

# Improving government health services through contract management: a case from Cambodia

ROBERT SOETERS AND FRED GRIFFITHS

*HealthNet International, Amsterdam, Netherlands*

Most government health facilities in Cambodia perform poorly, due to lack of funds, inadequate management and inefficient use of resources, but mostly due to poor motivation of staff. This paper describes contracting as a possible tool for Ministries of Health to improve health service delivery more rapidly than the more traditional reform approaches. In Cambodia, the Ministry of Health started an experiment with contracting in eight districts, covering 1 million people. Health care management in five districts was sub-contracted to private sector operators, and their results were compared with three control districts. Both internal and external reviews showed that after 3 years of implementation, the utilization of health services in the contracted districts improved significantly, in comparison with the control districts. There was adequate competition in awarding the contracts. A Ministry of Health Project Co-ordinating Unit measured the performance of the contractors, and contributed pro-actively. There was no evidence of rent-seeking practices by either the contracting agency or the contractors.

This paper describes in more detail the successes and failures in one of the contracted districts, where HealthNet International applied the contracting approach. Despite significantly increased official user fees, constituting 16% of recurrent costs, the utilization of services was equally increased. Patients thought the fees were reasonable because they were still lower than the fees demanded if government health workers charged informally. They also thought that the services were of better quality than in the unregulated private sector. Another important result was that combining strict monitoring with performance-based incentives demonstrates a decrease in total family health expenditure of some 40% from \$18 to \$11 per capita per year. Innovative and decisive management proved to be essential, which is more likely to be achieved by a contracted manager than by regular government managers with life-long employment. This paper discusses how the contractor addressed the deeply rooted problems of informal private activities of government health workers. The NGO district management experimented with two management systems: first by individual contracts with health workers, and secondly by sub-contracting directly with the health centre chiefs and hospital directors.

A reason for concern is that poli-pharmacy and excessive use of injectables continued. Also, the participation of the central level of the Ministry of Health was positive in the contracting process, but the role and participation of the provincial level of the Ministry was more tentative.

**Key words:** contracting, health services, management, Cambodia

## Introduction

Cambodia is an agricultural country with 11.5 million people, of whom 86% live in rural areas. It experienced considerable political and social turmoil during the last decennia. After the Pol Pot period of genocide and the Vietnamese occupation, the government fought several Khmer Rouge insurgencies. Since early 1999 there has been a fragile political stability.

Until 1994, Cambodia experienced galloping inflation as the result of uncontrolled expenditure. This inflation was brought under control by strict fiscal discipline, but this also brought complex procedures for obtaining public funds for the social sectors. The economic development of rural Cambodia is constrained, with a budgetary bias towards

urban areas (World Bank 1999). During the last decade, Cambodia's economy made remarkable progress, although it still remains one of the poorest countries in South-East Asia, with a per capita Gross Domestic Product (GDP) of US\$238 (ORC Macro 2000).

## The Cambodian health care system

The health status of the Cambodian population is among the poorest in South East Asia. Average life expectancy is 54.4 years. The maternal mortality rate is estimated at 437 per 100 000 live births, mainly due to abortion complications, eclampsia and haemorrhage (ORC Macro 2000). Acute respiratory infections, malaria and, increasingly, HIV-related illnesses are the main causes of mortality. HIV prevalence in adults reached an alarming 4% by the end of 1999, the highest

in Asia (UNAIDS 2000). Outpatient attendance in public health facilities in Cambodia is only 0.35 consultations per capita per year, below the World Health Organization international standard of 0.60 (World Bank 1999).

Annual government health expenditure is US\$1.6 per capita, or 0.5% of GDP, and only a small proportion of this public expenditure reaches the peripheral level. Health facilities lack adequate infrastructure, trained staff and sufficient funds to operate. The use of sparse government funds is also inefficient. The budgetary system is so cumbersome that managers of health centres and hospitals have little idea how much funding they are supposed to receive and when. Health facilities further suffer from the effects of informal diversion or leakage of funds at higher administrative levels (World Bank 1999).

Donor aid for the health sector is relatively high with US\$5.7 per capita per year. Much of this assistance during the 1990s was of an emergency nature, and was not designed to create sustainable improvements of the health sector (Lanjouw et al. 1999).

Out-of-pocket expenditure amounts to 82% of total health care expenditure, or US\$33.3 per capita per year (World Bank 1999). This constitutes 11% of GDP, far more than many households can afford. A recent survey showed that the average cost per treatment is US\$20.7, and that 6% of patients needed to sell assets to pay their bills. Once the cost per treatment rises above US\$100, it becomes catastrophic for many families seeking health care (ORC Macro 2000).

Patients in Cambodia may choose among various health care providers that compete in a mostly unregulated market. When sick, most patients first seek self-treatment by buying mostly from informal drug sellers. As a second choice patients – if they fail to improve – may invite to their homes traditional healers, traditional birth attendants, health centre nurses, midwives or private practitioners. In one study it was found that as many as 90% of all health care transactions took place at home (van de Put 1992).

When patients eventually seek health care outside the home, they visit a variety of traditional healers as well as the allopathic private and public health sector. People do not have time to waste, particularly during peak agricultural periods – waiting time in government health facilities is often too long, or staff may be absent so that patients fail to obtain a consultation. Health staff also tend to lack respect for those patients seeking ‘free’ public health care. Real or artificial shortages of supposedly ‘free’ government drugs are common, further aggravating the unpredictability of whether patients receive treatment at all within public institutions.

The root cause of this poor performance in public institutions is that irregularly paid salaries of US\$10–30 per month force staff to seek alternative sources of income for their survival. They may informally earn US\$30–1000 per month depending on their training, the affluence of the community they work in and their ruthlessness to maximize profits regardless of the

consequences for patients. Most stakeholders still accept that government health workers supplement their inadequate salary by informal activities. Although not authorized by legislation, authorities do not object if government health workers open private clinics, laboratories or pharmacies; on the contrary, these ‘extra-legal’ activities generate additional income for them. Government health workers freely publicize these informal activities, and openly discuss their practices, including about their earnings (personal observation). Forces to fundamentally change this informal system were weak until recently.

### **Reforming the health system in Cambodia: the contractual approach**

The Cambodian government responded to the above-described weaknesses by initiating several reforms. In 1995, the Ministry of Health launched a health coverage plan, to redress infrastructure shortcomings of the Vietnamese-modelled system installed in the 1980s. It established 71 Operational Districts, and started to build new referral hospitals and health centres. A Minimum Package of Activities was also formulated, which aims at using public money more efficiently for priority health problems. Until 1997, there were no official user-charges in Cambodia’s government health facilities. The Financing Charter of 1997 opened the possibility for cost-sharing, and was as such an important event in moving away from the official policy of ‘free’ health services, to which, in practice, the population had limited access. The objectives of the Financing Charter were to reduce unofficial fees and household health expenditure, to improve the quality of care, to enhance staff motivation and to improve access to priority public health services for the majority of the population (Thavary et al. 2000).

As part of the health reform plan, in 1998 the Cambodian government started, with a loan from the Asian Development Bank, an experiment with the contractual approach in eight districts, covering 1 million people. The district health management in five districts was sub-contracted to private sector operators. The objective of this pilot project was to gain experience with different reform models. If successful, the pilot phase may be followed by an implementation phase covering more districts, while adopting lessons learned as Ministry of Health policy.

There were three types of reform models in the project (Fronczak et al. unpublished data):

- (1) contracting-out of district management to private contractors (three districts);
- (2) contracting-in of district management to private contractors (two districts);
- (3) continuing existing government policies in a number of reference districts (three districts).

Contracting-out provides complete control over staff and budget to the district contractor. The contractor has autonomy regarding the service delivery system and staffing patterns, and is bound by contract to achieve health service targets. The bid includes all costs such as staff salaries,

running costs, medications, consumables and costs related to the contractor.

Contracting-in provides private sector management within a largely public sector set-up. In this scenario the hands of the management are still tied and major management decisions have to be taken in collaboration with the national and provincial health authorities. Most health workers are civil servants, still receiving their civil service salary. The contracting-in approach has similarities with the concepts of 'planned markets' (Salman and von Otter 1992) and 'managed competition' (Enthoven 1993). Strictly speaking, contracting-in concerns the relationship between two public sector operators (Perrot and Adams 2000). However, in Cambodia the term is used to describe a contract between the government and a private sector operator, whereby civil service regulations still have to be obeyed.

The 'reference districts' serve as a control for the contracting-in and -out districts. They receive a similar amount of additional budget as the contracting-in districts, but continue to operate under the traditional government management structure.

### Contracting of district management: the case of Pereang district

This paper describes the case of one of the districts applying the 'contracting-in' model. Pereang operational district (in Prey Veng province) with 176 000 inhabitants has one 60-bed referral hospital, one 40-bed district hospital and 15 health centres. The contractor, an international NGO, was awarded a 4-year contract in 1998 and started work in April 1999.

#### Concepts

During the first months there was a process of discussion and consensus building with the main stakeholders, and an analysis of the literature. This resulted in the following concepts, which were introduced for implementation from the end of 1999 onwards:

- The inadequate official salaries of government health workers dictate that *additional financial incentives for health workers should be identified* to improve performance and quality of care. This was thought to be more important than alternative staff morale-boosting interventions. The incentives should provide a liveable wage for the health workers so that they can support their families. It was thought that a significant proportion of this budget gap could be filled by *official* cost-sharing revenue by partially formalizing the informal out-of-pocket expenditure which constituted 97% of total health expenditure in Pereang.
- A *performance-based staff incentive structure* should replace the traditional fixed salary and per diem system. It was thought that more and better work should also lead to higher payments. This implied the abandonment of the traditional salary system. Only if more patients were attracted could the monthly staff payments create the required liveable wage, because it would mean more cost-sharing

revenue and more subsidies from the district management. By making the incentive structure dependant on achieving certain utilization targets, it was also assumed that health workers would become more 'consumer' friendly, and motivated to accept changes in their behaviour.

- *Quality should be high* from a professional *and* a consumer point of view. Professionally, quality is usually associated with correct diagnosis and treatment, and to assure this the external NGO management was thought to play an important monitoring role. From a consumer point of view other quality factors are equally or more important. Often mentioned is quick attendance to patients, with an implication that staff should be punctual and be accessible 24 hours a day, including weekends. Other important factors are respectful treatment of patients by health workers and the availability of drugs.
- It was thought that if the staff of government health facilities were to *stop their informal private practices*, they could achieve their utilization targets. The alternative of accepting private practice by government health workers – for example outside office hours – was rejected, because this would mean that health workers are 'competing with themselves', have a de-facto fuzzy monopoly, and will not be fully dedicated to their work in the public sector.
- *Abandon the fee exemption system and replace it when appropriate with an equity fund*. Several studies in Cambodia show that free provision of health care to the poor through a fee exemption scheme creates serious selection problems (World Bank 1999). In practice fee exemptions do not reach the *poor*, but rather the *well-connected*. Exemptions may also create an environment of poor accounting, in which 'lost revenues' enhance rent-seeking practices. In order to redress urgent access problems for the poor, preference was given to an equity fund mechanism – in particular at hospital level where user fees are higher than at health centres. The equity fund mechanisms assure that the costs for the treatment of the poor are paid by an external fund instead of by the health workers themselves.

### Contract negotiations with health staff in 1999: the individual contract system

The main question the NGO contract managers posed during negotiations with the Pereang district health workers was 'what payment would you consider reasonable for a decent living?' The answers included adequate access to essential commodities, education for children and marketable training opportunities. Government salaries of US\$10–30 were considered so unfair that it blocked discussions about work ethics, motivation and the provision of good quality care. A commonly heard perception among outsiders about civil servants in Cambodia was that they recklessly pursue their income-generating activities at the detriment of the public interest. However, in Pereang it appeared that some health workers became interested in the idea of receiving reasonable incentives while also giving up their informal activities. The NGO managers, having comparatively good salaries themselves, realized that they would probably also behave unethically if they were in the same position as their

Cambodian colleagues. This mutual understanding created an atmosphere of partnership and realistic negotiations.

Contracts were signed with each health worker applying the following formula: basic monthly incentive payment 55%; punctuality incentive 15%; performance bonus 30%. *Basic monthly incentive* payments were guaranteed during 3-month contract periods. The *punctuality incentive* was paid after the head of each health centre or hospital department confirmed that the employee had not been absent from duty without justification. The *performance bonus* depended on the degree to which the monthly financial targets for the department or health facility were fulfilled, and were calculated as shown in Table 1.

Besides the financial targets, a number of *non-financial targets* were specified such as EPI coverage, number of tuberculosis inpatients, percentage of correct diagnosis and treatment. During negotiations of individual contracts between the international NGO managers and the government health workers, there was not as yet a monitoring system suitable to review these non-financial indicators.

Pereang district started official cost-sharing and the payment of staff incentives in December 1999. Health facility staff established the level of user fees based on their experience with informal pricing practices. The NGO managers aimed to negotiate that user fee levels would remain as low as possible, but were aware that the user fee revenues should also generate adequate staff incentives. Health facility managers could determine the fee level, on condition that their local communities would agree. This was introduced as the 'floating fee system', whereby fees would be allowed to fluctuate at around 60% of the market prices. The assumption was that this would take away the market incentive for the health workers to continue their informal private practices. The price for outpatient attendances settled at on average US\$0.25, and for one inpatient day at US\$0.75. The revenue

from these fees constituted approximately 50% of the staff payments. The remaining 50% of staff incentives was paid by subsidies from the NGO district management. Medical doctors and district managers settled for contractual incentive payments, on top of their government salaries, of between US\$120 and \$180 per month, medical assistants and midwives around \$90, nurses around \$70 and cleaners around \$35. This implied an increase in their *official* income of between 500–800%, although for some health workers these incentives still constituted a decrease in income, due to the cancellation of their private informal activities.

The cost-sharing and incentive scheme was introduced initially in three health facilities, in which 60 of the 140 district health workers were working. A comparison of the 1999 and 2000 output statistics showed that the utilization of health services before and after the introduction of cost-sharing and incentive payments increased considerably (see Table 2). Indicators increased by between 3.2 times (outpatient consultancies) and 5.4 times (inpatient days) of the output. The number of family planning acceptors slightly decreased, also due to the fact that previously there was over-reporting.

The 13 remaining health centres in the District used the traditional Ministry of Health financing system, whereby staff were paid a fixed 50% of cost-sharing revenues. This amounted to an official incentive payment to staff members of approximately US\$7–10 per month. In these health centres informal and under-the-table payments continued as this was the only means of survival for the health staff. This difference in approach within the same district also allowed a comparison of the output, which showed that the number of outpatient consultancies in the health facilities *with* incentives was on average 3.6 times higher than in the health facilities *without*. These data seemed to show the positive effect of performance-based contractual staff payments on utilization figures.

**Table 1.** Methodology for calculating the individual performance bonus of health staff

% achievement of financial target	Performance bonus = 30% of agreed incentive
<60	0
60–90	50
90–120	100
>120	150

**Table 2.** Comparison of output data in three health facilities *before and after* the introduction of the cost-sharing and incentive scheme

	1999 monthly average	2000 monthly average	Ratio 2000/1999
Outpatient consultancies	750	2412	3.2
No of consultancies/year/inhabitant	0.24	0.77	3.2
Inpatient days (non TB)	123	665	5.4
Deliveries	5	17	3.8
Antenatal attendances (new attendants + re-attendants)	27	106	3.9
Depo-provera + oral contraceptives	578	508	0.9

### Developments during 2000: from individual contracts to health facility sub-contracts

During 2000, the individual contract system started to show its limitations. It was difficult for the NGO district managers to monitor the performance of 60 individual contracts – and it would be even more difficult to extend this system to all health facilities covering 140 health workers. The performance-based bonus payment of 30% also proved inadequate to fundamentally change staff behaviour, and it was thought that the proportion of performance-based payments should increase. However, probably the most important stagnating factor was the lack of ownership by the health centre chiefs and hospital directors. They were unable to manage their staff – because all staff contracts were signed by the NGO managers at district level, instead of by them. As a result, by the end of 2000 utilization indicators remained below expectations. The ‘remote control’ management of individual contracts by district managers proved too cumbersome and unpractical.

From November 2000 onwards the NGO district management invited the managers of all health facilities to develop performance-based sub-contracts. It was felt that the health facility managers should have the authority to decide on the incentive payments, to hire and fire, and to allocate recurrent cost expenditures according to their preferences, instead of continuing with the micro-management system by the NGO contractor. The chiefs and directors of each of the 17 health facilities were invited to make proposals, indicating the current situation in their health facilities, their strategies for the future and setting their targets on population-based standards. These targets were on average three times higher than the existing output levels. Monthly payment of the sub-contractors was done by adding an 80% subsidy on top of the monthly realized cost-sharing revenues. Each trimester an additional subsidy was paid to cover non-user-fee activities such as immunizations, health promotion and TB control.

During 2001 all health centres signed sub-contracts with the NGO management. The awarding of the contracts was made *competitive*. If management or output of a particular health centre proved to be poor, other health workers or health managers were requested to write a new proposal for that particular health facility to replace the current non-performing management. As a result, during 2001 the contracts with four health centre chiefs were cancelled, and replaced by contracts with other health centre managers.

The results of the new sub-contracting system were positive, and during 2001 output indicators further improved in comparison with 2000, as shown in Table 3. In particular the increases in institutional deliveries and birth spacing attendances were significant.

### External utilization and quality review

The Ministry of Health conducted a baseline household survey and health facility survey in June 1998. Three years after the start of the project the same surveys were repeated to compare the outcome over time and between the districts. The surveys found that the contracted districts consistently out-performed the control districts with respect to the pre-defined coverage indicators, and that contracting-out districts were better performing than the contracting-in districts (Keller and Schwartz unpublished data).

The results for six health service coverage indicators in Pereang district are given in Table 4. These results show that after 3 years there was a remarkable improvement of all indicators. Another finding of the household survey was that out-of-pocket expenditure in Pereang reduced by 40% between 1998 and 2001, from US\$18 to \$11 per capita. This is an important finding because in Pereang there were substantially increased *official* user fees, with no user fee exemptions for the poor at health centre level. This finding seems to show that by providing good quality care at reasonable cost, the population starts attending public health facilities, and thereby avoids the extremely high cost of unregulated private sector providers.

### Monitoring and evaluation

During 2001, a modified monitoring and evaluation system was put into place to cover all health centres in the district. The NGO district management also signed a sub-contract with the MOH Operational District director, who then became partially responsible for the monitoring of the health facilities. Monitoring and evaluation visits consist of supervising health facility activities, and conducting spot-checks at household level. At random, a number of patients are selected from the health facility registers, after which the ex-patients are interviewed in their homes. The interviewers ask when the visit to the health facility actually took place, about the patient's satisfaction with the visit, and their opinion of the fees paid. Each trimester the monitoring and evaluation teams compile a report about each health centre and give a

**Table 3.** Comparison output indicators of all health facilities in Pereang district in 2000 and 2001

	Results 2000	Results 2001	% change
Outpatient consultancies (old cases)	50.277	99.412	98
Outpatient attendance per capita	0.29	0.56	98
Antenatal total cases	2.461	6.191	152
BS total (Depo-provera + oral contraceptives)	8.740	16.982	94
Institutional deliveries	283	1.324	368
Fee paying revenues (in US\$)	16.138	41.122	155

BS = Birth spacing.

**Table 4.** Health service coverage data in 1998 and 2001 measured by independent households and health facility surveys in Pereang district

	Baseline 1998 (%)	Evaluation July 2001 (%)	% change
Delivery in health facility	3.0	19.5	550
Two or more ANC visits with blood pressure checked at least once	3.0	25.2	740
Knowledge of four or more modern family planning methods	21.0	68.0	224
Modern family planning method used by woman with child 12–23 months	14.0	30.4	117
Children fully immunized (card + history)	24.0	51.9	116.3
Children with diarrhoea given ORS packets	11.0	27.6	151

ANC = antenatal care; ORS = oral rehydration salts.

score based on a number of criteria, such as *good quality* (hygiene, sterilization practices, correct diagnosis and treatment), *patient satisfaction* (perception of quality, no overcharging, transparent fee system by publicizing fees at health facility entrance), *no fraud* (no ghost patients or inflation of statistics). These reports assist the district NGO management to calculate the monthly and quarterly payments to the health facilities.

These monitoring activities – and in particular the patient spot-checks – proved essential to assure quality and to control transparency. When contractual payments are linked to performance, *monitoring must be frequent and effective*. Such intense monitoring may be less feasible in remote districts or in areas where travelling is dangerous due to political tensions. In general, monitoring and evaluation is supposed to take place in a supportive fashion, but in this particular contractual approach, auditing skills are equally important. Behavioural change issues and improving knowledge are said to require the ‘soft’ approach of supportive supervision, but this concept in itself is a contradiction in terms in most of Cambodia. Auditing issues such as detecting the reporting of ghost patients, unrealistically high user fees and outright fraud in statistical reporting require a ‘low or zero tolerance’ approach. Sub-contracted health facility managers who cheat should be penalized, and if fraud continues, contracts should be discontinued. A strict approach in monitoring that comes with sanctions as well as incentives has proven to be successful in Pereang, as it has been in other sectors in Cambodia such as small-credit schemes and marketing experience in the

promotion of diverse products such as Tiger Beer and Nr. 1 Condoms. An effort to combine the soft and low tolerance approaches to supervision can be done within a team instead of by individual supervisors. The division of tasks is thought to improve transparency.

#### Financial analysis of Pereang contracting experience

In 1998, annual public expenditure for health services in Pereang district was only US\$0.56 per capita (see Table 5). The bulk of the 1998 public expenditure was used in providing essential drugs to the health facilities. After 3 years of the contracting experiment in Pereang, direct public health expenditure almost tripled to US\$1.55, mainly through revenues from cost sharing and contractual subsidies to the health facilities by the NGO district management.

In 1998, public health expenditure was 3% of total health expenditure, while private out-of-pocket expenditure by patients represented 97% (see Table 6). From 1999 onwards, the Ministry of Health paid US\$1.63 per capita per year for the contract management. Public expenditure increased between 1998 and 2001 from 3 to 23% of total health expenditure, while total health expenditure decreased dramatically through the reduction of patient out-of-pocket expenditure from US\$18.67 to \$13.88.

The above data show that with a combination of user fees and effective performance-based incentives, subsidies to health facilities can be provided at a highly satisfactory level of

**Table 5.** Development of annual public health expenditure in Pereang district from 1998 onwards (per capita)

	1998		2000		2001	
	US\$	%	US\$	%	US\$	%
Fee paying revenues	–	0	0.15	13	0.45	29
Contractual payments	–	0	0.35	29	0.40	26
Salaries paid by MOH	0.09	16	0.10	8	0.10	6
Operational costs to MOH (mainly patient food)	0.06	11	0.05	4	0.05	3
Free provision of drugs by MOH	0.41	73	0.41	34	0.41	26
Training and research costs	–	0	0.14	12	0.14	9
Total public expenditure	0.56	100	1.20	100	1.55	100

MOH = Ministry of Health.

**Table 6.** Public and private expenditure in Pereang district compared between 1998 and 2001 (per capita)

	1998		2001	
	US\$	%	US\$	%
Direct public expenditure at health facility level	0.63	3	1.55	11
Payment to contract management NGO	–	0	1.63	12
Out-of-pocket expenditure	17.90	97	10.70	77
Total public and private health expenditure	18.67	100	13.88	100

Sources: internal project data, and Asian Development Bank evaluation mission surveys among households and health facilities.

about US\$3.00–4.00 per capita per year (recurrent costs). This compares more favourably with the \$12 per capita often quoted as required to provide a minimum package of activities (World Bank 1993).

In the contracting-in experiment in Pereang district the NGO received US\$0.25 per capita for direct recurrent costs, while the remaining recurrent costs were supposed to be received from the Ministry of Health through the Provincial Health Department. In practice this did not take place, and the NGO added US\$0.15–0.20 per capita from its own resources to subsidize the activities at health facility level. This lack of funds did constitute a problem, and utilization would have been better with more financial resources. Such problems were not faced by the districts managed under the contracting-out model. They operated with a budget of US\$4.50, which they could freely decide how to use. This explains their better performance in comparison with the contracting-in districts. Thus, it is implied that in the contractual approach private sector operators should be provided with sufficient funds and not be made dependent on traditional government budget allocations with all their inefficiencies.

#### Collaboration with different stakeholders

Contract management was initially not fully understood and accepted by government health staff. Contracting services to non-governmental agencies was seen as a threat to the MOH staff.

Some local health workers challenged the system of non-private practice. This is understandable because they saw their sometimes large private incomes being threatened. Some health workers complained to the authorities about what they considered ‘their right’ to practice privately. These complaints did not receive a warm welcome from local district politicians and the representatives of the Ministry of Health in Phnom Penh. However, they did receive a willing ear from the provincial authorities, who became the main opponents of the contracting approach. Their opposition is understandable. Provincial health authorities traditionally decide on the allocation of government funds and on such issues as staff transfers. They were little involved in the contracting process, did not directly benefit from it and, as a result, showed little interest. Provincial officials’ opposition also stemmed from the fact that it reduced their influence and informal income-generating activities in the districts. This

problem has still to be solved. One may also question the rationality of having two controlling authorities; one at provincial level and one at national level. Under the Cambodian situation it seems logical if provincial health authorities change their role from a human resource management and financing one to a regulating and monitoring one. Cultural factors may also play a role. For example, provincial health directors had fewer difficulties with the contracting-out model than with the contracting-in. This may be linked to the hierarchical nature of the Khmer society. Leadership cannot be shared among different parties. In contracting-in the provincial health authorities were still responsible for the civil servants, while the NGO management were supposed to manage them, thereby creating conflicts of authority (Keller and Schwartz unpublished data).

#### Discussion

In Pereang district, health service utilization increased dramatically, while at the same time considerable user fees were introduced, constituting 16% of recurrent costs. If official cost-sharing fees were the only factor, we would expect demand to go down with the sharp increase in user fee levels. However, this economic law does not apply when at the same time other factors change such as, in particular, reduced informal payments. Another factor of demand is quality. In Cameroon, Litvack and Bodart (1993) showed that better quality together with the introduction of user fees may increase demand, and that the poor make more use of health centres because the alternatives impose even higher costs. The system in Pereang, in particular with the sub-contracts with health facility managers, considerably improved the accessibility of health facilities, because staff obeyed working hours and improved their attitude towards patients.

Staff involved in the contracting process largely complied with the non-private practice agreements. However, not all government health workers did. Some health workers have relatively luxurious lifestyles through their informal tax-free income. Others are not so ‘lucky’. Therefore, health staff responded differently to the non-private practice arrangement depending on their previous informal incomes. Experience in Pereang showed that compliance depended on peer pressure from colleagues, but that it was equally important for health facility managers to have powers to enforce the rule. Informal activities constitute the main source of income in many countries, such as in the Former Soviet Union

countries (Ensor and Savelyeva 1998) and Bangladesh (Andaleeb 2000). Addressing this issue is increasingly recognized as a key component for success in any health reform effort, and the experience in Pereang shows that it can considerably change the accessibility and quality of care.

### Analyzing the contractual relationships

In an interesting paper, Palmer and Mills (2000) propose a framework to analyze contractual relationships. Their study showed the result of the contractual approach in South Africa. For their analysis they used a framework of three main criteria which identify successful contracts:

- (1) the existence of market competition in awarding contracts;
- (2) rationality by the contracting party and contractors to specify and monitor contracts;
- (3) non-opportunistic behaviour by the stakeholders.

The contracting experience in Cambodia fulfilled the first criterion of *market competition* by a tendering process among for-profit and not-for-profit international agencies. One may question why the Ministry of Health only contracted external NGO operators instead of local NGOs or private sector operators. A study carried out in 1998 for the Ministry of Health on the private sector in Cambodia showed that the bulk of for-profit and not-for-profit private operators are small, undercapitalized and unorganized (Taylor unpublished data). As a result, no bids were received from local NGOs (the first local NGO was only established in Cambodia during the early 1990s). The for-profit private sector consists of individual practitioners, not organized firms, and was therefore unable to submit technically responsive bids. Despite this, in future contracts could gradually be awarded to Cambodian companies, instead of to international contractors. Some Cambodian staff members of international NGOs have already gained so much experience that they could start their own companies, possibly first in a consortium with external organizations. For-profit international companies also submitted proposals for the Ministry of Health contracts, but lost to the international NGOs because they were either technically unresponsive or financially uncompetitive.

The process of *specifying and monitoring contracts* was implemented by the Project Co-ordination Unit of the Ministry of Health. The Asian Development Bank loan provided sufficient funds for technical assistance, and pays the salaries of this Unit. Rational behaviour of the NGOs was promoted through the monitoring of their performance by this Co-ordination Unit, which collected output statistics and regularly visited the districts. This system functioned well. The contracting experience was new for the NGOs and they are not accustomed to working with contracts; their funding is usually in the form of a grant, and the funder is usually a donor and not the host country government. It was difficult for some NGO contractors to internalize the change in relationship (Keller and Schwartz unpublished data). The experience in Cambodia seems to show that those international NGOs who wish to continue participating in the

contractual approach may need to change their conceptual thinking and management practices.

So far, there has been no evidence of *rent-seeking behaviour* by the Project Co-ordination Unit – the contracting agency. There is also no evidence of deliberate opportunistic behaviour by contractors, although at one stage the Ministry of Health felt that some NGOs made unrealistic profits on their contracts by providing less human resource inputs than planned. Other NGOs contributed from their own funds to fill budget gaps to achieve their targets. The lesson learned is that besides adequate monitoring of contracts by the contracting agency, it may equally be important to seek partnership and collaboration because both parties share common goals. Less successful was the participation of the Provincial Health Department, who were supposed to monitor the work of the contractors and to support them with additional financial inputs. Their behaviour can best be explained by the fact that their personal income-generating capacity was reduced in the contracting approach, and that there was no material incentive for them in the contracting process.

### Levels and type of contracting

The Pereang district experience seems to show that contracting district management to the private sector is only the first step, because it seems equally important to develop contractual relationships between the district management (or a financing institution such as through a prepayment scheme) and the management of the health facilities. This proved to be crucial – in combination with effective monitoring of the contracts – to achieve agreed health package targets. For example, the 550% increase in Pereang for deliveries in health facilities to 19.5% of total deliveries is more than twice the national average, and one of the highest rates ever documented in rural Cambodia. One of the reasons for this success was that health facility managers paid a fixed incentive to traditional birth attendants if they convinced pregnant women to deliver in the health centres. The management in the district hospital hired an Echocopy machine, instead of buying a new machine, and thereby considerably increased the appeal of that hospital to patients. Another health centre sub-contractor introduced a probation system for newly recruited nurses, with a starting salary that could be increased after the probation period. Other health facility managers employed new staff in order to cope with the increased workload. The sub-contracting system thereby created new job opportunities, and in some health centres the majority of staff are locally recruited, instead of MOH staff. These results showed that decentralized sub-contracting of health facilities had superior results in comparison with the individual contracting system such as first experimented with by the NGO contractor. A crucial advantage of the sub-contracting system was also that it considerably improved the ownership of the reforms among the local health workers.

This is not to imply that there is no role for the individual contract system. On the contrary, individual contracting is particularly suitable for establishing relationships between the management of a health facility and their staff. It creates a direct ‘micro-management’ relationship between an



employer and an employee, and is suitable to link to job descriptions with agreement on output and non-private practice.

### **Cultural factors influencing the feasibility of successful health care services**

How do contracting, user fees and performance-based incentive payments for health staff fit in the cultural realities of Cambodia? The feasibility of any reform proposal will increase when it is adapted to what is acceptable to society at large. Health reforms in developing countries are often the result of policies promoted by international organizations, and are rarely adapted to the cultural and social circumstances of a specific society (Soeters 1997).

The health care system introduced in Cambodia during the early 1990s – mainly by international organizations – was also culturally poorly adapted. National health objectives were based on the equitable distribution of free health care to the poor, and heavily relied on the concept of community solidarity. This assumes that poor patients can be identified, and that there are sufficient resources to treat them free-of-charge. It also assumes that government health workers are willing to carry out these tasks without additional rewards. In this participation model, community representatives are supposed to monitor the performance of health workers so that they do not transgress. This assumes the presence of people willing and able to defend the community interest.

Few of the above assumptions seem valid in Cambodia. Experience shows that targeting the poor is difficult. If large groups of patients are exempted from fee paying, there should be sufficient financial resources. The reality is that such resources rarely exist. Patients can only find good quality health care if they are willing to pay, independent of whether they are poor or rich, or whether government health services are supposed to be free. Some argue that government should increase its health expenditure to finance crucial public health tasks. However, this also assumes that Cambodia's politicians are willing to significantly increase taxes for health, and that those taxes will then indeed be used efficiently for the health sector. It assumes that the population is willing to pay those taxes, and that they have the confidence in the government system to deliver the services. Anthropological studies argue that there is a low level of social integration in Khmer society, which tends to be more organized around the nuclear family. Relationships are reciprocal, and tend to be mainly translated in monetary terms (van de Put 1992; Thome et al. 1998). These findings question the feasibility of community participatory mechanisms as advocated in the Cambodian Health Reform Plan during the 1990s.

There is also an important assertion in public choice theory, which may be helpful to understand the Cambodian society. Public choice presumes that man is an egoistic, rational, utility maximizer (Mueller 1976). Similar to the theory that consumers will try to get the best for their money and providers will maximise their profits, public choice theory assumes that politicians and civil servants will pursue their personal interest and not necessarily the public interest (Mackintosh in Wuyts et al. 1992).

The validity of relying on the community concept and a degree of solidarity among its members is not only a point of concern in Cambodia. Zakus and Lysack (1998) conclude that the community participation approach will remain externally imposed if it does not answer such fundamental questions as 'How is the community defined?', 'How can true representatives be identified?', and 'How homogenous is the community so that representatives truly defend the interest of their community?'.

In order to improve the health system, the strong points of the Cambodian culture should be built on. The individualistic features of the society make Cambodians good business people. When travelling in Cambodia the entrepreneurship of its citizens becomes apparent. Markets are thriving. Private transport systems with a mix of motorbikes, pontoons and boats seem extremely well adapted to dry and rainy season conditions. In translating this comparative advantage to the health sector, it implies that government should create clear financial incentives for its health workers to carry out those tasks which are beneficial for the health status of the population. The current 'fuzzy monopoly' of government health workers dominating both the public and private markets seems particularly counterproductive. Government would do better to promote a competitive environment between public and private sector operators, whereby consumers are provided with better information about the price and quality of what is being offered. Equally, at higher bureaucratic level it is unlikely that civil servants – without clear incentives – will defend the national interest or will actively assist the poor. It seems culturally logical to minimize the number of bureaucratic levels and downsize the number of civil servants, but to pay higher official salaries to those who carry out the key financing and regulating tasks. 'The incentives should be right', so that it becomes attractive to carry out public tasks without being tempted to rent-seeking. This is particularly important for those who have the responsibility to monitor the contracting process, which involves handling large sums of money.

### **Management practices**

What management lessons can be learned from the Cambodian case? In the first place, it seems favourable under the Cambodian circumstances that relative outsiders introduced new management procedures. A contractor has a comparative advantage over regular Ministry of Health district directors. Civil servants expect life-long employment and, generally speaking, they will not accept risks that could jeopardize their position. The contract manager knows that he has to 'score' within the contract period; failure means losing the chance for contract renewal. Therefore, a contractor is intrinsically better motivated than traditional government managers. Another lesson seems to be that the contractors should recruit highly experienced managers and technical specialists, who are senior enough to be taken seriously by the different stakeholders and who have adequate knowledge of the latest developments in financing policies, quality assurance and public-private mix issues.

Management also needs to be flexible in adapting to local circumstances and needs to have enough autonomy to try

innovations. A 'business as usual' management approach is likely to fail, because the starting point is that the system has failed and requires innovative, well-informed, management to improve. Decisive management is important when implementing changes. Change almost by definition is painful. Some actors will support change, others won't; one cannot expect the process to be smooth and that everybody will always agree. However, if something goes wrong, the contractor should also be flexible and willing to change their approach or standpoint.

Cost-sharing revenues constitute an important element for motivating staff members. Although cost-sharing only constituted 20% of total income in Pereang, its influence on efficient management of health facilities was essential because it forced health staff to attract patients and to be consumer friendly. Therefore, the largest proportion of cost-sharing revenues was paid back to staff in the form of performance-based incentives.

### Poverty alleviation through health system management

The evaluation results of this pilot health system, which combined strict monitoring with performance-based incentives, so far point at a decrease in total family health expenditure of some 40%. Of course many questions remain, and further pilots will have to be undertaken to establish the feasibility of the system at higher management levels as well as the sustainability of the system at Pereang district level. The outcome in itself is nevertheless of major importance in a situation where poverty is an important barrier for change. The district is one of the poorest in Cambodia, and health expenditure is one of the main risks of economically 'dropping out' for Cambodian families. Health is the primary reason for families to lose their land, which is the first step in a vicious cycle of poverty (Oxfam 2000). A health care system that offers quality health care *and* helps save on health expense is a double-edged sword in poverty alleviation.

### References

- Andaleeb S. 2000. Public and private hospitals in Bangladesh: service quality and predictors of choice. *Health Policy and Planning* **15**: 95–102.
- Carrin G, Sergent F, Perrot J. 1997. *The contractual approach: new partnerships for health in developing countries*. Macroeconomics, Health and Development Series No. 24. Technical paper. WHO/ICO/MESD.24. Geneva: World Health Organization, pp. 1–63.
- Ensor T, Savelyeva L. 1998. Informal payments for health care in the Former Soviet Union: some evidence from Kazakstan. *Health Policy and Planning* **13**: 41–9.
- Enthoven AC. 1993. The history and principles of managed competition. *Health Affairs* **12** (Suppl): 24–48.
- Lanjouw S, Macrae J, Zwi A. 1999. Rehabilitating health services in Cambodia: the challenge of co-ordination in chronically political emergencies. *Health Policy and Planning* **14**: 229–42.
- Litvack J, Bodart C. 1993. User fees plus quality equals improved access to health care: results of a field experiment in Cameroon. *Social Science and Medicine* **37**: 369–83.
- Mills A, Broomberg J. 1998. *Experiences of contracting: an overview of the literature*. Macroeconomics, Health and Development Series No. 33. Technical paper. WHO/ICO/MESD.33. Geneva: World Health Organization.
- Mueller D. 1976. Public choice: a survey. *Journal of Economic Literature* **14**: 395–433.
- ORC Macro. 2000. *Cambodia Demographic and Health Survey*, 1st edition. Phnom Penh: National Institute of Statistics.
- Oxfam. 2000. LADIT Interim Report, July 2000. Oxford: Oxfam.
- Palmer N, Mills A. 2000. Serious contractual difficulties? A case study of contracting for PHC in South Africa. Presented at the CERDI International Conference on Health Systems Financing in Low-income African and Asian Countries, 30 November – 1 December, Auvergne, France.
- Perrot J, Adams O. 2000. *Applying the contractual approach to health service delivery in developing countries*. Geneva: World Health Organization.
- Salman R, von Otter C. 1992. *Planned markets and public competition: strategic reform in health care*. Milton Keynes: Open University Press.
- Soeters R. 1997. Rapid assessment of health reforms in Africa: the case of Zambia. Ph.D. thesis.
- Thavary K, Thwin A, Kanha S, Bekedam H. 2000. Introducing user fees at public health facilities in Cambodia. Presented at the CERDI International Conference on Health Systems Financing in Low-income African and Asian Countries, 30 November – 1 December, Auvergne, France.
- Thome J, Brun P, Pelletier J, Santepheap M. 1998. Document de Synthese: *Mise en Place d'un systeme de Financement d'un Hopital Provincial avec Recouvrement de Coûts*. *Hopital Provincial de Takeo*. Bern: Croix-Rouge Suisse.
- UNAIDS. 2000. *Report on the Global AIDS Epidemic*. Geneva: UNAIDS, pp. 1–135.
- Van de Put W. 1992. Empty hospitals thriving business: utilisation of health services and health seeking behaviour in two Cambodian districts. Report on Medical Anthropological Research in Cambodia. Médecins Sans Frontières, the Netherlands. Unpublished.
- World Bank. 1993. *World Development Report 1993: Investing in Health*. New York: Oxford University Press.
- World Bank. 1999. *Cambodia public expenditure reviews*. East Asia and Pacific Region. Washington, DC: World Bank.
- Wuyts M, Mackintosh M, Hewitt T. 1992. *Development policy and public action*. Oxford: Oxford University Press.
- Zakus J, Lysack C. 1998. Revisiting community participation. *Health Policy and Planning* **13**: 1–12.

### Acknowledgements

We thank representatives of the Cambodian Ministry of Health, the Asian Development Bank, and the World Health Organization for commenting on earlier drafts of this paper and for authorizing us to publish the findings. We would specifically like to acknowledge the contributions of Mr Sao Chhorn of ADB, and Dr Krang Sun Lorn, of the Project Co-ordination Unit of the Ministry of Health. Dr Henk Bekedam and Dr A Aye Aye Thwin from WHO Cambodia made important contributions, as well as Dr Jean Perrot from WHO Geneva. We also thank for their comments Mr Willem van de Put, Mr Jos Dusseljee, Mr Marc Vandenberghe from HealthNet International and Ms Sheryl Keller, who was involved in the project for the Asian Development Bank.

### Biographies

Robert Soeters, MD, MPH, Ph.D., is a public health and financing specialist with HealthNet International, a Netherlands-based organization working in the field of complex and chronic emergencies.

Fred Griffiths, MD, is Programme Manager in Pereang Operational District, Cambodia, for HealthNet International, Amsterdam, Netherlands.

*Correspondence:* Robert Soeters, Kramsvogellaan 22, 2566 CC Den Haag, the Netherlands. E-mail: 101625.141@compuserve.com