Public Purchaser-Private Provider Contracting for Health Services

Examples from Latin America and the Caribbean

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Foreword

Spending on private health services and medications represents more than one-half of all health spending in Latin America–some 3.5% of the region's GDP. Yet until recently, public health policies have rarely addressed the challenges or opportunities represented by this segment of the health sector. And when the public sector has chosen to engage this private sector directly, there has been very little documentation.

This study provides a window into such experiences–experiences in which the public sector has chosen to fulfill its responsibility to assure health services for all through purchasing these services from nongovernmental agents. It aims to document and characterize the range of such experiences while extracting policy lessons–both successes and failures. In addition to its analysis of the cases, the study has generated a publicly available electronic database that can be corrected, updated, and expanded. It is hoped that this database will promote more systematic efforts for documenting public-private arrangements. In this way, the study and the database can be useful to policymakers who are seeking information about contracting options; for researchers seeking to understand the effects of contracts on service provision; and for technical staff seeking to design better contracts.

Clearly, such contracts are only one of many innovations in health service provision that are taking place today. But in their own way, these experiences provide valuable information regarding what is or is not feasible in the campaign to universalize health care in the Americas.

Mayra Buvinic, Division Chief
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Contents

Introduction

Governments in Latin America and the Caribbean are increasingly contracting with private sector healthcare providers either to harness the resources of the private sector and capture some of the advantages of competitive markets or simply to ensure that some services are provided in the most remote geographical areas. The types of healthcare services provided under these arrangements are varied and changing quickly. Many countries are learning through trial and error, experimenting with different contract types and finally picking the one that works best. Others are just beginning to use the most basic types of contracts.

Few studies have been performed to analyze the contracting experiences of individual countries, and fewer still to compare the experiences of several countries. Many governments believe their circumstances are so unique that they cannot learn from other countries' efforts. While this is true, it remains useful for policymakers to know what contract types exist and which have been successfully adopted in which situations. There must be lessons to be learned from the experiences of countries with more developed markets that can be applied in the countries just beginning to experiment with contracting.

Three sets of issues are commonly held to determine the success or failure of contracts: the incentives created by the provider payment mechanism; the adequacy of the accompanying monitoring and information systems; and the readiness and suitability of the service, the market, and the key actors. By considering the existing examples we should be able to identify a number of problems that countries have found within each of these three categories, and suggest some ways to avoid them.

The exercise would be more useful still if the contracts could be categorized in some way and ranked objectively by feature, e.g. by degree of provider autonomy and by adequacy of Quality Assurance (QA) systems. This would help researchers compare contracts objectively, understand which contracts were most suitable for which market environment, and decide which most needed revision in each. With further work to study the performance of different types of contracts under different circumstances, we could even begin to predict the effectiveness of contract designs.

In response to the research gap just described, this paper's objectives are:

- To create a database giving a range of examples of contracting between public and private sectors in Latin America and the Caribbean for use by researchers (searching for case study examples to examine in more detail) and by project teams (looking for examples of other countries with comparable experiences).
- To categorize the examples by key contractual and institutional characteristics and identify patterns.
- To use the examples to illustrate the key issues for consideration when implementing healthcare contracting, using as sources the database, interviews with health experts, and relevant publications.
- To devise a method of ranking the examples by key subjective characteristics (e.g. level of provider autonomy, adequacy of Quality Assurance mechanism) to aid future comparison and help identify the benefits and problems of different systems.
- To draw conclusions with regard to system performance and health outcomes.

Data, Sources and Methodology

This study discusses 27 examples of contracting with the private sector in Latin America and the Caribbean. It does not, however, list every example of contracting between public and private sectors in the region. The examples in the database were identified through interviews with IDB health experts and others; therefore, the selection is based on the knowledge and interest of individuals, and is neither comprehensive nor representative. (Fifteen individuals were interviewed; a list of their names and positions is given in the Appendix.)

The examples were chosen using a number of criteria. First, the purchaser had to be a public social security institution, the Ministry of Health or a state or municipality. Second, the provider had to be a private service provider, insurer or hospital management organization. Procurement of pharmaceuticals, catering and other nonmedical services were omitted. Examples were selected to cover a range of geographical areas (a total of 13 countries) and a range of payment mechanisms and service types (ambulatory care, secondary care and other more specialized services).

Most examples were generic (contracts between types of organization, not individual organizations) and current. However, interesting examples between specific purchasers and providers, such as a contract between a purchaser in one country and an NGO or hospital, were not excluded. Also included were cases from the recent past that had since been changed but were nevertheless found to illustrate interesting lessons. Therefore, seven specific contracts are included in the database, as are four that have now been abandoned or altered.

The examples cover three types of services and target population: 11 are broadly-defined services for the entire population (e.g. outpatient services by private hospitals in Brazil); 8 are specific services for the entire population (e.g. high-tech services–heart surgery, kidney transplants, hip replacements, etc.–by private units in Uruguay); and 8 are specific services for a target population (e.g. a program to reduce child malnutrition in Honduras).

Contract Categorization

THE PROVIDER PAYMENT MECHANISM

There is a wide range of payment mechanisms that can be broadly defined by unit of payment (Abt Associates, 1998). A classic categorization divides the range into four groups. At one extreme are the time-based and population-based mechanisms, with highly aggregated units of payment, which tend to focus on efficient use of resources. At the other extreme are performance-based systems that purchase on the basis of actual health outcomes. In between are those that measure outputs and encourage increased access: the service-based contracts.

In fact, the examples of contracts in the region fall into slightly different categories. No examples were found of wholly time-based or performance-based systems; but other contract types were considered, such as: "partnership" arrangements where the purchaser makes some payments but does not attempt to cover the whole cost of services, and service-based arrangements with some form of volume rationing. Strict per capita contracts between purchaser and insurer were considered separately from the population-based arrangements between purchaser and service provider because the payments to insurers tend to vary more over time, altering some incentives and other aspects of the contractual relationship. For the purposes of this paper, the contracts in the database have been categorized as shown in the table below.

Geographic and Demographic Patterns

The cases that were identified are diverse, both geographically and socioeconomically. They include examples from 14 countries in the region (See Table 1), from Central America through the southern cone. The sample includes cases in large countries, such as Brazil, and small ones such as El Salvador or Nicaragua.

Contracting with private entities for health services can also be found in every type of health system. Using the classification proposed by the IDB in 1996, 16 of the cases are in "segmented" health systems, 2 were found in "public integrated" systems, 3 in "subcontracting" systems, and 6 in "contract intensive" health systems (for

Table 1
Contract Categories

	Characteristics of contract	Number of examples	Countries
Type I	"Partnership" arrangements: purchaser donates/contributes training, infrastructure or some funds but does not attempt to cover whole costs of services	7	Honduras; Brazil; Bolivia; Dominican Republic; Haiti; Uruguay; El Salvador
Type II	Population-based/historical resource allocation to service providers	5	Guatemala (2 examples); Costa Rica (2 examples); Peru
Type III	Purchaser-Insurer contracts (resource allocation on a per capita basis)	4	Argentina; Colombia; Nicaragua; Uruguay
Type IV	Service-based resource allocation with volume rationing (e.g. fee-for-service for authorized service volume only)	4	Colombia (2 examples); Brazil (2 examples)
Type V	Service-based resource allocation with no volume rationing (e.g. retrospective fee-for-service funding)	7	Uruguay (2 examples); El Salvador; Nicaragua; Peru (2 examples); Chile

details regarding this classification, see IDB, 1996).

Although the sample is neither random nor representative, it is interesting to note that the process of identification yielded examples of partnerships in every kind of health system. However, population based service contracts were only found in the integrated and segmented systems, whereas purchaser-insurance contracts and service-based contracts without volume limits were identified in segmented and contract-intensive systems. Service based contracts with volume limits were identified only in Brazil (where the public sector subcontracts) and in Colombia. However, it is important to keep in mind that the sample is neither representative nor exhaustive.

The sample includes cases in countries of different income levels. Ten of the cases are in relatively low-income countries (with a per capita income of less than $1500 per year); 8 in middle-income countries (per capita income between $1500 and $3000), and 9 in higher-income countries (per capita income in excess of $3000 per year). Relatively more of the "partnership" contracts were found in lower-income countries, while most of the service-based contracts were found in middle- or higher-income countries.

In summary, the cases that were identified operate within a diverse set of countries, socioeconomic contexts, and health systems.

Illustrations of Key Issues for Contracting

There are various efforts to systematize analysis of contractual relationships in the health sector. The particular framework used in this paper and database builds on concepts from a "toolkit" that is currently being prepared at the World Bank. In our case, we have chosen to emphasize three key dimensions in the design and implementation of healthcare contracts, namely: the provider payment mechanism; the accompanying monitoring and information systems; and the market and policy environment. The examples in this database illustrate the importance of a number of questions within each of these groups that are posed below.

Provider Payment Mechanism

- Does the provider payment mechanism promote the right mix of provider incentives?
- Are residual claims great enough to attract good providers and influence their behavior?
- Does the public purchaser provide enough funding to influence provider behavior?

Quality Assurance, Monitoring and Information Systems

- To what extent do quality, productivity[1] and access need to be monitored?
- Are QA and anti-fraud measures and supporting information systems adequate?

Market and Policy Environment

- Are the market and the service suitable for contracting?
- Does the government have an active purchasing mentality, approaching service contracting and provider selection strategically?
- Is the community involved?

This section of the paper discusses why the issues are important and describes the pitfalls and solutions illustrated by the database examples. (The characteristics displayed in the database are set out, for ease of reference, in the same order as the discussion in this paper.)

PROVIDER PAYMENT MECHANISM

Three key questions emerge with regard to payment mechanisms:

- Does the provider payment mechanism promote the right mix of provider incentives?
- Are residual claims great enough to attract good providers and influence their behavior?
- Does the public purchaser provide enough funding to influence provider behavior?

Does the provider payment mechanism promote the right mix of provider incentives?

Payment mechanisms are chosen for a number of reasons: first, they are often developed in response to inadequacies in the behaviors of providers and performance of the system. New mechanisms are designed to adjust and change behaviors. Second, they take account of the political inclination of the government: is it ready to present a fully developed market-based health system to the public? Third, they are adjusted for its administrative capacity: can it handle large numbers of individual invoices? Every payment mechanism has both strengths and weaknesses that need to be understood to ensure successful implementation. Several issues are critical:

- Which actor bears most of the financial risk?
- Is the focus on access, productivity or quality?
- Does the payment mechanism lead to perverse incentives? (A poorly designed system can en-

[1] The term *productivity* is used throughout this paper, and in the database, to indicate the efficiency with which the services achieve their goals–whether in terms of health service outputs or, preferably, outcomes. In some cases, policymakers will be more focused on the ability to reach the most beneficiaries within the given budget. In other cases, they may be more concerned with limiting costs, or with improving quality. In any of these cases, when the service is more productive it is able to provide more, better quality services at lower unit costs.

courage providers to maximize income or minimize workload through bad practices-shorter inpatient episodes, discouraging transfers to "competing" providers, etc.-or rationing of services.)

The level of provider autonomy is obviously also relevant here since perverse incentives matter more for a more autonomous provider. (This is discussed in more detail in the section on Quality Assurance, Monitoring and Information Systems.)

In general, systems with more aggregated units of payment involve higher financial risk for the provider and, therefore, encourage efficiency and productivity. Payments can be prospective (the payment rate for a package of services is set before treatment takes place) or retrospective (the rate is decided after service is rendered). Prospective mechanisms, e.g. per capita schemes, encourage efficiency, again because the provider bears most of the financial risk. As a first approximation, the key dimensions regarding risk and provider payment are shown in the Table 2.

the services by denying care or limiting the kinds of services that are provided. Similarly a "classic" partnership arrangement also places the major burden of risk on providers who are expected to respond to all service needs in their area after receiving government support. Again, in situations of weak oversight, such "partners" may resort to reducing the quality or quantity of care provided. Keeping in mind such qualifications regarding the importance of context, the sections that follow provide an approximation of how these different contract types function.

1. Type I: "Partnership" Arrangements

In these arrangements, governments support the work of NGOs either by making a monetary payment or through other types of contribution. The NGO provider bears most, if not all, of the financial risk, but the focus is generally on access rather than productivity. The reason is that the government is simply helping the NGO with a task it had already set itself: to cover as much of the population as possible given its limited funds.

Table 2
Key Dimensions of Risk and Provider Payment

Type of payment mechanism	Who bears the risk?	Provider payment focus	Variable that may suffer
"Partnership"	Provider	Access, Productivity	Quality, Access
Population-based/ historical	Provider	Productivity	Quality, Access
Purchaser-insurer (per capita resource allocation)	Insurer	Productivity	Quality, Access
Service-based with volume restriction	Mainly provider	Productivity, Access	Quality
Service-based with no volume restriction	Shared or mainly purchaser	Access	Productivity, Quality

It is worth noting that identifying who bears the risk in such contracts may be difficult to do *a priori* because of the different contexts of operation. For example, in a "classic" capitated arrangement, the provider bears most of the risk when more services than expected have to be provided or the cost of the services is higher than anticipated. However, if regulatory mechanisms and oversight are weak, the provider under a capitated arrangement could pass the risk on to those affiliated with

One example of this type of arrangement occurs in Uruguay, where some church-based NGOs, supported by donor funding, provide services for mentally retarded children. The NGOs are focused on providing high-quality care for as many children as possible; the government contributes toward the costs of this care. The arrangement is designed to take advantage of each player's comparative advantage. The government's advantage is in bulk buying of drugs; the NGO's is in the staff's

dedication to the cause and the expectation that high-quality service will be provided. As a result, payments are often in kind: for example, the NGO might add ten children to its existing patient population in return for government provision of drugs for one hundred children. In such a case, the provider's risk is very limited, and the incentive for increased productivity weak, unless the public sector audits and holds the NGO accountable for fulfilling the terms of the arrangement.

2. *Types II and III: Population-based/Historical Contracts (for service providers) and Per Capita Contracts (for insurers)*

In population-based/historical contracts, the provider is allocated a fixed amount of funds, based more or less loosely on the size of the population to be served. The provider bears the risk of any deficits but also keeps any surplus.[2]

The strict per capita funding of insurers is slightly different: it involves a fixed payment for each person affiliated with the insurer. In this case, payments are much more variable, particularly if competitors enter the market. Insurers have stronger incentives to compete through quality and productivity under each mechanism. However, the fundamentals are the same in both cases: the provider bears the financial risk and the focus is generally on productivity.

To deal with risk, providers or insurers may try to pass extra costs onto users, or ration care. Alternatively, they may return to the government and argue for additional resources to cover any deficit that may emerge. Consequently, there are three major problems that arise with fixed-payment systems. First, there is the potential for excessive rationing, since the provider may respond by reducing services. Secondly, quality may be sacrificed. Thirdly, providers may enroll healthier patients, avoiding those who really need service provision. The probability of these problems occurring is increased if the fee-setting formula is inaccurate, which is the case in a number of countries. In Guatemala, for example, the population-based payment to PSSs is based on a rough cost estimate of the basic package of services to be provided to each individual. However, the cost estimate per person is inaccurate, in part because the service package has not been well defined.

Problems are as likely to occur in purchaser-insurer contracts as in those between purchasers and service providers. The per capita contracts between the national health insurance program (PAMI) and provider groups in Argentina illustrate this. There is a chronic problem of under-service, due to the perverse incentives created by the payment mechanism and exacerbated by the almost complete absence of consumer choice. Experience in Peru indicates that the danger of underprovision can be avoided. CLAS (which are nonprofit community-administered institutions that manage one or more health providers)[3] are financed through block grants from the Ministry of Health. In addition, a second contract is signed which holds each CLAS accountable for reaching targets agreed upon in the local health plan. The contract is renewable every year, based on achievement of these goals. Assuming that this results-based contract renewal system includes real sanctions for failing to meet targets, it gives each CLAS incentives to raise productivity and to operate efficiently. This would lead to improved results in terms of coverage and quality (see further discussion of this in the section: Potential Implications for Performance).

In order to assume risk responsibly, insurers or providers have to enroll a large enough population to properly pool risks.[4] This may prove difficult in small countries with small populations when a trade-off emerges between pooling risk and encouraging competition among multiple agencies. For example, in Nicaragua, EMPs (public or private medical care insurers) are paid a per capita

[2] In a strict scheme, the budget is fixed at the beginning of a period and does not adjust for cost overruns. In practice, these systems may not be so strict, thereby creating an opportunity to shift responsibility for deficits back on the government.

[3] The categorization of CLAS as "private" is debatable. Since they are community-based, they could also be viewed as health boards and, therefore, as another part of the public sector.

[4] The other option is to have access to reinsurance, which appears to have emerged as a solution for several small insurers following the 1990s reform of Colombia's health sector.

amount by the INSS. Since each insurer needs a large pool of enrollees to offset the variability of service use (and therefore risk), the INSS chose not to apply a competitive bidding process but rather to award contracts to a limited number of EMPs. Unfortunately, the resulting lack of competition probably caused more problems than it avoided, since it reduced EMPs' incentives to provide adequate volumes of high-quality services (La Forgia et al., May 2000).

Finally, some per capita systems have much more obvious problems. In Colombia, where publicly subsidized families choose among insurers, the insurers are responsible for collecting 12 percent of employees' pay. However, the redistributive mechanism requires insurers to retain only a fixed amount of the money collected, based on risk adjustments (for age, sex, geographical location, and catastrophic illness risk). Whatever amount is left is allocated to a central fund that helps finance the subsidized regime for the population unable to pay. The fact that patients have a free choice of insurers gives the latter a perverse incentive to collude with consumers by misreporting each patient's earnings and undercollecting funds. Thus, the insurer is more likely to attract customers without reducing its revenues since the shortfall is covered by the solidarity fund.

3. *Type IV: Service-based Contracts with Volume Restrictions*

In these cases, providers are paid a fee per service, but the number of services to be performed is in some way restricted. For example, each doctor or unit may be given an account with a limited amount of funds or allowed to submit a limited number of individual discharge forms to the purchaser for reimbursement. The provider does not have to bear the risk for the composition of services that are demanded, but does bear the risk that the rates per service, which are agreed in advance (prospective payment), will not cover the full costs. The provider is therefore focused on controlling costs, but mainly through keeping costs per unit of output below the preset fees. Any services beyond the limit are not covered and, consequently, either the user's access to services is limited or the providers have to attend to patients without additional compensation.

Rationing by providers is less of a problem under this system because providers receive more funds only if they perform more services (up to the authorized limit). Therefore, there is a very strong probability that output will regularly equal that limit. In such a case, purchasers are able to specify the level of output (the volume restriction they set in the contract). This may be preferable to the type of rationing inherent in Type II mechanisms since the provider must demonstrate that it has provided the volume of services in order to be paid.[5] The purchaser cannot control this "provider rationing" other than by canceling contracts if service provision is truly inadequate. In essence, by spending the same amount of money but using a Type IV rather than Type II mechanism, the purchaser is able to set incentives that result in more centrally driven (and therefore strategic) rationing. The system also has two advantages over Type V unrestricted fee-for-service mechanisms: the provider has no incentive to induce demand beyond the specified volume limit, and the public purchaser can anticipate and control the magnitude of expenditures.

This system exists in Brazil, where states and municipalities pay private providers for hospital services. Provider payment is based on agreed prices per diagnosis and an authorized volume of services based on historical figures and agreed between the municipality and the individual provider. Providers are reimbursed for each individual discharge form submitted, up to an agreed maximum. The prospective agreement on payments is meant as a method of cost control and data generation. Unfortunately, the quality disadvantages of this DRG-type funding have become apparent in Brazil where hospitals try to reduce costs per diagnosis for the reasons mentioned above (Lewis et al., May 1997). Therefore, hospitals are reluctant to treat severely ill patients, tend to discharge patients too early, and reduce the use of necessary technologies.

[5] Of course this depends, in turn, on the government's ability to monitor actual service provision under the Type II contract.

The complexity of these contracts (caused by the high number of invoices generated) also leads to problems. Administrative costs and problems have, in extreme cases, forced the government to abandon this payment mechanism in favor of something simpler. In Colombia, for example, the new government changed the system for contracting between the Social Security Institute and private providers in 1998. Aiming to reduce waiting lists, the government abolished the per capita payments to groups of doctors, and introduced a system of prospective fee-for-service payments to individual doctors. Each doctor was given a finite account, enabling him or her to provide services to a finite number of patients. But the administrative burden was huge, and the government quickly lost track of the number of services performed. Rationing became very difficult: in the first year spending was more than $1 billion greater than expected. For this reason, the system has since been changed again, to a DRG-type arrangement.

A second type of "volume-limited fee-for-service" mechanism is that where payment is partly service-based and partly time- or population-based. These contracts exist, for example, in Colombia where PROFAMILIA contracts with the Ministry of Health to provide reproductive health services. The exact arrangements vary, but in one such contract payment is 50 percent prospective, based on the expected volume of services, and 50 percent case-based retrospective reimbursement. The incentives are similar to those created by the straightforward restricted-volume arrangement above, since providers have an incentive both to improve efficiency (to keep within the prospective part of the funding) and to increase the volume of services (to earn a larger retrospective reimbursement). However, there may be some perverse incentives, as in Type V contracts, since providers could increase their retrospective reimbursement by artificially inducing demand.

4. *Type V: Fee-for-service contracts, no volume restrictions*

There are two types of unrestricted fee-for-service contracts: one prospective, where the risk is divided between purchaser and provider, and one retrospective (cost reimbursement) where the purchaser bears almost all the risk. Both types can lead to increased access and to a flexible use of resources. However, they can also result in providers increasing the number of services reported, either by inducing demand, by double-counting, or by exaggerating the complexity of an illness admissions in order to increase revenue. Cost control can become a real problem.

Retrospective systems lead to a second cost control problem: not only are providers tempted to induce demand but they also have no incentives to control costs per treatment since they are essentially reimbursed for their full costs. In Uruguay, where the Ministry of Health contracts with private high-tech providers, studies have found that services could be provided 20 to 25 percent more cheaply in public facilities.

Recognizing these cost control problems, many purchasers look for ways to keep spending down, often without changing the payment mechanism. In Chile, for example, FONASA contracts with private providers on a fee-for-service basis. Its cost control strategy is simply to pay private hospitals well below cost–at the 1979 rate increased by little more than inflation. Consequently, hospitals charge patients high co-payments to make up the difference. This is the exact converse of Type IV contracts: rather than restricting volume the purchaser puts a severe cap on the payment provided per service. The effect is both a control on FONASA payments and also a certain amount of self-rationing by FONASA patients. But there are two negative implications: first for equity of access (FONASA patients should not be forced to self-ration more than other patients) and second for quality. The best provider units would rather contract with ISAPRES (private insurers) which pay higher fees, so those contracting with FONASA tend to be viewed as meeting lower standards of service and quality of care. Participating providers also have incentives to reduce costs per individual service wherever possible, either by making non-clinical changes like reducing average lengths of stay or by reducing treatment quality. All this implies that controlling volume through Type IV contracts may be preferable to controlling funding per unit volume in Type V arrangements through low reimbursement rates.

Are residual claims great enough to attract good providers and influence their behavior?

The discussion of FONASA in the previous section leads to an important, more general point regarding the relationship of costs to the fee setting and/or capital charging formula for paying providers. If fees are greater than costs, then the provider has an incentive to win the contract and then to operate efficiently, since marginal cost saving effort will generate revenue flows that the provider can keep. If not, then distribution of residual claims is irrelevant—there is no residual to be claimed–and there is little incentive for high-quality providers to bid for contracts. One of the key issues to be determined in each case is, of course, whether fees are in fact greater or less than costs. The answer is often not clear. Although some work has been done in this area (in Guatemala, for example, a mechanism has been set up to identify production and cost functions), it remains one that requires further research across the region.

In some cases, the inadequacy of funding is fairly clear. In Nicaragua the formula for calculating the per capita rate for payments to EMPs (private medical care organizations) was developed in 1994, based on Ministry of Health unit costs for each covered service, and increased to adjust for inflation in 1996. The increase was not based on further cost or actuarial analyses and the amount was not adjusted for risk. It seems very unlikely that the current fees cover costs (La Forgia, et al., May 2000).

In Brazil, where states and municipalities pay private providers on a per-diagnosis basis for hospital care, reimbursements often cover far less than costs, particularly for basic services. For example, the reimbursement of US$130 for normal deliveries (the most common reason for hospitalization, 12% of total admittance in 1990) did not come close to the actual cost of US$576 in 1990 (although it probably did cover a little more than marginal costs). The most efficient providers in Brazil opt not to take up contracts with the public sector, and those that have taken them simply use them to add volume and help cover fixed costs. They have cut spending as far as possible; for example lengths of stay have declined.

Does the public purchaser provide enough funding to influence provider behavior?

If government is the largest, or only, buyer, then the terms of the contract will determine the pressure providers are under to deliver high-quality services. If not, then government may have little power to alter provider behavior. For example, in Uruguay the government has much more impact on the NGOs providing care for mentally retarded children (even though its assistance is limited to payments in kind) than does the Dominican Republic's SESPAS on PROFAMILIA (which receives only around 1 percent of its funds from the government).

QUALITY ASSURANCE (QA), MONITORING AND INFORMATION SYSTEMS

Provider payment systems are designed to encourage certain behaviors that are not adequately ensured through other means (regulation, direct provision by the public sector etc.). But to do this successfully, they depend on associated mechanisms like QA and monitoring mechanisms and information systems. Each type of payment system will require a different type of QA and monitoring mechanism to counteract the problems associated with the particular incentives it creates. The strength of the safety checks needed vary with the autonomy level and motivation of the provider and the type of contract being used.

Two key questions emerge with regard to quality assurance and monitoring:

- To what extent do outcomes, quality, productivity and access need to be monitored?
- Are QA and anti-fraud measures and supporting information systems adequate?

To What Extent Do Outcomes, Quality, Productivity and Access Need to Be Monitored?

The autonomy that the provider has to make decisions is important for all contract types. It should be considered in terms of power to hire and fire and set the wages of staff, power to decide services and prices, and horizontal and vertical integration. A provider is vertically integrated if it is also involved in purchasing/insurance; it is horizontally integrated if it has links with other providers (e.g. in different regions), or if it provides related goods and services like pharmaceuticals or laboratory tests. Obviously a certain level of autonomy is needed to make contracting worthwhile; but with more autonomy, more monitoring is required.

Type of Provider (Nonprofit, For Profit): The level of motivation of the provider is also important. For example, it is commonly believed that nonprofit providers, particularly those that are church-based or charitable, may be more motivated to provide high-quality services than for-profit private providers. If true, they would require less monitoring than for-profit providers. Clearly, this needs to be empirically verified in any particular case.

Is the Contract Enforceable? Corporate law generally governs formal contracts, which will be reviewed by the courts in cases of dispute. In contrast, internal public sector agreements and informal *convenios* and *compromisos* between the public sector and NGOs cannot go to the courts as a last resort. These contracts can be implemented very successfully; however, they may need to be monitored more carefully because their less formal nature can limit their credibility. In Guatemala, for example, *convenios* have been used successfully to make purchaser-provider arrangements between the government and NGOs. However, there are suggestions that the next step should be some kind of legal contracting –(despite the danger of disrupting the good working relations between purchaser and providers) to ensure a competitive market that would lead to adequate incentives for high quality and efficient service provision (Nieves et al., May 2000).

Even formal contracts can be unenforceable in practice. This is the case in a number of Central American countries where the judicial system is weak and there are constitutional problems. In El Salvador, for example, contracts tend to be both weak and opaque. Even the Ministry of Health failed to fulfil all its obligations to the NGO FUSAL in 1996-98, prompting FUSAL to threaten to terminate the contract. Monitoring is clearly both important and extremely difficult in these circumstances.

Are QA and Anti-Fraud Measures, and Supporting Information Systems, Adequate?

Adequacy of Overall Quality Assurance Mechanisms: Quality always needs to be controlled since no payment mechanism can ensure a perfect balance between cost efficiency and quality of care. Not even direct public administration of health services obviates the need for QA. However, quality assurance is a key weakness in Latin America and Caribbean countries. In Chile, for example, where FONASA contracts with private providers, accreditation happens only once. After passing this test the provider is added to FONASA's list of participating units and patients may choose from this list. Yet, there is no subsequent technical monitoring to assure that providers' quality standards are maintained, no tool for patient feedback, limited evidence on health outcomes, and providers are practically unregulated.

Of course, simply arranging monitoring is not enough; the process also needs to be impartial. This is an issue in Uruguay, where doctors from local public facilities visit private high-tech providers to monitor the appropriateness of care. The process runs the risk of being biased for obvious reasons: professional ties between the monitoring physician and the unit being monitored (the physician may even be affiliated with it) can lead to unreported problems.

Adequacy of Payment/Fraud Monitoring Systems: Different types of payment mechanism require different types of monitoring. This is illustrated by several cases in the database. If providers receive population-based funding, for example, they will

have an incentive to overcount the population in their areas. This requires close monitoring. This is an issue in Guatemala, where the census is conducted by the same NGO that receives population-based funds to provide health care services. The NGO is thus provided with an opportunity to cheat the system by overstating the population in the area. Of course, it is also necessary to monitor what proportion of the population receives NGO services (or is even aware that they are available) i.e., how good a job the NGO is doing of publicizing and providing services. In Guatemala, the government is currently trying to establish a system for auditing compliance with agreements through surveys of populations in the served areas. Such surveys can detect whether or not individuals know about and/or utilize the contracted services, as well as measuring health impacts, if any.

Fee-for-service payment mechanisms need different types of monitoring. Specifically, these contracts need something to counterbalance the incentive to induce demand and provide excessive services. For example, such contracts need systems that keep deter unnecessary hospital admissions, ensure that patients are not discharged too quickly once admitted, and accurately record the numbers of patients admitted for each type of service (World Bank, December 1999). Invalid claims must also be prevented: in Brazil for example, 28 percent of the services claimed in 1995 were later found to be invalid. This kind of fraud is not surprising (and in a sense is justifiable), particularly in Brazil, given the low level of fees per service already discussed. It is a risk in any service-based payment system, just as overcounting of population is a risk for per capita and population-based payments. It is also often difficult to track: for example, if a patient requests treatment at one hospital but is referred to a second hospital, both hospitals may well have records of the patient with which they can file for reimbursement.

Adequacy of Information Collection and Analysis: Information collection is essential to back up the QA and monitoring systems discussed above. Not surprisingly, given the cost of installation and upkeep of MIS systems, this is a problem in many areas across Latin America and the Caribbean. Chile, for example, has problems with identifying which patients are covered by the public insurer (FONASA) and which by the private sector (ISAPRES): data is wholly inadequate and gathered only on an irregular basis for market research studies (although recent initiatives are trying to correct this problem). Brazil has had similar problems with identifying, for example, whether patients with private social security insurance receive treatment in public facilities. A computer system is currently being set up to avoid public financing for treatments already covered by the patient's private sector insurance.

Even where they exist, information systems are insufficiently used in a number of countries. In Colombia there is a monitoring institution that gathers data on contracts and the number of people affiliated with each insurer. But, until recently, the information has not been fully analyzed or used: for example, significant fluctuations in trends over time, that almost certainly indicate either fraud or severe problems with the system, have not been addressed. The situation is now being worked on.

MARKET AND POLICY ENVIRONMENT

In addition to the dynamics of the specific contract, it is important to consider the external environment.

- Is the market sufficiently developed to support contracting?
- Does the service being provided lend itself to fair payment mechanisms and tracking of outputs?
- Is the government's attitude to contracting sufficiently sophisticated?
- Is the community likely to be supportive?

Are the Market and the Service Suitable for Contracting?

The value of contracting will be increased if the market is competitive or contestable, and potentially increased further if the service output is measurable.

Is the Market Contestable? The competitive pressures in the system (both actual and potential) are a key determinant of the incentives facing both purchaser and provider. If a provider faces direct

competition then it has strong incentives to perform because purchasers can choose to go elsewhere for services. This can be an effective way to encourage good performance without unduly increasing the costs of monitoring, regulation and supervision. However, introducing competition may not be feasible, since the markets in a number of countries are not yet fully developed. For example, private medical organizations in Nicaragua face competition only in certain geographic areas. In other regions there is no competition and no real threat of contract withdrawal (no contracts have yet been cancelled due to poor performance). So the market is not competitive, and provider incentives to perform are not yet strong.

Competitive pressures can still yield benefits, even where competition is not feasible because of insufficient scale. This can be achieved by making the market "contestable." Contestability occurs when providers need to bid for concessions over particular areas, and/or where there are few barriers to entry. The potential threat of being displaced by a competitor can induce better performance. If a market is not yet competitive then it should ideally be contestable. Most of the markets covered in this database are probably contestable.

The existence of a competitive market will create the right incentives for providers in the short term only if they have been thoroughly prepared for competition. In Peru, operational problems occurred in individual CLAS because health staff was unfamiliar with personnel and financial management and because health facility managers (chief physicians) lacked experience and training to carry out their new management tasks (Altobelli et al., May 2000). Conversely, problems can occur if providers are too strong, holding all the negotiating power. For example, in Uruguay, prices for the National Health Insurance Sickness Fund are in theory set by negotiation between the public fund and private providers. But in practice, the providers hold most of the power since they are well organized and it is difficult for the purchaser to monitor the costs of materials and labor.

Of course, even in a market with many competitors, the actual competitive pressures are determined partly by patient inertia. In Uruguay, where patients have a choice of private HMO-type insurers (IAMCs), there are no restrictions on switching between insurers. This implies a fairly high level of competition, particularly in Montevideo where supply is greatest. However, switching costs have proved to be fairly high, so competition is less intense that the number of IAMCs in the market would suggest and established players have a substantial competitive advantage (Labadie, 1998).

Is Output Measurable?

Measurable services are those where the output is easily seen and counted. The distribution of condoms by CSOs in Brazil is one example. If precise measurement is possible, then the advantage is obvious: it is more effective to devise a provider payment mechanism that focuses on outputs or, even better, outcomes, than to focus on inputs because it should encourage productivity and efficiency.

Nevertheless, many services do not have easily measurable outputs. While this can make designing output-based and outcome-based payment mechanisms difficult, the service should not necessarily be changed if it works well in other ways. The problem can, in many cases, be solved by relying on quantifiable results; or shifting to shorter-term and more specific contractual arrangements; or by tightening reporting, monitoring and accountability mechanisms. As a final alternative, when the measurement of outcomes or outputs is not possible, less strategic metrics such as inputs or processes may have to be used. This is the case for MARCH, an NGO that provides women's health services in Haiti. MARCH is an integrated healthcare provider, responsible for all care within the scope of the contract, rather than just for one or two specific treatments. Integrated care is not easy to measure, but the benefits of integration may outweigh the problems with measurability. Policymakers need to find a workable balance between highly measurable and highly integrated systems. With integrated care, the closer to health outcomes, the better. But then, attribution of the sources of changes in health outcome raises other difficult problems of measurement.

Does the government have an active purchasing mentality, approaching service contr acting and provider selection strategically?

To take advantage of contracting, purchasers need a strategic approach both to services and to providers. High strategic orientation implies an active purchasing mentality; low implies a passive budgeting approach (World Bank, December 1999).

Degree of Strategic Orientation Toward Services: However services are provided, demand is unlimited, so supply must be rationed in one way or another. If approached strategically, rationing can be managed thoughtfully and in a planned way through the benefit package (by excluding high-cost or nonessential services). The precise terms of the contract are vital. For example, in Nicaragua, contracts with EMPs specifically list exclusions such as expensive and chronic services, and this has not generated problems for the system's implementation. However, in Guatemala the basic package of services has not been clearly defined (e.g. it's unclear whether women's health and obstetrics are included). In Colombia, responsibilities for many preventive and public health functions are not clear. As a result, measures like vaccination and control of tuberculosis appear to have worsened. Colombia is currently trying to clarify the division of responsibilities so as to reverse this situation.

The provider payment mechanism chosen is very relevant here. Strategic rationing involves protection from induced demand by providers even more than protection from consumer demand. The contract types that include limitations (population-based or service based with limits) are probably more effective for strategically guiding the allocation of resources.

The second benefit of a strategic approach to services is the use of the contract to promote provider efficiency and productivity. If the service output is measurable, this can be achieved by focusing the contract on volume, mix, quality and price, rather than inputs like type of service and mix of providers. This is the case in several Latin American and Caribbean countries. For example, the DRG-based arrangement between hospitals and states/ municipalities in Brazil manages both volume and price. A further example shows that a lack of measurable outputs does not always prevent strategic contracting: the provision of primary and outpatient care by COOPESALUD in Costa Rica does not have easily measurable outputs, but the arrangement is designed to solve this problem. In addition to being allocated a global budget based on population, the NGO signs a performance-based contract and undergoes six-monthly monitoring assessments that are intended to keep it focused on productivity. However, the impact of monitoring will be reduced if no clear consequences for failing to meet targets exist.

Degree of Strategic Orientation Toward Providers: It makes sense for purchasers to be strategically oriented towards providers, contracting selectively based on past and/or potential ability to perform the desired level and quality of services, rather than non-strategically oriented, contracting based on historical patterns. However, for a variety of reasons, selective contracting, for example through competitive bidding, seems to occur relatively rarely in the region. First, it requires comparative information about quality, efficiency and effectiveness, which can be very difficult to obtain in many countries. Second, in some cases the government already has a relationship with NGOs or other providers with the specialized knowledge needed, so it may appear risky to open up the selection process (e.g. ICC providing TB services in Haiti). A competitive selection process carries the risk of choosing an unqualified provider and jeopardizing the relationship with the prior provider. Finally, even where there is a bidding process there can be a lack of transparency and objective selection criteria (e.g. PAMI in Argentina).

There can be problems with arranging selective contracting even when the government is strategically oriented toward providers. For example, contracting cannot be selective unless the government is committed not to contract with every bidder. In certain circumstances this commitment is impossible. For example, the Program to Extend Coverage of Basic Health Services in Guatemala exploded in size within 2 years, from 7 *convenios* in 1997 to 117 in 1998. This speed of expansion meant that the supply of experienced PSSs (NGO providers)

was quickly exhausted. As a result, the government contracted with every provider, including NGOs with no experience in healthcare service provision. Moreover, existing healthcare NGOs had to take on funding and responsibilities beyond their experience, leading to institutional problems.

Consumer choice and price often play a part in selection (e.g., price in Brazil or consumer choice in Uruguay and Colombia). Price can be a strategic lever to encourage efficiency and cost-effectiveness. Consumer choice is indirect, but still strategic. Of course it functions best when consumers are well informed about the quality of clinical services (not just hotel-type services) and the actual quality of services provided by physicians (not just their reputations). Relying on consumer choice can sometimes counterbalance problems of overprovision and can work adequately when choices are restricted to accredited providers, who are subject to effective quality monitoring or liability laws.

Contracting may not be the only interaction between public purchaser and private provider. The government often makes capacity-building investments in providers outside the terms of the contract. This is the case in Brazil, for example, where nonprofit providers receive training and equipment along with public institutions, but for-profit providers are left out of the loop. This type of investment is important in many countries to help strengthen the market: as already mentioned, there is little point in contracting unless there are viable competitors. International financial institutions and donors can play a role in supporting such capacity-building investments. However, they must be transparent and completely separate from the contracting process. If not, they will reduce switching costs (having already invested in one organization, a purchaser may be reluctant to terminate the contract and begin again with a different one) and reduce the capability of public purchasers to contract strategically.

Is the Community Involved?

Community involvement is helpful in many circumstances to ensure local support for and control of compliance with the contract. Like consumer choice, community involvement can introduce a degree of accountability that might otherwise be lacking from contracts. Local community involvement in designing the contract, setting its targets, or authorizing payments, brings with it detailed knowledge of local conditions and better information regarding the actual performance of community services. Local communities can often be better monitors of provider performance than itinerant auditors or inspectors. On the other hand, caution is also required to assure that local community input is truly participatory and representative; otherwise, it too can serve narrow interests.

Community involvement can also lead to faster improvements in service than would otherwise occur. For example, CLAS establishments in Peru have higher rates of community participation and have been quicker at introducing improvements than non-CLAS establishments.

Community organizations also have greater access than government agencies to specific at-risk groups simply by nature of their nongovernmental status. For example, ABORDA, a small civil society organization (CSO) dealing with HIV/AIDS in Rio Grande do Sul, Brazil, established a limited needle exchange program geared to intravenous drug users in low-income neighborhoods. ABORDA, which was composed of a largely volunteer staff already close to the local community, was able to more than double the number of drug users reached, increase the drug-prone areas serviced, and substantially increase the monthly number of needles exchanged. It is unlikely that a government agency could have reached this population so effectively (Garrison et al., May 2000).

Proposal for Ranking Contracts

Given the importance of the issues discussed above, the characteristics described in the database are key to the success of healthcare contracts. Different contract characteristics will be successful in different markets. So the database, which contains data on both market type and contract features, provides a framework for gathering the information needed to determine whether a given contract is likely to be successful in a given situation.

It would be beneficial to rank the contracts by each of the key characteristics (for example, to rank them by degree of provider autonomy or by adequacy of information systems). This would help policymakers compare contracts more objectively and determine which type of contract to implement in which circumstances. Where the characteristics are objective in nature, classification is straightforward (for example, provider payment mechanisms are discrete categories: per capita, fee-for-service, etc.) However, eight of the characteristics in the database are not discrete and can be highly subjective. These are the degree of provider autonomy, the adequacy of overall Quality Assurance mechanisms, the adequacy of payment/fraud monitoring systems, the adequacy of information collection and analysis, the contestability of the market, the measurability of outcomes or outputs, the degree of strategic orientation toward services, and the degree of strategic orientation towards providers.

This paper proposes a method for ranking these subjective criteria based on the examples in the database. This approach and its results are shown below for each characteristic.

DEGREE OF PROVIDER AUTONOMY: A PROPOSAL FOR RANKING

The ten questions listed under "autonomy" in the database cover the main aspects of autonomy from the public sector purchaser. So answers to six of these questions could be combined to measure the degree of autonomy in each contract. Since the database contains 27 examples of contracts, we chose to create only 3 categories. The thresholds were chosen explicitly to assure a fairly even distribution, and should therefore be interpreted as relative, and not absolute, rankings. Thus, fewer than 4 questions answered "yes" is classified as *low* autonomy; exactly 4 questions answered "yes" is classified as *medium* autonomy; and contracts with 5 or 6 questions answered "yes" are classified as *high* autonomy.

Table 3
Degree of Provider Autonomy
Selected Examples

Does the provider have autonomy:	Guatemala: PSS provider units	Colombia: Private insurers	Haiti: MARCH
To hire and fire staff?	Yes	Yes	Yes
To set wages?	No	Yes	Yes
To decide services provided within the contract?	No – required to provide basic package	No	No – required to provide basic package
To decide services provided outside the contract?	Yes – can provide additional services	Yes	Yes
To set prices of services covered by the contract?	No	No – per capita payment	Yes
To set other prices?	No – just population-based and donor funding	Yes	Yes
Number of questions answered "yes"	2	4	5
Degree of provider autonomy	Low	Medium	High

Note that this ranking ignores the impact of vertical and horizontal integration and of provider and contract type. A more sophisticated mechanism could be devised that includes these and other factors to be applied to a larger sample.

Results of this Approach

Of the 27 examples, 7 fall into the low autonomy category, 13 into medium autonomy and 7 into high autonomy. Three illustrative examples are shown in the table: for Haiti, Colombia and Guatemala.

Note that high autonomy, of itself, is not necessarily the goal of effective contracting. Rather, there may be a balance required between autonomy in certain functions (which allow the entity scope for choosing the most effective approach), and so much autonomy that the purchaser cannot determine whether or not the contract terms was fulfilled!

OTHER CHARACTERISTICS

A similar approach can be applied to the other characteristics. One such proposal is suggested in Table 4.

The results are useful, but need to be qualified in several ways: First, the questions are neither comprehensive nor "complete". Specifically:

- The ranking for *provider autonomy level* currently covers only administrative decision-making autonomy. A separate section may be necessary to include "clinical autonomy."
- The single question for *adequacy of payment/fraud monitoring systems* should be broken down into several questions. In practice, the answer relied on the judgment of informants as to whether "it works," "it exists but doesn't work too well" or "it doesn't exist/it really doesn't work." This is an area requiring further study.

Table 4
Other Characteristics

	N*	Classification			Frequency		
		Low	Medium	High	L	M	H
Degree of provider autonomy	6	< 4 "yes"	4 "yes"	> 4 "yes"	7	13	7
Adequacy of overall Quality Assurance mechanisms	7	< 3 "yes"	3-4 "yes"	> 4 "yes"	8	15	4
Adequacy of payment/fraud monitoring systems	1	"No" or "Very weak" or "big discrepancies"	"weak" or "not fully implemented"	"Yes"	10	10	7
Adequacy of information collection and analysis	1	Bottom	Middle 2 rankings	Top	4	13	10
Scope for market competition	2	None	Some competitors	Many competitors	8	12	7
Measurability of Output	2	Undefined set of services; integrated provision	Some outputs are countable; provision can be integrated	Individual treatments; tangible objects provided; can be integrated	10	11	6
Degree of Strategic Orientation towards Services	2	Both false	One true	Both true	5	9	13
Degree of Strategic Orientation towards Providers	4	Selection based mainly on history (usually no bidding)	Selection based primarily on price and infrastructure (usually no bidding)	Selection based primarily on ability to perform services (usually through bidding process)	11	11	5

*This column indicates the number of questions from the database that were used to rank the particular case.

- The ranking for *adequacy of information collection and analysis* should include additional questions on, for example, the ability of purchasers to access and analyze the data, the mechanisms for checking data accuracy, and the exact types of information gathered (does it include coverage; quality; clinical outcomes; patient satisfaction?).

Secondly, the concepts themselves are extremely difficult to measure. In particular, it was difficult to identify objective questions to classify the degree of strategic orientation. In many cases the actual basis for ranking was not clear. For example, in cases where accredited providers were selected through consumer choice, it was assumed that accreditation was fairly weak–probably based on no more than a list of required infrastructure. In such a case, the example was ranked *medium*. In cases where consumer choice was the lever without any prior accreditation process, historical patterns were assumed to be key and the example was ranked *low*.

Finally, the rankings are relative, and not absolute. With a different set of countries and cases, the rankings would differ. For example, in many countries a "high" ranking in *degree of strategic orientation toward providers* should correspond to a bidding process based on ability to provide the right services. But with this definition none of the contracts in the database would have ranked as *high*. The advantage of a relative classification is that it ranks contracts relative to standards that are attainable. The disadvantage is that it makes comparisons across studies more difficult. By reporting the underlying data in the database, rather than simply displaying the rankings, other researchers can construct their own indices. The appendix provides only a summary of the cases, but the entire database can be obtained by sending an email to bills@iadb.org with the words "contracting database" as the subject.

POTENTIAL USES FOR THESE RANKINGS

Using this method, it is possible to distinguish the various contracts by their strengths and weaknesses. Table 5 shows all 7 rankings, and some other key characteristics, for 3 contracts.

The table provides a number of insights about the potential performance of each example. For example, the arrangement between municipal governments and PROSALUD in Bolivia is fairly typical of such partnerships in that the NGO's autonomy is high, and its QA, monitoring and information systems are all medium/high. The one potential weakness in this arrangement is the low strategic orientation toward services and providers of the government. This may not cause problems, since many NGOs have international expertise and support, are experienced, and can take care of these issues on the purchaser's behalf. However, a real lack of government expertise here could cause problems if inexperienced providers enter the market.

The contract between MSPAS and PSSs in Guatemala highlights different issues. The population-based funding mechanism, with its inherent incentive to underprovide services, requires a tight definition of the services covered and good QA and monitoring mechanisms. However, in this case QA is low, the services covered have low measurability, and monitoring and information systems are only average. This may be problematic even though provider autonomy is also ranked low. The government may be relying on the goodwill of the NGOs and their missions to assure that they are reaching out to the covered populations as much as possible. But, as with PROSALUD, this could be problematic if such goodwill is not forthcoming. There is anecdotal information that supports both claims in different places.

The low level of development of the market is an additional problem: contestability is low, because rural areas are sparsely settled and because the government is expanding the system more quickly than supply can easily expand (see earlier discussion). As a result, purchasers are constrained regarding their ability to be strategically oriented and selective toward providers. A current government program is addressing these issues.

Finally, the service-based contracts between the National Health Fund for Specialized Procedures and IMAEs in Uruguay illustrate how systems can work in relative harmony. The unrestricted prospective service-based payment system results in

an incentive to overprovide in terms of volume but to reduce quality where possible. Therefore, good QA and monitoring systems and a high strategic orientation toward services (for strategic rationing) are needed. In this case QA and level of strategic orientation to services are ranked high and monitoring is ranked medium. The high technology services provided, and the high level of provider autonomy, imply a need for strategic orientation toward providers. This too is ranked high. The only obvious cause for concern here is the medium level of contestability of the market. Providers are well organized and hold a significant amount of power; therefore, service quality would probably improve with a higher level of competition. Since some observers view this system as problematic, it may be that the relative ranking is misleading – monitoring and strategic orientation may be high relative to the other cases in the sample, but still not sufficiently high to make for effective contracts.

These examples illustrate that by using an objective ranking system to compare contracts, policymakers and project teams can identify high priority problems with any given contract, and begin to define the best contract type for a particular situation. Better still would be to use this or a similar ranking mechanism to investigate the correlation between contract features and outcomes. This could lead to a truly evidence-based strategy for promoting health care improvements through contracting.

Table 5
Rankings and Key Characteristics of Selected Contracts

Country	Bolivia	Guatemala	Uruguay
Purchaser	Municipal government/USAID	Ministry of Health (MSPAS)	National Health Fund for Specialized Procedures
Provider	PROSALUD: NGO that provides preventive and curative health services	PSSs (provider units) and ASSs (administrative units): directorates or subdirectorates of geo-administrative health units	Private providers: IMAEs
Service type	Outpatient care	Primary care/administration	High-tech services
Payment mechanism	Partnership: municipality builds or provides infrastructure	Prospective population-based allocation	Prospective service-based, volume not restricted
Degree of provider autonomy	H	L	M
Adequacy of overall Quality Assurance mechanisms	M	L	H
Adequacy of payment/fraud monitoring systems	H	M	M
Adequacy of information collection and analysis	H	M	M
Contestability of market	M	L	M
Measurability of output	M	L	H
Degree of strategic orientation toward services	L	M	H
Degree of strategic orientation toward providers	L	L	H

Potential Implications for Performance

Given this proposed ranking system, it would be helpful to link contract characteristics to system performance (and preferably health outcomes). For example, do good monitoring mechanisms actually lead to good health outcomes? Do they ensure the smooth and efficient operation of the system? If such mechanisms are poor, do perverse incentives lead to wastefulness, low quality services, and poor health outcomes?

There is little documentation to link contract types to performance. The complexity of contracts and the number of factors that affect both outputs and outcomes, make this particularly difficult. This is clearly an area for further research. However, a few tentative thoughts in this regard are set out below.

INCENTIVES RESULTING FROM PROVIDER PAYMENT MECHANISMS CAN AFFECT PERFORMANCE

As many studies have shown, payment mechanisms affect performance. In the cases presented here we can see that fee-for-service mechanisms encourage excessive spending and low productivity (see Table 6).

Population-based and per capita systems suffer from poor quality and reduced services, as can be seen, for example, in Argentina. There are serious problems under PAMI, the country's national health insurance program for the elderly and, as already mentioned, the lack of beneficiary choice exacerbates the problems. There are no data on rates of use of services, so it is not possible to quantify the extent of underprovision of service. Nevertheless, there is some evidence regarding beneficiaries' perception of quality: an estimated 13 percent of PAMI beneficiaries also purchase private insurance coverage because of dissatisfaction with PAMI services (ARSS, 1999). Still others use the public system. This suggests problems with the quality and accessibility of health care under PAMI.

NONGOVERNMENTAL PROVIDERS ARE SOMETIMES MORE SUCCESSFUL THAN PUBLIC PROVIDERS

A relatively high degree of provider autonomy from the government can be advantageous. For example, in Peru, a recent study comparing CLAS to non-CLAS establishments found that the former have higher rates of community participation and have been quicker at introducing improvements to services. Waiting times were improved in 86 percent of surveyed CLAS health posts, but in only 75 percent of non-CLAS posts. A health promoter program was implemented in 80 percent of surveyed CLAS health centers, but in only 60 percent

Table 6
Provider Payment Mechanisms and Performance

Provider payment mechanism	Issue	Evidence
Fee-for-service, no volume restrictions	No incentive to keep costs down	*Uruguay*: high-tech services can be provided 20-25% more cheaply in public units than in contracted private facilities
Fee-for-service with volume restrictions	Incentive to claim for treatments not actually performed	*Brazil*: in 1995, 28% of inpatient hospital services for which payment was claimed proved not to be valid
Fee-for-service with volume restrictions	Increasing number of treatments by doctors, beyond volume restrictions, as monitoring system loses track of claims	*Colombia*: the individual fee-for-service system introduced in 1998 led to overspending by more than $1 billion in the first year. (System has now been changed.)

of non-CLAS centers. Other indicators (home visits, new availability of needed services) show the same pattern, although there have as yet been no systematic evaluations of the impact of the CLAS program on coverage and quality of services (Cotlear, March 2000).

Nongovernmental organizations, by exercising their freedom to manage services autonomously, can also make efficiency and productivity improvements that escape their public sector counterparts. PROSALUD's productivity, efficacy and cost-effectiveness in outpatient care in Bolivia all ranked higher than comparable indicators in Ministry of Health facilities according to a study by Richardson et al. in Santa Cruz. A further impact, of these impressive performance results, is the positive influence on Ministry of Health facilities with which PROSALUD units compete. One study cited evidence that public facilities began to extend their service and evening hours in areas where PROSALUD clinics were located (see studies cited in Mintz et al. 2000).

Finally, nongovernmental organizations are also free to experiment with innovative funding mechanisms. The Bolivian public sector only subsidizes PROSALUD's fixed startup costs (municipalities build or provide the physical infrastructure of the clinics). This freedom from government financing allowed PROSALUD to develop its own financing scheme. By carefully analyzing its members' ability to pay, it evolved a system of cross-subsidies, with middle class populations subsidizing clinics in areas with lower standards of living. Curative services also subsidize the costs of preventive care. By 1994, 9 years after its founding, PROSALUD financed around 70 percent of its budget from revenues; only 30 percent came from outside funding such as USAID (Mintz et al. 2000).

Conclusion

A large variety of healthcare contracts between the public and private sectors exist in the countries of Latin America and the Caribbean. The examples in this database cover a range of these contract types, but the list is by no means exhaustive. In addition, in some countries (Brazil and Colombia are two obvious examples) the contracts are in a state of flux. A similar research exercise in one or two years' time would therefore yield a number of new examples of contracts.

Despite its limitations, however, the database draws out a number of key issues to consider when developing contracts. The first is the provider payment mechanism: what incentives does it create, both positive and negative, and does the public purchaser provide enough funding to really influence provider behavior? Secondly, given the payment mechanism, the nature of the provider and the type of contract, is there adequate attention paid to QA, monitoring and information systems? Finally, what is the impact of factors outside the contract itself: the level of development of the market, the type of service, and the attitude and involvement of both the government and the community? The examples provided in this paper highlight both problems and successes. They should therefore help policymakers devise systems that avoid many of the pitfalls that the countries of the region have already discovered, and mimic successful strategies to avoid those pitfalls.

The paper also illustrates how the classification of contracts can help policymakers and researchers compare contracts and identify potential problems before they arise. A number of opportunities for further research are highlighted that could ultimately form the basis of a strategy for improving health care services through purchasing and contracting. First, the database should be expanded to cover a larger number of examples. Comparing just 30 or so cases is only indicative.

Second, the list of questions in the database could be expanded. If the questions are to be used as a tool for ranking contracts, then they must cover every important aspect of each subjective characteristic. For example, as already mentioned, the *degree of provider autonomy* characteristic could be broadened to include clinical as well as administrative autonomy. The *adequacy of information systems* could be expanded, to cover the ability of the purchaser to analyze and use the data, and the exact types of data collected. A methodical exercise should be undertaken to ensure that all the relevant questions are covered in the database.

Third, the database framework and method for ranking should be recognized as an opportunity for portfolio analysis. For example, current IDB projects in a particular country could be examined and compared to other contracts in that country and with those elsewhere in the region. This exercise could improve the technical advice provided to countries and make it possible to concentrate on a smaller set of high priority dimensions of the contract.

Finally, in the longer term, a large-scale research initiative should collect information on the performance (either output or health outcome) of each example in the database. This information, linked to the rankings described above, could be used to investigate if there is an association between the mixture of characteristics and performance in different market environments. This could lead to a strategy for the appropriate use of contracting and purchasing in seeking to improve health care services, and health conditions, in Latin America and the Caribbean.

References

Abt Associates. 1998. Alternative Provider Payment Methods: Incentives for Improving Health Care Delivery, Partnerships for Health Reform Primer for Policymakers.

Altobelli, Laura C., and Jorge Pancorvo. 2000. Peru: Shared Administration Program and Local Health Administration Associations (CLAS). Washington, D.C.: The World Bank and IESE.

Asociación para la Reforma de los Sistemas de Salud (ARSS). 1999. Report of Survey of Health Care Coverage and Satisfaction. Buenos Aires: ARSS.

Cotlear, Daniel. 2000. Peru: Reforming Health Care for the Poor. Washington, D.C.: The World Bank.

Fiedler, J. L. and L. R. Hougen. 1995. Mid-Term Evaluation of the Self-Financing Primary Health Care II Project (PROSALUD) (511-0607). POPTECH Report No. 95-034-029. Washington, DC: POPTECH for USID/Bolivia.

Garrison, John; Anabela Abreu and Loppacher Sanchez, Julio. 2000. Brazil: HIV/AIDS Program in Brazil Innovates through Partnerships with Civil Society Organizations (CSOs).

Inter-American Development Bank. 1996. Economic and Social Progress in Latin America, Special Section: Making Social Services Work. Washington, D.C.

La Forgia, Gerard M. and Jaime Ribera. 2000. Nicaragua: Growing Pains, The Nicaraguan Social Insurance Model in Transition.

Labadie, G. 1998. Regulation and Peformance of Health Cooperatives in Uruguay. In W. Savedoff, ed. *Organization Matters: Agency Problems in Health and Education in Latin America.* Latin American Research Network. Washington, D.C.: Inter-American Development Bank.

Lewis, Maureen and Andre Medici. 1997. The Challenge of Healthcare Reform in Brazil: Balance and Trends.

Mintz, Patricia, William Savedoff, and Jorge Pancorvo. 2000. Bolivia: PROSALUD and the Insurance Program for Mothers and Children (SNMN). Washington D.C.: Inter-American Development Bank, The World Bank and IESE.

Nieves, Isabel, Gerard La Forgia, Jaime Ribera. 2000. Guatemala: Large-Scale Government Contracting of NGO's to Extend Basic Health Services to Poor Populations in Guatemala.

World Bank. 1999. Purchaser/Provider Payment Initial Statement of Work. Draft. Washington D.C.: The World Bank .

Appendix 1
Glossary of Acronyms

ABORDA	Associacao Brasileira de Redutores de Danos (The Brazilian Association of Harm Reducers)
ASS	Administradora de Servicios de Salud (health service administrators, Guatemala)
BEMFAM	Sociedad Civil Bem-Estar Familiar do Brazil
CCSS	Caja Costarricense del Seguro Social (Social Security Institute in Costa Rica)
CLAS	Comité Local de Administración de Salud (Local Health Administration Committee, Perú)
COOPESALUD	Cooperativa Autogestionaria de Salud, Costa Rica
CSO	Civil Society Organization
DRG	Diagnosis-related Group: grouping of diagnostic categories used for reimbursement
EMP	Empresa Medica Previsional (Medical Provision Companies in Nicaragua)
FNS	Fundación Nacional para la Salud (National Health Foundation, Costa Rica)
FONASA	Fondo Nacional de Salud (Public Social Security Institute, Chile)
FUSAL	Fundación Salvadoreña para la Salud y el Desarrollo Social (NGO in El Salvador)
GDP	Gross Domestic Product
HIV/AIDS	Human Immuno-Deficiency Virus/Acquired Immune Deficiency Syndrome
HMO	Health Maintenance Organization
IAMC	Instituto de Asistencia Medica Colectiva (HMO-type organizations, Uruguay)
ICC	International Child Care
ICU	Intensive Care Unit
IDA	International Development Association
IDB	Inter-American Development Bank
IMAE	Insituto de Medicina Altamente Especializada (private providers of high-tech services, Uruguay)
INSS	Instituto Nicaragüense de Seguridad Social (Social Security Institute in Nicaragua)
IPSS	Instituto Peruano de Seguro Social (Social Security Institute in Peru)
ISSS	Insituto Salvadoreño de Seguro Social (Social Security Institute in El Salvador, now ESSALUD)
ISAPRES	Instituciones de Salud Previsional (Private health insurers, Chile)
LAC	Latin America and the Caribbean
MARCH	Management and Resources for Community Health, NGO
MINSA	Ministerio de Salud (Ministry of Health in Nicaragua)
MIS	Management Information System
MOH	Ministry of Health
MOU	Memorandum of Understanding
MSPAS	Ministerio de Salud Pública y Asistencia Social (Ministry of Health, Guatemala)
MSPP	Ministerio de Salud Publica y Población (Ministry of Health, Haiti)
NGO	Nongovernmental Organization
PAMI	Programa de Asistencia Médica Integral (National Health Insurance Program, Argentina)
PECSB	Programa de Extensión de Cobertura de Servicios Basicos (Program to Extend Coverage of Basic Health Services in Guatemala)
PHR	Partnerships for Health Reform
PROFAMILIA	Asociacion Pro-Bienestar de la Familia, Inc.
PROSALUD	Nonprofit Bolivian healthcare organization

PSS	Proveedora de Servicios de Salud (health providers, Guatemala)
QA	Quality Assurance
RHA	Regional Health Authority
SESPAS	Secretaría del Estado de Salud Pública y Asistencia Social (Social Security Institute, Dominican Republic)
TB	Tuberculosis
USAID	United States Agency for International Development

Appendix 2
List of Sources

Interviewees

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APPENDIX 3
LIST OF CASES IN THE DATABASE

The following matrix provides basic information to identify the cases that are included in the database. The authors cannot guarantee the accuracy of the content of the database due to changes that may occur over time, or to differences in interpretation of situations and performance by different observers. The authors would be grateful for any corrections or additions to the database, which should be sent by email to bills@iadb.org with *"more data"* in the subject. For a copy of the full database in electronic form (in Microsoft Access), send an email to bills@iadb.org with the words *"contracting database"* in the subject.

Contract Type	Country	Begin	Purchaser	Provider	Program
Partnership	Honduras	1997	Ministry of Health	At least 3 community volunteers or monitors (monitoras) per community	Program to reduce malnutrition
Partnership	Brazil	1987	Ministry of Health	Numerous small Brazilian Civil Society Organizations (CSOs)	HIV/AIDS prevention and care
Partnership	Bolivia	1985	Municipal government/USAID	PROSALUD: NGO that provides preventive and curative health services	Outpatient care
Partnership	Dominican Republic	1999	Secretariat of Public Health and Welfare: SESPAS/Duarte Provincial Health Authority	PROFAMILIA NGO: Dominican affiliate of the International Planned Parenthood Federation	Reproductive health
Partnership	Haiti	1996	Ministry of Health (MSPP)	"MARCH: Management and Resources for Community Health, NGO (other national/international NGOs have similar roles)"	Women's health
Partnership	El Salvador	1996	Ministry of Health	FUSAL: NGO	Rural health program administration
Partnership	Uruguay	1980	Government	"NGOs for special cases, e.g. services for mentally retarded children"	Care for mentally retarded children

Population-based or historical contracts	Guatemala	1997	Ministry of Health (MSPAS)	PSSs (provider units) and ASSs (administrative units): directorates or subdirectorates of geo-administrative health units	Primary care/administration
Population-based or historical contracts	Haiti	1990	Ministry of Health (MSPP) using IDA loan	NGOs providing TB services	Assistance to TB care provider units
Population-based or historical contracts	Costa Rica	1998	Social Security Fund (CCSS)	COOPESALUD: cooperative NGO	Primary and outpatient care
Population-based or historical contracts	Costa Rica	1998	Costa Rican Social Security Institute (CCSS)	National Health Foundation (FNS): responsible for construction and management of Hospital de la Imaculada Concepcion in Heredia	Hospital construction and management
Population-based or historical contracts	Peru	1994	Ministry of Health and RHAs	"CLAS: Local Health Administration Committee, co-managed by community and Ministry of Health"	Management of health centers
Per capita Contracts: Insurer	Argentina	1971	PAMI: national health insurance program for the elderly	"37 provider groups (in effect, private insurers)"	Primary and secondary care
Per capita Contracts: Insurer	Colombia	1996	Consumer (premiums subsidized by FOGYSA)	Private and public insurers	Primary and secondary care services
Per capita Contracts: Insurer	Nicaragua	1994	INSS: Social Security Administration	Private Medical Care Organizations (EMPs) (& public EMPs) that contract with providers	Primary and secondary care
Per capita Contracts: Insurer	Uruguay	1960	Social Security administration	IAMCs: private insurers similar to HMOs	Primary and secondary care
Service-based contracts w restricted volume	Colombia	1990	Ministry of Health	PROFAMILIA NGO: Colombian affiliate of the International Planned Parenthood Federation	Reproductive health
Service-based contracts w restricted volume	Brazil	1970	Municipal secretariats of health	Sociedad Civil Bem-Estar Familiar do Brazil (BEMFAM)	Management of reproductive health services

Service-based contracts w restricted volume	Colombia	1998	Social Security Institute (public insurer in competition with private insurers since 1996)	Private providers	Primary and secondary care
Service-based contracts w restricted volume	Brazil	1983	States/Municipalities	Not-for-profit hospitals (hospitales filantropicos) and for-profit hospitals (public hospitals also have similar contracts)	Inpatient services
"Service-based contracts, no restriction"	Uruguay	1980	National Health Fund for Specialized Procedures	Private providers: IMAEs	High-tech services
"Service-based contracts, no restriction"	El Salvador	1990	ISSS: Social Security Institute	Physicians who work for ISSS but also act in a private capacity	Ambulatory specialty care
"Service-based contracts, no restriction"	Nicaragua	1994	INSS: Social Security Administration	Private hospitals	Specialized and hospital care
"Service-based contracts, no restriction"	Peru	1991	IPSS: Peruvian Social Security Institute	Private hospitals and clinics	Minor surgery
"Service-based contracts, no restriction"	Peru	1992	IPSS: Peruvian Social Security Institute	Private ambulatory care physicians	Primary and Ambulatory care
"Service-based contracts, no restriction"	Chile	1979	FONASA (public sector social security institution)	Private providers	Ambulatory and hospital care
"Service-based contracts, no restriction"	Uruguay	1970	Ministry of Health	Private units that provide clinical services not available in public hospitals	High-tech services