, but often too many factors have changed for a meaningful comparison. Standards, for instance, may change as a result of the contract. Comparison-control situations (e.g. comparing a government facility to a contracted facility) also face complications regarding comparability of the health centers (Walsh 1995; Mills and Broomberg 1998). For example, if contracted facilities are receiving larger budgets than the government facility, the results of contracting are may not only be due to the contracting itself, but also to the additional funding. Finally, the contracting project is often not the only health service provider in the area, so changes in provision may not be solely attributable to the contractor. This is particularly true in densely populated (e.g., urban) areas or areas where multiple organizations are active.

To guide LEAD-Philippines in decisions regarding whether and how to contract, this literature review focuses on experiences in developing countries of contracting for health services provision, and implications for contracting for reproductive health and contraceptive coverage.

*Key points:*

- *Governments and other buyers must have an underlying capacity to develop, administer and monitor contracts.*
- *A system of quality assurance and auditing, which establishes clear standards and monitoring, must be implemented.*
- *A thorough understanding of the local context is important in establishing realistic targets.*
- *Careful planning for impact evaluation is necessary for determining the success of contracting.*
- *Impact measures and performance targets may not be the same.*

## **Methodology**

The following analysis of international experiences in contracting for health services provision is informed by a literature review conducted during the period January-June 2005. Documents consulted included both peer-reviewed journal articles as well as publicly accessible “grey literature” accessed by the Internet and personal research. Primary search engines included PubMed, Google, and site-specific searches (e.g. World Bank). Bibliographic citations contained in retrieved documents were also consulted.

### *Analytic Framework*

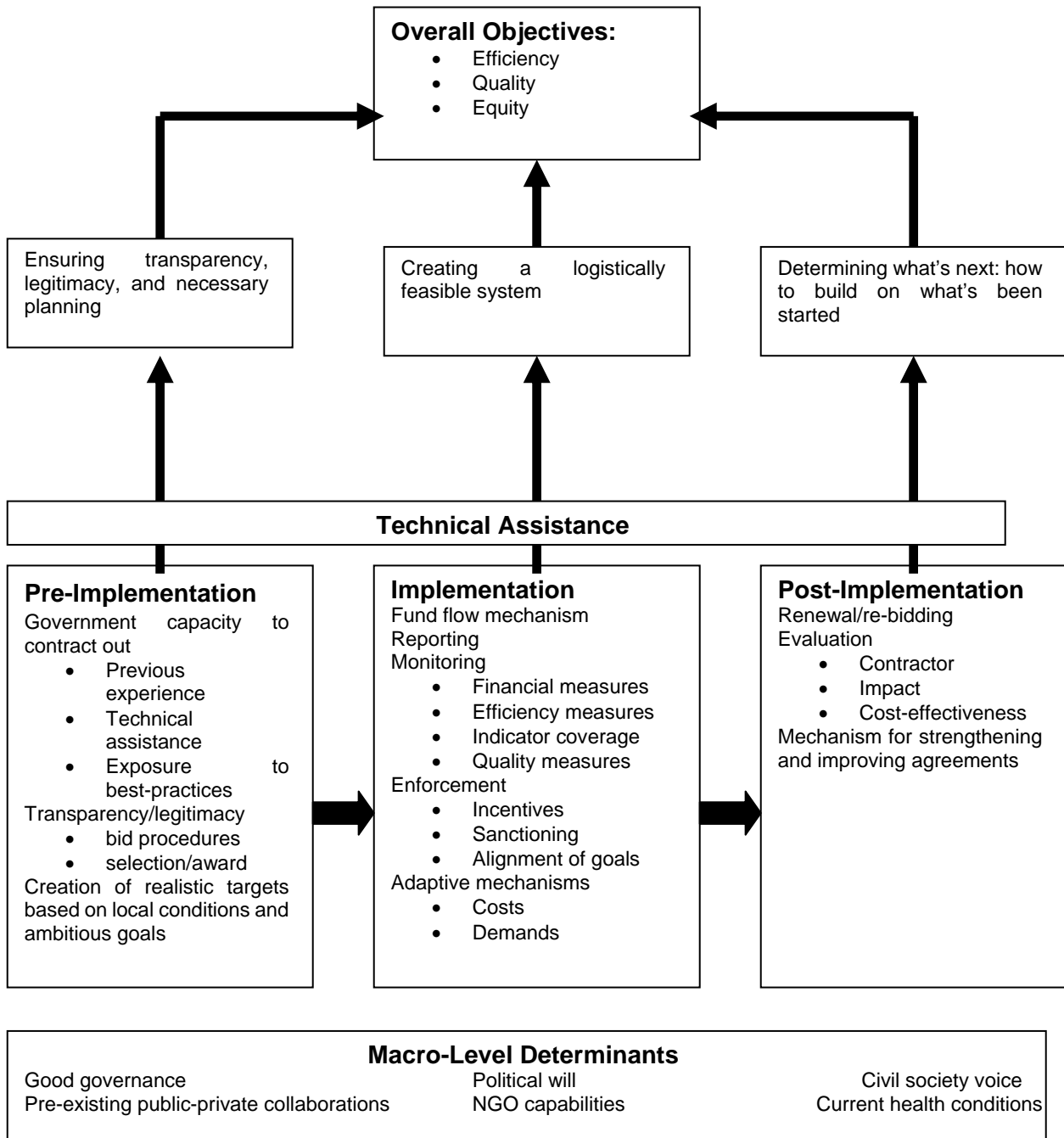
The following literature review considers “contracting” to refer to a formal or informal agreement between parties regarding the provision of explicit services or products within

specified guidelines. The precise nature of the contract varies widely from context to context, creating a wide range of contract types.

Liu et al. suggest a framework to analyze the monitoring and evaluation of a contracting-out intervention. The framework focuses on four main areas: first, the attributes of the intervention which include the services covered, the formality and duration of the agreement, the selection of the contractor, specification of the performance requirements, and payment mechanisms; second, the external environment including characteristics of the entire health sector and the financial and legal setting; third, the response of both parties both within and outside the intervention including how the contractor manages inputs, outputs and performance and actions of both to monitor performance as well as responses in the market and responses affecting other health services; lastly, the impact of the intervention as measured by changes in access, quality, equity and efficiency (2004).

This following literature review uses a modified version of their framework to assess contracting experiences. First it looks at the pre-implementation (planning) stage. Specifically, it delineates reasons that organizations give for choosing to contract out services, and methods used to ensure a successful bidding and award process. The review then summarizes processes used to develop appropriate performance targets. Next it looks at the implementation phase and various attributes of the contracting “intervention” that are generally considered to influence its success or failure, such as: clearly and objectively defined goals, goals and targets that accurately measure achievement; monitoring and evaluation that informs practice; and an incentive system that discourages underachievement and rewards success. Post-implementation topics are then addressed. Successful achievement of contracting targets and goals should be the ultimate determination of success and this analysis looks at both the ability of the contractors to achieve their targets as well as the appropriateness of the targets themselves. The targets are also assessed to see whether they appropriately measure access (coverage), quality, equity or efficiency. Additionally, reducing costs is often a motivation for contracting and projects are assessed for escalating costs. Finally, a general assessment of the external contracting environment is done.

**Figure 1: Framework for contracting health services**



(Source: authors)

*Limitations*

The ability to make causal claims regarding contracting and objectives is somewhat limited. Although many articles have been written which detail experiences with contracting, few have systematically evaluated the effectiveness of contracting. A 1998 overview of health service contracting literature cited “very little systematic data on the

impacts of these contracts” (Mills and Broomberg (1998)), a conclusion echoed elsewhere (McPake and Hongoro, 1995). While a broad review of primary health care and nutrition contracts was able to find ten studies meeting inclusion criteria for analyzing the effects of contracting on performance in the health sector (Loevinsohn and Harding, 2005), an analysis on private sector strategies for sexual and reproductive health was able to locate only one study meeting their inclusion criteria (Peters et al, 2004). To date, many analyses of contracting experiences are found in “grey literature” which have not been subjected to peer review, underscoring the need for caution in interpreting findings.

Of those studies that have explicitly analyzed contracting experiences, several studies analyzed are cross-sectional studies—studies which draw upon data measured at only one point in time—and are therefore more suited to highlighting associations between contracting and outcomes (e.g., effectiveness, performance) than cause-and-effect mechanisms. Use of time-series data by other studies enhances the ability to isolate “effects” of contracting on outcomes, but even those may contain methodological limitations as well. For instance, a contracting project in Bangladesh suffered from poor definition of project areas, project areas adjacent to control areas with no limitations for “crossing-over” and innumerable alternative services (Mahmood 2004, Mitra 2003); these factors limit the ability to attribute changes in outcomes solely to contracting. This is not to say that causal inferences are impossible. For instance, the review of primary health care and nutrition contracts noted earlier included a study in Cambodia that used a semi-randomized approach and where few external activities contributed to outcomes (Loevinsohn 2000, Schwartz and Bhushan 2004(a)). Nevertheless, relatively few studies have used methodologies capable of rigorously evaluating the effectiveness of contracting.

## **Findings**

To review the current knowledge on contracting as it relates to public provision of health services, including reproductive health and contraceptive coverage, this review analyzed six dimensions of contracting:

- the rationale used to justify contracting;
- bidding and selection processes;
- target-setting, in terms of process and usefulness;
- degree and usefulness of monitoring and evaluation;
- incentives and mechanisms of enforcement to achieve success; and
- effectiveness in achieving objectives.

### *Rationale*

Most often, the reasons cited for contracting projects related to reducing or limiting costs, improving quality, expanding or extending coverage or services, or speeding expansion (Abramson 1999, Slack and Savedoff 2001, Mills 1998, Nieves et al 2000). In Latin America, five studies aimed to “extend coverage, increase the availability of medicines and medical supplies, and improve the quality of care” and control costs or increase efficiency (pg. IX, Abramson 1999). Many of the projects included reproductive health services, child health, and contraceptive coverage. Two nutrition projects, one in Senegal and the other in Madagascar, used contracting to improve services on a large scale

(Marek 1999). Other claims of tapping public sector funding and avoiding bureaucracy were also cited (Mills, 1998). In Bangladesh one project used contracting to avoid expanding the staff size of the Ministry of Health and Family Welfare and was centered on primary health care with a focus on reproductive and children's health (Loevinsohn 2002), and in Nicaragua the primary rationale for service agreements was to create accountability and incentives (Jack, 2003). Additionally, in Cambodia, a project also explicitly sought to evaluate the marginal effectiveness of contracting over government-run provision of services (Bhushan et al. 2002) and five of the eight indicators assessed were related to reproductive health and contraceptive coverage.

#### *Transparency and competitiveness in the bidding process*

Transparency of the bidding process usually involved wide publication of the bid request and preliminary goals of the contract. In some cases, multiple stakeholders were involved in the development of the contract proposal (Loevinsohn 2000, Loevinsohn 2002, Eichler et al 2001, Nieves et al 2000). In other cases, outside consultants were brought in (Loevinsohn 2002). On the other hand, competitive bidding was not always possible or desirable. Two nutrition projects used non-competitive processes for overall execution of the project, but competitive bids for the implementation (Marek 1999). Contracts in Costa Rica negotiated with clinics that chose to form cooperatives (Gauri et al 2004). Hospitals in South Africa and Zimbabwe were contracted after initial construction by private companies or direct negotiation with a private provider in locations that aided the government's efforts to expand services (Mills 1998).

#### *Target-setting*

In terms of process, targets were often based on arbitrary estimations of both need and feasibility. Only one study specified using a baseline survey to assess current service provision levels (Loevinsohn 2000). However, literature and international goals, such as the Millennium Development Goals, were also used to set targets, and some targets were based on current operating knowledge (Eichler et al 1998). Additionally, in Haiti, a baseline survey, while not specified as helping to create targets, was used to establish a baseline for comparison and evaluation (Eichler et al 1998).

A number of articles mention the importance of appropriate targets (Abramson 2001, Mills and Broomberg 1998, Mills 2004). Worry about creating perverse incentives to over-report, cut services to reduce costs, or lower quality was also mentioned (Eichler 2001, Mills 2004).

In terms of the ability of agreed-upon targets to accurately measure performance, even with specified outcome measures and frequent monitoring, there was difficulty in attributing the effects to the contractors. In some cases the measures of achievement or efficacy were themselves flawed. A contract between the Costa Rican Social Security Fund and a cooperative, COOPESALUD, aimed to cut costs and increase coverage to underserved populations in a district. Although the contractor received an excellent rating by the evaluator, the outcome measures used had several flaws. For instance, the use of user-satisfaction surveys by the contractor was rated as "yes/no" and contained no information on whether the surveys were utilized to improve services or on the contents

of the surveys. Another measure reported impossible coverage rates of 160%, indicating a possible problem with the definition of the target population (Abramson 2001).

### *Monitoring and Evaluation*

The success of contracts often hinged on their ability to create accountability. Good monitoring ensured that the contract was being followed continuously and provided information that could be used to improve services. Several contracting projects suffered from poor monitoring (Abramson 2001, Nieves et al 2000, Rypkema 2002), and others either failed to specify a mechanism for monitoring or responsibility for monitoring was left unspecified (Mills 1997 as cited in Jack 2003, Mills 1998). However, some used frequent supervision, surveys, and reporting to monitor performance (Soeters and Griffiths 2003, Marek et al 1999).

In Nicaragua, the Social Security Institute utilized an objective supervisor by employing a physician at each contracted service provider to ensure quality, instead of relying on one employed by the service provider who might not be able to objectively supervise the service provision (Bonardi and Carrazana 2002).

Proper evaluation of contractor performance relies on good indicators and targets as mentioned above. Early contracts often neglected performance evaluation relying on a more relational approach (Mills 1998, Mills and Broomberg 1998) or did not specify performance benchmarks (Bonardi and Carrazana 2002). Other contracts did not appear to link monitoring to terms of the contract. For example, a project in Bangladesh analyzed a number of indicators, but it was not clear that the contractual relationship depended on the results of the analysis (Mercer 2004).

In some instances, incorrectly specified indicators led to an inability to evaluate performance (La Forgia et al 2005). In Costa Rica (Abramson 2001), poorly specified target populations resulted in outcome measures of greater than 100% and some quality outcomes that were too imprecise. In Guatemala (La Forgia et al 2005) targets were so poorly specified that NGOs were unable to comply.

Later experiences showed a growing sophistication. A long-term project in Guatemala evolved to create performance targets and develop an electronic system of data collection and performance monitoring (Nieves et al 2002).

### *Incentives and Enforcement*

Performance-based contracts have three main mechanisms for creating incentives to achieve agreed-upon targets: threat of termination, sanctions, and bonuses. Historically, most of the incentive came from the threat of contract termination (Nieves et al 2002, Mills 1998, Abramson 1999). More recently bonus and sanction systems were tried, wherein contracts include financial incentives to achieve targets (Abramson 2001, Eichler et al 2001, Jack 2003, Soeters and Griffiths 2003). Sanctions either took the form of a reduction in budget where non-compliance was met with set or sliding reductions in budget allocations or payment (Abramson 2001) or fines (Mills 1998). Bonus systems were usually a set payment and an additional “bonus” that was paid based on the

contractor's achievement of specified targets. Usually a percentage of the bonus was paid for near achievement, and the full bonus was paid for 100% achievement. In other contracts a sanction system was used. On the other hand, there was not always an incentive to over-achieve specified targets (Abramson 2001, Eichler et al 2001, Jack 2003).

In some instances contracting produced incentives to cut costs or increase efficiency. Block grants and allowing contractors to keep a portion of revenues or be affected by losses (often called "residual claimant status") encouraged contractors to make the most efficient use of fixed funds or maximize revenues by limiting costs (Gauri et al 2004, Cercone et al 2005).

### *Effectiveness in achieving objectives*

While some analyses suggested that greater efficiency can be achieved in short periods (Loevinsohn and Harding 2005), other evidence suggests that transaction costs may limit cost savings in efficiency and that quantity may substitute for quality (Mills and Broomberg 1998). A study by Eichler et al analyzed a project implemented by USAID and managed by Management Sciences for Health that used performance-based contracting to improve effectiveness of local NGOs in providing basic health services (2001). The study found significant improvements in child health but mixed results in prenatal care measures. A review by Peters et al (2004) of contracting in Haiti (Eichler, 2001) partly attributed the mixed results to a small sample size.

Failures of contracting in the Mills review were largely attributed to structural failures in contract design or implementation relating to the governments capacity to negotiate and monitor contracts. Several other studies report relatively unsuccessful experiences. In Zimbabwe, an analysis of a long-standing contract between the Ministry of Health and Wankie Colliery showed some cost efficiency, but ultimately uncontrolled total costs. Wankie Colliery had established a monopoly position in hospital services in the district so lack of competition as well as poor government capacity to negotiate and monitor the contract was a concern (McPake and Hongoro 1995).

Three programs in South Africa—a contract with five part-time district surgeon facilities in the Eastern Cape (Sinanovich and Palmer, 2000), the contracting out of emergency ambulance services between provincial and local government, and the contracting out of the delivery of school meals as part of a nutrition project (McCoy, Buch and Palmer, 2000)—were also relatively unsuccessful, showing high costs, low quality, contractual conflict, and administrative difficulties. A contracting project in Nicaragua between the Ministry of Health and providers (hospitals and health centers) "has not resulted in large changes" (Jack 2003, pg. 202) except that it eliminated user fees, but the cost-effectiveness of this elimination was undetermined (Jack 2003). A more recent study by Mills et al (2004) reported mixed cost-containment results in two South African experiences, one that contracted with individual general practitioners to provide primary care services and another with a major construction company to include primary care at its construction sites and local communities. But Mills et al also noted problems with a lack of standardization in line with government guidelines.

Other recent literature seems to suggest that contracting can improve health services as measured by increased target indicators in comparison to national statistics or baseline statistics (Mercer 2004, Ambramson 2001, Slack and Savedoff 2001, Loevinsohn and Harding 2005). Tanzania has shown some success in improving the infrastructure and increasing services and accessibility by contracting with church hospitals to compensate for a lack of district hospitals (Rypkema 2002), and two nutrition programs in Senegal and Madagascar show promise (Marek 1999). In Senegal the government signed “conventions” with the NGO Agetip to execute the program. In Madagascar the government hired contracted staff to manage the project. While both programs show positive health outcomes, the measurement and direct attribution of the results of contracting is weak (Marek 1999). Additionally, some evidence of cost-efficiency/cost-effectiveness of contracting can be seen, but Marek used overall health expenditure as a comparison to expenditure in the nutrition project and the project in rural Bangladesh was on a relatively small scale (Mercer 2004). Greater success was seen in Cambodia where substantial increases in antenatal care, trained birth attendants, and use of modern contraceptives were seen, as well as even larger improvements in immunization and vitamin A coverage (Schwartz and Bhushan 2004(a), Schwartz and Bhushan unpublished).

Although the increase in use of private sector contracts is slowly providing more evidence on the ability of contracting to improve efficiency, little attention has been paid to whether competitive contracting can succeed in improving equity of the distribution of primary health care services instead of favoring the non-poor. Equity is a major concern for health care provision in developing countries and contracting is often used to extend coverage to reach rural or disadvantaged groups (eg. Nieves et al 2000). Additionally, some payment systems create incentives to treat the poor differently, using cheaper drugs that are less effective or more cumbersome (Nzapfurundi 2002). While some evidence suggests that contracting and private sector management of health services tends to favor the non-poor, most of the cases did not specifically include equity measures as part of the contract.

On the other hand, Loevinsohn and Harding found several instances of contractors working in underserved areas (2005) and a Cambodia study showed that when contracts explicitly included targets for reaching the poor, contractors were able to meet their targets and greatly improve services and that they were more successful than the government at reducing inequities (Bhushan et al 2002, Schwartz and Bhushan 2004(a), Loevinsohn and Harding 2005). Early analysis of a project in Bangladesh also offers some promise (Mahmood, unpublished). Specifying in the contract that the poorest half of the population was to be targeted appears to have resulted in greater improvements for the poor. In addition, while not specifically targeted to improve equity, many reproductive health programs are aimed at poor populations.

However, even when increases in indicator levels were seen (Mercer 2004), it was difficult to directly attribute those successes to the contracting. Evaluating contracting is often difficult because of the need for appropriate comparison groups (Walsh 1995, Mills



and Broomberg 1998). For instance, Marek's comparison of cost in the nutrition program to overall health expenditure was tenuous. Programs in urban areas with numerous NGOs and alternative programs occurring at the same time make a comparison group difficult to identify, and using before and after assessments doesn't account for changes that might have occurred due to the natural improvement of conditions within an entire country (often called "drift"). Evaluating the effectiveness of targeting the poor has the added difficulty of not only needing objectively measurable health outcomes, but also viable and observable definitions of "poor."

## Case Study: Cambodia

**Sources: Loevinsohn 2000, Bhushan et al. 2002, Schwartz and Bhushan 2004 (a,b), Heard, unpublished, Schwartz and Bhushan, unpublished**

### *Rationale:*

Twenty-five years of conflict left Cambodia with limited health infrastructure. In the mid 1990's, the government received a grant from the Asian Development Bank (ADB) to implement a new coverage plan, based on World Health Organization (WHO) guidelines, to improve their healthcare system. Within this grant, a specific project was designed to improve service delivery and evaluate its success. Contracting was chosen largely to determine whether it worked better than government efforts to quickly improve services. Two contracting models were explored, contracting out all health services and contracting in management to manage the provision of care. Since equity was often a concern in contracting, a specific provision was written in the contract to target the poorest 50% of the population. The ADB and Cambodian Ministry of Health (MOH) wanted to see if contractors could effectively target the poor if it was explicitly written in the contract.

### *Key points:*

- *Wanted to quickly improve health services*
- *Specifically sought to determine whether contracting with NGOs would work better than using governmental provision of services*
- *Further wanted to investigate which model of contracting was more effective, contracting out total provision of services, or contracting in the management of the services.*
- *Wanted to see if including targeting the poor in the contract could reduce inequity in service provision*

### *Transparency and Legitimacy in the Bid Process:*

Contractors were expected to deliver the Minimum Package of services and Activities (MPA) with explicit targets established for specific services. Achievements of the contractual parameters were incorporated into an overall performance score upon which their level of success was to be measured. In addition to the MPA, contractors were expected to operate the district hospital and provide a series of complimentary services, such as emergency obstetrical care, minor surgery, and in-patient treatment of more serious illnesses. Bidders had to specify in their proposals the mechanisms they would use to ensure quality of care in health centers and hospitals.

Prior to bidding, the Cambodian districts were randomly assigned to be contracted-out, contracted-in, and non-contracted (to have standard government provision of services). Contractors bid based on the type of contract and services assigned to the district. Bids were accepted based on technical responses to the set of indicator target requirements.

Tender documents, including a formal contract, were developed by the MOH, an international consultant, and the ADB and stipulated the responsibilities of the contractors and the MOH.

Discussions were held between the MOH, NGOs, and other stakeholders to determine how the contracting process should be implemented. A committee was established within the MOH to oversee the initial phase of the contracting project, chaired by the Director General, Health Services.

Selection of contractors was done through an international competitive bidding process. The contracts were advertised in the international press and invitation letters were sent to consulting firms registered with the ADB. A “two envelope” system with separate technical and financial proposals was employed for evaluating bids. The technical proposals of the bidders were judged on the basis of the qualifications of the senior personnel nominated, the experience of the NGO/firm, and the project plan—the plan of action for delivering services. In Cambodia the evaluation was carried out by a committee comprising representatives of the MOH, the WHO, and Medicam, an association of NGOs working in the health sector there, along with an international consultant. If the bid was judged to be responsive, the financial proposal of the bidder was opened publicly. Contracts were awarded to the best responsive bid at the lowest price.

Although some firms were concerned about the broad scope of work, risks in bidding, the perceived instability of the government and the dislike of fixed price contracts, ultimately, sixteen bids from ten bidders were submitted for the eight available contracts (bidders were able to apply for more than one contract). Although at least two bids were submitted in all but two districts, several bids were unresponsive and two were too expensive (one for \$10.65 per capita per year, the other for \$13.50 as compared to average winning bids of \$5.04 for contracting out services and \$1.54 for contracting in management). This left three districts without acceptable bids.

Winning bidders in Cambodia (with one winning two contracts) were all international NGOs with previous experience working in Cambodia. In total, two contracts for contracting-out and three for contracting-in were signed. Four districts were designated for budget supplements while remaining under government control. An additional three districts were designated non-supplemented comparison districts.

*Key points:*

- *Expectations should be clearly laid out*
- *Careful attention should be paid to ensure transparency and legitimacy*
  - *Targets can be created by consensus committee, but should be based on explicit criteria*
  - *Bids can be judged by a consensus committee or outside consultant*
  - *A two envelope system to evaluate bids separates technical proficiency from financial considerations*
- *Competitive bidding relies on supply-side competition for efficiency*
  - *Technically responsive and financially viable bids require country expertise as well as management and health service provision knowledge which may not exist in every developing country*

*Target-setting:*

Prior to full project initiation in each country, a pre-contract household survey was administered. All twelve rural candidate districts in Cambodia were surveyed. Results from the baseline surveys, combined with consideration of proven effectiveness, ease of implementation, disease prevalence, and cost-effectiveness helped establish the MPA. The MPA was created so that it would significantly improve the health of the rural poor in Cambodia. Based on the MPA, objective standards for pre-qualification of prospective partners, service delivery, values of key performance indicators and specific performance targets were enumerated.

A significant amount of effort was put into developing objectively measurable indicator targets. Final decisions were based on the literature and baseline measurements, but also arbitrary and part of a political negotiation process. Generally, indicators were chosen to reflect priorities cited in the Millennium Development Goals and local needs. Targets were ambitious and included improving immunization coverage, vitamin A supplementation, the percentage of having a trained birth attendant at delivery, the percentage of facility deliveries, use and knowledge of modern contraceptives, provision of antenatal care and use of public facilities.

*Key points:*

- *Targets should be based on local needs and international standards such as:*
  - *Baseline surveys*
  - *Implementation considerations*
  - *Disease prevalence*
  - *Millennium Development Goals*
  - *Literature*
- *Final decisions ultimately a political negotiation*

*Monitoring and Evaluation:*

The pre-contract indicators for each district, as well as the targets to be achieved at the end of the five-year test were provided to all potential contractors prior to bidding, as well as to the managers of the government comparison districts that were receiving funding but not contracted.

In addition to standard health management information system reports on activities, contractors were required to maintain clear accounts and to provide the government with financial reports. The Cambodian MOH was permitted to monitor the contractors' health centers and hospitals throughout the life of the contract and have regularly done so using a standard checklist. Each contract was for four years and has explicit terms for termination by either the client or the contractor.

Periodic spot checks were performed by randomly selecting patients for home interviews. Interviews included questions regarding timing of the visit, patient satisfaction with the service, and views about fees paid. Monitoring was shared between the NGOs and the MOH operational district director. The information was used for management and evaluation purposes. Poor results were met with supportive guidance for contractors and managers. The monitoring was done both by the MOH and the contracting agency as part

of the contract requirements, and household and facility surveys were done by a third party to evaluate target achievement by the project at midterm and at completion, two and four years into the project respectively.

Household surveys were used to assess outcomes of the percentage of fully immunized children, coverage of vitamin A supplementation, antenatal care, percentage of facility deliveries, percentage having a trained birth attendant at delivery, use of modern contraception, knowledge of birth spacing methods, and use of public facilities. A measure of equity of distribution of coverage was also calculated to determine whether services become more or less “pro poor.” An analysis was also done of financial reports (individual out of pocket expenditures and district level recurrent expenditures).

*Key points:*

- *Clear targets are important*
- *Periodic spot checks help to ensure contractors are on track and aid in performance improvement*
- *Midterm and Final household surveys by an outside group to assess performance avoid incentives to misreport*
- *Outcome-based targets help focus contractors on measurable effects*
- *Cost assessment should look at difference in district expenditures as well as individual out of pocket spending*

*Incentives and Enforcement:*

Most of the incentive to fulfill contractual obligations came from the threat of contract termination if targets were not met. Target achievement was measured by a baseline survey and follow-up midterm and final surveys. It was originally planned to include additional incentives through a bonus/penalty system where both positive and negative pressure would be applied. The idea was to reward over-achievement with a bonus and underachievement with no bonus. However, due to lack of funds and the not-for profit status of the contractors, the bonus plan was removed prior to contract creation. The penalty system is being implemented in the second phase of the project. On the other hand, complete failure to improve was to result in contract termination, and failure to improve by less than a percentage of the required target was to result in probationary procedures with closer monitoring. One contract in Cambodia was terminated.

*Key points:*

- *Incentives often come primarily from threat of contract termination*
- *A system that rewards achievement and overachievement increases motivation*

*Effectiveness in achieving objectives:*

It is likely that most of the changes in health service outcomes were due to the project. Because contractors generally had a larger budget than the government-run districts within the project, it is somewhat unclear whether the effect is due to the way in which the contractors operated or the extra funding they received. However, since the project began at a time when there were few other sources of health care, virtually all of the

changes can be attributed to the project's implementation, both in government districts and contracted districts.

Contracting out districts were bid out at about \$5.04 per capita, contracting in at \$1.38. Inclusive of staff salaries and other expenditures for which the contractors were not responsible, the cost of contracting in was closer to \$2.50. The government-run districts spent about \$1.65. Technical assistance for district management provided by NGOs (both types of contracted districts) and salaries paid to health care workers (especially in contracted out districts) accounted for most of the difference in expenditures between contracted and government districts.

A bivariate analysis at midterm, assessing outcome measures of percentage of fully immunized children, coverage of vitamin A supplementation, antenatal care, percentage of facility deliveries, percentage having a trained birth attendant at delivery, use of modern contraception, knowledge of birth spacing methods, and use of public facilities. by district, showed that, overall, contracted districts outperformed government districts, CO districts performed better than CI districts, and that these differences were statistically significant at the 5% level or better. It also showed decreases in out-of-pocket spending for CO districts, and that contracted districts provided more than proportional benefits to the poor, which was largely attributed to increased use of public services by those in the bottom 50% socio-economically (Bhushan et al 2002, Schwartz and Bhushan 2004(a), Schwartz and Bhushan 2004(b)).

After conclusion, a more thorough analysis supported the midterm findings that contractors outperformed government districts in health outcomes, targeted the poor, and decreased out-of-pocket spending. In addition to the bivariate results, multivariable probit regression was performed for each outcome using district dummies to evaluate the effect of contracting. Overall, contracting districts had larger effect estimates than government districts for predicting better outcomes (Schwartz and Bhushan, unpublished).

*Key points:*

- *Contracting can quickly improve health services*
- *Contractors are able to effectively target the poor when equity targets are explicitly included in the contracts*
- *Technical assistance and higher salaries can be largely responsible for increased costs*

## Case Study: Costa Rica

**Sources: Contract analysis based on Abramson 2001 and Gauri et al 2004, results based on Gauri et al 2004 and Cercone et al 2005**

### *Rationale:*

Remarkable progress has been achieved in the health of the Costa Rican population over the past 20 years through a universal social security system and large government expenditures. Rising costs, decreasing quality and increasing demands for better quality and increased attention to client needs created pressure to make structural changes to the health system. In the late 1980's the government began to construct a long-term strategy, based on earlier decisions to shift all responsibility for health care provision to the Caja Costarricense de Seguro Social (Costa Rican Social Security Fund (CCSS)) and strengthen the regulatory and policy oversight role of the Ministry of Health. By 1994 much had been learned but little had been done to introduce real change.

To address problems of inefficiency, declining quality and increasing dissatisfaction, the government launched a reform that included increasing the participation of the private sector as a provider of services within a regulated framework. The main objective of the reform was to address the problems in the system through the implementation of structural reforms, focusing on better value for spending in the social security system. Structural reforms were along three branches, organization, financing, and delivery of services. Additionally the reforms used a multidimensional approach including strengthening primary healthcare through an integrated healthcare model, improving efficiency and quality with output based payments, and separating the financing, purchasing and provision of services.

In 1997 CCSS entered into performance contracts with seven hospitals and five health areas. The contracts standardized expectations and outlined performance measures to guide providers. For example, the contracts clearly established the population and types of services to be covered. Outcome measures were established for provision of services (coverage rates and compliance with protocols), quality, organization and management capacity, and billing documentation. The contract also laid out a system for monitoring and evaluation including incentives and sanctions.

However, problems extending services to the metropolitan areas due to restricted hiring and a hesitancy of the middle-class to use public services, spurred a decision to purchase services from the private sector. The aim was to increase the capacity of the primary care network and bring essential services closer to the population without increasing public investment.

### *Key points:*

- *The government wanted to extend services to the hard-to-reach metropolitan population*
- *CCSS needed to reduce costs and hoped to leverage private sector investment capacity, management experience and flexibility to increase efficiency*

- *CCSS wanted to focus more attention to client needs*

*Transparency and legitimacy in the bid process:*

CCSS supported the formation of COOPESALUD, a health cooperative run by former CCSS employees. The first partnership between CCSS and the private sector was with COOPESALUD. The literature is unclear on the selection mechanism, but it did not appear to have been competitively bid. Additional cooperatives followed shortly thereafter.

*Key points:*

- *Competitive bidding is not always possible or desirable*
- *Current relationships with known organizations may provide a foundation from which a more formal arrangement can clarify roles and expectation as well as create accountability through performance-based payments*

*Target-setting:*

The contract objectives were clearly defined and organized around three areas, organization (optimize use of resources), service delivery (satisfying health needs of the population, improvement of access to healthcare, working for the benefit of the individual), and quality (gaining knowledge of user opinions on health services and improve user satisfaction). More loosely specified is the desire to improve efficient use of funds.

Targets to measure organization, service delivery and quality were mostly based on coverage rates or whether activities had taken place and there was no baseline against which to compare. Organizational indicators were compulsory and rated yes/no. Service provision measures were quantitative and relied on coverage rates for various services such as reproductive health counseling and service provision, vaccinations and child growth monitoring. They were also based on attainment of a minimum requirement or standard (for example, the percentage of files that met the minimum standard).

Some of the target indicators were straight forward, but others had problems with specification. For instance, one target was 90% prenatal coverage within the target population, but the target population was poorly defined. Quality indicators were based on “effectiveness” and “productivity”, but these terms were undefined. Additionally, contractors were rated on a yes/no basis making it difficult to determine what level of effectiveness or productivity was attained.

*Key points:*

- *Clear definition of objectives is important but not sufficient*
- *Outcome measures should reflect the type of action or outcome being measured*
  - *Organizational measures can often be rated yes/no based on whether an activity occurred or not*
  - *Service provision measure are likely better measured by coverage rates (percentages or ratios)*



- *Quality measures may better be measured on a sliding scale rather than yes/no*
- *Service provision measures should clearly define both the target population and the desired target*
- *Service provision measures should reflect baseline measures to understand how great an improvement is needed both in percentage points and in percentage increase*

*Monitoring and Evaluation:*

The contracts included an evaluation protocol that called for contractor evaluations every six months. The evaluations included interviews, site observation, provider reports, electronic data, and other relevant information. The contract additionally stipulated how the results would be used but did not include discussion of how they related to the renegotiation of the contract. Additionally, no provision for ongoing monitoring was explicitly mentioned in the contract.

Outcome targets included mostly population based targets (coverage rates). Quality requirements sometimes stipulated that a certain portion of the total be achieved. For example, for growth and development of children, the target was 90 percent, but the quality requirement was that four of the six criteria (classification of risk, iron supplementation, examination of nutritional status, post-natal care within 28 days, development evaluation through age graphing, neonatal screening of infants within seven days) be met. This loose requirement essentially lowered the acceptable standard.

*Key points:*

- *While evaluation is important, a systematic monitoring process should be implemented to efficiently address problems as they occur*
- *Regular evaluations at reasonable time intervals are essential to measure contractor compliance with the contractual agreement*
- *Evaluations should utilize more than one kind of information. Use of interviews and focus groups, electronic data, and surveys in combination complement each other and aid interpretation when there is missing information*
- *Population based thresholds provide little incentive to overachieve unless specific measures are created to reward it*
- *Quality requirements should be carefully determined so as to encourage success rather than allow for lower standards*

*Incentives and Enforcement:*

Overall results less than 90 percent of the agreement were subject to directly proportional budget reductions up to 2.5 percent of the total budget. Additionally, lack of compliance with specified level of materials and equipment, as measured by periodic audits, were cause for contract termination.

*Key point:*

- *Budget reductions in a poorly functioning system may make it even more difficult for the contractor to achieve the specified targets. A system that includes sanctions or budget decreases should also include technical assistance or guidance in how to make improvements*

*Effectiveness in achieving objectives:*

Since there were no baseline measures, it is hard to determine what can be attributed to the contractor's performance. However, comparisons of CCSS clinics and cooperatives such as COOPESALUD note that inherent differences in corporate culture of organizations may drive some to convert to cooperatives and those characteristics may be what makes cooperatives perform differently from CCSS clinics. It is also possible that local population differences, rather than organizational differences, explain the differences in performance.

Nevertheless, a report comparing costs between two cooperatives and five CCSS clinics in 1991 showed that variances in expenditures and treatment were higher in CCSS clinics (Herrero Villalta Asociados 1992 as cited in Gauri et al 2004), but was based on cross-sectional data and a non-random sample. A comparison between four cooperatives and four CCSS clinics between 1990 and 1994 found that cooperatives had higher expenditures, but was based on non-random selection of CCSS clinics and incomplete budget data (Durán et al 1995 as cited in Gauri et al 2004). Two analyses of three cooperatives and four CCSS clinics found that cooperatives had higher but declining expenditures from 1992-1998 but were also based on non-random samples (Picado 1999 and Rodríguez 1999 as cited in Gauri et al 2004). Additionally, the first performance-based contracts were signed in 1997 or 1998.

Gauri et al's comparison from 1990-1999 of cooperatives and the "universe of CCSS clinics at the same level of complexity" (2004, pg. 295), was more thorough. On the other hand, another reference to the same analysis states there were four CCSS clinics and three cooperatives in the comparison (Cercione et al 2005). Gauri et al's analysis included years without management contracts. Trend lines indicate that cooperatives appeared to provide fewer general visits, lab tests and drugs than CCSS clinics, and patterns for specialty visits, emergency visits and expenditure were less clear. While cooperatives provided fewer lab tests and medicines, they did so for the entire decade and started at lower levels as well. Emergency visits seemed to see a dramatic increase over the decade, but leveled out from 1997-1999 while CCSS clinics started at a higher level but remained more or less constant with a small spike from 1997-1999 (Gauri et al 2004).

Population mortality rates appeared higher near cooperatives, but a t-test showed the difference was not statistically significant. A multivariable regression analysis showed that cooperatives provided more general visits per capita, more dental visits, and fewer specialty visits while non-medical, emergency, and first time visits were indistinguishable. The authors interpreted this to mean that cooperatives cut costs by substituting generalist for specialist services (reducing specialist referrals) and offered more dental services, but that norms and government oversight prevent them from cutting the most essential services. Additionally, cooperatives authorized fewer sick days, performed fewer lab tests,

and gave out fewer medications. The authors point to the lack of difference in emergency visits and acceptance of new patients as *prima facie* evidence that the cooperatives weren't "skimping" on care (pg. 297, Gauri 2004). On the other hand, management contracts accounted for no significant differences in any indicator beyond the effect of being a cooperative. But, data on management contracts was limited in comparison to other data (Gauri 2004).

Another analysis was more specifically concerned with the contracting aspect of the cooperatives (Cercone et al 2005), however the contracted cooperatives generally had higher targets than the CCSS clinics to which they were compared, and measures were based on percentage achievement of target rather than total achievement.

Cercone et al found that in five of the seven indicators analyzed the contractors outperformed CCSS clinics by about ten percentage points and in one case as many as twenty. In two cases, elderly care and coverage of children, CCSS clinics outperformed contractors but the difference was partly due to higher targets for the contractors and the difference was one to four percentage points. Additionally, user satisfaction surveys showed that CCSS members were more satisfied under the contracted model (2005).

*Key points:*

- *Differences in corporate culture between CCSS clinics and COOPESALUD cooperatives may have accounted for some of the differences in effectiveness; it is also possible that local population differences, rather than organizational differences, explain the differences in performance*
- *Contractors were able to achieve higher targets with greater success than comparable CCSS clinics*
- *The cooperative framework seemed to produce financial incentives to find a less costly mode of service delivery*
- *The regulatory functions of the government, the organizational structure of the cooperatives (in that they were run by doctors and nurses who might be more motivated to care for patients and less likely to skimp), and perhaps the management contracts, seemed to be able to prevent skimping of service and decreases in quality of care*
- *Careful monitoring of quality of care and access to services is still warranted to ensure financial incentives to cut costs do not override responsibilities to provide quality care*
- *Original claimant status (keeping revenues) can encourage more thoughtful expenditure*

## Conclusions and Recommendations

### *Summary of main findings*

The above analysis of contracting suggests several trends that inform the LEAD-Philippines project in their consideration of contracting:

1. Reasons for contracting usually revolve around increasing or extending coverage, improving quality, reducing cost, or increasing efficiency of services such as reproductive health, child health, and contraceptive coverage.

The strengths of contracting rely on the ability of contracts to create accountability. Basing budget allocations or payment upon performance motivates the provider to achieve expectations set out in the contract.

The rationale for contracting with the private sector also relies on theories that the private sector is more efficient due to competition and that the private sector is better able to respond to changing conditions due to increased flexibility in management options. Additionally, contracting with the private sector can be advantageous when the government lacks sufficient capacity to improve or expand services within the current budget or within a limited timeframe.

2. Competitive bidding can create supply-side efficiency and therefore lower costs.

Increased competition taps market forces that push competitors to become more efficient so that they can bid at the lowest possible price and win the contract. If competitive bidding is used, it is important to implement clear measures to ensure transparency and legitimacy in the bidding and selection process or corruption could eliminate gains from competition. Lack of sufficient qualified bidders will also limit cost-savings or even increase costs due to costs of negotiating the contract, especially if no efficiency is gained.

3. Clear objectives and clearly defined goals or targets are essential.

Without clear objects it is difficult to define appropriate targets to obtain the ultimate goals. A plan to reduce spending may inadvertently reduce the quality of services unless a goal of high quality services is clearly stated. Once objectives are understood, targets should be carefully designed to achieve the objectives. A thorough understanding of current conditions will help guide determinations of what is both logistically and politically possible, while still providing ambitious goals. Methods to gain knowledge that will help identify ambitious yet achievable targets include baseline surveys, collection of current data from paper or electronic records, interviews, focus groups, and national statistics. However, some negotiation may be necessary to provide a comfort level to both the buyer and contractor.

4. A system of monitoring and evaluation based on facts and current information is essential.

Without constant monitoring it is impossible to know whether progress is being made and therefore difficult to address problems. A system of monitoring that allows collection of useful information without being too burdensome, with a specified mechanism to utilize the information to improve service delivery, is important. Unannounced spot checks are more effective at uncovering problems than scheduled evaluations. User surveys can also aid in monitoring and evaluation. Evaluation of contractor performance should be based on contractually designated measures that are clearly set forth at the beginning of the contract. Using outside groups to perform evaluations reduces possibilities for cheating or misreporting.

5. Bonus and sanction systems help create incentives to achieve targets, but should be carefully designed so as not to create perverse incentives.

Specifying a limited number of targets or poorly created targets can inadvertently cause contractors to concentrate on some areas and neglect others. Systems that include sanctions without rewards could result in lower morale or reduced funding in an already struggling district or facility. Poor performance should be met with guidance and constructive advice as well as sanctions or lack of rewards. In addition, buyers should consider possible consequences not only to poor performance or achieving goals, but also for over-achievement.

6. Isolating the effects of contracting on population health or health service delivery is difficult.

A host of constraints limit the ability to make causal inferences regarding the marginal effect of contractors compared with government or non-contracted service delivery. Differences in comparison populations, external factors such as other service providers, budgets or funding, and organizational culture can all contribute to differences in outcomes. Projects with isolated populations, clearly differentiated intervention and control populations, and some “luck” that few external factors change over time, will aid in the ability to identify the effect of contracting. However, it is still important to consider the effects of funding, regional differences, and unobservable factors.

7. With a carefully designed contract and capable contractors, contracting can often result in large improvements in service delivery including quality and equity of care and in cost reductions.

Several recent projects have shown dramatic improvements in coverage rates and distribution of coverage. While care must be taken to create clear and appropriate contracts, the benefits can be quick and dramatic. Allowing retention of revenues can further contribute to incentives to find cost-saving mechanisms for quality service delivery. However, good regulation and proper motivation should be used to ensure that desires for cost-saving do not over-run the requirements for quality and equity.

8. The level of contractor autonomy may significantly affect their ability to achieve targets or improve efficiency.

Contractors that must function within government procurement structures or who do not have full authority over staff may not be able to achieve as large improvements in efficiency as those with more control.

### *Recommendations*

1. Clearly define the objectives and rationale for contracting

If the objectives are not more likely to be met through contracting, it may not be the right strategy. Clearly defining the objectives will permit the creation of more appropriate targets which will therefore allow a better measure of whether you are achieving your objectives.

2. Take time to gather current, local information to guide target development.

A solid understanding of local conditions will allow for ambitious targets without creating unachievable one. It will also elucidate areas that are in greatest need of improvement and allow efforts to be focused where they are most needed. The level of autonomy that the contractor will have is an important consideration when creating targets.

3. Create a system of monitoring and evaluation that provides needed information without being overly burdensome.

Monitoring and evaluation both help improve performance and determine whether contractual obligations are being met. The accountability created by a contract is only fully realized with accurate measures and actionable consequences.

4. Reward good performance with bonuses and poor performance with constructive guidance and in some instances, sanctions.

Consider what will happen when contractors overachieve as well as underachieve. Thresholds provide little incentive when reached. Once one has reached a threshold there is little incentive to exceed it, and when one is far away from the target, efforts may be focused on targets that are perceived as more attainable creating little incentive to get “close.” A project in Nicaragua had a sliding scale of bonus and a project in Costa Rica had a sliding sanction. Neither rewarded overachievement. Incentive systems should consider actions for outcomes for the full range of substantially below to substantially above expectations. For instance, it may be possible to implement a system of limited payment reductions on a sliding scale for underachievement, full payment for achievement, and a bonus for overachievement.

5. Carefully design the payment mechanism so that perverse incentives are not created that encourage cream-skimming, skimping on services, reductions in access, or inappropriate treatment.

Block grants, without sufficient regulation or monitoring, can encourage service reduction as expenditures near the ceiling. Capitation grants can cause wasteful treatment to increase revenues. Allowing some control over potential profits or losses helps to encourage cost-saving, while including quality indicators can reduce incentives to skimp on services.

6. Separate the evaluation of the contractor's performance from evaluations of the program's success.

Indicators that appropriately measure a program's ability to improve health or health care may create incentives to misreport outcomes. For example, tracking the number of cases treated can be useful to determine whether utilization of services is increasing, but it can also tempt contractors to over-report if strict numbers are included in their contractual evaluation. On the other hand, indicators that accurately measure a contractor's efforts may not be able to determine the effects of the program itself. A large improvement in immunization coverage may partly be due to a new provider in the area, but if the targets are realized, the contractor should be rewarded. Similarly, if a provider pulls out, it remains the contractor's responsibility to reach the agreed upon target although it will likely be more difficult to achieve. Clearly in both cases the "effect" of the program is not to have increased coverage rates from baseline measurements to the target. The "effect" needs to account for the outside activities that occurred concurrently.

## References

- Abramson, Wendy. 2001. "Monitoring and evaluation of contracts for health service delivery in Costa Rica." *Health Policy and Planning* 16(4): 404-411.
- Abramson, Wendy. 1999. "Partnerships between the Public Sector and Non-governmental Organizations: Contracting for Primary Health Care Services; A State of the Practice Paper." Partnerships for Health Reform Project, Abt Associates, Baltimore, MD.
- Bonardi, Robert and Carlos Carrazana. 2002. "Monitoring Quality and Performance: Contracting of Private Health Care Services in Nicaragua." Commercial Market Strategies, Washington DC.
- Bhushan, Indu, Keller, Cheryl, and Schwartz, Brad. 2002. "Achieving the twin objectives of Efficiency and Equity: Contracting Health Services in Cambodia." ERD Policy Brief No. 6. Asian Development Bank. Manila, Philippines.
- Cercone, James, Rodrigo Briceño, Varun Gauri. 2005. "Chapter 4: Contracting Primary Health Care Services—The Case of Costa Rica" in *Health Systems Innovations in Central America, Lessons and Impact of New Approaches*. Ed. Gerard M. La Forgia. World Bank Working Paper No. 57. World Bank, Washington DC.
- Eichler et al. 2001. "Output-Based Health Care: Paying for Performance in Haiti." Public Policy for the Private Sector. Note Number 236. The World Bank. Washington DC.
- England, R. 2000. "Contracting and Performance Management in the Health Sector." DFID Health Systems Resource Centre. London, England.
- Gauri, Varun; James Cercone, and Rodrigo Briceño. "Separating financing from provision: evidence from 10 years of partnership with health cooperatives in Costa Rica." *Health Policy and Planning*. 19(5): 292–301.
- Heard, Anna. 2005. "The Role of Management Capability in the Success of Contracting Primary Healthcare Services in Cambodia." Master's Thesis. Harvard School of Public Health. Unpublished.
- Jack, William. 2003. "Contracting for health services: an evaluation of recent reforms in Nicaragua." *Health Policy and Planning*. 18(2): 195–204.
- La Forgia, G., Patricia Mintz, and Carmen Cerezo. 2005. "Chapter 1: Is the Perfect the Enemy of the Good? A Case Study on Large-Scale Contracting for Basic Health Services in Rural Guatemala" in *Health Systems Innovations in Central America, Lessons and Impact of New Approaches*. Ed. Gerard M. La Forgia. World Bank Working Paper No. 57. World Bank, Washington DC.



Liu et al. 2004. "Contracting for Primary Health Services: Evidence on Its Effects and a Framework for Evaluation." Partners for Health Reform Plus, Abt Associates; Baltimore, MD.

Loevinsohn, Benjamin. 2000. "Contracting For The Delivery Of Primary Health Care In Cambodia: Design And Initial Experience Of A Large Pilot Test." World Bank, Washington DC.

Loevinsohn, Benjamin. 2002. "Practical Issues in Contracting for Primary Health Care Delivery: Lessons from Two Large Projects in Bangladesh." World Bank, Washington DC.

Loevinsohn, Benjamin, and April Harding. 2005. "Buying results? Contracting for health service delivery in developing countries." *The Lancet* 366: 676-81.

Mahmood, Jamal. 2004. Final Aide Memoire of the Loan Review Mission 1 April to 5 May 2004. Asian Development Bank, Manila.

Management Sciences for Health. "The Local Enhancement and Development for Health Project—LEAD."  
[http://www.msh.org/programs/philippines\\_lead.html](http://www.msh.org/programs/philippines_lead.html)  
[Accessed 08/09/2005]

Marek, T. et al. 1999. "Successful contracting of prevention services: fighting malnutrition in Senegal and Madagascar." *Health Policy and Planning* 14(4): 382–389.

McCoy, David, Eric Buch, and Natasha Palmer. 2000. "Protecting efficient, comprehensive and integrated Primary Health Care: Principles and Guidelines for Inter-Governmental Contracting/Service Agreements." Health Systems Trust, Victoria Embankment.

McPake, Barbara and Charles Hongoro. 1995. "Contracting Out of Clinical Services in Zimbabwe." *Social Science and Medicine*. 41(1): 13-24.

Mercer, A. et al. 2004. "Effectiveness of an NGO primary health care programme in rural Bangladesh: evidence from the management information system." *Health Policy and Planning* 19(4): 187–198.

Mills, Anne. Improving the efficiency of public sector health services in developing countries: Bureaucratic versus market approaches. Departmental publication No. 17, London School of Hygiene and Tropical Medicine, 1995.

Mills, Anne. 1998. "To contract or not to contract? Issues for low and middle income countries." *Health Policy and Planning* 13(1) 32-40.

Mills, Anne and Jonathan Broomberg. “Experiences of Contracting: An Overview of the Literature.” *Macroeconomics, Health and Development Series 33*. World Health Organization (WHO), Geneva, December 1998.

Mills, Anne, et al. 2004. “The performance of different models of primary care provision in Southern Africa.” *Social Science & Medicine* 59 931–943.

Mitra and Associates, Bangladesh, and Johns Hopkins University. Mid-term Household Survey 2003: Bangladesh Urban Primary Health Care Project. Draft Report, 2003.

Moore, M. 1996. “Public sector reform: Downsizing, restructuring and improving performance. WHO Discussion Paper No. 7. WHO, Geneva.

Nieves, I.; G. M. La Forgia; J. Ribera. 2000. “Large Scale Government Contracting of NGOs to Extend Basic Health Services to Poor Populations in Guatemala.” IESE; Inter-American Development Bank (IDB) / World Bank, Washington DC.

Nzapfurundi Chabikuli, et al. 2002. Quality and equity of private sector care for sexually transmitted diseases in South Africa. *Health Policy and Planning* 17: 40-46.

Palmer, N. 2000. The use of private-sector contracts for primary health care: theory, evidence and lessons for low-income and middle-income countries. *Bulletin of the World Health Organization* 78 (6).

Peters, David H., Gita G. Mirchandani, and Peter M. Hansen. 2004. “Strategies for engaging the private sector in sexual and reproductive health: how effective are they?” *Health Policy and Planning* 19(Suppl. 1): i5–i21.

Quality Assurance Project (URL). Measuring Quality and Improving Quality. <http://www.qaproject.org/>  
[Accessed 4/21/05]

Rypkema, Sake. 2002. “Lessons from health sector experiences in contracting in Africa.” *Medicus Mundi International. Newsletter* 68, Spring 2002.

Schwartz, J. Brad, and Indu Bhushan. 2004(a). “Reaching the Poor With Primary Health Care Services: Contracting In Cambodia”

Schwartz, J. Brad, and Indu Bhushan. 2004(b). “Improving immunization equity through a public–private partnership in Cambodia.” *Bulletin of the World Health Organization*. September, 82 (9).

Schwartz, J. Brad, and Bhushan, Indu. Unpublished. “Improving the Performance and Equity of Primary Health Care: Contracting in Cambodia.” Asian Development Bank, Manila. 2004.

Sinanovic E, Palmer N. 2000. "Primary health care contracting study: Eastern Cape district surgeons." Research Report, Health Economics Unit, University of Cape Town.

Slack, K. and Savedoff, W. 2001. "Public Purchaser-Private Provider Contracting for Health Services: Examples from Latin America and the Caribbean." *Sustainable Development Department Technical Papers Series*. Inter-American Development Bank.

Soeters, Robert and Fred Griffiths. 2003. "Improving government health services through contract management: a case from Cambodia." *Health Policy and Planning* 18(1):64-83.

Walsh, K. (1995) "Public services and market mechanisms. Competition, contracting and the new public management." MacMillan Press, London.

## Annex

**Table 1a: Country studies – dimensions of contracting**

Source(s)	Country(ies)	Rationale	Bid process	Target-setting
Bhushan et al. (2002), Loevinsohn (2000, 2002), Soeters and Griffiths (2003)	Cambodia	Evaluate marginal effectiveness of contracting vs. government provision. Avoid expanding staff size of Ministry of Health and Family Welfare.	Involvement of multiple stakeholders in development of contract proposal.	Targets developed from baseline survey to assess current service provision levels, previous literature, MDGs.
Abramson (1999, 2001) Cercone et al (2005), Gauri et al (2004)	Costa Rica	Extend coverage; increase availability of medicines and medical supplies; improve the quality of care; control costs; increase efficiency	Only cooperative-formed clinics eligible.	Clearly specified in contract.
Nieves et al (2000)	Guatemala	Extend coverage.	Virtually every group that submits a proposal is granted a contract.	Poorly specified, but generally to improve services.
Eichler et al (2000, 2001, 2001, OBA online)	Haiti	Standardize services. Increase NGO capacity to delivery health services.	Involvement of multiple stakeholders in development of contract proposal.	Current operating knowledge used to set targets.
Marek et al (1999)	Madagascar & Senegal	Improve nutrition, reach rural poor.	Non-competitive processes for execution of project; competitive bids for implementation.	Based on previous projects in India and Tanzania.
McPake and Hongoro (1995)	Zimbabwe	Increase efficiency.	Long-standing.	
Jack (2003)	Nicaragua	Improve hospital performance.	Non-competitive, with established hospitals.	

<b>Source(s)</b>	<b>Country(ies)</b>	<b>Rationale</b>	<b>Bid process</b>	<b>Target-setting</b>
Bonardi and Carrazana (2002)	Nicaragua	Expand reproductive health care.	Certification requirements.	Long-standing.
Mills et al (2004)	South Africa	Compares 5 models. 2 contracting: 1 with general practitioners to increase coverage to poor and underserved, second between mining company and facility for care for its employees.	Long-standing.	Long-standing.
Palmer and Mills (2003)	South Africa	GP contracts to extend coverage.	Long-standing.	Fee-for-service specified.
Loevinsohn (2002)	Bangladesh	One to improve nutrition (BINP) and avoid expanding staff size of Ministry, second to improve urban primary health care (UPHCP).	BINP-bid selected on technical quality for fixed price. UPHCP-competitive bid.	Involvement of multiple stakeholders in development of contract proposal.
Mercer et al (2004)	Bangladesh	Reach rural poor.	Competitively bid.	Based on current operations/essential package of services specified in health reform.

**Table 1b: Country studies – dimensions of contracting**

Source(s)	Country(ies)	Monitoring and Evaluation	Incentives & Enforcement	Effectiveness in achieving objectives
Bhushan et al. (2002), Loevinsohn (2000, 2002), Soeters and Griffiths (2003)	Cambodia	Monitoring and evaluation done both by contractor and government.	Bonus for achievement of targets.	Contractors outperformed government controls in almost every indicator. Increased costs were mostly due to higher salaries and technical assistance.
Abramson (1999, 2001) Cercone et al (2005), Gauri et al (2004)	Costa Rica	Performed every 6 months.	Contract specified how outcomes of monitoring were to be used but not how they related to renegotiation of the contract. However, budget reductions were specified for failure to achieve at least 90% of targets.	Mixed results on cost-containment; possible increased efficiency through more appropriate referrals. Outcomes unclear: one report showed no difference, one showed contractors outperformed (but contractors generally had higher targets than controls).
Nieves et al (2000)	Guatemala	Monitoring first consisted of financial checks; later contracts monitored performance through targets/electronic system of data collection.	Threat of termination	Better immunization rates, better service coverage.
Eichler et al (2000, 2001, 2001, OBA online)	Haiti	Third party hired to measure baseline and end-of-pilot performance.	Financial incentives included to achieve targets--95% of original agreement guaranteed, 10% additional "at risk" and awarded based on performance.	Improvements were: significant in immunization, moderate in child health, small in perinatal care and contraceptive coverage. Inappropriate quality/satisfaction measures to be redesigned for next phase.
Marek et al (1999)	Madagascar & Senegal	Performance monitored through frequent supervision, surveys, reporting.	Threat of contract termination.	Improved nutrition, replicability, large-scale, community involvement. Cost-efficiency was not measurable, but possibly good.
McPake and Hongoro (1995)	Zimbabwe		Fee-for-service payment system.	High costs, acceptable quality.
Jack (2003)	Nicaragua	By MINSAs and third party. Some outcomes are easily quantifiable, others more difficult.	Incentive to achieve at least 75% of target, but no incentive to exceed target.	Contracted NGOs provided the same services, but were not permitted to charge additional fees. Contracts' effect on service delivery unclear.
Bonardi and Carrazana (2002)	Nicaragua	No performance requirements.	Administrative sanctions have caused some contract terminations.	Perceived superior quality. Newer initiative to measure improvements has not been completed.

<b>Source(s)</b>	<b>Country(ies)</b>	<b>Monitoring and Evaluation</b>	<b>Incentives &amp; Enforcement</b>	<b>Effectiveness in achieving objectives</b>
Mills et al (2004)	South Africa	Difficult due to poor record-keeping.	Not based on performance.	Cost were higher for company contract, but similar to government for contracted GPs. Contracted company had high quality infrastructure while GPs had poor investment. Quality of care was similarly better in the company contract and poor in GPs.
Palmer and Mills (2003)	South Africa	Dependent upon self-reported data.	Volume monitoring seen as effective in Western Cape; little quality monitoring was done. Monitoring in Eastern Cape seen as ineffective/non-existent.	Limited supply of doctors resulted in no competition. Based on trust, highly relational agreement.
Loevinsohn (2002)	Bangladesh	Third party hired to measure baseline/follow-up performance. Baseline measures were distributed and included in UPHCP contracts.	Bonuses were established for UPHCP project.	No control in BINP, results not yet available for UPHCP.
Mercer et al (2004)	Bangladesh	New IMS implemented. Surveys conducted to collect information.		Successfully improved health outcomes, cost-recovery was not important.