Potential collaboration with the private sector for the provision of ambulatory care in the Mekong region, Vietnam

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Background: Over the past two decades, health insurance in Vietnam has expanded nationwide. Concurrently, Vietnam's private health sector has developed rapidly and become an increasingly integral part of the health system. To date, however, little is understood regarding the potential for expanding public-private partnerships to improve health care access and outcomes in Vietnam.

Objective: To explore possibilities for public-private collaboration in the provision of ambulatory care at the primary level in the Mekong region, Vietnam.

Design: We employed a mixed methods research approach. Qualitative methods included focus group discussions with health officials and in-depth interviews with managers of private health facilities. Quantitative methods encompassed facility assessments, and exit surveys of clients at the same private facilities.

Results: Discussions with health officials indicated generally favorable attitudes towards partnerships with private providers. Concerns were also voiced, regarding the over- and irrational use of antibiotics, and in terms of limited capacity for regulation, monitoring, and quality assurance. Private facility managers expressed a willingness to collaborate in the provision of ambulatory care, and private providers facilities were relatively well staffed and equipped. The client surveys indicated that 80% of clients first sought treatment at a private facility, even though most lived closer to a public provider. This choice was motivated mainly by perceptions of quality of care. Clients who reported seeking care at both a public and private facility were more satisfied with the latter.

Conclusions: Public-private collaboration in the provision of ambulatory care at the primary level in Vietnam has substantial potential for improving access to quality services. We recommend that such collaboration be explored by Vietnamese policy-makers. If implemented, we strongly urge attention to effectively managing such partnerships, establishing a quality assurance system, and strengthening regulatory mechanisms.

Keywords: public-private partnership; primary care; health care access; health care quality; Mekong; Vietnam; regulation; quality assurance

Received: 28 September 2011; Revised: 18 February 2012; Accepted: 4 April 2012; Published: 27 April 2012

n a number of developing countries, private providers have become an increasingly important part of the health system and are the first choice for those seeking primary health care services (1–3). Additionally, public-private collaboration has become recognized as having the potential to improve key health system outcomes such as access, quality, equity, and efficiency (4–8). In Vietnam, despite rapid expansion in private providers of health care services, public-private partnerships in the

health sector remain non-existent. We undertook this study to explore the potential for such partnerships at the primary level in one important region of Vietnam.

Background

Launched in 1986, Vietnam's *Doi moi* reforms paved the way for major changes in health care provision. Notable among them were the introduction of user charges and health insurance, liberalization of the pharmaceutical

industry, and legalization of private providers of health care services. Private health care providers, as defined in the Ordinance on Private Health Practice enacted in 1993 and revised in 2003, include general and specialized hospitals, clinics run by doctors, nursing and maternity homes, diagnostic facilities, laboratory and radiology units, and traditional medicine clinics. In the past two decades, Vietnam's private health sector has grown in magnitude, and is now recognized as an integral part of the health system. Results from national surveys indicate that for certain services the private sector provides 60–75% of ambulatory health services and up to 4% of inpatient services (9–12).

After legalizing the private sector two decades ago, Vietnam began to introduce health insurance. The current health insurance system is implemented by the Vietnam Social Security (VSS), in the form of two key schemes: compulsory (state-subsidized) health insurance and voluntary (privately purchased) health insurance. Compulsory health insurance includes two sub-schemes: social health insurance for the formally employed and a targeted 'Health Care Fund for the Poor'. In addition, all children below the age of 6 years receive free health care. Private health insurance companies may enter the market by providing voluntary health insurance, but their coverage currently accounts for a small proportion of the total. A recent review of health insurance in Vietnam indicated that as of 2007, VSS schemes covered 50% of the total Vietnamese population and was expanding (13).

Regardless of the scheme, those covered by health insurance typically are entitled to a broad benefit package that includes medical consultations, diagnoses and treatment, X-rays and laboratory tests, functional examinations, imaging diagnoses, drugs listed by the Ministry of Health (MOH), blood transfusions, surgery, and antenatal examinations and deliveries (14). However, at the time this study was conducted, these benefits were available only at public facilities and a few accredited private hospitals. Private providers at the primary level were not permitted to provide ambulatory health care services to insured patients.

Although engaging the private sector in various forms of partnerships in order to ensure greater access to and higher quality of health care services has moved to the top of policy agendas in a number of countries, we found little evidence of such a trend in Vietnam (15–17). However, with overcrowded public hospitals and limited government health budgets, collaborating with private health providers appears to present a promising alternative to help the MOH expand access to and the quality of necessary services. We undertook this study in order to explore rigorously the potential for public-private partnerships in the provision of ambulatory health services for insured people at the primary health care level in Vietnam's Mekong region. Our specific objectives

included: investigating the capacity of private providers; improving our understanding of users of the private sector and why users chose the private sector; and examining how users perceive quality of care. The study also explored the potential for collaboration from the perspectives of provincial health officials and private providers. Here, 'collaboration' and 'partnership' will be used interchangeably to refer specifically to collaboration between the VSS and for-profit private health providers in Vietnam.

Methods

We employed a mixed-methods approach to collect information from a varied set of stakeholder groups. Qualitative methods included focus group discussions (FGDs) with health officials and in-depth interviews (IDIs) with private providers. Quantitative methods included surveys of private health facilities and exit surveys of health service clients.

Study sites

In 2007, the Mekong region in Southwest Vietnam had a population of 17.5 million people, representing 20% of the national population (18). One-fifth of this population lived in urban areas. In 2006, the poverty rate in the Mekong region was similar to the national average, ranking fourth of eight geographical regions. The literacy rate ranked sixth out of eight regions, slightly lower than the national average (19). According to unpublished data collected as a part of this study, licensed private providers in the Mekong region included 6,641 western medicine facilities, 7,159 pharmaceutical facilities, 1,489 traditional facilities, and 657 traditional pharmaceutical providers (20). There were 10 private hospitals that had 480 beds or more, placing it third in the country behind the Southeast region (which includes Ho Chi Minh City) and the South Central Coast region in the number of private hospital beds per 100,000 residents. The region had 23.4 privatelypracticing licensed physicians per 100,000 residents. The private sector in the Mekong region, along with that in the neighboring Southeast region, is the most developed in Vietnam.

The Mekong region includes 13 provinces and cities, of which five provinces, including Can Tho, Ben Tre, Kien Giang, Soc Trang, and Tra Vinh, were selected as study sites based on their varying levels of socio-economic development, urbanization, and development of the private health sector. Can Tho is an urban setting, with a relatively strong economy, well-educated workforce, and fairly advanced infrastructure. In contrast, Tien Giang, An Giang, Soc Trang, and Tra Vinh have mainly agricultural economies with large, rural populations. In each of the five provincial sites, we conducted FGDs with health officials. In every province, we then purposively selected two districts, one urban district and one peri-urban

district, in order to include diverse populations. Finally, in each district and in collaboration with local health officials, we purposively selected 4-6 licensed private health facilities for participation in the provider IDIs, facility surveys, and client exit surveys. The criteria for facility selection included: (1) having a minimum of 10 patient visits per day; and (2) providing outpatient services that potentially could be contracted out. We also aimed to capture a wide range of outpatient services, experiences, and potential for public-private partnership.

Data collection

Eight trained Vietnamese researchers, two supervisors and six data collectors, collected and analyzed the data. Two researchers conducted the FGDs with officials, one facilitating the discussion and the other taking notes in local government offices. Teams of four researchers collected all other data at each selected facility. At each site, the facility survey was completed first, followed by the IDI with the facility manager and the client exit surveys. As with the FGDs, the IDIs were conducted by two researchers. At the end of each day a research supervisor reviewed all completed surveys and notes with the data collectors to ensure consistency and to identify any missing data.

All FGDs and IDIs utilized a semi-structured question guide, allowing for open-ended responses and probing when appropriate. These were revised slightly following the initial discussions and interviews. All FGDs and IDIs were audio-recorded for later transcription. The facility surveys utilized an instrument adapted from a tool used by Karolinska Institute, Sweden and the University of Zambia for a private health survey conducted in Zambia in 2008 (21). The client surveys also used a questionnaire adapted from this study (21). Details on each component of data collection are provided below.

We conducted five FGDs with government officials, one in each selected province. Each included 4-5 health officials from related departments within the provincial health service and a representative from the provinciallevel VSS department. Questions addressed health officials' knowledge, views, assessment, and attitudes towards private providers. Participants also discussed the potential collaboration with the private sector and ways to promote such collaboration at the local level.

Facility surveys were conducted at each selected facility to assess basic features of the facility and connections with other providers. We visited a total of 42 facilities, with 40 managers available at the time of these visits and able to participate in the survey. Questions were directed to the manager of the facility and addressed: qualifications of staff, available diagnostic equipment, the types of services offered, and the illnesses handled. They also aimed to identify linkages between public-private providers, referral structures, and private providers' willingness

to participate in public-private partnerships. Following completion of the survey, an IDI was conducted with the manager of each facility. IDIs focused mainly on the potential for and challenges regarding public-private partnerships from the private providers' viewpoints. Saturation was reached after 36 IDIs had been completed. The exit surveys with clients seeking care at private providers aimed to understand health seeking behaviors, fees, and perceived quality of private sector care in comparison to government-provided services. On average five clients were randomly selected on the day the team spent at each private facility, after they had paid for and completed the visit.

Data analysis

With the exception of the client exit surveys, sample sizes were determined purposively on the basis of feasibility as well as timing and budget constraints. For the exit surveys, the sample size was based on the proportion of clients who reported coming first to a private clinic for outpatient care. Using a baseline estimate of 50% taken from national health surveys (12, 22), a margin of error of $\pm 10\%$, and a 95% confidence interval, we required a sample size of 96 clients. This was adjusted upward to 200 to allow for a 50% response rate.

Quantitative data were entered into a computer by trained data entry clerks using SPSS 10 (SPSS Inc., Chicago, IL, USA) and analyzed in Stata 10 (Stata Corporation, College Station, TX, USA). For continuous variables, the results are represented as means, maximums, and minimums, while frequencies and proportions are used to describe discrete variables. For the qualitative data analysis, all audio-recordings were transcribed. A senior researcher analyzed these transcriptions using Microsoft Excel 2003 (Microsoft Corporation, Seattle, WA, USA) according to themes identified at the beginning of the study, including: views of officials towards private providers; perceptions regarding the potential for public-private collaboration; and perceptions of challenges in collaboration. More detailed subthemes were developed during the analysis. Where appropriate, certain responses were quantified to indicate the proportion of participants who shared similar views on key themes.

Results

FGDs with government officials: overview

A total of 27 officials participated in the five FGDs. Two thirds of officials were male. All had a university degree, and most were physicians with a medical degree. Below we provide the main findings of the FGDs by topic. Illustrative statements by different officials are presented in Table 1.

Table 1. Illustrative statements by participants in FGDs and IDIs

FGDs with provincial health officials

The role of the private health sector

As you may know, the private sector has been an extended hand of the public sector and has contributed to the provision of health care services. Patients residing in disadvantaged areas where access to higher quality health facilities is limited have the opportunity to seek services from private providers which could lead to a reduction in crowding within the public sector facilities.

- Ben Tre provincial health service official

The private sector network extends throughout the provincial, district and community levels. Although the scale of the private providers remains medium in size, their facilities are equipped with key equipment which are able to detect and diagnose diseases in a timely manner such as dengue fever or injuries.

- Tra Vinh provincial health service official

Positive aspects of public-private partnerships in providing care

If we could execute the collaboration, it would be a fantastic opportunity for the private sector to share the responsibility with the public sector in resolving the overcrowding problem. Moreover, a more competitive market would be an impetus for public providers to improve their quality of care because if they don't they will lose patients to private providers. It will be expected that the monopoly health market would end. Patients are afraid of using their health insurance card at a public hospital because of the long waiting time. Therefore, they would be very happy if they could use the card at private facility.

- Ben Tre provincial health service official
- ... I think we should contract out with private providers to provide healthcare for the insured, including the poor. Doing so would have potentially several benefits. First, it could resolve the overcrowding problem. Second, the government could spend less on equipment. Third, we would not need to train and recruit more personnel because the private sector have their own facilities, equipment and staff.
- Tra Vinh provincial health service official

Challenging aspects of public-private partnerships in providing care

I personally think it is kind of difficult because fees for service are different between the public and private. Moreover, drugs are also come from different sources. Domestic medicines are provided to the public sector whilst freely purchased by the private sector.

- Tien Giang provincial health service official

One of the most difficult issues is price. They (private providers) invested a lot on medical equipment, so it would be difficult if the price is too low... The private providers would not probably be interested in the collaboration with the social health insurance agency if they could not be reimbursed as expected.

- Ben Tre provincial health service official

First, it is important to pilot in some clinics. For instance, providers that could be able to provide health services to the poor and insured should be contracted out. The scaling up will be based on experiences drawing from the pilot.

- Can Tho provincial health service official

IDIs with managers of private health facilities

Positive aspects of public-private partnerships in providing care

Providing healthcare for the insured is interesting. I am willing to join. The insured patients come to me, getting their health problems resolved and do not have to wait for a long time for services. If we could it, we would save much expenditure for the patients, especially the poor.

- Owner of policlinic, Tra Vinh town, Tra Vinh province

Such a collaboration will give clients more choices when choosing what they think are better providers rather than going to the public hospital. When they find their benefits increased, they will definitely buy health insurance.

- Owner of policlinic, Ben Tre town, Ben Tre province

If possible, let's consider it the collaboration between the community health center and private providers. The community health centre should have a pharmaceutical-in-charge person. We, the private provider, just provide the prescription What we want to do is to be independent, meaning that we give prescriptions and social health insurance reimburse us for the consulting fee. Doing so would help the poor and insured.

- Owner of pediatric clinic, Cho Gao district, Tien Giang province

Challenging aspects of public-private partnerships in providing care

There are two conditions that I would like the social health insurance to meet. First, paper work should be simple. Second, payment should be made quickly.

- Owner of pediatric clinic, My Tho city, Tien Giang province

If I am the only one in this district to participate, I would probably not survive because there are so many children under six years old. [These families]... will definitely find the clinics where services are good and the waiting time is short. Of course, they will come to me.

- Owner of pediatric clinic, Can Tho city, Can Tho province

Regarding the signing of a contract with them (the social health insurance agency), I am afraid of the processing payment. Even in my hospital, we designated many people to this task but still have problems with the paper work...

- Owner of internal medicine clinic, Cho Gao district, Tien Giang province

The private facility must partner with a hospital. For instance, my pediatric clinic must be connected with the provincial pediatric hospital to make sure the referral system works well. Internal clinics should be linked to the provincial pediatric hospital.

- Owner of pediatric clinic, Can Tho city, Can Tho province

The social health insurance agency should sign a contract with private providers. Articles related to infrastructure and basic equipment should be described clearly. Moreover, the contract should provide some clauses with respect to the benefits of the contractor, how services should be delivered, and how the providers are reimbursed. If everything is acceptable, there will not be any problem at all.

- Owner of pediatric clinic, Can Tho City, Can Tho province

Views of government officials: assessment of private providers

We found that the private sector has gained the recognition and support of government officials, and was recognized for its role in assisting the public sector to reduce crowding in public hospitals. Private health facilities were perceived to have relatively good infrastructure and patient waiting rooms. Officials noted that the investment in and amount of equipment per facility were generally greater in more affluent provinces such as Can Tho, and in urban relative to rural areas. They also tended to view the services provided by the private sector as having good quality, as evidenced by the courtesy of private sector personnel and short waiting-times. However, most mentioned that overuse of antibiotics and certain questionable services remained problematic as private providers appeared to be more interested in meeting clients' demands than following drug use regulation. Officials acknowledged that regulations were not sufficiently developed to prevent such overuse. They also agreed that the fees of private providers are usually higher than those in public facilities of the same level.

Officials' views regarding the potential for public-private partnerships

A strong consensus developed in the FGDs in favor of public-private collaboration to provide ambulatory health services for insured individuals in order to reduce overcrowding in government hospitals. Moreover, officials expressed the view that implementation of publicprivate partnerships could improve competition between service providers. They agreed that a more competitive market would be an impetus for public and private health providers to improve their quality of care. Such collaboration, according to provincial health officials, should be first piloted and implemented in qualified policlinics and specialized clinics. The pilot should be rigorously monitored and evaluated before being scaled up. Participants in the pilot project should be bound by a contract with carefully prepared articles on eligibility criteria, medicines, service fees, and payment.

Officials also expressed concerns related to potential challenges to such collaboration. First, they pointed to the wide variation in fees for services charged by private providers and those regulated by the VSS. For example, the VSS fee for a normal primary care check-up was one-fifth of the fee charged by private providers for the same service (VND 3,000 vs. 15,000; approximately US\$0.15 vs. US\$0.75). Secondly, the list of medicines paid for by the VSS was limited to generic and domestically produced drugs, which were deemed of low quality and unable to meet patient demand or specific prescriptions. Officials stated that the VSS might be reluctant to collaborate because the partnership would create additional administrative burdens. They also noted

that the local population had relatively low awareness of the health insurance benefit package and co-payment rules and would be disappointed when they discovered that VSS payments did not fully cover private provider charges. Perhaps the most challenging issue that emerged in the FGDs was the lack of necessary personnel at the provincial government level and the resulting relatively weak capacity for regulation, monitoring, and quality assurance. No provincial health service had a separate department in charge of regulating or managing private providers. Therefore, officials agreed that expanded public private partnership would require greater investment by the government and VSS in human resources and quality assurance systems.

Facility surveys: basic characteristics

A total of 40 providers were surveyed, categorized into three groups: specialized clinic, policlinic, and general hospital (see Table 2). Specialized clinics comprised 65% (26/40) of the total, while policlinics accounted for 27.5% (11/40), and general hospitals 7.5% (3/40). Internal medicine and pediatric specialists were most common while other specialists focused on obstetrics and gynecology, dermatology, and surgery. All private providers were for-profit with four types of ownership: individual, group ownership (usually by health professionals), company, and corporate group. Individual ownership was most popular, accounting for 96% of specialized clinics and 45% of policlinics. Half of the policlinics were owned by a group, while corporate groups and limited companies owned the general hospitals.

Policlinics and specialized clinics generally lacked beds for inpatient treatment, although some had a couple of beds for waiting patients. Ultrasound and ECG were the most common machines, and were operating in 47% and 52% of facilities, respectively. One-third of the facilities had an X-ray machine. Forty percent of facilities had computers and an internet connection. Outpatient loads varied from 110 to 180 patients per week for all types of clinics (Table 3). Polyclinics and pediatric clinics had higher patient volumes than other specialty clinics. General hospitals were busier, with a mean outpatient volume of 2,289 patients per week, and a range of

Table 2. Classification of surveyed private health facilities

Province	Specialized clinic	Policlinic	General hospital	Total
Ben Tre	5	3	0	8
Can Tho	5	2	1	8
Kien Giang	7	1	1	9
Tien Giang	3	3	1	7
Tra Vinh	6	2	0	8
Total	26	11	3	40

Table 3. Volume of outpatient per week by type of provider

Provider	Mean	Min	Max	N
General hospital	2,286	360	3,500	3
Policlinic	181	35	560	11
Internal medicine clinic	112	40	400	14
Pediatric clinic	148	30	420	9
Other specialized clinics	116	50	200	3

360–3,500 patients. The most common disease categories reported in adults were cardiovascular, neurological, and hypertension. Respiratory infections, fever, and diarrhea were the most common categories in children. The most common services provided were consultation (92.5% of all visits), provision of drugs (45.5%), and ultrasound imaging (32.5%).

Linkages between public and private health sectors

We assessed the linkages, including referrals and receipt of patients, between public facilities and the private providers we surveyed, as well as among private providers themselves. More than one-half of the total surveyed facilities (22/40) received referred patients from other providers, with 63% of these (14/22) referred by a public facility and 87% (19/22) referred by another private provider. All providers (40/40) reported that they had referred patients to other providers, 62% (25/40) of which were referred to a provincial or district hospital, and 58% (23/40) to another private provider.

Provision of health services for the insured and poor in private facilities

Ninety-five percent of sampled private providers (38/40) reported having patients who were enrolled in a health insurance scheme. A similarly high proportion (90%) reported treating low income patients. According to their estimates, low income clients accounted for 33% of patient load, with medium and high income patients constituting 48% and 19% of patients, respectively. However, among facilities surveyed, only two general hospitals in Can Tho and Kien Giang accepted health insurance. At these hospitals, patients paid directly for charges in excess of the VSS allowable reimbursement. At the remaining facilities, patients had to pay out-of-pocket regardless of their insurance status. We asked the private providers if they would be willing to provide services under an insurance agreement. The results show that the vast majority (90%) of surveyed private providers responded positively.

Monitoring and inspection of private facilities

Nearly all managers said that their facilities had been inspected, of which nearly two-thirds (67%) were spontaneously inspected and three-fifths (61%) were subject to a scheduled periodic inspection. Over the most recent 3 months, only one-third (28%) of the surveyed facilities were inspected (see Table 4). Provincial health services and the district health offices were most likely to have conducted the inspections. In some cases (15%), intersectoral delegations were established to conduct the inspections.

IDIs with managers of private facilities: overview

All managers had had some type of medical training: 45% were medical doctors; 30% had a Masters degree; 18% had a special-level I (similar to a Masters degree); and the remaining had a PhD or special-level II (7%). Just over one-half (55%) also worked for a public health facility. On average, managers had 25.6 years of experience working in the healthcare field.

Private providers' views regarding the potential for public-private collaboration

Most managers stated that public-private collaboration would increase the productivity of healthcare workers who are permitted to practice in both public and private sectors (see Table 1 for illustrative statements). Anticipating that many insured people would select a private provider as a primary health care facility, they agreed that such collaboration would help reduce overcrowding in public facilities. Some managers also noted that if the insured had more choice of private providers accredited by the insurance agencies, they might be more willing to buy health insurance, thereby increasing health insurance coverage. The majority of managers voiced the view that partnerships were promising in terms of types of services, capacity of private providers, and administrative procedures. Most also said that implementation of such arrangements would be relatively simple if agreements were developed based on mutual benefit and respect.

However, like government officials, some managers expressed caution about this collaboration. Private providers were concerned about what public-private partnerships would mean for their rights and responsibilities as service providers. Most revealed fears related to low fees for services and medications regulated by the VSS. Others, a minority, expressed concerns about specific barriers to collaboration, such as bureaucracy, complicated paper work, and slow payment processes.

Exit surveys: characteristics of users

Clients averaged 43.5 years of age, with one-half aged 15-40 years, and 30% aged 41-60 years (see Table 5). Only 18% of clients were aged 61 years or more. For child patients below the age of 15 years, a parent completed the survey on behalf of the child, resulting in an increase in the mean age of clients. About two-thirds of clients had completed primary and secondary school, while 10% had a college or university education. Farmers, venders,

Table 4. Inspection of health facilities

		Frequency	Percent
Ever been inspected	Yes	39	97.5
over life time practicing			
	No	1	2.5
Type of inspection	Spontaneous	26	66.7
	Periodic	24	61.5
Number of	No	26	66.7
inspection visits			
received during the last			
3 months			
	One	11	28.2
	Two	1	2.5
	Three	1	2.5
Inspecting agency ^a	Provincial health service	29	74.4
	District health office	22	56.4
	Inter-sectoral delegation	6	15.4

^aTotal is over 100% because of multiple choices.

and household workers were the most common occupational groups, consistent with the Mekong region's relatively few government offices and lack of industry. Of clients who provided household monthly income (69%), slightly over one-half (55%) reported an income of less than VND 1 million (approximately US\$53), while 14% reported an income of VND 2 million (approximately US\$106). The remaining 10% fell below VND 500,000 (US\$26). Approximately 40% of those who reported their insurance status (78/161) had a health insurance card. Six (3%) were defined as 'poor' by their local government and were supposed to carry a card identifying them as insured under the 'Health Care Fund for the Poor' policy. However, only two-thirds (4/6) said they were carrying the card.

Health seeking behaviors and expenditures of surveyed clients

Eighty percent of those surveyed reported that the facility where the questionnaire was completed was the first facility where they had sought care for their condition (see Table 6). The majority of these facilities (83%), however, were not the closest healthcare facility to the clients' homes. In most cases, a public facility was reported to be the most proximal. According to clients, the quality of health services was the most important determinant of users' choice of facility, with more than two-thirds reporting that they chose a clinic based on the quality of services. Proximity and personal recommendation were the next most commonly reported reasons for choosing the facility. Drugs accounted for one-half of total spending, while the next greatest expenditure was for testing, including blood pressure checks, urinary tests, ultrasounds, and X-rays. Indirect costs, including travel expenses, comprised 17% of total spending.

Clients' perceptions of quality of care

As shown in Table 7, 96% to 99% of clients reported being satisfied or very satisfied with each of the following at the private facility: cleanliness, wait time, and cost of services. All but one client reported being satisfied (52%) or very satisfied (47%) with 'overall perceived quality of care' (the remaining client was neither satisfied nor dissatisfied). Although private health services were typically more expensive than public services, most of those surveyed (72.5%) said that they were 'satisfied' with the cost and 25% were 'very satisfied'. Clients expressed their appreciation for short wait times and doctors' explanations. Eighty-nine percent of clients reported that they would return to the facility.

Clients were asked if they had consulted a public health facility within the last 6 months. Fifty one (25.5%) reported having used public services. Of these, 33 (65%) answered a question measuring patient's satisfaction with public providers. As Table 8 illustrates, one-fourth of patients reported that they were dissatisfied or very dissatisfied with the overall quality at the public facility. Wait times in public facilities was the most common problem identified, with the majority of participants (55%) expressing dissatisfaction with wait times, compared to less than 20% reporting being satisfied. Forty percent were dissatisfied with recommendations and explanations given by physicians at public facilities.

Discussion

In this study of the potential for public-private collaboration in the provision of primary care ambulatory care services in southern Vietnam, we found that government officials were relatively positive towards private providers and interested in exploring ways of partnering with the private sector. They also foresaw challenges in implementing such collaboration, highlighting discordant fee structures, potential administrative burdens, and low capacity for quality assurance systems. Similarly, most managers of private facilities expressed an openness to collaborate with the VSS to provide health services for insured people, though noted a need to increase VSSapproved fees for services. Clients of private facilities revealed a distinct preference for using a private care provider, despite having to travel further to access one and to pay higher fees, mainly due to perceptions of the quality of care.

Taken together, these findings have important implications for the broader policy debate regarding such

Table 5. Characteristics of IDI participants

Characteristic		Frequency	Percent
Age	15–40	103	51.8
	41–60	60	30.2
	>61	36	18.1
Gender	Male	64	32.0
	Female	136	68.0
Education level	Did not go	10	5.0
	to school		
	Primary	59	29.5
	school		
	Secondary	74	37.0
	school		
	High school	36	18.0
	College/	21	10.5
	university		
Occupation	Unemployed	2	1.0
	Farmers	59	29.5
	Students	3	1.5
	House	42	21.0
	workers		
	Retired	6	3.0
	Civil	13	6.5
	servants		
	Employees	21	10.5
	Venders	43	21.5
	Fishermen,	3	1.5
	gardeners		
	Others	8	4.0
Average income (VND) ^a	<500,000	15	10.9
	500,000-	61	44.2
	1,000,000		
	1,000,000-	31	22.5
	1,500,000		
	1,500,000-	12	8.7
	2,000,000		
	>2,000,000	19	13.8
Defined as poor	Yes	6	3.0
according to local criteria			
	No	193	96.5
Possession of a 139 card	Yes	4	66.7
	No	2	33.3
Possession of a health insurance card ^b	Yes	78	39.0
	No	83	41.5

^a500,000 Vietnam Dong was approximately US\$28 at the time of the study.

partnerships in health care in Vietnam. First, they indicate that creating public-private partnerships to offer ambulatory care at the primary level to insured individuals is a promising approach to expanding access to and the quality of health care services. They also suggest that the Mekong region is fertile ground for implementing such a partnership, with one possible controlled experiment involving the extension of insured primary care benefits through accredited private providers. By authorizing these providers to serve individuals who qualify for insurance due to their poverty status, the experiment would expand options for the poor to access needed health care. This type of partnership would appear to be operationally and administratively feasible as ambulatory services are technically simple and could be monitored at a low cost (23).

At the same time, our data highlight perceptions of the current inadequate enforcement of drug safety standards, and fears that public-private partnerships would add to existing administrative quality control administration. Such concerns on the part of government officials are understandable. Yet rather than viewing the perceived need for more effective regulatory mechanisms as a barrier, building greater capacity to monitor and enforce health care standards may be viewed as an important investment in government capacity to help ensure highquality health care services over the long run. Given Vietnam's rapid progress in achieving improvements in other sectors such as education and transportation, increasing the quality of services as well as the ability to ensure safety in the health care sector will be critical to Vietnam's continued rapid and broadly-shared socioeconomic development. Of course, it should also be recognized that it is unclear how public facilities would respond to the creation of public-private partnerships. Whether they would view private providers as competitors, and improve their productivity and service provision, or act as a second tier provider is difficult to predict.

Our findings both confirm and contrast with those of other studies of private providers in Vietnam and other developing countries. Some previous studies found that convenient operating hours were a major factor attracting clients to a private provider (24–26), but in our study only 13% of clients surveyed reported that they chose a private facility for this reason. Instead, they bypassed a more conveniently-located provider, often a public one, in favor of one further away and with a higher cost because of the latter's perceived higher quality of care. In some cases, clients might conceivably have received care from the same health worker as they would see at the public facility option, as many health workers provide care in both a public and a private facility. Thus these perceptions of quality go beyond the simple skills of health workers and encompass a much broader view of services, encompassing the physical building, atmosphere, and attitudes encountered during a facility visit. In contrast, a recent study conducted in Vietnam's Red River Delta found that

^bN is not equal to 200 because of missing values.

Table 6. Health seeking behaviors

Characteristic	Decision	Frequency	Percent	Ν
First provider sought	Yes	160	80.0	200
	No	40	20.0	
Closest provider	Yes	34	17.0	200
	No	166	83.0	
The nearest provider to home	Public owned	129	64.5	166
	Another private facility	34	17.0	
	Traditional health facility	2	1.2	
Reason for choosing facility	Proximity	33	16.5	200
	Familiarity of provider	30	15.0	
	Good attitude of provider	29	14.5	
	Reasonable price	11	5.5	
	Convenient opening-hours	27	13.5	
	Good quality service	148	74.0	
	Recommended by someone	32	16.0	

technical quality of care (including inputs and process) was poorer at private facilities compared to public community health centers (27). However, this same study found levels of user-perceived quality of care similar to this study.

This study has certain limitations. First, because of time and funding constraints, we focused on urban and periurban areas where users' ability to pay is likely to be higher than in rural areas. The focus in these areas may also produce bias in user-perceived quality of care because private facilities in these areas are usually better equipped and staffed with better qualified professionals. As quality of care was assessed only through consumers' satisfaction with certain aspects of care, we were unable to assess dimensions of technical quality. Further investigation might be needed to draw a more comprehensive picture of the private sector and to explore other stages of collaboration with public providers.

Despite these limitations, these findings contribute practical information for considering changes in the provision of ambulatory care at the primary level in Vietnam. In moving forward, we recommend careful piloting and evaluating of initial public-private collaborative efforts prior to scale up in order to identify and resolve issues in implementation. Instituting and adequately staffing a monitoring and quality assurance system should

be an important component of initial trials. We also suggest that agreements be based on mutual benefit between public and private sectors, rather than disproportionately benefiting one or the other. In addition, it may be helpful to revisit health insurance benefit packages in order to ensure appropriate coverage of services. Finally, in light of our finding that drugs and diagnostic tests accounted for a large proportion of total costs, an indication of possible inefficiencies in the provision of care, we recommend further investigation of pricing policies in order to avoid escalations in unnecessary tests and over prescribing accompanied by deterioration in primary care, as has occurred in China (28).

Conclusion

Public-private collaboration in the provision of ambulatory care at the primary level in Vietnam has substantial potential for improving access to and the quality of these services. We recommend that forms of such collaboration be explored by Vietnamese policy-makers. If implemented, we believe it is critical that attention is focused on effectively managing such partnerships, establishing a clear quality assurance system, and strengthening government monitoring and regulatory mechanisms.

Table 7. Clients' satisfaction with private providers

Criterion	Neither satisfied nor dissatified	Satisfied	Very satisfied	
Cleanliness of the facility	5 (2.5%)	113 (56.5%)	82 (41%)	
Wait time for services	7 (3.5%)	107 (53.5%)	86 (43%)	
Explanation given by the provider	0 (0%)	106 (53%)	94 (47%)	
Cost of services	5 (2.5%)	145 (72.5%)	50 (25%)	
Overall perceived quality of care	1 (0.5%)	104 (52%)	95 (47.5%)	

Table 8. Clients' satisfaction with public providers

Criterion	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatified	Satisfied
Cleanliness of the facility	_	2 (6.1%)	20 (60.6%)	11 (33%)
Wait time for services	1 (3%)	18 (54.5%)	8 (24.%)	6 (18.2%)
Explanation given by the provider	1 (3%)	13 (39.4%)	9 (27.3%)	10 (30.3%)
Cost of services	=	1 (3%)	18 (54.6%)	14 (42.4%)
Overall perceived quality of care	_	8 (24.2%)	19 (57.6%	6 (18.2%)

Sponsorship and ethical approval

The manuscript was developed from a consultancy for the Mekong Health Support Project funded by the World Bank/IDA loan and funded partly by the Center for Health System Research, Hanoi Medical University. The sponsor and its Project Management Unit (PMU) were not involved in study design and tool development. Approval for the study was obtained from the central PMU and the Ethics Committee of the Institute of Population, Health, and Development (PHAD), an independent research institute based in Hanoi. Permission to conduct the study in the selected provinces and districts was obtained from the provincial health service and provincial PMUs. Written informed consent was obtained from each respondent.

Acknowledgements

The authors would like thank Dr. Forsberg, Program Coordinator of the Private Sector Program in Health at Karolinska Institute, for sharing survey tools of the survey in Zambia. The views expressed in this paper are solely the responsibility of the named authors and do not necessarily reflect the decisions or stated policy of the organizations they work for and the funding organization.

Conflict of interest

We declare that we have no conflict of interest.

References

- Hotchkiss DR, Rous JJ, Karmacharya K, Sangraula P. Household health expenditures in Nepal: implications for health care financing reform. Health Policy Plan 1998; 13: 371–83.
- Makinen M, Waters H, Rauch M, Almagambetova N, Bitran R, Gilson L, et al. Inequalities in health care use and expenditures: empirical data from eight developing countries and countries in transition. Bull World Health Organ 2000; 78: 55–65.
- 3. Bagchee S. Private health sector in India: single level health care is the only solution. BMJ 2005; 331: 1339.
- Palmer N. The use of private-sector contracts for primary health care: theory, evidence and lessons for low-income and middleincome countries. Bull World Health Organ 2000; 78: 821–9.
- Diarra A. Making a public-private partnership work an insider's view. Interview by John Maurice. Bull World Health Organ 2001; 79: 795–6.
- Jack W. Contracting for health services: an evaluation of recent reforms in Nicaragua. Health Policy Plan 2003; 18: 195–204.

- Loevinsohn B, Harding A. Buying results? Contracting for health service delivery in developing countries. Lancet 2005; 366: 676–81.
- Agha S, Do M. Does an expansion in private sector contraceptive supply increase inequality in modern contraceptive use? Health Policy Plan 2008; 23: 465–75.
- General Statistical Office of Vietnam. Vietnam Living Standard Survey 1991–1992: results. Hanoi: General Statistics Office of Vietnam: 1993.
- General Statistical Office of Vietnam. Vietnam Living Standard Survey 1997–1998: results. Hanoi: General Statistics Office of Vietnam; 1999.
- 11. Vietnam Ministry of Health. Report on results of the Vietnam National Health Survey 2001–2002. Hanoi: General Statistics Office of Vietnam; 2003.
- Thuan NT, Lofgren C, Lindholm L, Chuc NT. Choice of healthcare provider following reform in Vietnam. BMC Health Serv Res 2008: 8: 162.
- 13. Ekman B, Liem NT, Duc HA. Axelson H. Health insurance reform in Vietnam: a review of recent developments and future challenges. Health Policy Plan 2008; 23: 252–63.
- 14. Government of Vietnam. Decree 63: Issuing Health Insurance Regulation. Hanoi: Government of Vietnam; 2005.
- Quy HT, Lonnroth K, Lan NT, Buu TN. Treatment results among tuberculosis patients treated by private lung specialists involved in a public-private mix project in Vietnam. Int J Tuberc Lung Dis 2003; 7: 1139–46.
- Israel E, Bao LN, Wedeen L, Hai PM. Fostering public-private partnership in HIV prevention, care and treatment in Vietnam. Hanoi: Presentation at the 33th Annual conference on Global Health; 2006.
- Raman V. As personal communication regarding public private partnerships in Vietnam. Hanoi; 2009.
- Vietnam Ministry of Health. Joint Annual Health Review 2008: Health financing in Vietnam. Hanoi: Ministry of Health; 2008.
- Vietnam Ministry of Health. Health Statistics Yearbook: 2005.
 Hanoi: Ministry of Health; 2005.
- 20. Unpublished data collected as part of this research study; 2008.
- 21. Webby W, Jesper S, Dale M, Chrispin M, Margaret M, Birger CF. Private health care in Zambia: findings from provider and clients surveys in two districts. University of Zambia and Karolinska Institute; 2008.
- 22. Vietnam Ministry of Health. National Health Accounts report for the 1998–2003 period. Hanoi: Ministry of Health; 2006.
- Liu X, Hotchkiss DR, Bose S. The impact of contracting-out on health system performance: a conceptual framework. Health Policy 2007; 82: 200–11.
- Azam M. Public Private Partnership (PPP) for essential health services. An innovative approach for optimum and efficient use of public and private resources. World Hosp Health Serv 2003; 39: 1.
- Widdus R. Public-private partnerships: an overview. Trans R Soc Trop Med Hyg 2005; 99: S1–8.

- 26. Tat S, Barr D. Healthcare in the New Vietnam: comparing patients' satisfaction with outpatient care in a traditional neighborhood clinic and a new, western-style clinic in Ho Chi Minh City. Soc Sci Med 2006; 62: 1229–36.
- 27. Tuan T, Dung VT, Neu I, Dibley MJ. Comparative quality of private and public health services in rural Vietnam. Health Policy Plan 2005; 20: 319–27.
- 28. Yip WC, Hsiao W, Meng Q, Chen W, Sun X. Realignment of incentives for health-care providers in China. Lancet; 375: 1120-30.

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